

THE NEW LOOK; TRANSFORMING SUSTAINABLE FASHION EDUCATION

*A Thesis submitted in fulfilment of the requirements
for the degree of Doctor of Philosophy*

Kate Francesca Sala
RMIT Bachelor of Design (Fashion) (Honours)

School of Fashion and Textiles
College of Design and Social Context
RMIT University

October 2019

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SUPERVISORS
*Dr. Angela Finn
Dr. Sean Ryan*

DECLARATION

I certify that except where due acknowledgement has been made, the work is that of the author alone; the work has not been submitted previously, in whole or in part, to qualify for any other academic award; the content of the thesis is the result of work which has been carried out since the official commencement date of the approved research program; any editorial work, paid or unpaid, carried out by a third party is acknowledged; and, ethics procedures and guidelines have been followed.

I acknowledge the support I have received for my research through the provision of an Australian Government Research Training Program Scholarship.

Kate Sala
24 October 2019

ACKNOWLEDGEMENT

This work is dedicated to two people;

*To Concetta Mollica, the woman who ignited the fire,
and to Kieran Christopherson, the man who kept it alive.*

I would also like to acknowledge my supervisors, Angela Finn and Sean Ryan for their wisdom and guidance. The generous support I have received from my colleagues at RMIT has acted as an essential source of encouragement and comfort throughout this journey.

Thank you to my family Marg, Joe, Daniel, Sarah, Emilia, Liam, Ari, Raffa, Lauchie, Anne, Peter, Aidan, Danielle, Lydia, Isabelle, Ben, Scarlett, Scott, Thomas and James. The help each of you have given me has made this experience that much more memorable for me. Thank you also to my dear friends who never stopped asking, 'how is *it* going?' Special mention goes to those of you who sat, listened, provided feedback, read and championed my ideas; Cass, Harriette, Jane and Laura.

This PhD is a product of collaboration and shared discussion; thank you to all who have provided their insight and donated their time during this process; Anne-Louise Bang, Dilys Williams, Jennifer Whitty, Lynda Grose, Nadine Möllenkamp, Nina Stevenson, Renee Cuoco and Timo Rissanen. This work would not be complete without your insight. Finally to Bruno Pieters, your leadership and passion inspired me to want to understand more about how we can make a change in this industry, thank you for leading the way.

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ABSTRACT

This research examines transformative learning theory's impact for fashion education. Through a study of current learning and teaching practices employed by educators within the field of fashion education for sustainability, this research finds that transformative teaching strategies can contribute to the effectiveness of students' understanding of sustainable fashion. Additionally, this research illustrates how promoting the use of these learning and teaching methods will support opportunities for students to grow through critical reflection and collaboration, with an emphasis on participation and collective inquiry; strategies supported through a mutual and dynamic learning environment.

The fashion and textile industries provide work to one in six people globally (Morgan, 2015). Considering the fashion industry's global influence, this field has become a popular career choice for many young graduates (Jenkyn-Jones, 2011). According to Jenkyn-Jones fashion design is one of the "most oversubscribed fields in higher education" (2011, p. 6). In light of this growth in popularity, fashion institutions are left to manage student preconceptions of the fashion industry; at times these are uninitiated ideas propagated by fashion media and brands who promote the notion of the celebrity fashion designer, working in isolation, relatively free of social responsibility (Jenkyn-Jones, 2015; Edelkoort, 2014).

In contrast to these widely promoted ideas of how the fashion industry operates, a fashion education aims to develop the skills required of a student in order to gain employment in the industry, both present and future, and in doing so, highlight the diverse functions and applications of fashion design practices. In addition to these skills, a fashion education is also an ideal environment to engage with specific learning and teaching strategies that will help facilitate student discussion and learning of issues associated with the influential choices fashion designers make, and how these choices impact our local and global communities.

Through this research, it has become evident that neither education theory (transformative learning theory) nor design theory (studio practice) has given adequate consideration to the advancement of appropriate learning and teaching methods to enable fashion to respond to the social and environmental challenges of the future. Literature on fashion education for sustainability is abundant, as is research exploring the application of transformative learning theory in disciplines outside of fashion. What is yet to be addressed through current literature are the distinct needs, as well as issues, arguing for the advancement and development of learning and teaching practice specific to fashion design education. This research contributes to a greater understanding of contemporary education practice within fashion design through an analysis of discipline-specific application of transformative learning theory to fashion pedagogy.

An analysis of current literature indicates that transformative learning theory appears to be the main driver for change when delivering content regarding sustainability at a tertiary level within similar design disciplines such as architectural education. Data gathered from multiple methods for this research reveals a correlation between best teaching practice for education for sustainability and transformative teaching strategies.

The literature review is organized into four areas of inquiry: sustainability, fashion design and the nature of change; the evolving forms of fashion design education; the fashion educator and the future; and transformative learning theory in higher education. Additionally a review of a select number of international fashion programmes offering fashion education for sustainability has been included. The research from this last section feeds into the development of a comparative study, from which key subsequent findings evolved. The aim of the comparative study was to identify existing trends in international pedagogical innovation and to establish a connection between these trends and transformative learning teaching practice in a tertiary fashion education setting.

A number of different approaches have been taken to complete this research, these include: a literature review, a range of semi-structured interviews and online surveys, a comparative study of fashion design teaching methods, as well as the development of strategies for transformative fashion teaching practice. In addition to identifying and analysing best-practice teaching for fashion sustainability, the findings of this research are geared towards equipping students and educators alike with the tools to critically reflect upon, and work towards, ethical and responsive possibilities for transformation in their own fashion teaching and learning practices.

The results from the semi-structured interviews and online surveys, combined with written reflection based on observation and literature research, formed the foundation for the comparative study of four leading international undergraduate fashion design courses. The key educators interviewed regarding their involvement in delivering these courses, are globally renowned for their contributions to sustainable fashion theory and practice, and thus are in a position to provide valuable insight from which comparative findings have been established. A key discovery from this process identified that the learning and teaching methods employed by these educators reflected an approach to teaching that correlates with the application of transformative learning theory. In addition, several students who participated in these courses took part in an anonymous online survey, from which an understanding of how these courses compared, in regard to student experience, was attained.

The comparative study within this research demonstrated how integrating transformative learning theory and its associated teaching strategies with more common and traditional practices of fashion education, developed an environment that enabled student designers to critically reflect on sustainable methods for fashion design practice. This research seeks to ground this theoretical and practical ambition in the realities of fashion education practices and the systems of tertiary higher education institutions, while unpacking the possibilities that lie in the adaption of the theory to fashion teaching practice, in preparation for a transformation of current realities.

KEYWORDS

Fashion design education, transformative learning theory, sustainability, education for transformation

PUBLICATION ACKNOWLEDGEMENT

This thesis interpolates material from a paper by the author, 'Revisiting Fashion Education: Inspiring transformative learning experiences for fashion design students', published and presented as part of the Global Fashion Conference in Stockholm, 2016. Chapter's 1, 2, 3 and 4 use material from this paper. Material from this paper has also been incorporated into the abstract.

This acknowledgement has been included in a Research Output Declaration.

1 INTRODUCING THE RESEARCH

1.1 Introduction

Education is also a design process, with the student as the target. Education embeds new beliefs and normative strategies, and it enables one to expand competence to new areas. Education facilitates both problem solving and the ability to step into new domains arising from visions of the future (Ehrenfeld, 2013. p 25).

The rationale for transformation-through-learning

To transform ideas, to encourage or experience a shift in paradigm, requires the recognition and reinterpretation of what has come before. As Dominique Hes and Andreeanne Doyon (2016) note in their article ‘Thriving, not just surviving . . .’, “the key is to change our attitude to development and growth, to change the story of what success looks like and the model by which we arrange our communities. This requires a shift in thinking from taking away from our world, community, economy and environment to giving to it” (Doyon, 2016, para. 4). This research discusses ideas of progress, innovation and the possibilities for transformation present in fashion education practice and learning, specifically in reference to the fashion educator’s role in enabling student designers to become critically aware of their place within the current fashion system.

The concept of transformation-through-learning is key to this research, specifically within a fashion education context. This project highlights the extent to which learning, and teaching methods play a role in shaping an emerging designer’s attitude towards their own fashion practice, and consequently their ability to contribute to their local and global community. Within this research, the term ‘emerging designer’ is used to refer to students enrolled in tertiary-level fashion design education programs. A fair assumption can and will be made for the purpose of this research, that the majority of students enrolled in an undergraduate fashion degree are aiming, at least while studying, to enter into the fashion industry in some form or another upon exiting their degree. In considering this aim, it is presumed that the fashion educator’s role is to consider the future of the fashion industry when developing curriculum in order to best equip their students with the relevant tools for fashion’s emerging future.

The fashion industry, Edelkoort (2014) claims in her ‘Anti-Fashion Manifesto’, celebrates the designer as an individual, working to attain celebrity in isolation. Such an industry encourages emerging designers to remain independent in their pursuits, commonly identifying success with working in competition with other practitioners to produce goods targeted at consumer culture. The current state of the industry, it is also argued, has evolved under the narrative of ideas of ‘progress’ tied to growth through the increasing consumption of material goods, “many of them shaped in garment form” (Fletcher & Tham, 2015, p. 18). Fast fashion companies can produce up to 12 seasons per year (Anson, 2010 cited in Fletcher, 2015), continuously refreshing and updating the availability of their stock. The high volume of garment production this fast fashion system demands adds pressure to companies locked in this cycle, resulting in a market of products made from inferior materials and construction, needing to be replaced at a faster rate. A pattern has emerged from this process through which “consumerist fashion is locked into a cycle of self-justification” (Fletcher & Tham, 2015, p. 18). As a result, these cheap, poor-quality garments are often quickly discarded, contributing to the prevailing global issue of textile waste management.

However, there are signs that the industry is preparing for a paradigm shift, transitioning away from this current, unsustainable model of practice. In opposition to this fast pace, the slow fashion movement was established in a bid to embrace design values committed to a shift toward sustainability (Strauss & Fuad-Luke, 2008).¹ This gradual evolution to a slower, more considered fashion system aids in establishing new roles for fashion designers. This research project reveals models for transformative fashion teaching practice which draw from available resources in order to educate students about the fashion industry's current methods of practice, the potential for change, and the opportunity this change could generate for the future of fashion design practice.

1. Discussion of Slow Fashion practices can first be linked to a paper by design facilitator and educator Alastair Fuad-Luke in 2002.

Dilys Williams of London College of Fashion's Centre for Sustainable Fashion notes that there is also a duty of care assigned to fashion educators "to ensure that what is being taught is mindful of the wider and current context of our lives" (Williams, 2016, Interview). Acknowledging the current responsibilities that fall to the role of the fashion educator in a transforming industry, this research investigates ways in which these educators can enable their students to develop awareness of their potentially profligate practice and transform this awareness into practices that consider the extent of their impact.

Only through a synthesis of existing literature on teaching practice strategies for creative industries (design education), fashion design methods (Jones, 1992; Inns, 2008; Barthes, 1990) and fashion theory (Sproles, 1974; Smelik & Rocamora, 2016) could a foundation be established upon which this research project and its contribution to the literature has been developed. In addition to the writing on education and design practice and fashion theory and design, key works by Janet Hethorn, Connie Ulasewicz, Ann Thorpe, Alison Gwilt, Timo Rissanen, Anupama Pasricha, Stephen Sterling, Walter Stahel, Kate Fletcher, Steven Faerm, Lynda Grose and Dilys Williams have been instrumental in informing the research with regard to fashion education for sustainability. The views in these works have been supported by my own professional perspective as a practising fashion educator, as well as the perspectives of the fashion educators involved in the interview series conducted to support this research.

Beyond Education for Sustainability

Undertaking an education for sustainability can be a difficult and overwhelming journey from the student perspective for a variety of reasons. Within a fashion context, learning about sustainability can feel limiting and laden with responsibility, burdened with facts and figures, and neither overly digestible nor optimistic. Learning about the darker, less glamorous side of fashion can be off-putting. Drawing from personal professional observations coupled with the survey responses gathered for this research, it is apparent that for students to feel engaged and optimistic about their place within the future of fashion, alternatives to current unsustainable methods of practice need to be presented as viable opportunities in order to transform the student mindset.

2. The widely renowned Bauhaus art school is known for its originality and history in providing "a significant 20th-century precedent for current schools of architecture focusing on learning through making." (Siebenbrodt et al., 2012. p11)

Although introducing issues of sustainability through text-based materials is one way to engage students, design education stems from coupling this type of information with creative and engaging examples of teaching practice and activities in order to help students absorb and respond positively to it. German architect and founder of the Bauhaus school, Walter Gropius, who in transforming the program for the Bauhaus² promoted 'a polarity' of practice and theory, highlighted the importance of advocating an approach to design

education which incorporates both practical and theoretical instruction (Findeli, 2001, p. 7). This point is supported by Paul Chan and Christine Räisänen in their paper 'Imagining a Sustainable Future: Shaping Emergent Thinking by Reflecting Through Aesthetic Action'. Chan and Räisänen (2017) discuss the nature of knowledge on sustainable development within an educational context, claiming that we need to move beyond relying on text-based materials to educate students about sustainability, and experiment with alternative artefacts and strategies in the classroom. Chan and Räisänen (2017) believe that the emphasis should be on transformative education, wherein students “construct knowledge using their own experiences of the world juxtaposed with divergent points of view” (p. 5) facilitated by the educator, resulting in the fusion of both practical and theoretical instruction as championed by Gropius.

1.2 Rationale for a Transformative Approach to Fashion Design Education

In this section, three central themes will be examined as a means for presenting a case for a transformative fashion teaching practice. These themes, *Challenges, Knowledge and Practice*, will be key topics for discussion in relation to the literature and interview data gathered for this research. These primary and secondary information sources provide insight into the specific challenges associated with fashion education, and the knowledge and practices related, but not limited to, sustainability. These themes will be used to set up a rationale for a transformative approach to fashion education in the following section.

Challenges

Over the last decade the fashion education sector has witnessed immense growth, with some institutions experiencing “enrolment increases tripling student populations” according to the Council of Fashion Designers of America’s Sara Kozlowski (Mellery-Pratt & Amed, 2017, para. 2). As the industry continues to grow, and as social media continues to expose a once elusive industry to the world (Mellery-Pratt & Amed, 2017), pursuing a fashion degree has become an increasingly popular option for those interested in a career in fashion. With this recent surge in popularity, fashion colleges and universities find themselves competing for global recognition and the increased international student intake this reputation delivers. In addition, students today are unlike those of past generations. Given the level of technological accessibility they enjoy, there is a need to design a new and innovative curriculum that keeps them engaged on this level. And of course, educators are expected to provide students with the necessary skills demanded by a present and future employment market that expects employees to be technologically literate.

In response to this rise in popularity and the resulting variety in choice prospective students face when considering where to pursue their studies, Imran Amed, Founder, CEO and Editor-in-Chief at The Business of Fashion, created the ‘BoF Global Fashion School Rankings’. Through assessing the voluntary responses of fashion colleges and universities from around the world, this ranking system aims to help prospective students make “informed choices” about their education in fashion, whilst creating a platform for the wider community to evaluate fashion education and its offerings (Mellery-Pratt & Amed, 2017). The results of the yearly rankings of 2016 indicated that students, whilst feeling satisfied with their educational experience, do not feel supported as they exit their programs. Accordingly, Amed notes “there remains a significant gap between the expectations of these student’s vis-a-vis their actual experiences while in school and after” (Mellery-Pratt & Amed, 2017, para. 10). This documented dissatisfaction could be due to a few underlying problems tied up with the fashion education system, either: 1. the job sector has not been able to keep up with the growing popularity of fashion education and there is now an oversupply of designers looking for work or, 2. students’ skills lie in roles outside of fashion design yet they have not identified this disconnect in their personal journey or, 3. students have not been appropriately guided towards the correct role for them and therefore experience challenges attempting to pursue a career as a fashion designer or, 4. they are disheartened by what they have experienced of the industry and/or are overwhelmed by their responsibility as practitioners. Regardless of the scenario, students have the ability to seek guidance prior to entering the workforce, however this guidance is evidently inadequate or not utilised, and as Amed (2015) notes, in the end more than 85 percent of students will find employment in a role that is not design affiliated.

In their article, 'Is Education Selling A False Dream' (2017) Robin Mellery-Pratt and Imran Amed claim that there is a current oversupply of fashion design graduates entering the industry. Anne-Louise Bang and Nadine Möllenkamp (2016, Interview), educators at Kolding Design School, however, believe that the industry is on the cusp of a paradigm shift, which will create an opportunity for new, more viable, roles to be established for the emerging fashion designer. In a fashion market that is being rapidly altered by new business models, changing consumer values and developing technologies, the role of the fashion designer is constantly evolving (Mellery-Pratt & Amed, 2017). This sentiment has been echoed by the Director of Education and Professional Development at the Council of Fashion Designers of America (CFDA), Sara Kozlowski, who reports that the fashion landscape is "poised for new sectors within innovative and hybridised specialisations that include digital manufacturing, social innovation, sustainability", amongst other new business models (Mellery-Pratt & Amed, 2015, para. 20).

In considering this emergence of new opportunities, understanding how to facilitate a shift in thinking is not only important when delivering content on sustainable fashion to emerging designers, it is also crucial in equipping them with the skills to prepare them for future positions within this transforming industry. Kolding Design School's Anne Louise Bang elaborates on this point in an interview conducted for this research, stating that she has accepted that her key duty as an educator can, at times, be a slightly problematic one. Bang (2016, Interview) notes that her main priority in education is to prepare her students for the shift in the fashion industry toward the adoption of more sustainable and ethical practices. Concurrently, Bang acknowledges that it is also her professional responsibility to ready students for positions within present day working contexts, which could potentially mean working for a fast fashion company.

This two-pronged approach means that students have to develop an understanding of both realities simultaneously, accepting that whilst they have the knowledge to apply themselves to current demands of practice, they should not lose sight of the skills and tools they have developed in order to adjust their practice once an opportunity for transition presents itself. Whilst this approach may seem complex, it also reveals a hopeful future for emerging designers; as with the possibility of transformation and growth in an industry that has appeared governed by traditional systems of practice, come new opportunities for emerging designers who may have otherwise been challenged by the limitations of the current system. As Mellery-Pratt and Amed (2017, para. 33) note, "the fashion education landscape is in an exciting period of flux."

It is difficult to expect a fashion educator to feel confident in adopting progressive approaches to teaching, such as transformative teaching practice, without receiving any formal preparation. Most tertiary level educators are respected as experts in their fields, and as Patricia Cranton (1996) identifies in her book, *Professional Development as Transformative Learning*, receive minimal academic training for their role as an educator. The majority of participants interviewed for this research did not identify as fashion educators. Most of the interviewees referred to themselves as researchers, industry fellows or designers. Perhaps it is the lack of formal educational training received that affords these teachers the room to experiment with more transformative methods for teaching and learning. As they themselves are not restricted by the formal expectations or parameters of their role, they can facilitate more freely the student learning process using their professional experience as a foundation, an important strategy praised in the practise of transformative learning theory.

Knowledge

Many emerging designers enter the fashion industry having developed their knowledge by experimenting with new and potentially non-traditional methods of fashion practice whilst studying. Within fashion education programs, students often explore the practical through the theoretical and are encouraged to create outcomes that critique the prescriptions of commercial fashion. This is aptly described by California College of the Arts' Chair of the Fashion Design Program Lynda Grose (2013), who notes that students are given the time to work outside of industry parameters to push the boundaries of their understanding, expressing complex sociocultural influences through the execution of new ideas (p. 54). This testing of boundaries could include researching ways to work with found objects, or with technological innovations such as 3D printing. However, Fletcher and Grose (2012) note that this passion for experimentation and design is often at odds with the core motivation of the fashion industry, citing the impact that economic efficacy has on the research and development process. In a bid to streamline product development at a rapid pace, designers can be 'decoupled' from the making stage altogether, which disempowers the fashion designer in the process and does not allow for the richer possibilities offered by research-through-making to be explored.

Fashion designers, whether it is acknowledged or not, have a significant ability to impact change within the current fashion system. Lynda Grose notes, however, that whilst this may be the case, sustainability initiatives have generally been led by industry, more specifically by companies working to improve their supply chain performance (Grose, 2013), and not through change led by practicing fashion designers.

The large commercial or industrial fashion studio has little time for conceptual design approaches. Exercises in patternmaking no longer stay with the fashion designer and are entrusted to technical staff or in most cases to the computer, while other creative design practices such as draping are almost all replaced by "intellectual exercises" ensuring "ideas are delivered at top volume and speed on a daily basis" (Grose, 2013, p. 54; Rissanen, 2011). This emphasis on speed and volume can burden the designer not only creatively but also ethically, and in some cases it can result in the designer contemplating their position and 'dis-ease', resulting in a move away from this fast fashion model towards a more considered, ethical and sustainable mode of practice (Grose, 2013). For some fashion designers this will mean forging ahead independently and putting their educational experiences towards acquiring different tools and skills to use. For others it will be the end of their journey working within the fashion system. However, as Anne Louise Bang notes in her interview, "my goal [as a fashion educator] is to make sure the students know how to find the knowledge when they need it" (Bang, 2016, interview). Her point highlights the necessity for fashion educators to equip their students with the knowledge they may need to remain relevant for future positions within a developing industry.

In saying this, it is important to note that not all fashion studios are large, commercially-focused enterprises and that there are still many smaller companies who do engage with classic fashion design and production processes, most of which are conducted 'in house' and by a small design team. Amongst these processes, occurring in varied forms depending on the size of the company, Sinha (2002) notes that there are two that engage most fashion

designers in professional practice, namely, the ‘research and analysis phase’ and the ‘synthesis phase’. During these two phases many classic fashion design activities take place, mirroring, as Gwilt (2013) states, the core fashion design processes as discussed and illustrated in key fashion educational texts (Renfrew & Renfrew, 2016; Sorger & Udale, 2006; Gwilt & Rissanen, 2011; Jackson & Shaw, 2006). These activities include designing and editing collections, working ‘on and off’ the stand to realise designs, pattern making, prototyping samples, selecting fabrics, costing samples and the production of the sample collection (Gwilt, 2013 citing Renfrew & Renfrew, 2009; Sorger & Udale, 2006). These phases, which involve knowledge acquired by most fashion design students during their educational experience, “remain the areas from which the designer has the most engagement or control to influence positive change” (Gwilt, 2013, p.79).

Practice

Many of the core design processes featured in most fashion education curricula closely reflect the stages of fashion industry practice, in order to help prepare students for the realities of working in the industry. Due to the close relationship between industry practice processes and fashion education curricula, students can find it hard to comprehend the potential importance of learning about alternative modes of fashion practice, if their prospective professional relevance is unclear. For this reason, Kolding Design School’s Head of Fashion, Nadine Möllenkamp, states, in an interview for this research, that her department emphasises the importance of learning both current industry practices and alternative, more sustainably oriented, fashion practices simultaneously. In doing so, Möllenkamp hopes students will be able to develop the skills and methods that will make their contributions to industry viable even as the system continues to change, and eventually adopt more sustainable business practices (Möllenkamp, 2016, Interview).

Similar to this pedagogical approach is the perspective adopted by the London College of Fashion’s collaborative course run with Nike in 2013, the *Nike Making Project*. Those associated with the educational component, a mix of educators from London College of Fashion and their Centre for Sustainability, worked to embed content on sustainability into their teachings so that students understood the realistic application and long-term viability of adopting these practices (see Dilys Williams’s interview in Chapter 4). This approach made it easier for students and instructors to work alongside Nike’s team, and the combination of the theory and practical components of the collaboration resulted in the creation of a smartphone-based application as well as their own propositional collections. This type of cultural project, working to combine industry with education, helps to spotlight the current relevance of and demand for alternative ideas as well as the practices needed to execute them in the fashion industry.

The four fashion education courses featured throughout this research project highlight the key position fashion education holds as a means by which a range of transformative and exploratory methods for practice can be presented and discussed. For the emerging designer, this educational environment can play a crucial role in how they develop as future practitioners. Educators working in this space hold a responsibility not only to ensure these emerging designers understand the current context for their work as students, but also to help them develop the skills and methods for the future roles they are likely to occupy.

The courses selected for comparative study each engages in progressive fashion teaching practices, prioritising the future practice needs of their students, attempting to empower students with the innovative nature of sustainable fashion design and the “integral and poetic capacity for creative advantage” this form or practice creates (Grose, 2013, p. 56). Massey University’s Jennifer Whitty notes that, currently, content on sustainable fashion is at times taught as an ‘afterthought’, which can affect student perceptions of the importance of these practices (Whitty, 2015, interview). Alternatively, she notes, sustainability should be embedded within fashion design education and encouraged as an attribute of better design. When sustainability is taught as an additional subject, students run the risk of regarding it as separate from core practice methods.

If [the fashion student] is not positively exposed to the principles of sustainable design, then the problem of poor engagement will continue. If fashion designers do not understand what sustainable design strategies are, how to engage with them and the possibilities that they offer then they are unlikely to alter their fashion design process. It is imperative that the contemporary fashion designer sees sustainable strategies in terms of the opportunities for innovation (Rissanen & Gwilt, 2011, p. 67).

London College of Fashion’s recently departed Head of School, Frances Corner, is another educator who actively works towards supporting sustainable innovative fashion practices through partnership with industry. LCF recently signed a five-year partnership between their Centre for Sustainable Fashion and the Kering³ group (owners of Gucci, Saint Laurent, Alexander McQueen, Balenciaga, Stella McCartney...). A partnership of this calibre, which aligns prominent names from the luxury fashion industry with the future minds of the sector, allows students to put their learning into practice through interaction, collaboration and reflection: “The programme will act as [an] incubator for new ways of thinking about sustainable fashion” (Corner, 2015). These activities are fundamental elements of creating a transformative learning experience for the student, equipping them with the ability to put learning into real-world practice and reflecting on their output and responsibilities as designers beyond the classroom.

3. Kering is a growing Group of 20 high profile, profitable brands that create apparel and accessories for the luxury and sport & lifestyle markets. Available: <http://www.kering.com/en/group/about-kering> [Accessed 23rd June 2016].

1.2.1 The Role of The Fashion Educator as an Agent of Change

Currently the fashion industry operates within a consumer economy which is heavily reliant on increasing demand. In order to meet rising demand (and increase profits), companies are producing cheaper garments, at an increased rate of production, with the primary focus on greater economic efficacy (Morgan, 2015). As a result, this process has applied immense pressure on the fashion supply chain, demanding in return cheaper manufacturing costs and accelerated deadlines. This cyclic production/consumption relationship is unsustainable in its current form, as the natural and human resources used to fuel its growth continue to experience exploitation and depletion. In an interview with the author, fashion practitioner and educator at Parsons School of Design in New York, Timo Rissanen, stated that he believes fashion education has a duty to its students to prepare them for the “somewhat unpredictable changes in the fashion industry during their working lives,” noting that as an educator he feels it is his independent responsibility to “address emergent economic systems, as well as changes brought about by rapidly evolving technologies and their impact on labour and trade [for example]” (2017, Interview).

In some cases, workers within the garment supply chain experiencing pressure to meet these production demands are accepting unethical workplace practices in order to safeguard their livelihood. This issue was vividly captured by Andrew Morgan in his film *The True Cost* (2015).

There are roughly 40 million garment workers in the world today; many of whom do not share the same rights or protections that many people in the West do. They are some of the lowest paid workers in the world and roughly 85% of all garment workers are women (Morgan, 2015).

In order for there to be a prospect of change, emerging designers must be educated about present industry practices, and the direct implications their decisions as designers and the competing desires of consumers have on the supply chain. Educating emerging designers about their capacity to influence change at an industry level has the potential to catalyse transformation within the global design community. Practicing fashion ethically and with awareness is not only about the designer's decisions, it involves society re-defining its perceptions and norms in order to reassess its values and adopt a more holistic understanding of the true cost of its consumption habits (Grose, 2013 citing Bradley et al., 2010).

Virajita Singh, educator and researcher at the University of Minnesota's College of Design and Centre for Sustainable Building Research, commenting on the environment most likely to nurture a shift in perspective within the learning experience, states: "when we have experiences that touch our humanity at a deep level, transformation is likely to occur" (Singh, 2012, para. 6). Experiences of great depth cannot be created artificially. Fashion educators are required to equip students with the ability to critically reflect on their personal design practice methods, as well as encourage them to align these methods with a set of personal values. This onus of responsibility on the educator became evident to me when discussing teaching experiences with Dilys Williams at CSF, who notes that navigating ideas around sustainability in fashion can be difficult. Williams elaborates that for certain students, once you start to pose questions about "what are your values and desires for the world", the learning process becomes quite an emotional and profound mutual journey for educator and learner (Williams, 2016, Interview). This process of encouraging students to identify and question their personal values in relation to their practice is the key to the ongoing task of engaging with change and growth within our own practices, according to transformative learning expert Patricia Cranton (1996). Experiencing a shift in perspective through the dialectical approach of questioning (or challenging) the learner's personal beliefs and assumptions is a crucial element of the transformative learning journey (Mintz et al., 1998; Slavich & Zimbardo, 2012; Mezirow, 1996; Cranton & Taylor, 2012).

In an interview with the author, when asked her opinion of what fashion education's duty of care is to its students, Dilys Williams stated "I think [fashion education] has a duty of care to each individual that is within the educational process. Higher education is about exploring who you are as a person and your place in the world, and I think the duty of any educator to their students is to support this journey, whilst thinking about what the world actually needs and wants... considering beyond the specific needs of a particular industry or role" (Williams, 2016, Interview). Williams also sheds light on a fashion institution's role in creating an environment that nurtures the fashion educator's ability to put transformative teaching into practice, adding: "educators themselves need to be given the space to be experimental

and through their own working through of ideas they then work with students around those ideas” (Williams, 2016, Interview). This adds another dimension to how students might best learn about fashion and sustainability, illuminating the need for institutions to provide the freedom that allows for the practice of transformative teaching amongst staff.

Utilising learning theories that develop a student’s ability to absorb new concepts, challenge their way of thinking and critically reflect on their learning process may help to equip a fashion student for the future of the fashion industry. In their paper ‘Transforming the Fashion and Apparel Curriculum to Incorporate Sustainability’, authors Landgren and Pasricha (2011) note that “educational theories provide a teacher with multiple ways of thinking about how students learn” (p 3). Learning theories that link active learning, collaboration and technology encourage lasting learning experiences for students, creating lifelong learners and ‘team players’ (Landgren & Pasricha, 2011; Cone, 2001). Dorothy Ettlting discusses the educator mentality associated with transformative pedagogy in her chapter, ‘Educator as Change Agent; Ethics of Transformative Learning’, in Taylor and Cranton’s *Handbook of Transformative Learning*. She views education as a valuable, inspirational and challenging experience for the learner who brings with them predispositions and “varying degrees of openness to new knowledge” (Ettlting, 2012, p. 544; Cranton, 2012; Mezirow, 1996).

These fundamental ideas are consistent with findings that have emerged from this research project, revealing the complex network of ever-changing, interrelated themes of educator role and responsibility. More specifically, they are illustrative of the ways that fashion teaching practice must evolve alongside a changing industry, and indeed the ways that it already has begun to do so.

Timo Rissanen (2017, interview) has discussed in detail his views on how teaching sustainability in fashion has progressed, the alternative modes for practice that exist now, and how he has come to regard his role as a fashion educator. With over fifteen years of fashion teaching experience, Rissanen notes that whilst there has been change towards a more widespread acceptance of sustainability teaching in fashion, the overall economic system is inherently flawed and unsustainable, and this is not being adequately addressed within the educational sphere. Without the acknowledgement of this reality, he believes that positive change will be difficult to achieve.

However, Rissanen also claims that focusing on the problems associated with the fashion industry such as those to do with unsustainable behaviours, without providing students with real world examples of solutions, can often have a paralysing effect, leaving them feeling overwhelmed and unable to understand how they can make an impact in a positive way. In response to this, Rissanen adds that within his classes he seeks to highlight existing solutions in practice, as a way to help students identify what opportunities can be created as a response to the issues presented. Rissanen uses this strategy for presenting and reviewing ideas about sustainability in fashion and its associated issues, as a way to transform his students thinking, a teaching strategy that developed as a direct result of reflecting on his own practice and his experiences with his students.

It is through the reflection and evolution that follows, that Rissanen’s alignment with transformative fashion teaching practice becomes evident, as he continues to explain the way he

challenges students' ideas about social and cultural issues,

...with care and in a way that doesn't invalidate the student or their culture in any way, but such that a new vision or point of view opens up. For example, the idea of wearing second hand [clothing], or even promoting that notion, can be challenging for students in whose cultures wearing the clothes of a deceased person is a taboo. I also recall a class many years ago where I talked about visible mending, with examples of my own work. An Indian student said that in the social group in India that he grew up in, repair is simply a sign of poverty. I acknowledged that and we then had a class conversation about what it might take to change societal-level perceptions such as that, without in any way invalidating that particular culture or country (Rissanen, 2017, interview).

Through encouraging inclusive dialogue that validates an individual students' story, whilst presenting other students with an opportunity to learn about new perspectives on formerly or currently entrenched cultural ideas, such as hand repair or recycling clothing, an environment can be created that seeks to educate, protect, and challenge student opinion in a safe and inclusive way. These strategies help to create shared experiences within the classroom, in which the educator has the skills, knowledge and interest in facilitating a challenging situation for the students, that is carefully transformed it into a mutual learning experience for all.

As further evidence of the transformative nature of Rissanen's teaching practice, he comments that learning in tandem with the student is crucial and involves a degree of humility from the educator in order for the latter to be a "successful, effective teacher" (Rissanen, 2017, interview). Rissanen, like the other educators interviewed for the comparative study, emphasises that it is important for educators not to feel as though they need to possess all answers to questions posed by students, but instead should strive to learn alongside the student as well as independently. When considering his teaching practice, Rissanen concludes that his goal is to activate a sense of agency in his students, so that, just as Kolding Design School's Anne Louise Bang also argues, regardless of career choice students are able to access the knowledge they acquired at university and use it to make a difference. "My aim is that students relate to themselves as a possibility, whatever that possibility may be, and take actions consistent with that possibility" (Rissanen, 2017, interview).

The Transformative Fashion Teaching Practitioner

This model of teaching practice seeks to challenge any unsustainable behaviours rooted in current fashion education models that forego the opportunity to encourage students to reflect on their responsibilities as both fashion designers and global citizens. Transformative fashion teaching practitioners:

- Are facilitators of the learning journey, prioritising student well-being through the creation of a safe, trusting environment that nurtures vulnerability and reflection.
- Explore student values through connecting the designer with the different contexts of design practice, unpacking the responsibilities they bear to both the local and global communities.
- Adopt a holistic approach to fashion design practice, offering alternatives to the current unsustainable system through the proposition of unconventional, future-centric theories and methods of making.

The Community of Practice

The community of practitioners operating in this field think in a like-minded way about learning and teaching, and this manner of thinking is potentially (intentionally or unintentionally) informed by transformative learning theory and its associated teaching strategies. This community of educators is also the potential audience for, and collaborators with, the present research project.

For further discussion of these concepts, refer to Ch 2.4 Fashion Education, The Fashion Educator and The Future.

1.2.2 The Role of The Future Fashion Designer

Whilst there is significant focus in the sustainable fashion sector on the impact certain design decisions can have on the environment, for example, in considering the preferability of mono-materiality over the use of blended fibres, or of zero-waste design methods that avoid textile waste, the future of fashion design practice relies on shifting the focus to also address broader issues of sustained consumption (Rissanen, 2011; Grose, 2013). How can fashion design encourage sustainable lifestyle choices among consumers? In response to this question, Rissanen (2011) outlines the important difference between sustainable design and design for sustainability (DfS), in that the latter is focused on design that influences consumers to adopt more sustainable behaviours.⁴ Perhaps through embedding education on fashion practice with sustainable design strategies that encourage behavioural change, and delivering this content through a change-oriented pedagogy such as transformative learning theory, fashion design students would feel more adequately prepared and open for the diverse professional roles the future of fashion will generate, such as those of problem solver, innovator, pioneer and social activist.

4. Sustainable behaviours such as laundering, drying, repair, alteration, delaying disposal, amongst others. (Rissanen, 2011).

The effectiveness that this type of approach could have on fashion education practice is recognised by a number of educators. Lynda Grose from California College of Arts, alongside Dilys Williams, Renee Cuoco and Nina Stevenson from London College of Fashion's Centre for Sustainable Fashion, note that engaging students with strategies for critical reflection helps them become more aware of the reasons for their design habits as practitioners, and combining this reflection with education about sustainable fashion practice helps to provide students with a tangible example of how to shift their current methods and adopt skills and knowledge to encourage greater consideration for the impact of their craft. Grose (2013) adds:

By enabling students to form an interactive relationship with ecological issues as agents in their own craft and reflecting on the outcome, they become engaged and active, the logic of current fashion practice becomes apparent (consciousness) and, as it does, it can be critically investigated through a number of lenses (structure). As idealism is tempered, students realise that ideas for sustainability are not fixed, but emergent and they begin to develop a grounded perspective regarding their own potential as fashion practitioners in furthering change (agency). (p. 139).

Rissanen (2011) talks at length about the alternatives that exist for fashion practitioners to facilitate a shift in behaviour from current unsustainable procedures to those incorporating more sustainable measures.

A list of Rissanen's recommendations for alternate perspectives on how to practice fashion includes:

- Fabric waste management through upcycling discarded scraps to reinforce the garment
- Designing with a focus on increasing garment durability to avoid deterioration and disposal
- Personalising garments to invest them with meaning for the wearer by means of alteration
- Employing a keen eye when observing production methods such as marker making, using this to achieve optimum use of workable width
- Designing with consideration for longevity of the design, negating trends
- Equipping designs with the tools to allow consumers to customise them
- Producing garments using high quality resources to ensure durability
- Revisiting the fashion calendar, investigating alternatives to showing seasonal collections which in turn make "obsolete the previous season's clothes" (Rissanen, 2011, p.136).

Rissanen's (2011) suggestions for disrupting traditional perspectives of fashion design practice take into account the increasing stress the industry puts on environmental resources. Not only do these propositions aid in providing alternatives for the fashion designer to consider, they are also tailored to facilitating a change in consumer behaviour toward a more informed and more gradual consumption of fashion. Why not ask how sustainable design can work with design for sustainability to ensure that product and user are interlinked? Transformative fashion practitioners have the ability to persuade the consumer to engage with sustainable design, to go beyond the notion of merely sustaining, and to push for the establishment of an industry that might flourish with the consumer's help.

Transformative Fashion Practitioners

A transformative fashion practitioner focuses on developing and adopting generative forms of fashion practice. It is a practice that has moved beyond ideas of sustaining itself for the present or near future and is instead focused on its ability to develop and thrive. This shift involves pushing conceptions of fashion practice beyond the designing of garments for mass production and reinterpreting the fashion business model accordingly. The transformative fashion practitioner may create garments in collaboration with the end user, provide a service in place of a garment, work to educate consumers through action, or seek to upskill consumers with workshops and information sessions. Their practice embodies their personal values and seeks to better impact their local and global communities. This form of fashion practice is suited to designers who are facilitators of the consumer's own learning journey, and they prioritise the well-being of their environment. Transformative fashion practitioners explore their own values by connecting their practice with their values, identifying what their responsibilities are to both the consumer and their community. Above all, these practitioners adopt a holistic approach to fashion design practice, exploring and offering alternative modes for the future of their practice.

For further discussion of this concept, refer to Ch 2.4.3 Existing Transformative Fashion Design Practices.

1.3 Introduction to Research Questions and Methodologies

Research Questions

The process of collating and analysing the research material gathered through the interview and survey methods, in addition to the literature review findings, presented several opportunities to pose and respond to the following secondary question:

Q. Did participating in this course encourage a shift in the way emerging designers view the fashion industry and its systems? If so, in what way?

The above research question has been essential to the data collection and analysis processes, in helping to understand the experiences of the students surveyed. Combining short answer and multiple-choice question methods helped to collect personal student accounts, providing greater insight into student perspectives of the courses in which they participated. This question, whilst a key component in documenting student experience, was not as useful when investigating the educators experience, objective and participation in the course. As a result, an additional secondary research question more pertinent to the intention of the interview series was framed:

Q. How might fashion educators employ transformative teaching strategies to encourage a shift in the way emerging designers view the future of fashion practice?

These two questions are important providers of both quantitative and qualitative data, the first offering more precise and measurable information, and the second more open and personal responses. Whilst these secondary questions were instrumental during the data collection process and subsequent synthesis and generation of findings, they sit under a broader line of inquiry outlined by the following research questions:

Q. How does current fashion design teaching practice relate to transformative learning theory?

Q. How might this theory and its strategies contribute to fostering alternative modes of fashion education for sustainability?

Both questions are posed and investigated on the assumption that current fashion practice needs to transform itself towards a future in which issues of sustainability and sustainable design have become fundamental.

Methodology

The third chapter of this thesis is dedicated to a detailed discussion of the multiple methods employed to complete this research project. This chapter is split into three sections; the first and second discuss the educator interview series and student online survey, and the relevant methodology employed throughout the creation, dissemination and analysis of each of these data collection methods. The third section introduces the student perspective, acting as an important connection between chapters three and four.

Admittedly, the project was initially broad in its research scope and included secondary research into fashion education for sustainability as well as progressive adult education theory. Nevertheless, this broad explorative space allowed for the focus to settle on an examination of current tertiary level fashion programs renowned for their delivery of content on sustainable fashion as well as their contribution to the development of this field. This progression towards a study of various global institutions and their methods for fashion teaching practice (within a studio-style teaching environment) led to the creation of selection criteria and subsequently to methods for a comparative analysis of these selected undergraduate programs, employing both primary and secondary research methods to do so. Through this analysis specific methods for determining student engagement with issues of sustainability and ethics were established, and these were aligned with a learning theory and teaching strategies that had yet to be explicitly associated with the field of fashion education practice.

Limitations posed by Methodology

Whilst there have been significant findings extracted from this research it is important to note that every student and student group is unique, and as Sue Jenkyn-Jones observes in *Fashion Design* (2011), “The same assignment can yield entirely different results in different hands at different times. One of the great pleasures of being a student, and indeed a teacher, is the experience of sharing and learning from the surprises, triumphs, and mistakes” (p 9).

Unbalanced Sample

It is not clear whether the unbalanced nature of the number of respondents from each of the schools affected the quality of data collected. I was able to calculate how many respondents came from each university and correlate each short answer response to a specific school, and during the process did not come up against any issues with data collection or analysis due to this point. However it is important to reflect upon this subject for the sake of equivalence. (4 California College of Arts, 3 London College of Fashion, 2 Kolding Design School, 5 Massey University)

Parsons was part of the initial case study selection, being one the programs that took part in the *Local Wisdom Project* and fulfilling the selection criteria for the study. However poor timing, and uncontrollable circumstances, meant that the educator involved in running the course that was selected for analysis was unable to partake in the interview series. Thus the program was eliminated from the selection.

Time

Some respondents had the advantage of time on their sides. The LCF respondents were reflecting upon their experiences from a greater distance (4 years post completing the course), whilst the other students, in some cases had only just finished their courses. How would this have affected their perspective on their experience? A separate research project would be required to obtain more information about this area of inquiry and how time can affect the students recollection of their experience.

Securing Responses

I found it to be difficult to secure responses from the international participants without having had the advantage of meeting the students prior to requesting their participation in the survey. Potentially it was beneficial that they had no affiliation with me or my work prior to responding to the questions, as it could be argued that this added to the anonymity of the nature of the survey. Furthermore the lack of contact between the surveyor and respondents could have led to the creation of less expectation, and potentially more honesty from the respondents.

Structure

The questions that were composed for the educator interview series and the student survey achieved interesting and key findings. Without knowing this in advance, the breadth of topics covered by the questions allowed for both educators and students to share in depth accounts of the experience and opinions. It is always hard to predict the trajectory of the research at the early stages when putting together a questioning strategy, however the questions and the data they generated has been significantly relevant to the contribution this research offers.

Read more on research methodology in Chapter 3 A Multi-Method Approach.

1.4 What this Research Contributes and Who Will Benefit

This research project identifies and proposes new pathways for fashion design education globally. The project recognises fashion educators as practitioners contributing to the field of fashion education and design, potentially promoting and advocating alternative models of fashion practice that are viable and prospective. There are several areas to which this research contributes knowledge, with its main implications being for educators in the fashion discipline.

Through an examination of selected current, past, and future fashion education practice methods, a gap in the field of fashion education research is established. The literature review reveals that there is insufficient published work detailing transformative learning and teaching experiences and practices specific to the fashion educator in fashion design education at a tertiary level.

This research seeks to fill this gap by improving our understanding of the fashion educator's experience and practice. It provides a study of the impact that existing learning and teaching strategies have on both the educator and learner's perspective of current and future fashion practice. Through a combination of primary and secondary research it examines both the educator and student experience in order to generate renewed reflection upon the role and responsibility of the fashion educator and institution.

This research also considers, through a study of transformative learning theory and its associated teaching strategies, a range of contemporary (transformative) methods employed in preparing emerging designers to participate in a future fashion practice focused on holistic, ethical and innovative design. The research identifies how transformative learning theory and its associated teaching strategies are appropriated to deliver sustainable fashion education, through a series of expert interviews and online surveys. These expert educators do not all intentionally engage with transformative learning theory when delivering their courses, and a contribution of this research is to make this implicit engagement explicit.

Furthermore, this research proposes ideas for a transformative fashion teaching practice by outlining a series of reflexive propositions that might be used by fashion teaching practitioners. These reflexive propositions, developed from the primary research into the experiences of students and educators, are focused on engaging both the fashion educator and student (emerging designer) at the design education phase in order to influence the development of a future-oriented fashion design practice. These propositions for reflection seek to promote and enable more ethical, environmentally conscious, critically aware and progressive fashion practices.

1.5 Chapter Summaries

Chapter 1. Introducing the Research

In this chapter an introduction to the research is offered through a discussion of fashion education and its specific challenges, knowledge base and practices, related but not limited to sustainability. This sets up a rationale for adopting a transformative approach to education.

Succeeding this initial establishment of context is an exploration of the concept of the fashion educator, and more specifically, how fashion educators can harness their position to engage students with responsible forms of fashion practice. This chapter continues with the theme of change, introducing ideas of transformative fashion practice through a discussion of the possible roles for future fashion designers. This section also includes the presentation of the work's research questions and introduce the methodologies that have been used to execute the research.

Chapter 2. Transformative Fashion Education

The second chapter elaborates on the introduction through a contextual discussion of current literature on issues of sustainability in relation to fashion. More specifically, this chapter discusses fashion and sustainability through the lens of education and change. The context of fashion education is presented within this chapter as the ideal environment in which to examine the durability of the current fashion system and how it can be developed in order for future practitioners to thrive. The chapter is split into four sections.

The first section commences with an introduction to the main definitions of the key research terms: Sustainability, Fashion Education and Transformation. The second section identifies the evolving forms of fashion design practice from an educational perspective, engaging with historical and cultural factors where appropriate. This research provides insight into the nature of fashion design practice using the concept of transformation to generate further discussion on ideas of agency and change. Alongside this identification of the evolving forms of practice, a study of existing examples of progressive, innovative and ethical practices in fashion design is presented. With this background, the research then questions what the role of the future fashion designer may look like, considering the aforementioned discussion around transformative forms of practice.

The third section of this chapter brings together a discussion around future fashion practice, fashion education and the student fashion designer. The section commences with a look at fashion education's role in designing for change, design responsibility and how these ideas sit within the context of the current fashion industry climate.

The fourth section comprises a literature review undertaken to examine the corresponding principles of design education and transformative learning theory. This segment examines transformative learning theory and its associated teaching strategies within a higher education context and in its relation to fashion education for sustainability.

Chapter 3. A Multi-Method Approach

Following the introduction and context provided in the preceding chapters, this chapter discusses the methodological approach employed in order to carry out this research. The chapter is split into three main sections: the first discusses the semi-structured expert interview series and the second presents the analysis process applied to the interview data. The final section covers the limited online student survey and the processes employed for analysing the data generated by this method.

Each of these sections details the relevant methodology employed throughout the creation, dissemination and analysis of each of the respective data collection methods. Information presented in this chapter covers participant selection, sampling methods, processes employed for analysing data as well as an explanation of the series of maps used to outline the evolution of key concepts and findings pivotal to this research. This chapter also includes the list of questions compiled for the educator interviews and student survey as a point of reference.

Chapter 4. A Study of Transformative Fashion Education in Practice

This chapter is dedicated to analysing a selection of fashion studio projects wherein transformative fashion teaching has been practised in the delivery of education for sustainability. This analysis has been developed from a series of expert educator interviews and a limited student survey undertaken to investigate four international fashion programs, and the steps they have taken to incorporate sustainability into their curriculum. These fashion programs, and the fashion educators involved, have been recognized internationally for their efforts.

The first two sections of this chapter outlines key details about the study including an outline of the selection criteria employed in the initial stages of the research, course aims and administrative variances. In addition, context is provided by a review of existing literature combined with written observations and data gathered from the semi-structured interviews to introduce each project in detail.

The final section within this chapter presents perspectives on fashion education and teaching through a discussion informed by detailed recounts from the educator interview series. Throughout this chapter, data collected from the interviews is analysed to explore common issues fashion educators encounter delivering sustainable fashion curriculum within the structure of fashion education programs. These interviews additionally reinforce the connection between the application of transformative learning teaching strategies and existing innovative sustainable fashion teaching practices. This section ends with a discussion of future forms of fashion design practice and learning in greater depth.

Chapter 5. A Shared Narrative

Following on from the presentation of each of the selected studio projects in the previous chapter, this chapter is a thematic discussion of the findings presented under the following headings: The Student Learning Experience, Transformative Teaching in Sustainable Fashion, and A Mutual Learning Journey.

Chapter 6. A Reflexive Proposition

The final chapter of this work presents a summary of the main topics investigated throughout the course of the research. This chapter presents a discussion around the question why fashion needs transformative education, in summarizing the findings from the study together with a final summation of the literature on fashion education for sustainability, transformative learning and teaching practices.

The thesis concludes with a reflection on the role of transformative fashion teaching practice in the fashion education space and its wider implications for the future of the fashion industry. This proposition is presented through a series of recommendations intended to be used as points for reflection about how fashion educators could develop and engage with transformative fashion teaching practice.

2 **TRANSFORMATIVE FASHION EDUCATION**

2.1 Providing Context

The relationship between sustainability and fashion is a critical one, considering the impact the fashion industry has on the global workforce, environment and economy. This critical relationship, combined with the fashion industry's broad reaching impacts, has provided this project with its initial focus. The fashion industry encompasses the activities of various practitioners, of which fashion educators play a vital role. Through an analysis of the diverse positions that the industry is comprised of, this project seeks to highlight the change that educators specifically can affect in their students.

This chapter provides a survey of literature presented through key themes acting as the structural foundations for this project; sustainability theory provides a platform from which further discussion around the urgent need for more innovative and change-oriented fashion education practice is cultivated. The chapter commences with a discussion of the context within which this project lies: the problem with sustainability, its relationship with fashion education and how change can be engaged with at this level to support learning and teaching. Through combining personal experiences with evidentiary material as it is presented in the literature review, this chapter acts as a contextual review for the project. The experiences discussed within this chapter provide a personal context for the educator interviews and student surveys presented and analysed in the succeeding chapters (Chapter 3, 4 & 5), as they come from the perspective of a former student and now current educator. These observations will be used to frame the primary research, the types of questions that were posed, and the responses that were anticipated.

Succeeding the review of sustainability, fashion and the nature of change, a brief history of fashion design education is provided to anchor the perspective and case for re-evaluating contemporary fashion education. The chapter then moves to discuss the fashion educator's role within this space, and in particular the unique challenges they face in delivering fashion education for sustainability. This conversation transitions into a section dedicated to relevant literature on transformative learning theory, as well as a brief introduction to the established strategies for delivering this learning. This section introduces transformative learning as the theoretical framework that will be employed to examine how the courses selected for comparative analysis within this research are delivering sustainable fashion curricula in a higher education context, even if the relation to transformative learning theory has yet to be drawn by the practitioner.

This section of the chapter explores the application of the term 'transformative' within a sustainable fashion education context, developing into an exploration of the relationship between fashion education for sustainability and transformative pedagogy. This line of inquiry has resulted in the discovery, and characterization, of transformative fashion teaching practice.

What will be made clear through this chapter is understanding the importance of teaching practice in addressing issues of sustainability within fashion education. Additionally, through addressing how the becoming-sustainable of fashion practice can be engaged, encouraged and nurtured by the fashion educator, through the use of specific transformative strategies, a gap in current literature will be addressed.

2.2. Sustainability, Fashion Education and the Nature of Change

As resources are getting scarcer, we need to find ways of changing the current patterns of fashion consumption. This requires serious adjustments in textile production, the fashion system, the use phase, as well as in the education of designers (Riisberg et al. 2014, p. 2).

In order to give context to the topic of transformative fashion education for sustainability, a brief discussion of the main issues associated with sustainability in reference to the fashion industry will ensue. The theme of sustainability was used initially to frame a context for the intended trajectory of the research. Considering this, an initial examination of the issues of sustainability from a global vantage point developed into a re-evaluation of how fashion educators cultivate change, specifically in regard to how students perceive sustainable fashion practice. With the implicit integration of transformative learning theory and its associated teaching strategies into fashion education, sustainability comes to be taught through a more critically aware and socially conscious lens. Additionally, this reevaluation involved a review of fashion education from a historical context, the conceptual and practical nature of change and finally how change is conceived in design education.

2.2.1 The Problem of Sustainability

According to a report authored by Rockstrom et al. (2009), the planet's environment has experienced a period of stability, known as the Holocene, for the last 10,000 years. On some accounts, since the Industrial Revolution, a new era known as the Anthropocene has arisen, "in which human actions have become the main driver of global environmental change" (Rockstrom et al., 2009, p. 1). In order to return to the Holocene state, Rockstrom et al. propose a framework based on nine planetary boundaries, used to define the safe operating space for humanity with respect to the Earth's systems. They further indicate that three of these nine planetary boundaries have already been breached, specifically climate change, the rate of biodiversity loss and the rate of human interference in the nitrogen cycles, with others being approached at a rapid pace (Rockstrom et al., 2009; Tham & Fletcher, 2015). In order to uphold these remaining boundaries, it is necessary, and possible, for us to reflect on the initiatives and approaches we can enact in order to sustain a safe operating space for humanity. The fashion industry, like any industry, "is not impervious to the threats presented by the world's uncertain future" (Bennie et al, 2010, p. 1). However, for us to maintain relative climate stability and safeguard our planet from further degradation, "substantial reductions in the resource requirements of economic activities are necessary" (UNEP, 2011, p. 30).

2.2.2 Sustainability and Fashion

Andrew Morgan (2015) explores these threats by investigating the 'true cost' of fast fashion production, shedding light on the environmental, social, economic and future impacts of the industry's consumption and waste. In his film *The True Cost* Morgan appeals to the compassion of all consumers, global corporations and fashion industry members by highlighting the global implications of our current 'fast' attitude towards fashion consumption. Morgan discusses key issues with the fashion system prevalent in most sustainable fashion literature: the exploitation of human rights, the long and short-term health risks and social implications of low-price production, the pollution and magnitude of textile waste created

as a result of this production, and the economic effect this level of consumption has on the future. Goldsmith (2015) asserts that in response to learning about these issues, consumers do not want to “feel co-responsible for the indignities of low cost at any cost” (p. 161) mentalities toward consumption. The assertion highlights a developing demand in the consumer market for more sustainable alternatives to the current system, which indicates increasing opportunity for designers, and fashion educators, to develop new business models and creative practices.

Textile production contributes significantly to the world’s global waste problem, and fashion designers have a moral responsibility to be part of a solution. Those with substantial public profile may use such a platform to communicate directly, which is one relatively straightforward avenue through which designers can discuss the issues associated with passive consumption of fast fashion products. Psychological research on consumption confirms that increasing levels of material wealth do not lead to an increase in happiness, in fact those who have highly materialistic attitudes “report lower levels of mental and physical well-being” (Tim Kasser cited by Thorpe, 2010, p. 8). For this reason, fashion designers who are made aware of the detrimental impact of high consumption on not only the world’s natural resources but additionally on human welfare, might assume a sense of responsibility to communicate the unsustainable nature of this behaviour to their consumers.

Williams (2013), former chair of the Fashion Program at the Californian College of the Arts, notes that design education could profit from informing and equipping students with the tools to overcome the creative challenges posed by sustainability (Bang, 2016, Interview; Woodward, 2007). Furthermore, Williams declares sustainable design curricula to be a ‘smart investment’ for student learning, adding that, in her opinion, such education is “the future of our [fashion] industry” (Phelan, 2013, para. 7).

2.2.3 Fashion Education and the Opportunity for Change

Fashion education offers us an opportunity to question, experiment and propose viable, as well as radical, alternative ideas to “take us beyond what already exists”, as experts call for systemic change in how and what we teach and learn (Williams, 2016, p. 218). As this opportunity for questioning and testing presents itself to students once they embark upon their fashion education journey, so does a considerable obligation to develop the skills and knowledge needed to participate within an industry that is in the midst of transition to a model that prioritizes more sustainable fashion practices (Bang, 2016, Interview). Fashion companies today are seeking employees who not only hold competent applied design skills but also hold environmental knowledge (Richardson et al. 2005). This requires training to ensure that the student skill set not only reflects relevant current industry practices and demands, but also, as I will claim, prepares them for its imminent shift to adopt a model that prioritizes more ethical and educational strategies. Throughout this body of work, I will be demonstrating how the role of the fashion educator necessarily involves critical reflection on what constitutes student learning, such as developing an awareness of the unique opportunity to which practicing fashion designers are privy. In time, students will be allowed to create connections between the stories they tell through their own practice and the knowledge and attitudes of their potential customer.

Education plays a key role in mitigating the impacts of issues associated with sustainability through informing design students of their responsibility for the greater life cycle of the

garments they create. Carolyn Strauss, founder of slowLab, notes that “introducing new contexts for fashion design to students, such as the effects of an environmental calamity on a particular community, can enable shifts and re-attunements in fashion awareness, sensibilities and skillsets, from personal curiosity or career concerns towards self-preservation and community well-being” (Strauss, 2015, p. 54). From personal experience, working with fashion designers who have established routines, methods and industry connections can see temporary change result from their learning about sustainability issues in relation to fashion practice. For these designers, more often than not, the decision to overhaul the methods and practices they follow, requiring them to establish new contacts and skills, can present as challenging, costly and time consuming.

As Richardson et al. (2005) highlight, the challenge with sustainable design education lies with the means by which the industry could shift sustainable design thinking into mainstream design thinking. In a report titled ‘Fashioning Sustainability’, UK based non-profit organization Forum for the Future lists eight key issues that require urgent attention in the clothing supply chain to alleviate the negative impact that the fashion production cycle currently has on the planet. However, amongst these eight key issues what is absent is a discussion around how educating the designers of tomorrow enables them to be informed and equipped to find their footing when it comes to their eventual decisions as practitioners. In Williams’s opinion, the education space is perhaps the most important place in which possibility can be “guided and developed into the change that we need in the world” (Phelan, 2013, para. 6).

Much of the focus to date has been on the role of design in creating more sustainable products, but a potentially more powerful and transformational role for design is at the other end of the spectrum – in influencing consumption choices and lifestyle aspirations (Richardson, Irwin & Sherwin, 2005, p. 12).

Since the 1970s, design education has been experiencing gradual adjustments, shifting its structure from that of a technically focused art school system to one creating courses that closely mirror “traditional degrees” (James, 2007, p. 2). The common teaching methods and practices currently employed within fashion education include lecture, tutorial and studio formats. Students are presented with information by a lecturer or studio leader, and in the corresponding tutorial or studio class they are then encouraged to unpack this information using both theoretical and practical exercises. This approach to fashion design teaching is often aligned with studio-style pedagogy and is used to support the growth of its students through their engaging with critical reflection, guided exploration, collaborative practice-led design research and class discussion on topics and issues. Assessment tasks, similar to what Mackintosh discusses in regard to architectural pedagogy, are usually focused on gauging understanding of theory and content as well as skills that have been learnt (Mackintosh, 2014).

James Gustave Speth, an ex-US advisor on climate change, reflecting on environmental issues in an address to American evangelicals and environmentalists stated,

I used to think that top environmental problems were biodiversity loss, ecosystem collapse and climate change. I thought that thirty years of good science could address these problems. I was wrong. The top environmental problems are selfishness, greed and apathy, and to deal with these we need a cultural and spiritual transformation. And we scientists don’t know how to do that (Wilson, 2013, p. 35).

Whilst Speth refers to cultural and spiritual transformation, educational transformation is fundamental to this change. Engaging students in conversations about sustainability at the learning phase of their design journey has a greater chance of influencing their decisions about practice methods, at a time when they are forming their ideas and connecting these with their values and experiences; they are in an ideal environment to challenge their received skillset, learn new things and take on new ideas. Transformative education practices, in particular, are the means by which we can encourage a shift in perspective amongst our students, when it comes to informing their fashion practice behaviours. This research contends that fashion educators find themselves in a position of opportunity from which to encourage students to assume new ideas, challenge old assumptions and shift their perspective on fashion practice and consumption.

In their paper ‘Interacting Pedagogies: A Review and Framework for Sustainability Education’ (2019) Papenfuss et al. demonstrate that the contention of this research is emerging as an area of interest to the broader research community. They state that “more clarity is needed about pedagogical approaches” that seek to innovate along the themes consistent with the Sustainability Design Goals⁵ of transformation and emancipation, in order to encourage students to “become innovators that change existing structures and systems” (p. 1). Papenfuss et al. continue by stating that “institutions of higher learning are expected to play a pivotal role in a global shift toward sustainability” (Papenfuss et al., 2019. p.2).

See Chapter 4 A Study of Transformative Fashion Education in Practice for a more in-depth discussion on fashion education in practice.

2.2.4 The Nature of Change

The key notion of transformation discussed within this research draws upon literature on transformative learning theory, and its associated teaching strategies, as a theoretical framework through which to examine fashion education methodologies, employing multiple methods to explore a range of professional perspectives. A definition of the term ‘transformation’ relevant to this work has been established through an examination of the work of pioneering American environmental scientist, teacher, and writer Donella Meadows. Transformation, transformative learning and transformative practice are all key terms used throughout this research project, in reference to fashion practice and education. It should be noted that in fact the definition of transformation, in respect to this research, is in relation to what we perceive ‘normal fashion practice’ to be, and how we can contribute to changing it. In this chapter, the origins and evolution of fashion practice are explored and contrasted against more contemporary, and in some cases, change-oriented forms of practices. This shift in perspective from the familiar to the unfamiliar is where transformative practice lies.

Donella Meadows describes the idea of transformation as situated in the space of mastery over paradigms (Meadows, 1997), believing that transformation occurs when we experience a “shift in the way we view the world and its systems in order to correct our course” (Meadows, 2012, p. xi). This shift in perspective affords us the ability to move beyond set ideas or patterns of thought established over many years of cognitive development. In 1996 Meadows founded the Donella Meadows Institute in the United States, with the mission to bring economic, social and environmental systems “into closer harmony with the realities of a finite planet . . . [and the human race]” (Nina, 2016, para. 1), by engaging with systems

5. “The 2030 Agenda for Sustainable Development, adopted by all United Nations Member States in 2015, provides a shared blueprint for peace and prosperity for people and the planet, now and into the future. At its heart are the 17 Sustainable Development Goals (SDGs), which are an urgent call for action by all countries developed and developing in a global partnership. These goals were adopted at the UN Sustainable Development Summit in New York in September 2015” (para 1. United Nations, “Sustainable Development Goals”, www.un.org)

thinking, system dynamics and collaborative learning. This idea of collaborative learning is an important component of the educational approaches that underpin transformative learning experiences. Students are encouraged to collaborate with classmates as well as their community in order to ground their learning in a relevant, pre-existing environment (Singh, 2012). This helps students to associate real-life scenarios with their learning, and thus critically reflect upon and visualize the actual repercussions of their choices.

In addition to Meadows' work, transformative learning theorists Edward Taylor & Patricia Cranton (2012) argue that while a person's understanding of transformative learning may differ depending on their context or situation, the outcome is the same: "a deep shift in perspective" (p. 3). Consequently, this shift opens us up to "better-justified" perspectives (Mezirow, 1978). In contrast to Mezirow (2009), who describes the process of transformation in learning as "transforming existing ways of thinking and doing" (p.101), Meadows' definition alludes to a focus on the future rather than looking to the changing of past behaviours. This idea of correcting our course through the experience of a shift in perspective on the world and its systems corresponds with the basis for this research work and its focus on the ways in which educators are enabling a shift in student perspective through the use of transformative learning tools.

A theoretical discussion about transformation and its connection to fashion practice and education would not be complete without considering a recent interpretation of the work of Gilles Deleuze on the philosophy of becoming, a practice concerned with transformation and change (Smelik, 2016). Deleuze describes the process of becoming as involving repetitions with a difference. Smelik elaborates by explaining that through executing each of these repetitions with slight difference each time (gestures, thoughts, manners) one can "differ from what one was before" (p. 167) and thus creatively undergo a continuous process of creative transformation. This notion of becoming sees human identity as taking a 'fluid and flexible' form in life, a form that lends itself to adapting to new directions and thus a change in perspective. Through his interest in understanding not what an object means but what it does, in terms of the effects it has, Deleuze's philosophy can translate to fashion practice through a questioning of 'What does fashion do?' (Smelik, 2016) and 'How can we use knowledge of how it affects people to adapt to new future directions?'

In this chapter, in *Thinking Through Fashion* (Rocamora & Smelik, 2016), Smelik discusses how Deleuze's theory of transformation can be transposed to fashion, re-appropriating questions that explore ideas of dress, identity and the fashion system. Smelik, in discussing the notion of 'multiple becomings' and the transformation that involves moving beyond the 'fixed and confined self', examines Deleuze and Guattari's critique of the 'you' as an 'ego-centred, self-aggrandizing, nar-cissistic entity' and how the limits of this entity can be surpassed to include a greater and even all-encompassing context. Applying this idea to thinking about sustainable fashion theory, one can see how this shift in context from a narrow-minded focus allows for a more unified, collaborative and holistic approach to fashion practice to develop. Adopting this idea of 'multiple becomings' encourages, as Smelik notes, the stretching of boundaries in the development of a universal outlook, one that could be applied to sustainable fashion practice. Applying the same 'universally focused' outlook to fashion encourages practitioners to consider the communal implications of their actions, which as a result places emphasis on their current and future impact on the greater 'you'.

This perspective emphasises thinking about ‘what fashion does do’ in contrast with ‘what fashion can do’, reconsidering fashion not as a singular isolating practice but as a collective movement focused on growth through transformation.

Whilst Smelik does not explicitly link Deleuze’s theory with fashion education for sustainability, her appropriation of his work can be successfully adapted to the field. The key element of Deleuze’s philosophical exploration of transformation and metamorphosis that can be carried across is the idea of ‘becoming-world’ (Deleuze & Guattari, 1994). When applied within a fashion context, Smelik’s appropriation of Deleuze’s thinking on the ‘prevailing regime of effect today’ enables us to examine the ways that fashion designers experience “critical engagement with our times” or “a new orientation towards the future” (p. 180-181). The answer to Deleuze’s line of questioning may lie in engaging fashion designers of the future through the development and use of transformative fashion teaching practice in the present.

2.2.5 Design Education and Change

Today, dramatic transformation happens in global economies and societies. The consequent changes that characterize organizations and companies and the complexity of problems from a social and environmental point of view put education in the need for a transformation itself (Bertola, 2018. p.9)

It has been argued that transformative learning and its associated teaching strategies support opportunities for students to grow through critical reflection and collaboration, with an emphasis on participation, collective inquiry, and reflective learning (Mezirow, 2009; Taylor & Cranton, 2012). I will show that many of these strategies are already utilized by fashion educators in studio-based learning environments. Ordinarily, the studio-based learning environment involves a combination of theoretical, technical and hands-on learning to familiarize students with reflective methods, such as responding to presented information through discussion, writing, journal annotation or design. Collaborative practice can also feature in the studio learning space, as students are often introduced to design challenges to which they respond through working in groups. Whilst many of these methods may be common practice found within most fashion studio-based learning environments, their link to Transformative Learning Theory (TLT) and an understanding of the potential for applying this theoretical framework to fashion education, to increase student engagement with issues of sustainability in fashion, has not yet been established. In addition to a study of current fashion programs and their engagement with teaching strategies associated with TLT, this research has examined existing literature on TLT in the field of architectural education, to understand its implementation and how this could be adapted within fashion education. Influential within this area have been the works of researchers Lara Mackintosh (2014) and Amanda Woodward (2007), who both discuss the relationship between TLT and sustainability through the lens of architectural education. In addition, ‘Kahn at Penn: Transformative Teacher of Architecture’, written by James Williamson (2015), alongside Robert McCarter’s 2015 review, have aided in providing historical context to Mackintosh and Woodward’s work.

In her doctoral thesis, ‘Sustainability and Architectural Education: Transforming the Culture of Architectural Education in the United States’, Woodward (2007) presents a case study

of Ball State University's Architecture Program in order to examine the efforts to implement sustainability initiatives over a fifteen-year period. Woodward seeks to highlight the need for change in architectural education in order to adapt to the contemporary demands of entering students, who "increasingly expect that environmental and related social issues will be addressed within their education" (Woodward, 2007, p. 2). Woodward's study resulted in the identification of a link between the success of education programs generating sustainable behaviour with the application of teaching strategies (identified by Kasworm and Bowles, 2012) associated with TLT. Similarly, Mackintosh (2014), in her paper 'Just Doing It: the role of experiential learning and integrated curricula in architectural education', comments that the teaching of design in architecture incorporates many of the elements key to transformative learning, a point which can also be applied when talking about design in fashion.

The fashion design journal, a working folio used to document coursework, acts as a foundation for critical reflection through the process of design development and its accompanying written annotation. Alison James (2007) observes, through her research into fashion teaching within various programs at London College of Fashion, that many educators associate reflection with fashion design processes such as journaling, annotation, pattern drafting, draping fabric onto the stand, marking onto the fabric, etc. These stages of design practice, and the opinions held by many of James' (2007) interview participants, are congruent with Jarvis's (1987, 2001) distinction between non-reflective (remember and repeat) and reflective (plan, watch, and reflect on the experience) models for learning from experience. It could be concluded that these fashion design processes also employ both non-reflective and reflective learning in different ways.

There are various key learning environments that transformative learning theorists agree are conducive to fostering transformative experiences. In her paper 'Just Doing It...', Mackintosh (2014) identifies the four main contexts within which learning takes place: the built environment (the university), the natural environment (informal learning context), the social context of learning (learners), and the educational context for learning (curriculum, content, pedagogical approach). According to Mackintosh (2014, p. 1) these contexts for learning, coupled with the participating learner and the consequent interaction taking place within the system, have the ability to contribute to ongoing change. This perspective is also held by experiential learning theorists Kolb and Kolb (2005) who list 'interaction between the learner and the environment' as one of their six general propositions of experiential learning theory. Additionally, Mackintosh (2014) elaborates on the importance of the relationship between the learner and their environment, asserting that the individual learner has the ability to change their reality through their behaviour; a behaviour that is, according to Walden (as cited by Mackintosh, 2014, p. 1), "determined by their social and physical environment". TLT is interested in how the learner's environment can be utilized in order to create a setting that is conducive to shifting perspective and altering paradigms. As Mackintosh notes, this approach recognizes the learning experience as a complex system.

To advance the discussion of architectural education and its adoption of transformative teaching, a review of architect and educator Louis I. Kahn's work, is useful. Kahn, who endeavoured throughout his career in teaching to "articulate the mysteries of the design process" (McCarter, 2015, p. 239) for his students, and at a later stage for the field of architecture overall, was known for an unconventional educational philosophy influenced by the

Parisian academic architectural style of the École des Beaux-Arts. Kahn was known to bring his commissions into the university studio, and as a result his students were assigned to professional tasks and afforded opportunities to work on major projects (McCarter, 2015). This engagement with real life professional practice allowed students to anchor their learning in reality, presenting challenging scenarios for them to navigate within the studio facilitated by Kahn. This environment allowed students to see themselves as collaborators rather than students, working within a design team alongside their teacher. As a result, Kahn's teaching influence was significant on both his students and the "future course of architectural practice and education" (Williamson, 2015, p. iv).

Like many of the educators who took part in the interview series for this project, Kahn's initial experience as a teacher was acquired outside of academia. Rooted in his experience of architectural practice, Kahn's pedagogy was informed by the Socratic method of questioning and the Talmudic tradition of the parable and the paradox (Williamson, 2015). Engaging with these methods through his teaching encouraged students to prioritize the process of questioning as the essence of any assignment. Questioning through reflection and discussion are key elements embraced by transformative teachers, leading to an investigation of student attitudes and values in order to encourage personal evolution, strategies that Kahn also encouraged in his practice. As Williamson (2015) notes, Kahn was concerned with the role the architect plays in society from a moral perspective. Advocating for the importance of authenticity and moral values through a process of questioning, Kahn challenged many prevailing views within architecture, supporting a redefinition of the architect's role in society. This body of work, much as Kahn did through his own practice in many ways, advocates for a redefinition of the fashion educator's role in fashion pedagogy. Just as Kahn believed the architect should be considered an artist as well as a "professional solver of problems" (Williamson, 2015, p. 21), this research argues that the fashion designer be given the opportunity to consider the social responsibility connected with their role and to contemplate where and how they should apply their practice within the social domain.

2.3 The Evolving Forms of Fashion Design Education

2.3.1 A History of Fashion Design Education

Literature on the topic of fashion education exists in a number of forms. One is that of a broad discussion about the fashion education journey as a preparatory information guide for the potential fashion student, explaining the steps involved in fashion design practice (range planning, collection development, prototyping...) as well as descriptions of the possible role's students can expect to apply for. Another form is more theoretical in nature, discussing the role fashion education plays, for example, within the context of education for sustainability, often closely aligned with theories of design for sustainability and issues surrounding sustainability and fashion. Finally, fashion education may be discussed indirectly through literature relating to design education, wherein references to historical growth and the use of creative practical strategies may be considered within a more general conversation about design pedagogy. Furthermore, this section will be reviewing literature on fashion education as a studio-based pedagogy.

Alain Findeli's 2001 work, 'Rethinking Design Education for the 21st Century...', sits in the category of literature indirectly addressing fashion education through a broader discussion of historical and contemporary design education. Findeli examines the evolution of design education from that of applied to involved science⁶, unpacking the historical development of design theory to reveal that design thinking has roots in the nineteenth century design education models and, as he admits, "must be considered as outdated today" (2001, p 9). By presenting an argument regarding the means by which design education could transcend its nineteenth century limits, Findeli stresses consideration of anthropology and cosmology as frameworks from which to build a design curriculum. Through such consideration, design responsibility could be integrated into the curriculum in order to alter the systemic view of what to expect from a design project outcome, moving away from the assumption that it should be an artefact (e.g. garment) (Findeli, 2001). Shifting a student view of fashion practice from a product-driven to potentially action-based presents additional opportunities for creation, problem solving, collaboration, reflection and alteration, encouraging a departure from what may have acted as a constraint on the imaginative capacities of a student in the past. Expanding the expectation of student outcomes beyond making allows room for the discovery of the designer's preferred processes, values and responsibility, which students should be conscious of each time they engage in a design project (Findeli, 2001). A subject which Findeli feels especially strongly about is that "some kind of moral education must be included in the design curriculum, so that the moral consciousness of every student is increased... Our research tends to show that aesthetic and moral dilemmas or decisions are structurally congruent. Therefore, aesthetic education could contribute to moral literacy" (p. 14).

6. Findeli writes that, historically, design theory discipline embraced two paradigms, rooted in nineteenth century thinking, to explain the rationale of design thinking: applied art and applied science. Instead of applied science, Findeli proposes involved or embedded science as a manner to consider how scientific inquiry is carried into the field and practice (Findeli, 2001).

In a review of literature on significant moments in the history of fashion design studio pedagogy, it is important to glance back to 1840, to the foundation of the world's first documented fashion design school. There is not a lot of literature that exists on Alexis Lavigne, founder of what is now known as ESMOD, and his perspective on the practice of fashion education. The following information has been gathered from sources associated with or printed by ESMOD International fashion school, in addition to a small number of complementary fashion history re-sources (Ormen, 2011; Arbuckle & Sterlacci, 2008; Walter-Bonini, 2016). Guerre-Lavigne, currently known as the École supérieure des arts

et techniques de la mode (ESMOD), founded by Lavigne in 1840 in France (ESMOD, 2016; Amed, 2016; Arbuckle & Sterlacchi, 2008; Ormen, 2011), was the first documented school to offer a formal fashion education. Just over 100 years after its foundation, ESMOD opened its doors to international students in the 1990s, and today it is made up of 21 schools scattered over 14 countries, which, as noted on Business of Fashion’s ‘ESMOD Profile Page’⁷, creates opportunities for its students to engage in exchange programs not only within these 21 schools but also with other partnering institutions around the globe (Amed, 2016). However, whilst the school has experienced extensive change since its opening over 170 years ago, ESMOD, and in particular their International General Director Christine Walter-Bonini, attributes its key strength to expertise in innovation not diversity, providing curriculum that covers a “full range of the fashion industry’s demands, as it has been doing for over 170 years” (Walter-Bonini, 2016, para. 2).

7. ESMOD Profile Page, on the Business of Fashion: <https://www.businessof-fashion.com/organisations/esmod>

*The Origin of Working on the Stand*⁸

8. ‘Working on the stand’ refers to working on a dress-makers mannequin.

According to their publicity material, ESMOD was founded in the nineteenth Century when Alexis Lavigne, a renowned master tailor, witnessed change erupting in fashion stores around Paris. Simple, ready-to-wear, ‘common’ garments were available in store for purchase, which revolutionized Lavigne’s perspective on fashion practice. The introduction of industrialized production democratized access to fashion, something which had been formerly reserved for an elite few who could afford to enlist the services of a tailor or couturier. In addition to benefiting from newfound access, 1840s France was in the process of standardizing a system of measurement in order to apply Alphonse Bertillon’s anthropometric system across all disciplines (ESMOD,2016). This would, in turn, facilitate the mass production of clothing, further shaping the evolution of consumer experience, access and consumption. With his background specializing in handcrafted manufacturing, and as a means to reduce time within his design process, Lavigne used the ‘mechanical corset’, an adjustable undergarment which could be used to take a client’s measurements, along with paper ribbons marked with scissors to indicate measurements (ESMOD,2016). In step with the movement away from customization, Lavigne standardized these forms and offered a range of mannequins in various shapes and sizes (ESMOD, 2016).

The methods of design and production that grew from creating and using these time saving creations informed Lavigne’s teaching practice. The four fashion schools selected for comparative analysis within this research all employ teaching practices that work with designing on and for the stand, whilst also utilizing the time saving benefits of the measuring tape. This practice has become what fashion practitioners now consider to be a traditional and well-established approach to the fashion design process. Alexis Lavigne also became the first to publish a cutting method based on his technical approach to fashion design (ESMOD, 2016). Lavigne published this method not only in his native French language but also in German and English and consequently Lavigne’s technique became widely known. Lavigne’s unique method for tailoring prioritized starting with measuring the client’s body, using exact rather than approximate measurements. After just one fitting, according to ESMOD’s archival collection of Lavigne’s work (ESMOD, 2016), Lavigne would build a muslin mold of the body according to its measurements, and from this he would produce the final garments.

If we fast forward from the 1840s to a study of contemporary teaching methods, the first-year program at ESMOD employs similar procedures as those documented by Lavigne in

order to allow students to learn the notion of volume. Through creating bust castings, students are able to understand the transfer of measurements and shapes into two dimensional drawings, which helps establish a foundation for pattern making skills (ESMOD, 2016). Many fashion schools emphasize the teaching of this method of working from the stand, as a way to familiarize the student with the process of moving from working with paper to working on the body. At RMIT University in Australia, first year students have been instructed to construct their own half scale mannequins as a method for introducing this fashion practice to them, on a smaller, more manageable scale. These mannequins, incidentally, can help reduce waste and time by minimizing the design students' working area, which in turn introduces students to design methods, such as drape, in an economical and approachable way. Studio practice, as described by the Bachelor of Design (Honours) course overview (RMIT, 2019), involves unique and immersive learning experiences that challenge students to develop innovative solutions to design problems. This learning takes place within a "state-of-the-art studios and teaching facilities on industry-standard machines", engaging students with "case studies, problem-based learning and reflective techniques such as keeping blogs and design journals" (RMIT, 2019, para. 5).

Unlike today, the breadth of establishments offering a fashion education historically was not extensive. Many of the fashion designers who established themselves as practitioners prior to the mid 1990s received training in the arts, and not necessarily within the specific domain of fashion. Whilst the first fashion school may have been established by Lavigne in the early 1840s, many historically renowned fashion designers such as Mariano Fortuny (1871-1949), Elsa Schiaparelli (1890-1973), Jean Patou (1880-1936) and Charles Frederick Worth (1826-1895), received no formal training in fashion design; instead they employed existing skills learnt from similar fields such as millinery, painting or sculpture and applied this to the development of their fashion practice. It was only as the fashion labour market developed that the requirements of the recruitment processes tightened, resulting in the emergence of education and training as key conditions of access to the market (Divert, 2012).

These changes provide some insight into the development of students' pedagogical and career expectations from their education in fashion design, which in turn highlights the need for a transformation of those expectations. In his work on the market of fashion education in France, Divert (2012) discusses the growing popularity of fashion studies amongst young people and the widening gap that has been created between the demand for this education and the vacancies currently available in the industry. Divert (2012) uses Lavigne's history in fashion education as a model to illustrate the growth of interest and the corresponding change in the education system throughout the 1970s. As Divert notes, more public and private higher education institutions at this time progressively introduced teaching in the field of fashion studies and simultaneously expanded their reach from Paris to greater France, and since 1984, Internationally.

Contemporary Fashion Education

Fashion design has its foundation in the design and production of garments. Textbooks speak about silhouette, line, texture and rhythm, contrast, balance etc. respectively as central elements and principles of garment design. These notions refer to basic formal and expressional aspects of garments and clothing as such. But fashion design is not only a matter of expressing the functions of clothing or the form of garments, what we do, in some sense, is also to express people, i.e. to define the way in which they present themselves to us. Garment making becomes world making as we define wearing intentions (what we do dressing and wearing) through wearing expressions (what garment does dressing and expressing us) (Thornquist, 2017, para. 1).

As a practitioner, entering the realm of fashion education for the first time in 2014, I found there to be inadequate literary support available on fashion teaching practice. To enable a deeper understanding of my new professional identity, I needed insight into my responsibilities and strategies for how I could prepare students for the current demands of the industry whilst simultaneously readying them for potential future opportunities around sustainable fashion practice. Whilst information gained from literature on education for sustainable development and on sustainable fashion practices proved beneficial in planning for the initial stages of my professional transition into the classroom, it did not adequately satisfy my interest in understanding what fashion-education-specific strategies I could employ to facilitate meaningful learning experiences for my students. It was only through identifying the symbiotic relationship between the concept of change, the future of fashion practice and the issues presented by sustainable fashion researchers that I began to look into learning theory centred on challenging student perspectives through re-developing the role of the educator and evolving the student perspective in the process. This process was serendipitous, and completely inspired by my post-graduate research journey, without which I feel I may still have been borrowing techniques, inspiration and strategic teaching advice from creative domains other than fashion.

Whilst this research confirmed for me the presence of a shared global awareness and readiness for change in regard to fashion education and practice, design education as we understand and practice it today is a very recent development (Findeli, 2001; Lawson, 2005). Discussing architectural and product design education, Lawson (2005) in *How Designers Think...* notes that the history of design education illustrates a gradual move from the workplace-apprenticeship style learning environment to a formalised educational setting such as the studio or classroom. However, whilst it may be recent in educational terms, the model that most fashion institutions have used as a point of reference in creating their curriculum is a dated model in need of re-evaluation.

Closer examination of the historical origins of fashion education shows that many of the strategies used within the studio today have their roots in nineteenth century ideas. The very first pedagogical model for education was known as applied art, sometimes referred to as the industrial arts (Findeli, 2001). Findeli discusses the journey design education has taken from its origins in applied (or Industrial) art to involve scientific models, and there are a number of practitioners who are working towards developing their students' learning experience through stimulating strategies adopted from a variety of disciplines that exist outside of the fashion context.

In order to encourage debate around education and research and to question how knowledge and learning take place in differing contexts, Professor of Fashion Design at Sweden's University of Borås, Clemens Thornquist, has published a series of pictures of classrooms from around the world in order to lead the viewer to imagine how teaching is conducted, what its purpose in these settings could be, and how this impacts the students in both the short and long term. In this way Thornquist allows us to envision the learning journey, without providing us with explicit direction and with only the slightest suggestion of that journey captured in the images. This documentation of the contemporary learning environment helps and empowers educators to provide their own interpretation of what happens in these spaces. As Thornquist notes, "it is a strength housing artistic activity and thereby enabling the mediation of perspectives to societal issues and phenomena that in different ways capture opportunities as well as challenges" (Thornquist, 2018, p. 7).

Just as Thornquist captures the learning environment in its varying forms in order to generate ideas and conversation regarding the different contexts that design learning can inhabit, Salama et al. (2007) prompt discussion around the advantages and disadvantages of teaching techniques associated with studio style pedagogy. They propose a formative conceptual framework for models of teaching strategies in fashion design courses, a framework conceived through research studying teaching strategies employed at selected public and private institutions in Malaysia. This research, whilst presenting a model for development that focuses specifically on cultivating the skills fit for industry, does not identify how it aims to enhance student learning experiences and skills acquisition.

The Educator

A review of the works of Steven Faerm⁹ (2012, 2014, 2020) on the evolution of fashion design education and his discussion of how to build best practice reveals that, to ensure productive student interaction and in turn an understanding of the critical issues of what sustainable fashion practices are and how they might be employed as a design framework, fashion pedagogy must adopt a broader view of how the larger fashion system is perceived.

The field of art and design education is preparing for this new landscape by rethinking the role future designers will play (Faerm, 2012 citing Wax, 2010). Academia has begun to question how it can prepare students. What new skill sets will be needed for the shifting professional landscape? How can our programs and graduates prepare for a future that is so highly unpredictable? (Faerm, 2012, p. 212)

There are schools of thought who believe that due to the different skills required to design clothing and teach students, all fashion educators should gain the latter skills before being considered qualified to teach at the tertiary level (Faerm, 2012, 2014). However, both this research and my experience shows that the fashion education system is populated with practitioners operating within the teaching space who do not identify as educators, aligning instead with their practice (fashion designer, fashion researcher, etc). The practitioners who took part in the interview series, with little formal education training, are working to pioneer strategies for teaching students about critical issues surrounding the future of fashion practice and are experiencing constructive results doing so.

9. Steven Faerm is the BFA Director of Fashion Design at Parsons, The New School for Design. Faerm began teaching in 1998 while working for Marc Jacobs, Donna Karen, Kenneth Richard. He has been recognised for his teaching by winning 'The University Distinguished Teaching Award' and The School 'Teaching Excellence Award'. Steven has created college programs and courses for Parsons and other leading international institutions (Faerm, 2020, p. 159).

The Importance of the Studio

Literature on design education and its evolution from the Beaux Arts to the Bauhaus model describes how a student's prior learning experience, in conjunction with skills acquired through studio style learning, leads to the creation of form (Habraken, 2007). The range of what is taught within the studio environment, however, is limited by the teacher's experience, inclinations and knowledge of fashion practice. In considering Habraken's argument, the point can be made, for the purpose of this research, that whilst the student has the ability to question and challenge the educator within the studio, the brief and direction of the learning journey is curated by the educator and will be in line with their preferred pedagogy. The educator within the studio pedagogical setting is the agent through which change of perspective can be instigated; the educator in this context has the ability to create an environment conducive to transforming a students' understanding of their role and behaviours as a fashion practitioner.

In *Design Studio Pedagogy: Horizons for the Future*, Habraken (2007) discusses the strengths and weaknesses of studio pedagogy within architectural education. According to Habraken, from the perspective of a student and educator, the studio demands a fixed outcome, "completed by a single student who is encouraged to act unrelated to what others do" (p. 14); this insight can be readily adapted from architecture when examining studio-style pedagogy in fashion. Regarding learning within the fashion studio, its development could likewise incorporate the redistribution of design responsibility, the examination of values, and embrace change in the participants' attitudes so as to expect this from their studio learning experience.

Currently, the studio is a place for students to experiment with practical knowledge they have developed over the course of their degree. This experience is led by the educator to apply new knowledge and techniques to create, for the most part, outcomes familiar to traditional fashion practice; a single garment, a range of garments forming a micro collection, a collection, or a body of sample garments. Customarily, undergraduate fashion design students are encouraged to use the final outcome of their studio learning as a means to express the process of research and development that has been undertaken to conceive and create their garment. Often missing from this process, from my own experience and observations teaching in a studio environment, is encouragement for students to align reflection on their final outcomes and the preceding conceptual development, with their own values and personal experiences, alongside a broader reflection on the significance and value of fashion in the future.

Educators can incorporate opportunities for students to address their own beliefs and values at various points through the course; the studio brief can be created to outline the intentions for the course and the outcomes be used to convey the importance of these design intentions. Educators can also embrace class discussion as a time to facilitate students' critical, personal reflection, to unpack the importance and impact that uncritically accepted values can have on student engagement and practice. Incorporating these conversations into class discussion as well as through the studio brief encourages students to engage both a personal and a professional understanding of how their fashion practice can evolve to become an extension of as well as a vehicle for their own commentary on the social, cultural, political, environmental or economic issues they feel passionately about.

Whilst renowned fashion designers of the twentieth century may not have received formal training in design, Jenkyn-Jones (2011) observes that very few fashion designers today are able to succeed in such a demanding industry without preparation. In her book *Fashion Design*, aimed at promising fashion design students, Jenkyn-Jones (2011) provides insight into the fashion industry system from a traditional perspective as well as the potential roles available to people seeking to work within the industry. Jenkyn-Jones asserts that a degree in fashion design can be beneficial for those looking to secure a position in such a competitive industry, arguing that through higher education students are equipped with industry required skills, training and contacts which make them a valuable asset for future employers.

Students can learn technical skills. They can be shown how to apply fabric on the stand and taught principles for how to best execute an idea. They can be supported to develop confidence in sharing their ideas, even challenging their peers and trainers. They can acquire methods for constructing new perspectives as a result of these collaborations. As educators, we can even play a role in the students' realisation that it could be fit to take responsibility for the implications of their practice. As Jane Rapley, former Head of College at Central Saint Martins, observes in an interview for *Another Magazine*, fashion can be taught, technical and transferable skills can be enhanced and imagination can be embraced, however "... you can't in the end teach them how to make decisions about what they choose for themselves. And that's where the talent lies, the talent of picking, out of what they see, something that they can make into their own recipe" (para. 9). With this observation Rapley indirectly highlights the importance of exposing students to diverse conversations, professionals and their practices, environments and methods for practicing in order to provide them with a broader understanding of what their contribution could become and of the industry to which they will be contributing. Considering that students leave the classroom taking with them their new-found skills and knowledge, the time educators have with students is crucial in providing them with the means to be able to make decisions for themselves.

Whilst these various approaches make important contributions to our understanding of fashion education, a sustained analysis and discussion of the fashion educator's role and a sense of their responsibility has yet to be presented. Without addressing these factors and their impact on the learner's experience, an idea of how to adequately utilise the learning space to enact perspective change cannot yet be fully appreciated.

2.4 Fashion Education, The Fashion Educator and The Future

2.4.1 Fashion Education's Role in Designing for Change

Tertiary fashion education institutes were established to provide emerging fashion practitioners with the tools and skills needed to prepare them for a career within the fashion industry. Whilst these tools and skills have evolved over time alongside the “profound mutations in the industry”, they have not necessarily developed beyond the traditional model for fashion practice and production (Ormen, 2011, p. 7). The fashion education space needs to lead the changes brought about through the evolution of alternative methods and processes, rather than respond to them. However, fashion education has not experienced the growth required to encourage new learning and teaching strategies to emerge, strategies that push outcomes beyond garment or collection-based ideas. Alternative modes of fashion practice, outcomes geared towards revisiting the structure of fashion production systems, promise to reinvigorate and empower students to carve out new roles for themselves, roles that are unique to their specific set of values and desires for contribution.

Alain Findeli (2001) argues that design educators still operate with an understanding of the profession that has not grown since its conception in the nineteenth century, concluding that this generally “safe, quiet and serene” landscape, is in need of renewal (p. 5). Developing Findeli's perspective, there has been a focus within fashion education on the immediately translatable value of the skills developed during a student's degree so as to increase the likelihood of employment post education. Thus, there has been a tendency to use employment rates to act as a promotional tool to increase student intake and determine the style of tuition taught to students. This system, which emphasises student industry placement as its ultimate goal (as a means to then guarantee further demand), is faced with the pressure for change, and as Findeli (2001) alludes, in order for students to maintain their relevance upon exiting educational programs, they too need to prepare for shifts in demand and equip themselves with tools applicable for the future of fashion practice.

The practice of fashion education has evidently taken its cues from systems and structures adopted by other creative disciplines, especially architectural education. In my own practice, when seeking inspiration for studio workshop ideas, or even strategies for teaching, I have often repurposed papers written about architectural education and translated the content over to the field of fashion. This inspiration may have been misguided, as Salama et al. (2007) note that from an academic perspective architecture “was always (and still is) regarded essentially as a fine art in which principles of a formal composition stemming from classical traditions are considered to be of greatest importance” (p. 4). However, according to Findeli (2001), current design education generally is based on an antiquated idea of creative arts training, a model which no longer sufficiently prepares students for the broader social responsibility they assume as design practitioners.

As global environmental temperature patterns change, so does our attitude toward consumption and creation. The Business of Fashion's Global Fashion School Ranking system (Amed 2015, 2017) included ‘environment / sustainability course satisfaction’ as an area of assessment in the teaching component of their ranking methodology. This indicates that fashion institutes are being assessed on their ability to include teaching on sustainability within their fashion curriculum, demonstrating that the demand for student learning about

environmental issues, led by public demand through fashion media and echoed by students, is coming to be seen as an essential component of fashion education. On a global scale, perspectives are shifting and there is evidence that fashion industry members, alongside the general public, are realising the finite nature of the world's resources, and our learning systems should be adopting methods capable of responding to these shifts (Salama et al. 2007). The documented environmental and social impact of the fashion industry, through its pre and post-consumer waste output, coupled with the global uncovering of unsustainable and unethical working practices within garment production systems, indicates that the current system for producing fashion, as it stands, is no longer viable (Kozlowski, Bardecki & Searcy, 2012; Rissanen, 2013; Fletcher, 2008; Tham et al., 2015, Niinimäki, 2013). We must be conscious of the impact our chosen methods of practice have on the resources available to us; as the Freshwater Manager for the WWF, Christine Colvin notes, we are in a time now where the patterns of the past are no longer an accurate guide to the future (Watts, 2018).¹⁰ The textile industry uses more water throughout all its processes than any other industry aside from agriculture (Niinimäki, 2013; Chen & Burns, 2006).

10. Christine Colvin's reaction to the news of South Africa's one-in-384-year drought.

Perhaps it is an indication of the time in which we live today, that we have the luxury to consider more broadly both the implications and possibilities aligned with our choices and practices and, should we decide to, we can take action and innovate through a process of collaboration, research, trial and error. The technological advancements that have been made available to us today through tablets, smartphones and computers etc., provide practitioners and the general public alike with a certain level of accessibility never experienced before. This new level of connectivity facilitates direct communication between makers, manufacturers, suppliers, designers and creative teams internationally, which simultaneously proves to be beneficial and detrimental to the sustainability of fashion design practice. With greater connectivity between makers and designers, thanks to logistical and technological developments, comes the ability to minimise lead times and allow designers access to international working standards which in addition bring production costs down. From this perspective, the advancements that have allowed fashion production systems to grow faster, and at a cheaper rate, through employing offshore manufacturers have not necessarily taken into account the social and environmental issues impacted through this rapid growth.

Kirsi Niinimäki, Associate Professor in Fashion Research at Aalto University, has noted that approximately 95% of sold garments in Finland, for example, are imported and states that this figure is the same for Western countries in general. As an estimate, import averages of sold garments range between 90-95% (Niinimäki, 2013, p. 14). Without the safeguarding of the world's natural resources, waste impact and pollution, as well as protecting workers rights, unsustainable and harmful practices have been allowed to flourish.

11. "Danish VIGGA.us is the founder of an award-winning business model for a circular economy in the textile industry. VIGGA™ is a maternity and kids wear brand. The VIGGA™ product-service-system enables parents to lease organic maternity and childrenswear. VIGGA™ saves time, money and resources" (Vigga, 2014). www.vigga.us

However, from an alternative perspective, those fashion practitioners who have been able to capitalise on advancements, through monetising developing social media platforms and turning e-tail businesses into profitable enterprises, are succeeding by embracing innovation in communication. These businesses enjoy greater connection and ability to communicate directly with their customers through these platforms. There are even viable examples of new, alternative, business models evolving as a direct result of these emergent platforms. Businesses such as Danish company Vigga (rebranded as Circos in 2019), which operates on a circular subscription model for childrenswear, is an example of this point. Vigga utilises their website¹¹ as a platform to share knowledge and promote their subscription-based

12. “Bruno Pieters has made the conscious decision to completely reorient his label, Honest by, around a new model that puts transparency and traceability at the very core of his ethically-sourced, organic luxury fashion brand” (BOF, 2019).www.honestby.com (<https://www.facebook.com/honestby/>)

company, creating a community of like-minded people who are interested in the reuse and repair of clothing. Similarly, Belgian designer Bruno Pieters uses his website platform¹² to promote his transparent fashion company, inviting the public to educate themselves about the making processes of each garment for sale online. These are just two examples of businesses who have benefitted from advancements in connectivity through the use of media platforms, and this is becoming a common story for new fashion brands operating in the spaces opened up by this new paradigm.

Design Responsibility

If Cosette Armstrong’s observation is true, and “consumption of fashion goods is now recreational rather than needs based” (Armstrong, 2013, p. 103), then designers of those fashion goods should be employing methods to strengthen the changing consumer relationship with garments. Fashion educators have the opportunity to present emerging designers with the tools to engage in social and cultural dialogue with consumers, to influence the recreational values now determining the purchase of fashion goods.

In order to sustain the fashion industry and its diverse group of global stakeholders (makers, suppliers, buyers, etc), future practitioners need to develop their existing awareness of the impact of their practice, to take more responsibility for the practices they choose to adopt. This sense of responsibility is imparted through a moral education, as Findeli (2001) puts it, in order to develop the connection between personal values and personal design practice.

Design responsibility means that designers always should be conscious of the fact that, each time they engage themselves in a design project, they somehow recreate the world (Findeli, 2001, p. 14).

13. Some examples of these luxury companies embracing change are: Stella McCartney, antifur and leather activist; Vivienne Westwood, green energy promotion; Gucci, 100% traceable handbag, biodegradable sandals.

Transformative learning theory prioritises the promotion of consciousness and interconnectedness of values and practice throughout the learning journey. Concentrating on educating with consideration for these two elements allows for the creation of an environment to facilitate discussion around what constitutes an ethical perspective, and how this can be embedded in individual fashion practices. The fashion industry is currently experiencing a paradigm shift, and whether or not it is discussed openly, there is some evidence of larger scale ‘luxury’ houses responding to consumer demand for greater transparency and acknowledgement of their responsibility within the garment supply chain.¹³

Context: Current Fashion Climate

In her 2008 work, *Thinking in Systems: A Primer*, Donella Meadows explores the conditions and precipitating factors for transformation, offering different ways of thinking about everyday problems found across business, society and nature through the analysis and clarification of ideas such as system functionality and leverage points for change. While these ideas are not directly linked to an analysis of the fashion system, they can be used to help us understand the current system and why it may be under strain. Meadows states that “any force applied to [a] system has consequences” (Sisodia, 2009, para.1), a principle that can be applied in order to understand the forces fast fashion consumption and production has applied to the current fashion system (Meadows, 2012). Meadows continues, “a well-designed system can absorb these forces and still maintain system functionality, a poorly designed system cannot absorb external forces, causing the system to collapse” (Meadows cited by Sisodia, 2009, para.1).

In this case it is not a question of design but rather the immense pressure of internal (production) and external (consumer demand) forces that have strained the resources supporting this system. Fashion houses such as Burberry have responded to consumer pressure to make their collections immediately buy-able, in 2016 trialling the 'click-to-buy' live-stream runway model along with major fast fashion company Topshop (Press, 2016). Designers Tom Ford, Michael Kors and Tommy Hilfiger are leading conversations on whether or not the industry should adopt the 'see now, buy now' model, and whether fashion presentations should be solely consumer-focused events (Press, 2016). These designers announced in February 2016 that they would be appealing to the wants of their consumers by making their luxury items immediately available for purchase off the runway. However, there have been unfavourable reactions to these industry responses to appease consumer demand. In an interview for Buro247, Belgian designers Dries Van Noten and Eugene Rabkin discussed the rise of fast fashion and its power to encourage irresponsible consumption (Rabkin, 2016). Van Noten believes that luxury fashion has capitalised on this consumer mindset, with buyers purchasing out of extravagant desire to have products of any kind, most of the time settling for 'affordable' luxuries such as perfumes, cosmetics or accessories in order to satisfy this insatiable desire to consume. In response to the fashion industry's current climate, Van Noten has chosen to concentrate on developing 'the stories' behind his collections. Van Noten believes that by focusing on textile development and working closely with craftspeople in India, he is remaining true to his skills, and resisting producing for the sake of more product (Rabkin, 2016).

In 2016 the Italian Fashion Chamber's president Carlo Capasa formally rejected the 'see now, buy now' business model, stating, "the difference between creating a desire and satisfying a need is the difference between slow fashion and fast fashion" (Abnett, 2016, para. 79). The 'see now, buy now' model eliminates the traditional time period fashion companies have had between the presentation of their collection and its arrival in store. Without this, Capasa remarks, people will not have the time to understand the message, 'the stories', behind the collections, "because if a creator is a true creative, he is proposing something that doesn't really exist" (Abnett, 2016, para. 80) and therefore, a concept that takes time to digest.

Belgian designer and creative director Bruno Pieters left his position at major fashion company Hugo Boss aiming to help generate change within the fashion industry. Through his own fashion company, Honest by., Pieters has sought to pioneer the world's first 100% transparent fashion business model (Borromeo, 2013). Each component of the life cycle of every garment sold through Honest by.'s online store is traceable, allowing consumers to understand the supply cost, manufacturing costs, production costs and business costs of the item they are purchasing. Pieters comments in an interview with The Wild Magazine:

I was missing something that was made in a sustainable way that was organic and ethical. There was nothing out there that I would wear that was made in a way that I could ensure corresponded to my beliefs and intuition. There was nothing out there that was transparent. If you want to shop transparently you need to know everything about the product (Barr, 2016, interview, para. 2).

This call for a shift in the current fashion climate is raised not solely amongst fashion designers. Educators and researchers alike are publishing works reinforcing demand for

transformation and change within current fashion practices in order to accommodate and sustain a future industry. In his 2010 paper, 'Thematizing Change: Creativity, Dynamic Practices and Sustainability', Robinson discusses the need to shift traditional representations of fashion "towards new directions and possibilities," (Robinson, 2010, p.10) a move that seeks to embrace a new understanding of fashion creativity beyond garment production; in essence a transformation of fashion practice, a view shared by Fletcher (2008) and Hethorn & Ulasewicz (2008). They argue that the present function of fashion design prioritises garment production, the selling and marketing of commodities, which in their opinion excludes the possibility for change-oriented forms of fashion practice and design (Fletcher, 2008; Hethorn & Ulasewicz, 2008).

This view of the state of the current fashion system highlights the importance of fashion education institutions in establishing the framework for change-oriented forms of fashion practice to evolve, which is a sentiment expressed by the London College of Fashion's ongoing educational collaboration with the Centre for Sustainable Fashion. On her website, London College of Fashion's former Head of School, Frances Corner details the collaborative way LCF and CSF work with businesses to prioritise and influence change in the fashion industry:

Changing what we teach and how we learn is one of the greatest contributions an educational establishment can make. Although we want to change outlooks on education here at LCF, making sustainability a key part of the curriculum, we also want to influence change in the industry. Our Centre for Sustainable Fashion aims to not only set new agendas in government by driving legislative change, but also work with businesses, small and large, to guide sustainability strategy (Corner, 2015, para. 1).

2.4.2 The Fashion Educator and The Challenges of Fashion Education for Sustainability

In dealing with the complex problems we face today, such as industry waste management, unethical working conditions and habits of over-consumption, alternative conceptions of design and education are becoming recognised as necessary changes to conventional practices (Burns et al., 2006). This section of the chapter focuses on the connection between future-focused fashion practices, fashion education and the emerging designer. In order to support this multifaceted discussion, a review of existing literature combined with primary research into the role of the tertiary fashion educator is presented.

In their book *Fashion and Sustainability: Design for Change*, Kate Fletcher and Lynda Grose (2012) address the way transforming the products and practices of the fashion system can work towards creating more sustainable, viable methods for fashion practitioners to adopt. Fletcher and Grose touch on the idea of the 'role' of the designer as a major opportunity for transforming fashion design practice. This notion of the role of the designer is something that will be the focus of the educator interview series.

In particular, Fletcher and Grose refer to the role of the facilitator as key to transforming fashion design practice. Through a process of comparative analysis detailed in later chapters, this research aims to understand what this role might mean in regard to the

responsibility and identity of the educator. The research seeks to establish whether there are commonalities of approach followed by the educators working for the selected fashion programs, who work to educate their students about the sustainability issues associated with the fashion industry and its processes.

A review of the current fashion climate indicates increasing opportunity for designers and fashion educators to develop new, alternative, business models and creative practices. Amy Williams (2013), former chair of the Fashion Program at the Californian College of the Arts, notes that education could profit from informing and equipping students with the means to overcome the creative challenges posed by the demand for alternative sustainable practices. In declaring sustainable design curricula to be a 'smart investment' for student learning (Phelan, 2013), Amy Williams highlights the responsibility of fashion education to equip future designers with innovative tools, through shifting their perspectives of fashion systems. Dilys Williams reiterates this notion of responsibility, stating that "[as] educators [we] have a duty of care to ensure that what is being taught and learnt is mindful of the wider current context of our lives" (Williams, 2016, Interview).

Stephen Sterling, in his book *Sustainable Education: Re-visioning Learning and Change*, contends that progress "towards a more sustainable future relies on learning, yet most education and learning takes no account of sustainability" (Sterling, 2001, p. 100). While the number of significant publications on sustainability in fashion¹⁴ and sustainable design education has grown substantially in the last fifteen years, there is little sustained research to be found on transformative teaching practices geared toward creating an environment that enables student designers to reflect critically on the current fashion system and to identify and create sustainable positions for themselves in the future. Sterling (2001) goes on to argue that while progress toward education for sustainable development is important, these progressions are "not sufficient in themselves to reorient and transform education as a whole" (Parker & Dickson, 2009, p. 212). Sterling's perspective on learning theory and its relationship with sustainable education can be applied to fashion teaching practice.

According to Otago Polytechnic's Head of School Caroline Terpstra and Senior Lecturer Tracy Kennedy in their paper 'A Stitch in Time Saves Nine: Identifying Pedagogies for Teaching Sustainability Issues to Fashion Students', one area that is insufficiently understood is "how students become informed about sustainability issues and interpret and apply this knowledge to a fashion context" (Terpstra & Kennedy, 2013, p. 127). As educators, Terpstra and Kennedy (2013) emphasise the importance of understanding what can "influence . . . and motivate" (p. 127) a student in order to encourage constructive fashion responses to their learning experience, and to improve their understanding of the industry they will be entering. Collaborative problem-solving with existing fashion companies is one transformative teaching method utilized at a tertiary level to engage students in the realities of industry practice. Susskind (2013) notes that industry partnerships are being adopted by many institutions of higher learning to allow undergraduate and graduate students to engage in "the world at large", reflecting an emphasis on "learning by doing" and "learning about the world" (Susskind, 2013, p. 235). This approach is reflected in the collaborative project London College of Fashion launched with their Centre for Sustainable Fashion in partnership with Nike to develop the *Nike Materials Sustainability Index*. Nina Stevenson, CSF's Education for Sustainability Leader, explains, "co-creation and collaboration are key to our work as we believe this to be one of the important defining features to sustainable development" (Stevenson, 2015, p. 1).

14. BLACK, S. 2013. *The Sustainable Fashion Handbook*, UK, Thames & Hudson.

SIEGLE, L. 2011. *To Die for: Is Fashion Wearing out the World?* UK, Fourth Estate.

GROSE, K. F. A. L. 2012. *Fashion and Sustainability: Design for Change*, UK, Laurence King Publishing.

FLETCHER, K. 2013. *Sustainable Fashion and Textiles: Design Journeys* (2nd Edition), Routledge.

MINNEY, S. 2012. *Naked Fashion: The New Sustainable Fashion Revolution*, New Internationalis.

2.4.3 Existing Alternative Fashion Design Practices (Transformative)

As design educators and researchers, we have identified a need to develop and introduce tools and techniques that can support future fashion and textile designers in embracing environmental challenges through user engagement. We assume that by employing a participatory methodology to the field of fashion and textiles, alternative transformational strategies furthering the design of products and services for a more sustainable future may have a better chance of emerging (Riisberg et al. 2014, p. 2).

Whilst not as globally publicized as the more traditional business models, there is an evolving variety of progressive and innovative fashion business practices becoming known to consumers as a result of the accessibility and connectivity that social media provides. These alternative fashion business practices serve as examples of how to develop the current approach to consuming fashion, the ‘see now- buy now’ model, into a more sustainable and ethical one.

In their paper, ‘Transformational Strategies...’, Bagnall and Collier (2014) question how the transformative nature of clothing practices can offer consumers new modes of experience and a more sustainable relationship with the environment. The conference and subsequent publication in which this paper appears, *Shapeshifting: A Conference on Transformative Paradigms of Fashion and Textile Design*, present research exploring “transformative paradigms in fashion and textile design through four thematic frameworks; Ambiguous & Automated Forms; Surface & Structural Transformations; The Fashion System & The Ephemeral; and Transformational Strategies” (AUT, 2015, para. 1). Each of these frameworks addresses a variety of alternative perspectives on methods for creating fashion design. Papers cover diverse innovative propositions for how fashion practices can be shifted to utilize transformative strategies, including by incorporating new textile technologies, experimenting with new fashion ideation processes such as using pattern as a method for generating design, understanding garment reuse and repair in order to re-engage the wearer, practicing zero waste design principles, and unpacking how designers can employ social media as a tool for co-creation.

As just noted, there is a variety of alternative methods for practicing fashion that have emerged in response to the broader conversation about the sustainability of the current system. According to Bannon and Ehn (2012), some of these alternatives (for example participatory design) can be linked to the 1980s UTOPIA project in which computer scientists, social scientists, as well as industrial and graphic designers worked together to create new ways of ‘design by doing’ and ‘design by playing’, including in this process a consideration for the user experience of the designed outcome.

Listed below are a number of these alternative strategies (and key theorists) discussed in short detail, in order to provide context around the form that change-oriented methods for practice can take. These modes of practice focus on promoting self-consciously responsible design, and in some cases advocate for an ‘active’ outcome in place of a ‘made’ artefact.

Slow Design¹⁵ (AF Luke & C Strauss)

One of the most formative sources of inspiration for this restructuring is the natural world and its systems and processes. Speed, including fast speed, is a key feature of natural systems (Fletcher & Grose, 2012, p. 140).

Slow design, as the name suggests, addresses the local implications of design practice by considering how the making process can be in a closer relationship with its environment and serve the people that occupy that space. Slow Design derived from the Slow Movement, which began with the notion of Slow Food, a concept established in response to Fast Food. Slow Design, a term first coined by Alastair Fuad-Luke in his paper ‘Slow Design, a paradigm for living sustainably?’ (2002), prioritizes holistic and democratic practices.

Slow design practices are built on a system that values small-scale production, traditional craft techniques, sourcing materials locally, working to challenge the value of rapid growth through providing an alternative to mass-produced items (Fletcher & Grose, 2012). The *Slow Design Principles*¹⁶, published by Carolyn Strauss and Alastair Fuad-Luke (2008), acts as an evaluative tool, proposing six principles (Reveal, Expand, Reflect, Engage, Participate and Evolve) for designers to “interrogate, evaluate and reflect on their design ideas, processes and outcomes using quantitative, qualitative and intuitive means of assessment” (p. 1). These principles, along with the movement itself, aim to shift design toward sustainability.

Emotionally Durable Design (J Chapman)

Emotionally Durable Design is a term for design that focuses on creating objects that have an ability to connect on an emotional level with their user. The idea is founded on the premise that once a user has created an emotional bond with a product, it will increase the longevity of the relationship between user and product and thus the life of the object, presenting a counterpoint to the values of our throw-away society (Chapman, 2015). “The theory of emotionally durable design continues to propel the sustainable design field beyond its established focus on energy and materials, toward a deeper engagement with the psychosocial phenomena that shape patterns of consumption and waste” (Chapman, 2015, p. xiii).

Co-Design / Participatory Design (L Bannon & P Ehn)

Participatory design, as the title suggests, explores methods for how stakeholders (users, developers and planners) can work in cooperation to make or adjust systems, technologies and artefacts in order to better serve the end user (Bannon & Ehn, 2012). Participatory design democratizes the design process, shifting the emphasis away from the producer’s control to focus on those who will use the product (Fletcher, 2008). The designer may still be a catalyst for development, however they work to engage or involve the user, on the principle that their participation creates a better-quality outcome.

Niinimaki and Koskinen (2011) believe that in order to improve the sustainable qualities of a garment, fashion designers must consider how to engage users to foster the relationship between product and user. This aim of integrating user experience in the process of creation is a progressive method for including both participation and contemplative practice in

15. The following fashion practices identify with the Slow Design movement: <http://www.moniquevanheist.com> <https://alabamachanin.com/> <https://www.slowandsteady-winstherace.com/> <https://slowtextiles.org/>

16. The Slow Design Principles: A new interrogative and reflexive tool for design research and practice

the design process and shifting the focus from the designer's conception of the product to ways in which the users' involvement with a garment can influence its conception.

Service Design (Ezio Manzini)

Ezio Manzini (1997) has long declared that sustainability is a societal journey, brought about by acquiring new awareness and perceptions. Guy Julier (2008) makes a case that design activism builds on what already exists. In keeping with this thinking, service design research projects have been developed with direct participation from members of the public (Whitty, 2014).

Service design has evolved from user-centred design, as a way of working with people in order to improve the outcome of design. This mode of design is an example of the designer identifying where they can usefully intervene within the system in order to enhance the user experience. Service design is about making services more accessible and simpler for the user. "While a service may seem intangible in itself, it will incorporate a number of 'touchpoints', all of which involve conventional tangible design outcomes. Service design therefore includes the creation of many other forms of design outcome" (Chick & Micklethwaite, 2011, p. 23)

Transition Design Framework (T Irwin, C Tokinwise, G Kossoff)

Transition Design has adopted, as its main principle, the need for societal transitions to more sustainable futures, arguing that design has a pivotal role to play in these transitions (Irwin et al., 2015). This framework for design identifies and outlines four main transitions involving knowledge, action and self-reflection: Vision; Theories of Change; Mindset and Posture; and New Ways of Designing. Transition Design aspires to bring about a convergence between often unrelated sectors of society and focuses on educating designers to work in future transdisciplinary team environments (Irwin et al., 2015).

[Transition Design] applies an understanding of the interconnectedness of social, economic, political and natural systems to address problems at all levels of spatiotemporal scale in ways that improve quality of life. Transition Design advocates the reconception of entire lifestyles, with the aim of making them more place-based, convivial and participatory and harmonising them with the natural environment (Irwin et al., 2015, p. 1).

Circular Design

Circular Design models for practice operate as an alternative to the traditional model of 'take-make-dispose', prioritizing methods that achieve restorative and regenerative economies (Lewandowski, 2016). The main principles of this approach to economy are provided by existing schools of thought outlined by Mateusz Lewandowski (2016) in his article 'Designing the Business Models for Circular Economy...'. These include Regenerative Design, Performance Economy, Cradle to Cradle, Industrial Ecology, Biomimicry, Permaculture, Natural Capitalism, Industrial Metabolism and Industrial Symbiosis. Lewandowski (2016) outlines the main principles of circular design as being: Designing out of waste/ Designing for reuse; Building resilience through diversity; Relying on energy from renewable sources; Thinking in systems: and Sharing values.

The alternative design practices outlined above are a small but important selection of methods for practice that present sustainable alternatives to traditional systems currently being used within the fashion industry. Their development demonstrates that new paradigms and a re-evaluation of the future of fashion practice are underway. Fashion designers are beginning to work with consumers and other actors as co-creators in the design process, operating as consultants and facilitators in order to use their skills to influence consumption choices and lifestyle aspirations. Furthermore, they are participating in the rethinking of systems that are larger than the fashion system, as illustrated for example, through the conception and practice of transition design.

2.5 Transformative Learning Theory (In Higher Education): A Review of Existing Literature

In order to understand the connection between transformative learning theory and its application within the tertiary programs selected for comparative analysis, a review of existing literature on the theory and its integration into higher education will now be presented. This literature review aids in understanding the impact transformative learning theory has on both educators and students through a presentation of its early history and its past and contemporary employment within higher education environments. As there is insufficient literature available on the connection between fashion education and the utilization of transformative learning theory, this research seeks to use the literature review, comparative analysis and research findings to make a contribution to this area of knowledge.

Considering this work focuses on the student and educator experience and perspective in the context of higher tertiary education, it should be reiterated that the term 'emerging designer' is used to refer to the students are enrolled in tertiary-level fashion design education programs.

2.5.1 Transformative Learning Theory and its associated Teaching Strategies

2.5.1.1 Transformative Learning Theory (TLT)

Transformative learning theory is the theoretical framework employed to examine how the courses selected for comparative analysis deliver sustainable fashion curricula in a higher education context; the research investigates the extent to which these courses implement the theory. Jack Mezirow (2009), credited with the development of transformational learning theory, states that transformative learning is founded on transforming existing ways of thinking and doing. Transformative learning theory was initially based on research Mezirow was conducting on perspective transformation, through a study of how women returning to college as re-entry students experienced this transition in their lives (Cranton & Kroth, 2014). This was a stage-based study that commenced by documenting the disorienting nature of the women's experience of returning to college. This disorientation was followed by stages of "self-examination, critical reflection, feelings of alienation, relating to others sharing the same experience, exploring options, building self-confidence, acquiring new knowledge and skills and reintegrating into society with revised perspectives" (Cranton & Kroth, 2014, p. xiii). Almost twenty years after the study was conducted, Mezirow introduced transformative learning as a theory of adult learning which welcomed critiques of the rational approach he had taken to his work. Many of the texts referred to throughout this work associate transformative learning with adult learners due to the voluntary, self-directed, experiential and collaborative approaches to education illustrated by adult learners (Knowles 1975,1980).

Mezirow's work drew inspiration from social philosophy, psychoanalysis and social activism, and his theory was based on constructivist beliefs wherein individuals use social contexts to construct meaning which is then confirmed through communication with others (Cranton & Kroth, 2014). The theory is grounded in the ideas of Thomas Kuhn, Paolo Freire and Jürgen Habermas (Mezirow, 1991). Mezirow's work emphasizes the importance of communication with others as a means for exploring and validating personal

perspectives as well as challenging them, defining discourse as “that specialized use of dialogue devoted to searching for a common understanding and assessment of the justification of an interpretation or belief” (Mezirow, 2000, p.10- 11). Whilst Mezirow’s theory of transformative learning is concerned with learning processes mediated through rational and critical reflection (Dirkx, 1998; Daloz, 1986; Kegan, 1994), the past three decades have seen the development of alternative conceptual theories, informed by and in opposition to Mezirow’s early work. Unlike Mezirow, Daloz’s explanation of transformative learning “depends less on rational, reflective acts and more on holistic and even intuitive processes” (Dirkx, 1998, p. 6). Merriam’s (2008) *Third Update on Adult Learning Theory*, comprised of nine chapters by key learning theorists, presents an overview of the more recent “developments in understanding and theorising in adult learning” (p. 93). Merriam remarks that there are key differences between each of the chapters within the publication, noting that this third update incorporates, in detail, perspectives that were only briefly touched on in the last publication (the second update appeared in 2001). This change reflects the development of Mezirow’s theory from its basis in empirical research to a set of diverse perspectives incorporating non-Western views on learning, postmodernist interpretations of the theory as well as work on the relationship between neuroscience and learning.

The diversity in theoretical perspectives proposed in contrast to Mezirow’s psycho-critical perspective of transformative learning theory is extensive. In his chapter ‘Transformative Learning Theory’ in the *Third Update on Adult Learning Theory*, Edward Taylor addresses these varied perspectives and the implications they have for practice within social, scientific, cultural and spiritual spaces. Taylor discusses the diversity of the present state of transformative learning theory and how current conceptions refer to ideas that were “overlooked in the dominant theory of transformation (Mezirow’s)” (Taylor, 2008, p. 7). These ideas, which consider the role of spirituality, positionality, emancipatory learning, and neurobiology, challenge the assumption that Mezirow’s psycho-critical view of transformative learning theory is the sole possible conception of the theory, and the diverse perspectives contributed by more recent theorists such as Janik (2005), Brooks (2000) and Williams (2003) “have significant implications for [its] practice” today (as cited by Taylor, 2008). Whilst these published perspectives cover a large domain, the expanded field of transformative learning theory might nevertheless help us in understanding the social, scientific, cultural, spiritual, and indeed psycho-critical values that would underlie its possible application to fashion design.

Edward Taylor and Patricia Cranton (2012), in seeking a more unified theory in their *Handbook of Transformative Learning*, reiterate that the alternative theoretical perspectives can potentially coexist collectively alongside Mezirow’s initial conception. Taylor and Cranton observe that when transformative learning occurs it is personal; it concerns the individual’s experience. That experience could be rational, emotional or intuitive for one person, and for another the experience of or potential for social change may precede their personal transformation. The path the individual takes in experiencing this deep shift in perspective, whilst at times it can be aided by collaboration and interaction with others, is ultimately a personal one.

Transformation, according to Mezirow, requires the learner to be aware of the need for transformation. However, what if it is the case that the student is not interested in pursuing a course aligned with transformative learning principles? This research would argue, with the support of transformative learning theorists such as Taylor and Cranton, that the

learner does not need to be aware of the need for transformation, but instead simply needs to be open to new challenges and ideas. In turn, when presented with relevant information and having completed a series of activities, the learner can assess whether, upon reflection, they have embraced transformed behaviours and habits within their practice as well as new perspectives on what might be required of their future practice.

Merriam's (2008) publication in conjunction with Taylor and Cranton's (2012) *Handbook on Transformative Learning* have been instrumental in charting the various stages transformative learning theory has taken since Mezirow's initial study. In doing so, these publications provide this research with the means for understanding ways in which fashion education for sustainability may be implemented.

Chapter 2.5.3 Transformative Learning Theory and Alternative Education Models below examines literature on the connection between holistic teaching practices embodied by Rudolf Steiner's anthroposophic philosophy and transformative fashion teaching practice.

2.5.1.2 Tertiary Higher Education Context

Never before has it been so important to equip learners who can adapt and accommodate change within their practice responding to external socio-economic, cultural, political and environmental concerns. With sustainability a key global concern, it is imperative that educational institutions educate [their] learners to help change the direction of a throwaway and environmentally unsustainable industry (Morrish, 2017, p. 1).

A basis for understanding how to go about developing a shift within the classroom is offered by transformative learning theory and its associated teaching strategies, which also recognise the importance the role the fashion educator plays in laying the foundations for this shift. Mezirow (1996) theorized that a perspective transformation is "a more fully developed (more functional) frame of reference . . . one that is more (a) inclusive, (b) differentiating, (c) permeable, (d) critically reflective, and (e) integrative of experience" (p. 163).

While there is a lack of literature on transformative teaching practice within the context of fashion education, we may draw on the existing material on adult educational development, the use of transformative learning theory within architectural education, and literature on sustainable design education. In considering the role transformative learning theory can play in re-imagining the future of fashion education, a review of literature on change-oriented forms of pedagogy at a higher education and tertiary level is also helpful.

The work of Alex Ryan and Daniella Tilbury (2013) on flexible pedagogies poses important questions about "core purposes and modes of participation for teaching and learning in higher education" (p. 4). In their report, Ryan and Tilbury argue for the need to connect flexibility and pedagogy in order to identify new pedagogical approaches to teaching future higher education students.

Ryan and Tilbury (2013) identified six pedagogical ideas for the future in their report 'Flexible Pedagogies: preparing for the future', ideas that "offer new pathways for graduate attributes or capabilities" (p. 5). Amongst the future-centred ideas listed (learner empowerment,

future-facing education, decolonising education, transformative capabilities, crossing boundaries and social learning), there are three ideas that correspond strongly with the core teaching strategies linked to transformative learning theory. These ideas are:

1. Learner empowerment – actively involving students in learning development and processes of ‘co-creation’ that challenge learning relationships and the power frames that underpin them, as part of the revitalisation of the academic project itself (Ryan & Tilbury, 2013, p. 5).

Transformative learning theory, like the idea of learner empowerment, focuses on enabling learners and educators alike to embark on a mutual learning experience, challenging and developing the ideas of all participants regarding learning environments and relationships.

2. Future-facing education – refocusing learning towards engagement and change processes that help people to consider prospects and hopes for the future across the globe and to anticipate, rethink and work towards alternative and preferred future scenarios (Ryan & Tilbury, 2013, p. 5).

The importance of future-facing education provides the motivation behind this research project, to embed transformative learning theory and its practices into fashion education for sustainability. Transformation requires a shift in the emerging designer’s perspective of fashion, and in order to encourage or even entertain shifting perspectives in the classroom, educators first have to help learners to “consider prospects and hopes for the future across the globe” in order to reflect and “work towards alternative and preferred future scenarios” (ibid.). The process of reflection that enables a consideration of the aspirations of the wider community links the ideas of Ryan and Tilbury with Mezirow’s.

3. Transformative capabilities – creating an educational focus beyond an emphasis solely on knowledge and understanding, towards agency and competence, using pedagogies guided by engaged, ‘whole-person’ and transformative approaches to learning (Ryan & Tilbury, 2013, p. 5).

Ryan and Tilbury note that transformative capabilities focus on “agency and competence” (ibid.) and not merely knowledge and understanding, and in establishing pathways for graduates to en-visage their individual futures.

Additionally, Victor Papanek discusses the need for transformation specifically in relation to design education in *Design for the Real World* (1971,1985), claiming that “the main trouble with design schools seems to be that they teach too much design and not enough about the social, economic, and political environment in which design takes place” (Papanek cited by Loschiavo Dos Santos, 2013, p. 235). It is this failure that results in a lack of responsibility and connection felt by the design student in relation to the local and broader context of their work and the reality of their behavioural practices (Loschiavo dos Santos, 2013).

Teaching as transmission, transaction or transformation

According to John Miller, author of *The Holistic Curriculum* (2007), there are three common views on teaching practice: teaching as transmission, teaching as transaction and teaching as transformation. The three perspectives are fairly self-explanatory. Teaching as transmission is concerned with the transfer of knowledge from the teacher to the student. This approach would be considered teacher-centred, as it acknowledges the teacher as the supplier of information, and the student's success will be determined by their ability to retransmit the knowledge imparted by the teacher. This perspective employs standardised testing as an appropriate measure of learning outcomes.

One of the alternate approaches to this perspective is teaching as transaction. This approach utilises students' prior knowledge as a basis for constructing new knowledge. This perspective is not centred around the teacher, and their transmission of knowledge, but instead is focused on allowing students to use their existing knowledge to transact with new knowledge so as to create a meaningful learning experience. This approach is consistent with the constructivist educational philosophy. Student success here is measured by their "ability to use knowledge to solve real world problems, create products or performances that are valued in one of more cultural settings" (Johnson, 2015, para. 4). Teaching as transaction can be linked to the transformative learning theorists' perspective and approach to education, in that the emphasis is not on the educator's role within the learner's journey but on the learner's ability to connect their own prior life experience with new knowledge to challenge their perspectives and connections on a more holistic level. In some circumstances, however, it is not enough to build on existing knowledge, and that such knowledge needs to be left behind.

Finally, teaching as transformation is concerned with creating a learning environment that has the potential to shift the perspective of the learner, potentially away from their prior perspective. "Transformational teaching invites both students and teachers to discover their full potential as learners, as members of society, and as human beings" (Johnson, 2015, para. 5). Through this process transformational teachers aspire to develop students who consider themselves more connected to human, plant and animal life (Narve, 2001), and prioritise the learner's journey to self-actualisation.

2.5.1.3 Transformative Teaching Strategies

In *Fostering Transformative Learning in Higher Education Settings* (2012), Carol Kasworm and Tuere Bowles provide not so much a guide for enabling transformative learning as a means by which to encourage readers to both explore the potential for personal transformation, as well as understand how both educators and learners can work together to promote transformative learning in certain situations. This section presents a discussion of each of the five key environmental, instructional and individual strategies to Fostering Transformational Learning in Higher Education Settings as outlined by Kasworm and Bowles (2012), in conjunction with relevant literature on each strategy. As Mezirow (1991) states, and this research reiterates, there are no strategies that can guarantee transformative learning will occur in a given context; the educator employing this theory and accompanying teaching practices can only maximize the possible occurrence of a transformative experience with the help of a willing audience.

The teaching strategies associated with transformative learning outlined by Kasworm and Bowles (2012), and reinforced by transformative learning theorists, place importance on creating reflective, self-critical learners (Mintz; Steinberg & Kincheloe, 1998; Slavich & Zimbardo, 2012; Mezirow, 1996), encouraging them to question what, how and why they learn. Steven Mintz, Executive Director at the University of Texas System's Institute for Transformational Learning, believes that teaching is a developmental process used to "guide, motivate and assist your students through this maturational process" (Mintz, Columbia Center for Learning and Teaching, 2019). In Mintz's opinion, in order to engage in this developmental process, the student should be able to acknowledge the limitations of their current abilities and perspectives. This recognition creates room for new skills, knowledge and potentially a shift in perspective. One of the key roles of the educator in the student's transformative journey is to help facilitate the identification and acknowledgment of the student's limitations by being transparent about the educator's own, helping the student to create space for new perspectives and experiences to flourish in place of self-imposed restraint.

The following section presents a discussion of each of the five key environmental, instructional and individual strategies to Fostering Transformational Learning in Higher Education Settings as outlined by Kasworm and Bowles (2012), in conjunction with relevant literature on each strategy. The analysis of the responses from the educator interview series to be presented in detail later, will show that the studio projects selected for comparative study prioritised the use of the following key strategies.

Development of Self Reflection based on learners' openness to self-exploration

This approach, outlined as the first of Kasworm and Bowles's (2012) five key strategies, depends on how the development of self-reflection in a learner can be a key intervention strategy in supporting transformative learning. The development of self-reflection in a learner can be encouraged through the inclusion of writing and design journals, a space where learners have the opportunity to develop through reflective practice (Kasworm & Bowles, 2012). In addition, critical discussions that allow for students to experience sharing their opinions and actions in a group context helps learners develop an openness to self-exploration. Kasworm and Bowles discuss the power and impact of what they term the 'disorienting dilemma' can have on a learner's frame of reference, a disorientation that can be used to develop their self-awareness through presenting a challenging situation wherein they are supported to question their existing worldviews of self and other (p. 392). The comparative analysis component of this study will present an opportunity to scope the use of this and other strategies for intervention outlined by Kasworm and Bowles, as an encouragement for self-reflection through the use of design journals, class discussions, written reflections as well as cultural immersion as means for creating learning experiences inside and outside the classroom.

Strategies for Critical Reflection

Edward Taylor in *The Handbook of Transformative Learning* (1998) discusses the link between the teachings of critical reflection and transformative learning theory, in particular Mezirow's (1996) development of practical strategies (such as teaching) associated with the fostering of critical reflection in adulthood. Mezirow's ideas about transformation within the learning process are focused on understanding how adults learn and develop (Cranton & Taylor, 2012), through encouraging them to reflect critically on their own life experiences

and the personal meaning they attribute to these. As observed by Jacobs (2019) in his paper 'Applying a Systems and Complexity Framework to Transformative Learning', consistency is lacking amongst theorists in regard to how critical reflection is defined in the context of transformative learning, an inconsistency also remarked on by Mezirow (Jacobs, 2019, citing van Woerkom, 2008). Mezirow (1990) himself has defined critical reflection as "a critique of presuppositions on which our beliefs have been built" (p.1), and it is this definition that will be adopted for this research.

Strategies for critical reflection employed within a fashion education context include classed discussions about what the role of the future fashion designer may be, being mindful of and engaging with the variety of worldviews that are present in the classroom. In addition, reflective activities such as essay writing in response to a key line of inquiry, or design journal annotation, help to create contemplative environments. Collaborative activities through discussion-based group work or design team problem-solving support students in understanding a little more about how they work with others, and thus promote the practice of critical reflection. Collaborative opportunities can be used to encourage students to assess how, why and when they choose to contribute, providing them with clarity about their practice through active participation. Jennifer Whitty, selected for participation in the educator interview series, discusses her view of employing collaborative practice and its assistance in preparing students to critically reflect on future practice: "Designers will always work as part of a team of varying scales and we think it is essential that they experience this in order to be a well-rounded, prepared designer" (Whitty, 2015, Interview).

Encouraging a Supportive Social Environment

This emphasis on a variety of worldviews seeks to integrate all students regardless of preferred learning style, whereby student involvement is critical to successful and sustained learning (Johnson, 1991; McKeachie, 1999; cited by Cone, 2001). This allows students to feel represented in the learning process, thus encouraging an open mind when engaging with new and complex material. Consequently, students are better able to reflect critically, laying the foundations for a potential transformation in opinion and outlook. This approach is supported by transformative teaching practice theorists Baumgartner (2001), citing Davis and Ziegler (2000), and McGonigal (2005), who note that transformational learning environments need to be "safe, open and trusting," allowing "for participation, collaboration, exploration, critical reflection and feedback" (p. 20). Given that learners engaged in transformative learning are 'open to change' and thus emotionally and intellectually vulnerable, there is importance in creating the kind of environment that encourages the learner to consider and examine differing perspectives through listening carefully. The leader, mentor, facilitator, or instructor is key to guiding this learning. Many of the educators interviewed, Jennifer Whitty and Lynda Grose, for example, commented that allowing for more time with students would have been beneficial to their experience. Kolding Design School's Anne Louise Bang similarly noted that the freedom afforded to her allowed for flexibility in how she taught the course, which in turn meant the possibility for more one-on-one sessions with students, allowing for a variety of learning styles to be catered for.

Use of Arts, Literature, Film and Drama as Tools for Transformational Learning

This approach outlined by Kasworm and Bowles (2012) as the fourth of the strategies for transformative learning focuses on the use of "cultural media to enhance context awareness, to engage in visual or written disjuncture's from the learner's sense of life understandings

and realities” (p. 394). This strategy is aimed at improving awareness of context, allowing learners to engage in visual and other creative media to express their experiences. Students are encouraged to keep design journals as a method for documenting their journey throughout the course, and these journals act as a creative outlet for the students to express themselves in their own way, encouraging constant reflection throughout the process. All of the educators who were interviewed for this research employed various cultural media to enhance the students’ contextual awareness. Lynda Grose (CCA) expressed her preference for the use of Daniel Quinn’s novel *Ishmael* to give students “a sense of their own responsibility and power” (Grose, 2016, Interview). Others such as Anne Louise Bang (Kolding) spoke of the successful response students gave after viewing the film *Tomorrow*, whilst London College of Fashion’s Nina Stevenson and Renee Cuoco spoke of the learning challenges students had to overcome working on a smartphone application.

Holistic, Affective & Spiritual Processes

This approach challenges the often overly rational perspective that we apply to higher education, focusing instead on the non-cognitive and in some cases emotional aspects of transformative learning (Kasworm & Bowles, 2012). The strategies for teaching directed at the non-cognitive aspects of transformative learning target “empathetic connections, imagery and contemplative practices, as well as forms of culturally responsive teaching strategies” (Taylor & Cranton, 2012 citing Lennox, 2005; Tisdell & Tolliver, 2009; Yorks & Kasl, 2006, p. 394). Dorothy Ettling (2012), speaking about our role as educators in her work *Educator as Change Agent, Ethics of Transformative Learning*, notes that we have the ability to nurture new consciousness within our learners, feeding their capacity to find balance in life by providing them with experiences outside the classroom, and developing ‘soft skills’ such as communication, motivation, integrity and interpersonal relationships.

2.5.2 Transformative Learning Theory and Sustainable (Fashion) Design Education

In *ANTI_FASHION: A manifesto for the next decade*, trend forecaster and Trend Union founder Li Edelkoort claims that most fashion institutions encourage student designers to aspire to future roles as celebrity runway designers for luxury brands (Edelkoort, 2014). However, a review of leading international undergraduate fashion design courses¹⁷ undertaken as part of this research does not support this claim, instead revealing a curriculum that engages with transformative sustainable fashion design practices involving collaboration and reflection, a conclusion affirmed by Centre for Sustainable Fashion Manager, Renée Cuoco:

For us [the staff of the Centre for Sustainable Fashion], projects through which we work with industry are collaborative in the true sense – a process of knowledge sharing and exchange, rather than simply ‘sponsored’. *The Nike Making project* is a great example of this sort of collaboration – a great exchange between industry, research and education (Cuoco, 2016, Interview).

This connection, between implementing sustainability content at a higher education level and transformative learning and teaching values, has been a common finding of this research. Andrea Klimkova and Marian Bednar (2016) in ‘Ethical tools for implementation of sustainability in higher education’ discuss this connection indirectly. They contend that the discourse around sustainability and its development reveals it to be a transformative and

17. From the following universities: London College of Fashion, Parsons New School of Design, Massey University, California College of the Arts, Kolding Design School.

reflective process, whereby values are integrated into education systems as well as personal and professional lives. They claim that sustainability-education development involves a holistic approach that promotes values prioritized in other transformative learning experiences such as inclusion, participation and awareness.

Prior to developing a focus on transformative learning and identifying its correlation with sustainable fashion learning, the research has consulted key texts dealing with fashion education for sustainability. A community of fashion practitioners, researchers and educators such as Kate Fletcher (2012, 2015), Dilys Williams (2016), Lynda Grose (2012), Timo Rissanen, Alastair Fuad-Luke (2013), Jennifer Whitty, Janet Hethorn (2008, 2015), Connie Ulasewicz (2008, 2015) and Virajita Singh (2012) have been influential for this research.

2.5.3 Transformative Learning Theory and Alternative Education Models

The methods for applying transformative learning theory to teaching practice embrace a holistic orientation to teaching, both validating the students' prior experience and knowledge and emphasizing engagement with other ways of knowing (Taylor, 1998). This adoption of a holistic approach is one that can be linked to principles embedded within the Waldorf model of education established by Rudolf Steiner in the early 1900s.

Patricia Brien (2010) discusses sustainable fashion design through an exploration of Rudolf Steiner's theory, linking the holistic approach to education with the sustainable design process. Nielsen (2003), citing Miller (1997) & Yonemura (1989), points out that a holistic view of education embodies the belief that teaching should focus on "multiple facets of human experience" (p. 2), Steiner believing particularly that children were "in need of more than intellectual development".

Brien discusses the overlap between Steiner's philosophy and sustainable fashion practice, and notes that, for educators, Steiner's work can act as an aid to pedagogical and creative development. Brien notes that if we consider that the teaching of fashion travels beyond the walls of an institution, educators should be encouraged to 'take immediate steps' to providing an informative and positive influence within the classroom. Steiner's anthroposophic philosophy prioritises ideas of ethical practice, individual creativity, and particular practices such as colour engagement, handcrafting and cultivating biodynamic agriculture, strikingly similar ideas to those promoted within sustainable fashion design practice and production processes: ethical practice, hand finishing techniques, craftsmanship, valuing materials and textiles, and cultivating a safe and thriving textile agriculture.

Another connection to be noted between the ideals of sustainable fashion practice and Steiner's philosophy is the emphasis on consideration and respect for time. In the introduction to Steiner's book, *The Essentials of Education*, Torin Finser states, "Steiner urges us to consider our present actions in terms of both the 'before' and 'after'" (Steiner, 1997, p. 9). The notion of time is important to the discussion of sustainable fashion practice, most notably in Carolyn Strauss and Alastair Fuad-Luke's work on *Slow Fashion Practice* (2002, 2008). "More than any other form of education, Waldorf education works with the flow of time" (Steiner, 1997, p. 9). Brien (2010) states that if further attention was given into Steiner's views on individual creativity and ethical practice, we would find the potential to transform fashion design and its accompanying values in order to encourage alternative fashion practices that prioritise ideas of sustainability.

2.6 Conclusion

The research and practices reviewed in this chapter illuminate the methods and aims of contemporary fashion teaching practice, within education for sustainability. It examines the themes of education for sustainability, the history of fashion education and the role of the fashion educator, the nature and importance of change in design education, and transformative learning theory and its associated teaching strategies.

However, these different perspectives have not yet been brought together in a discussion of fashion teaching for sustainability. This chapter now looks ahead to the findings presented in this research, which aim to collate these different perspectives, in order to identify underlying relationships between current models for best practice in fashion sustainability and transformative teaching practice. An analysis of the evolving forms of fashion teaching practice — from a historical perspective to an understanding of how contemporary fashion education has assumed its current form — reveals there is a case to be made for a re-evaluation of the fashion educator's role and responsibility in the evolution of sustainable fashion practice through the reformation of fashion studio education and learning.

Finally, a response to the question of how the becoming-sustainable of fashion practice can be engaged, encouraged and nurtured by the fashion educator through the use of specific transformative strategies, and what the theoretical underpinnings of these strategies might be, addresses this gap in current literature within the field of fashion education practice.

3 A MULTI-METHOD APPROACH

3.1 Introduction

In the previous chapter, the review of existing literature on fashion design education for sustainability identifies a gap in current knowledge about contemporary teaching theory and practice within the field. The review raises the question of how sustainable fashion practice can be engaged, encouraged and nurtured by the fashion educator through the use of specific learning and teaching strategies associated with transformative learning theory.

Chapter 3 will outline how the methods chosen for this research aim to fill this gap in our understanding of fashion teaching practice. Through a presentation and discussion of the research design of this study, the chapter provides an account of the approaches that have been employed to complete this research and reflects on the validity as well as the limitations of the chosen methods. It is the aim of this research that the openness of the approach adopted throughout the methodology is what provides the findings with substance. This openness is characteristic of transformative teaching and learning, and in testing its employment in fashion design education the research seeks to discover what transformative teaching practice means in this field, through an understanding of the fashion educator's role and responsibility.

The multi-method approach followed by the research project has significantly contributed to the depth in analysis and the quality of findings, allowing for richer data to emerge than if it relied solely on the interviews or surveys. The design and structure of the interviews encouraged an open style of discussion on key issues, which in turn led to the discovery of important themes common to the interviewees. Throughout the comparative study, coding and mapping processes discussed below, the prominence and importance of these themes became clearer. The methods discussed in this chapter have been used to identify the extent to which transformative learning and teaching theory and practice is used by the selected educators interviewed, when delivering fashion education for sustainability. From this, a case has been made for a re-evaluation of the fashion educator's role and responsibility in the evolution of sustainable fashion teaching practice.

3.1.1 The Research Design

The research for this thesis was undertaken in four phases.

The first comprised the literature and contextual review and was undertaken to examine existing knowledge and practice within the area of transformative learning theory and teaching practice in relation to fashion education for sustainability. This research was discussed in Chapter 2 of this thesis.

The second phase of the research design, which included undergoing an ethics approval process, involved a pilot study conducted to test and refine interview questions for the following phase.

The third phase involved conducting a series of semi-structured expert interviews with a range of renowned sustainable fashion educators specialising in the field of education for sustainability. In order to prepare for the interview stage of this research, promotional

media as well as published literature was compiled on specific projects, courses and programs offered by the home institutions selected for this study. From this information, selection criteria (discussed in Chapter 4) were established to determine which studio projects from each university would make up the analysis portion of the study. After this process was complete, a detailed examination of all literature on each of these courses was undertaken, along with any published work by the participants selected for interview. Once the interview portion of the study was complete, the recorded data was encoded and analysed.

Finally, an anonymous, limited student survey was created to provide insight into the student experience of these chosen studio projects and the teaching strategies that were utilised by their educators.

The research methods have been approached from a grounded theory perspective, where the data collection precedes the analysis and development of a theory. However, this research has not been concerned with building a unique theory. Instead the research has sought to identify the presence and application of an existing theory (transformative learning theory) within a novel context, the field of fashion education. In addition to this, the findings that have emerged from the research seek to generate new perspectives on what we consider to be the fashion educator's role and responsibility within the learning process, a strategy Glaser (1967) identifies with grounded theory (Charmaz as cited in Holstein and Gubrium (2008)).

The following sections of this chapter (3.2, 3.3, 3.4) discuss the research phases in more depth. Initially the hypothesis of the study was that transformative learning theory would be able to explain the education transformation in selected fashion design studios, in a very general sense. The approach used for this research is thus partly explanatory but also partly confirmatory. This research utilised this theory as a means to test select cases of fashion education for sustainability through a study of teaching practice, by talking to those involved (educators and students) about their experience. These accounts of what had been initially only externally identified as best practice were then comparatively analysed, from which conclusions were drawn relating to fashion pedagogy and the role of the fashion educator.

3.2 Research Phases: Semi- Structured Expert Interviews

3.2.1 Introduction

Existing literature reveals few resources on the topic of transformative teaching and learning practices within design education and similar fields. This scarcity provides an opportunity for research into the practices and principles currently being employed by teachers within the area of sustainable fashion design. Due to the fact that design education is under-researched, then so too is research in fashion design; and a transformative approach to fashion design education in relation to sustainability is needed for reasons discussed in the previous chapter (Chapter 2).

This section provides insight into the utilisation of a series of semi-structured expert interviews. The combined open-ended and focused questions created for these interviews, relate to the respondents personal experiences and opinions on the practice of fashion education for sustainability. Themes to be discussed in this section include the selection of interview participants, the process behind developing the questions used in interview, as well as the analysis of the recorded and transcribed interview data.

3.2.2 Interview Participants

The educators participating in this interview series were not selected at random; instead the selection pool was populated with the key individuals involved in the development of each of the courses selected for analysis. The interview participants were selected for the most part prior to the interview series, however during the semi-structured interviews some educators provided recommendations for the study to include additional interview participants. The sample group of expert educators is made up of 7 participants within the field of fashion education for sustainability. The time set aside for this phase of the study was approximately 18 months, spanning the first half of 2016 to the end of 2017, the first 2 years of the thesis research schedule. This longer timeline allowed for a continual refining of the study, a process that evolved from observing and understanding the key relationships between themes that developed throughout the gathering of data. The goal of the interview process was to “strengthen the precision, validity, stability and trustworthiness of the findings” (Miles, Huberman and Saldana, 2014. p 33) through looking into a range of both similar and divergent cases, in addition to allowing for sufficient time to complete the interview series.

The final list of participants below is made up of people who, once having been made aware of the research intentions, expressed an interest in taking part in the interview series:

Institution: London College of Fashion / Centre for Sustainable Fashion

Studio Project/ Course name: *Nike Making Project*

Interview participant/s: Renee Cuoco, Nina Stevenson, Dilys Williams

Location: Video conference and email exchange

Institution: Massey University
Studio Project/ Course name: *Fashion Activism: Space Between China*
Interview participant: Jennifer Whitty
Location: Video conference and email exchange

Institution: California College of the Arts
Studio Project/ Course name: *Ecology of Clothing*
Interview participant: Lynda Grose
Location: Phone and email exchange

Institution: Kolding Design School
Studio Project/ Course name: *Design for Change*
Interview participant/s: Anne-Louise Bang, Nadine Möllenkamp
Location: There was only one interview conducted in person, at Kolding Design School, with Anne-Louise Bang during a field trip to Kolding, Denmark, in 2016. Nadine Möllenkamp was interviewed via video conference and email exchange.

In order to enable participation of the educators associated with the above courses, a detailed explanation of the research project and its aims was provided to each potential participant via email, along with all relevant supporting pre-approved ethics documentation (see List of Images, p. 149). These interviews were conducted in a variety of formats, however the face to face method was preferred. According to Denscombe (2007), face to face interviews, in person or via video call, create specialised situations through which unique information can be obtained, information that would otherwise not be possible to acquire. These types of interviews allow for direct contact to be made with the respondent, which in turn affords the opportunity for ‘detailed and rich’ data to be collected. This method can also create genuine experiences between the researcher and respondent, wherein the discussion is more spontaneous, more able to change direction quickly, and more open to responses to non-verbal communication. Equivalence was ensured throughout the interviewing process to account for cultural and language differences. In order to achieve this, the interview and survey questions were translated into Danish for the Kolding Design School’s *Design for Change* educator and student participants.

3.2.3 Interview Question Development

The questions used in the educator interview series were designed with consideration of how they could be used to answer the project’s original research questions, ‘*How does current fashion teaching practice relate to transformative learning theory?*’ and ‘*How might this theory and its strategies contribute to fostering alternative modes of fashion education for sustainability?*’ as well as the secondary question related to the use of transformative teaching strategies in fashion teaching practice, ‘*How might fashion educators employ transformative teaching strategies to encourage a shift in the way emerging designers view the future of fashion practice?*’

Using the project’s research questions as overarching objectives has aided the structuring of the interview design as well as the identification of themes (listed on the following pages) from which to draw out supplementary questions. The development of the interview questions was also informed by key themes that emerged from the literature review (discussed in Chapter 2): the fashion industry in the midst of change, current and future aspirations for fashion education for sustainability, and the fashion educator’s role in nurturing change.

The themes associated with this research have undoubtedly evolved alongside each other as the project has grown. However, it is important to acknowledge that at the time of establishing the project's method, the below themes were identified as the leading concepts for this research, and these have not essentially changed. The six key areas of interest, under which subsequent interview questions were created, are (the ethics-approved questions are listed under each theme):

Interviewee: Personal Context

The questions that were developed under this theme were used to understand both personal and administrative information pertaining to the respondent's professional role. These questions were used to help formulate a profile of the respondent's history in order to better contextualise their current role in, and views on, fashion education. Crouch and Pearce (2012) discuss the importance of context when gathering data and how this is an advantage of using qualitative methods in their book *Doing Research in Design*: "A key intention of much qualitative research is to provide a vehicle through which participants' voices can be heard. This intention has consequences for the ways the researcher conducts the research, and hence there is a need to foreground the personal experiences and insights of the researcher" (p. 73). The questions created under this theme are:

- Tell me about your position / role within this school / department / institution?
- How and when did you get into the fashion industry?
- How do you see fashion education? What duty do you feel fashion education has to its students?
- What made you decide to start teaching within fashion education? (How & Why?)
- Considering your perspective as both designer and researcher, what positives and negatives do you currently find in the teaching of sustainability in fashion?
- How has your perspective on sustainability in fashion changed over the space of your career?
- What is your view on fashion design as a means of creative expression, and what is its place in contemporary society?
- What other roles do you see as being available for the fashion designer?

Geographical Context

Initially this series of questions was created to understand similarities and differences based on the respondents' location, and their perspective on the implications that location had on their practice. However, when the first few interviews took place, these questions were not on the top of the list in terms of urgency and interest; those focused on uncovering information about the studio projects in question and uncovering the use of transformative teaching strategies were prioritised, which often meant that questions referring to location and its significance were left unanswered due to participant time constraints. A follow up study concerning the relationship between location and fashion pedagogy would be a valuable contribution to the field of fashion education, continuing beyond this body of work. The questions created under this theme are:

- What is it about this city that nurtures fashion education?
- Do you think that there is a big difference globally in perspectives toward fashion education for sustainability? If so, how and why?

Selected Studio Project Related Questions

This section was reserved for gathering information about the administrative aspects of the studio projects in question, such as understanding how students were incorporated into the class; was it by selection and if so, what were the criteria? These questions also unpacked the project's origins, documenting how the interviewee developed the idea for the studio project, and with what initial intention. The questions created under this theme are:

- Can you talk a bit about ('*Studio Project Name*') you have launched at ('*University Name*')? Where did the idea for this project originate?
- How do you incorporate students within the project?
- Is there a selection process involved, or a studio run in affiliation with the project?
- Do the students receive a credit for participating?
- How does this project sit in relation to the research activities at ('*University Name*')? Do they work together in certain areas? If so, how?
- Some students see sustainability as limiting and restricting, adding another layer of complexity to what they do. How did this project aim to address these sentiments with students?
- What is your long-term hope for a project such as this?

Transformation and Sustainability in Fashion Education

This section involved a series of ten questions built around expanding upon the respondents' personal opinion on fashion teaching practice and sustainability. This made it one of the more thorough sections in terms of ability to cover all pre-planned questions, as these were informed by the ideas of transformation and sustainability. These questions have been employed to understand the respondents' experience with the students during the class, and whether or not they were able to recall and explain particular instances of student transformation as a direct result of their teaching practice. In addition, the respondents were asked to discuss their experience with initiatives such as Kate Fletcher's *Local Wisdom Project*, *Craft of Use*, and how this might have impacted their own professional choices and goals. The questions created under this theme are:

- Have you noticed any change in fashion education since you began teaching?
- What has been the greatest assistance to you in your teaching practice?
- What is the biggest challenge you have encountered in this role?
- What do you see as the greatest impediment to developing your fashion teaching practice?
- What would you change about fashion education if you could, specifically in regard to sustainability and teaching practice?
- How has this project been inspired by other international projects / initiatives, such as the Centre for Sustainable Fashion in London's '*Local Wisdom Project*'? Discuss the influence that the *Local Wisdom Project* or similar projects has on your professional choices/ goals?
- How successful do you feel this course has been in transforming students' thinking?
- Can you describe examples of when transformation in thinking has occurred?
- Would you repeat this course again? If so, what if anything would you do differently?

The Learner's Environment

This is a smaller section in the questionnaire and sits closely alongside the preceding themes of Transformation and Sustainability, as an extension of the discussion aimed at identifying

the use of transformative teaching strategies. As the participants did not necessarily have substantial experience with or knowledge of transformative learning theory, its associated teaching strategies were discussed in a broad non-specific sense, so as not to influence the data analysis. Asking educators specific questions about how they structured their learning environments helped to visualise their teaching practice and aided in understanding whether students were working in a traditional (stools and desks, emphasising teacher-centred learning) or contemporary (outdoor/indoor, mobile, collaborative) studio environment. The questions created under this theme are:

- Can you describe the different learning spaces used within this course, and explain why? Do they vary?
- If they vary, how has the variation in learning space impacted the students' learning?
- Do you feel the learning environments play an important role in the student learning experience? If so, why?
- What future learning / working environments do you want to equip your students for?

Activities of Fashion Teaching Practice

This final section was another important and extensively investigated area of questioning, as it carried questions directly related to identifying the use of transformative teaching strategies, according to Kasworm and Bowles's (2012) descriptions of these, which are discussed in chapter 2. However, the following questions were posed under the guise of enquiry connected with general fashion education practices. Through asking these questions, it became clear that the favoured teaching strategies utilised were common across all respondents, and the feedback based on the respondents' experience with these strategies also generated some insightful findings. The responses to these questions helped to document and validate the use of strategies identified as transformative, whilst linking these strategies with common ideas around sustainable fashion practice, education and learning and teaching methods.

- How do you find collaborative or team-based learning in terms of productivity when navigating difficult content?
- How do you engage your students with critical reflection?
- Which strategies do you find most effective with students when teaching sustainability in fashion?
- What is your opinion of learner-centred teaching? Do you use any tools to integrate this approach in your classroom?
- Do you feel it is important for the students to be involved with the community through their learning?
- What skills do you prioritize when it comes to expressing concepts three-dimensionally; do you have a preferred design process?
- In your opinion, how important is the role of transdisciplinary practice within the education of sustainability in fashion?
- Have you experienced increasing student interest in the field of sustainable design over time?
- How can educators harness their position and motivate change in the future choices of their students?
- What is the goal of your lessons; how do you hope the students feel at the end of a class or course?

The interviews were designed to understand the educators' involvement in the course, their intention for and experience of the course, and their views on educating for sustainability within a fashion context. The objective of the interview series was to understand what transformative teaching strategies, if any, were being employed by these educators, as well as what teaching within the fashion context meant for educators, in regard to the future of fashion industry practice.

These ideas will be further detailed in section 3.3.1 Introduction to the Data Analysis.

3.2.4 Pre-testing Interview Questions

In order to refine the questions derived from these outlined themes, pre-testing was undertaken. Pre-testing was done to ensure efficiency during the interview process and to guarantee respondents would clearly understand and thus be able to answer the questions created for the purpose of the interview. This pre-testing was conducted with fashion educators at the home institution of this study, RMIT University in Melbourne, wherein four test respondents reviewed the questions prior to sending them to the interview participants. Singleton and Straits (2012) specify in their research, "the information gained by these cognitive diagnostic procedures gives direction to revision efforts" (p 77). As such, thoughts or questions that arose from this pre-testing process helped identify any issues with the question list, and as a result, the language and structure of questions included in the original draft was edited. In some cases, questions were combined or collapsed to form stronger questions, guaranteeing a more efficient and clearer way of proceeding for the interview participant. A similar process was employed when developing the students' online survey questionnaire.

After pre-testing had been completed, the selected interview participants received a copy of the drafted questions ahead of the scheduled interview. The purpose behind providing the interviewees with sample questions was not to convey the impression that what they were to expect from the experience would follow a rigid structure. Instead it was to provide the participant with ideas of what would be discussed and how the interview was intended to allow them to focus on their areas of expertise. Subsequently, all participants agreed to answer the questions in the open format in which they were presented, and the provision of the draft questions allowed participants time to prepare for the interview process.

3.3 Research Phases: Interview Data Analysis Process

3.3.1 Introduction to the Data Analysis

Throughout the study, collecting data on the educator and student perspectives has required continual refining of the direction of the study. Whilst there was a conceptual framework and research questions established prior to conducting the interviews and surveys, the data gathered for analysis has brought particular aspects of the research into focus. Initially the educator interview series was conducted with a focus on identifying the presence of teaching strategies that accord with transformative learning theory. Ultimately, the findings revealed additional, unexpected, discoveries relating to the respondent's agency and values which have been informed by their own personal and professional experiences. The interviews, once transcribed, primarily employed qualitative analysis to assess and identify what key themes evolved from the transcriptions.

3.3.2 Cross Case Analysis

Cross Case Analysis is discussed at length by Miles, Huberman and Saldana in their book *Qualitative Data Analysis* (2014). The term describes the nature of the analysis that was conducted within this body of work in order to accumulate knowledge from the separate studies of these four institutions and their associated studio projects, in order to compare and contrast these cases and in doing so draw out new insights. Cross Case Analysis of the four studio projects (using the research material collected, interviews conducted, and surveys distributed) increases "generalizability, reassuring yourself that the events and processes in one well-described setting and not wholly idiosyncratic...[enhancing] transferability to other contexts" (Miles, Huberman & Saldana, 2014, p 101). Through combining gathered data from more than one study, the research has been able to illustrate that the findings apply beyond one isolated case, and thus may be considered applicable in various educational contexts as a result. It is important to note that there will also be limits to the generalisability of the results, due to parameters of the study such as: the structure of the learning environment (studio-style teaching format is most applicable); and the level of the learning (this study was isolated to the examination of a 3rd year tertiary education cohort). Another benefit to examining more than one case is the richness of information that is collated from multiple sources, which allows for more detailed comprehension and aids in the formation of more general categories explaining the findings.

In order to analyse the data gathered from the multiple sources, in addition to the coding, jotting and mapping processes (discussed in further detail in this chapter), a framework has been used to arrange the information collected in each case in a matrix chart. This chart is presented in *Appendix 1* and discussed in greater detail in Chapters 4 and 5. The method employed within this research partially reflects a similar course of action to the replication strategy, a framework in which the study of an initial case is then repeated in order to find matches within the subsequent cases selected for study. Whilst there are similarities between the method chosen for cross-case analysis and the replication strategy discussed in works by Miles, Huberman and Saldana, (2014) and Yin (2009), there is also an important difference.

As each case is analysed individually throughout the coding, jotting and interview processes, by the time the matrix chart is engaged there is less emphasis on focusing on one study and comparing the others to this one study, and more priority allotted to using this chart to identify these teaching strategies comparatively. Rather than choosing an initial case study to feed into this matrix chart, the method employed for this research examines all four studies in tandem. With cross case analysis, the analysis falls at the end of the process, whereas with replication analysis it begins after the first case study. There was a combination of both of these formats used throughout this process; the analysis was both sequential and comparative, with the parameters shifting as each analysis proceeded. Thus the research does not truly employ replication analysis in a strict sense, primarily as there is no initial case that sets the parameters for the subsequent cases.

3.3.3 Coding Process

An audio recording device was used to document both the interviewer and respondent during the interview process; after the interview recordings had been transcribed shortly after each interview, they were discarded. Proceeding from the transcription process, coding cycles were applied to all transcriptions in three stages. These coding cycles were used to condense the data and retrieve its most essential elements. The coding process adapted for this study was based on processes outlined in *Qualitative Data Analysis: A Methods Sourcebook* (Miles, Huberman & Saldana, 2014), which as the authors state involve careful observation and reflection. The first cycle of coding is “initially assigned to the data chunks” (Miles, Huberman & Saldana, 2014. p 73), after which a second cycle of coding is applied working with the resulting codes from the first cycle.

The initial coding cycle involved highlighting segments of the transcripts, using specific colours to represent code titles created for this initial cycle of analysis. These titles were descriptive and deductive in nature; they were words that represented my own responses to how the transcripts related to different elements of the conceptual framework for the study. The words are evaluative rather than descriptive. Whilst it was important for these words to be explicit in their connection to the research, it was also critical that these words not be too precise, remaining abstract enough so to not skew the data findings prematurely. For example, one code was titled ‘Not expected’ and was used to label any responses that were found to be surprising or unusual during the interview and transcription process. Another code titled ‘Repeated by other interviewees’ was an extremely useful tool as it aided in labeling and grouping similar phrases, responses or ideas expressed by the respondents as they evolved.

The codes created for this analytical process were adjusted after each transcript was re-read, in order to determine whether the chosen words would act as appropriate and useful labels when analysing all of the interviewee responses, in consideration of the themes that arose. The codes created for the first cycle of analysis are illustrated below:








Outlier	
Reminds me of Teaching Strategies	
Repeated by other interviewees	
Transformative fashion practice	
Self reflection by interviewee	
Relevant	
Surprises me / Not expected	

Fig.1 The colour coded titles created for the first cycle of analysis.

Fig. 2 This second figure illustrates a portion of the matrix that was used to code the interview responses.

Aim for a conceptualisation of underlying patterns				4 (Main Result of Study, How Knowledge about the world from the perspective of the participants in the study)	5 Hierarchy among Categories (How figures to summarise results)	6 Write up Results	7 Discussion
Coding	Interview Data	Interviewee	Code Categories (Combining Codes) through THEMES (Objects, Processes, Differences...)	How are Categories Connected (Addition, Seeing Information, Problem Solving)	Describe Connections between Categories	Describe Categories on the Map and how they are connected, include notes, do not repeat results.	Write out interpretations and precise results in light of published materials, teaching pedagogy theory.
Repeated by other Interviews	The people I work with, CSR is just such a great choice to be. Different people have different perspectives and all feel comfortable in exploring them with each other. It is a trusted space for us to bring out our concerns and vulnerabilities and our excitement and the things that we feel 'happy about, so the thing that has helped me has been this group of people to work with.	Deja Williams	learning environment	Environment			Description can be found in Thesis Chapter (TBC)
Surprise me / Not Expected	We are questioning the current fashion business models.	Lynda Grise	Challenge	Alternative Modes	Practice evolution		
Surprise me / Not Expected	undergraduates can sometimes be self indulgent in their creativity.	Lynda Grise	Collaboration	Alternative Modes	Practice evolution		
Surprise me / Not Expected	you start to think about the role of fashion and design... and for me specifically design because that is my background, trying about individuals designers and the industry is predicated on the idea of being the solo designer, having a vision and it is one vision and it is not to be compromised. And when you are in this situation where you have to navigate and negotiate your ideas with others and watching that process, there has to be a lot of compromise.	Nina and Renee	Collaboration	Alternative Modes	Practice evolution		
Outlier	We have a lot of cross-disciplinary teaching here, between the 5 subject areas, and it is quite free in that respect, but some fashion educators think that it is too much because we don't have time for collections. I am not sure I agree with them, but at the same time I can understand where they are coming from. So it is always not to have a lot of time in the workshops. It is a dilemma, but at least in Denmark I think we need to help fashion designers understand they can adapt to other disciplines (we have a fashion industry but not that big).	Anne Louise Bang	collaboration	Alternative Modes	Practice Evolution		
Transformative Fashion Practice	According to Mathilda Thom (2008) designers can create courses of action or services that speak to the deeper layers of practices, attitudes or opinions of people to and about fashion.	Jennifer Whitty	Communicable Future-centric Change Growth	Alternative Modes			
Repeated by other Interviews	Course: These enabled them explore new rich and diverse role for designers as they take on multiple roles as a catalyst, facilitator, and co-creator to initiate change. That through this project they start to see the how to position their practice as fashion-research within this framework, shifting the focus from 'designed product to the person-product relationship' (Thom 2009, Manzon 1996).	Jennifer Whitty	social growth	alternative modes			
Repeated by other Interviews	design is in a time of transition as we move away from a 20th century mode where fashion was solely about commerce towards a 21st century model.	Jennifer Whitty	social growth change	alternative modes			
Relevant	We can really explore quite different concepts, questioning the whole idea of the collection - companies who are locked into certain buyers and ways of buying are locked into these models.	Lynda Grise	Future-centric	alternative modes			

Once these initial codes were used to analyse the interview transcripts, the data was arranged by its colour coded name to understand what types of responses were being grouped together and whether the codes could be reworded in order to improve the classification of the newly grouped responses. Re-arranging the interview responses according to code assisted in identifying emerging similarities and themes from the data. For example, creating the code 'Outlier' was key to contributing to the discovery of similarities in perspectives that were not necessarily aligned with direct questioning. Any comments that were considered to digress from the general line of questioning, or to be unique in comparison to other respondent comments, were grouped together under the 'Outlier' label. Using a code like 'Outlier' was beneficial in assuring that the data being analysed was not unconsciously manipulated to fit the assumptions of the researcher. Additionally, it served as a useful means of ascribing value to responses that could quite easily be misconstrued as irrelevant.

During the first coding cycle, some responses were assigned more than one code. Once the data had been arranged according to code, it became evident that the responses needed to be re-read, and the primary codes reworked in order to group the findings into a smaller number of more refined and specific themes. The responses that had been grouped under the initial codes listed in Fig.1 were then reread and recoded in more detail, employing inductive coding to complete this process (Miles, Huberman & Saldana, 2014). This secondary type of coding is more broadly speaking a speculative strategy, informed by the nature of the responses, not influenced by the original context of the interview. Jumbling up all of the educator interview responses created a sense of anonymity for the data, even though the comments could be traced back to their respondent if required for quoting purposes. This rearrangement in format aimed for objective coding based purely on the interview responses and their interrelationships. Once the data had gone through these two initial processes of coding, it was subsequently grouped according to its secondary labelling and ready to be submitted to the pattern coding cycle.

Pattern Codes

Pattern coding, according to Miles, Huberman and Saldana (2014), uses information gathered from the initial coding cycles, discussed above, to understand what themes are emerging from the analysis process. This additional stage in the research analysis phase encouraged further reflection on the data gathered from the interview series and aided in steering the focus beyond confirming signs of transformative teaching strategies into the discovery of additional findings unique to the study. The emerging codes from this process are highlighted in blue in the fifth column in Fig.2 above, and in more detail on the following page in Fig.3.

fashion education. These words were chosen after much consideration of the developing themes that had emerged from both the interview coding processes and the empirical evidence gathered from the interviews and throughout the research journey. Taking the highest frequency stem word 'students' and using NVivo to generate a word tree for this word resulted in a striking illustration of all the various phrases that had been linked to this word. The capacity of this function to clarify any word use and its significance within all the transcribed interviews encouraged further investigation, using not only the most frequently appearing words in interviews but also keywords that were identified in relation to the larger body of research.

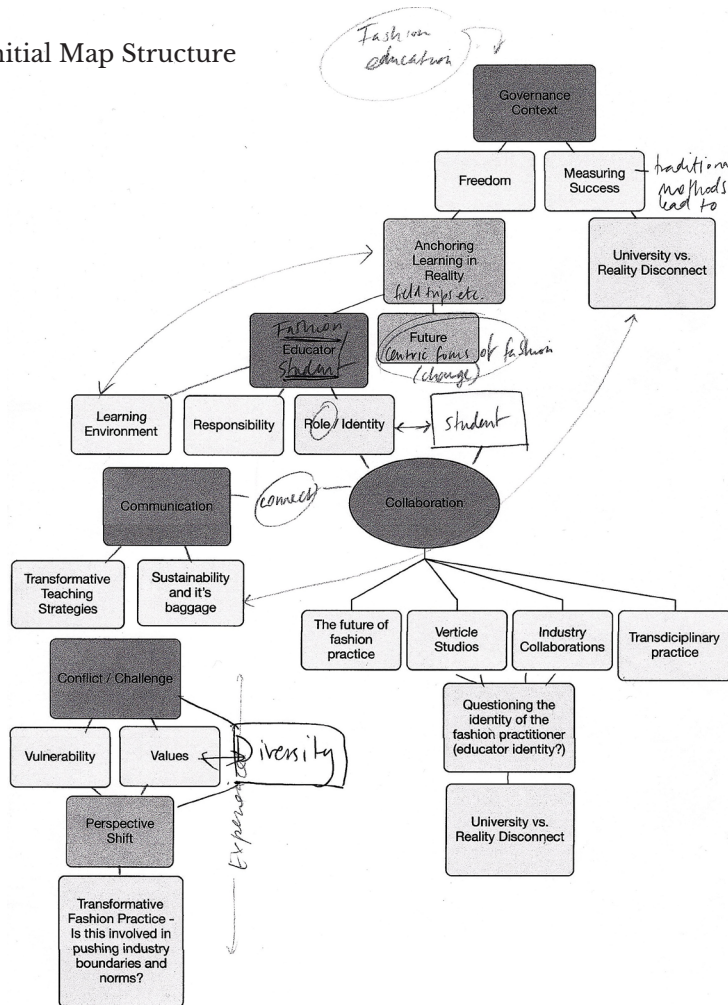
Experimenting with Computer Assisted Qualitative Data Analysis Software, NVivo, was an interesting exercise in understanding how removing oneself from the manual process of data analysis can encourage new perspectives on the data and save time during the coding process. However, as there were only 7 interviews conducted for the interview series, it was not an overwhelmingly large task to code the data manually. Additionally, this manual process proved extremely beneficial as it prompted comprehensive personal reflection that will be discussed in the next section.

3.3.5 Jotting

In combination with the various forms of coding and conceptual mapping, note taking was used to document personal reactions and remarks in relation to the interview data. As noted by Miles, Huberman and Saldana, (2014), "as you work on a project, reflections of several sorts typically swim into awareness" (p 94). This observation influenced the decision to jot comments alongside any thought-provoking interviewee responses, recording informal reflections during the data analysis providing an informal and preliminary opportunity to interpret the data. These jottings acted as a documentation of real-time reflection and were able to preserve fresh thoughts and perspectives that commented on similarities, differences, outliers and theoretical validation. In *Qualitative Data Analysis* (2014), Miles, Huberman and Saldana discuss the tedious nature of coding, referring to the sensation of being bored as "usually a signal that you have ceased to think" (p 94). To remedy this, in order to remain mindful during the process, jotting encouraged me to think actively about each coded portion in relation to the goal at hand: does it answer the research questions, does it provide something illuminating, how can this piece of data fit into the overarching study? Asking these reflective questions helped to keep the process from becoming mechanical.

3.3.6 A Series of Maps: An abstract conversation around themes that emerged from the analysis

Fig. 5 Initial Map Structure



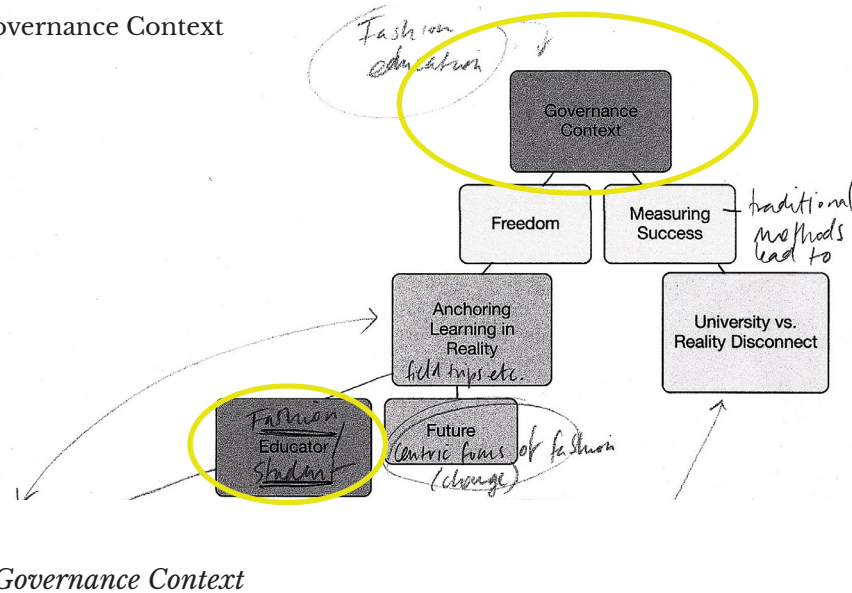
When the concept mapping process commenced, the codes within the matrix cells were considered as the starting point for creating clusters of ideas. Each idea generated from the coding process was noted down, and under each heading comments were made as to where the idea sits within the context of the broader research question. Having to reconsider each idea's placement aided in the refinement of these themes. The arrows used to link ideas together represent their connection, and how one idea flows onto another; a double arrow illustrates a two-way connection whilst a single speaks to a one-way flow.

Above, Fig. 5 illustrates the first (hierarchical) iteration of the conceptual mapping process, initially drafted using NVivo mapping features. The process of using a hard copy of the map, onto which I could draw directly, allowed for more reflection about the ideas and their relationships which in turn prompted a re-thinking of the map's initial structure. It was only upon reflection that the 'top down' approach taken to complete this map was identified, which does not accurately reflect the style in which the ideas evolved. This observation was important, firstly as the concepts are not in themselves hierarchical, and secondly because it is the concept of governance that is placed at the top, which in a way legitimises hierarchy itself. In addition to this point, Fig. 5 maps an idealised flow of events, from the initial setting up of a framework to the outcome of a shift in perspective. Upon further reflection, this process can also be described as one-directional.

3.3.6.1 The Evolution of a Conceptual Discussion through the Mapping Process

The following is a discussion of the ideas represented through this initial mapping process. The inclusion of imagery within this section aids in visually clarifying the relationships between each of the ideas within this map, illustrating how these ideas came to take the position they hold.

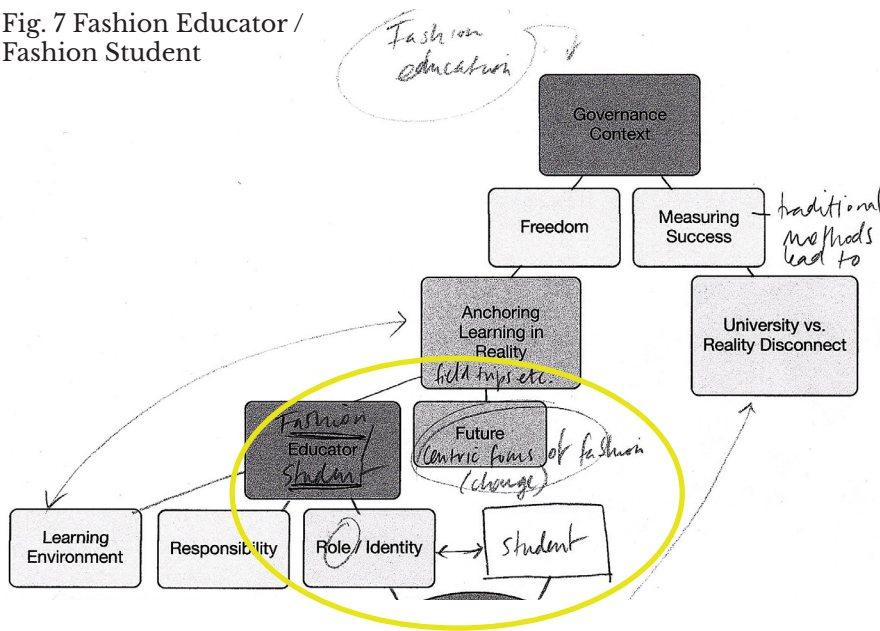
Fig. 6 Governance Context



Governance Context

This map places the Fashion Education Institution (‘Governance Context’) as the overarching context from which all other ideas appear to stem. The educator practices within the fashion institute, as do the students. The governance of the institution influences the relationship between educators, students and provides its context. In addition, the ideas of ‘Freedom’ and ‘Measurement of Success’ also sit within the context of university governance, on this map. The educators interviewed, for the most part, spoke highly of their colleagues and department, especially in discussing the positive elements that contribute to their teaching practice. As established through the interview process, the greater freedom these practitioners enjoy, the more able they feel to experiment in their teaching practice. It is with this sense of freedom that educators can allow themselves to push expectations of what success may look like and how it is measured. It was noted in interview that understanding the unique impact of the types of studio project that make up this study would require time and reflection from both the student and educators involved. Nina Stevenson, of London College of Fashion’s Centre for Sustainable Fashion, notes that with traditional methods of teaching and assessment comes a dated perspective on measuring the success of their work: “What is underpinning the motivation for [fashion] education and what is underpinning how we are recognizing success in students? Is it about getting a job, getting a top grade, creating a collection, or is it about looking at what other subject matter they have interacted with, how they have engaged with the world around them, how they have looked at other disciplines, how they are looking at fashion as a way of communicating and sharing and influencing change? Fashion is almost the vehicle for change.”

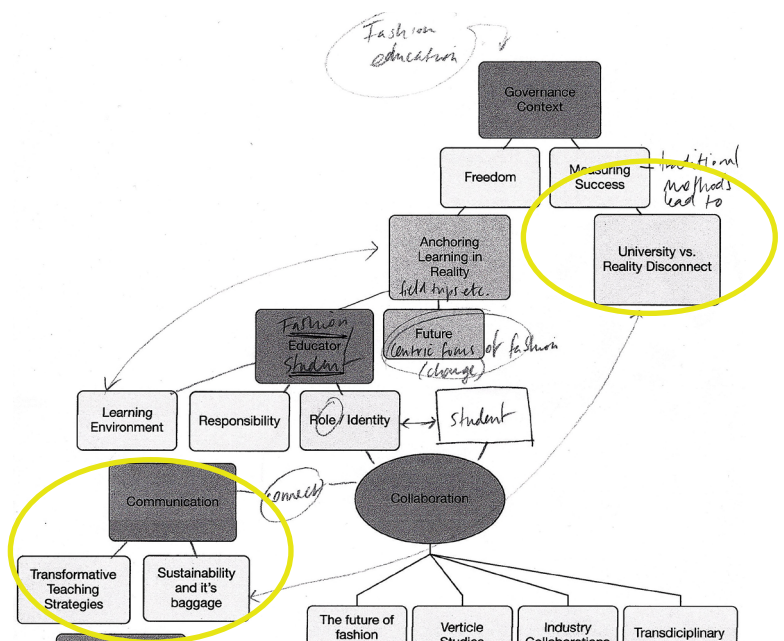
Fig. 7 Fashion Educator / Fashion Student



The jotting on this map indicates how using NVivo to uncover word frequency patterns throughout the interview series has changed the placement of certain ideas. Placing the ‘Student’ in the same position as the ‘Educator’ was the result of manual data analysis reinforced by NVivo analysis results. All interview respondents agreed that throughout their teaching practice they prefer to identify as mutual learners working alongside their students to unpack ideas. This emphasis on a mutual learning experience indicates that these educators see themselves as collaborating with their students in these environments, facilitating, in place of leading, the learning experience. Using the NVivo software to analyse word frequency patterns within the data identified the word ‘students’ as the most frequently used throughout all interview processes.

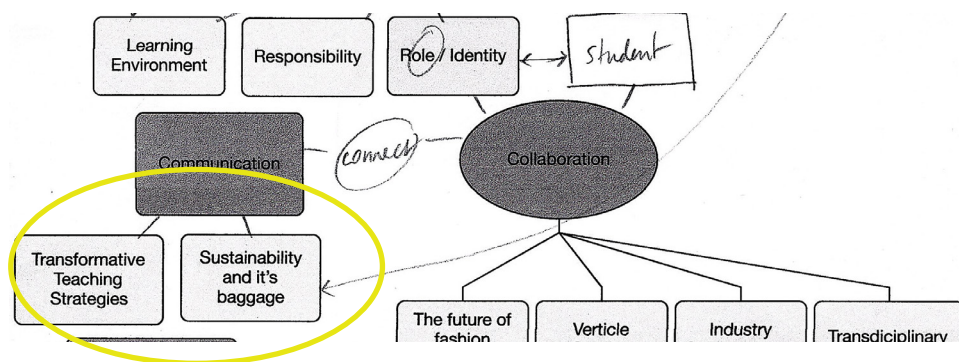
When asked about the challenges they experienced in delivering education for sustainability, educators often referenced the disconnect their students expressed in relation to their learning and the inapplicability of said learning to real world contexts. Educators remarked that, due to the fact that graduate jobs often exist within fast fashion companies, they felt the responsibility to ready students for the current industry as well as the future of the industry, which they believed to be embedded in sustainable fashion practice. The educators interviewed relied on direct communication with their students when discussing the state of the fashion industry and the realities involved in practicing fashion design both now and in the future.

Fig. 8 University vs. Reality Disconnect + Communication



Stevenson touches on this re-occurring theme discussed by all interviewees, which is the 'disconnect' between fashion education for sustainability within a tertiary context and the common realities of working within the fashion industry (Stevenson, 2016, Interview). In the previous image, a hand drawn line joins 'University vs. Reality Disconnect' to a group of ideas linked to 'Communication' as a proposed response to this disconnection. Educators commented that talking openly with students about these concerns, appropriately preparing them for the reality of the industry, and instigating partnership projects with industry bodies worked to create a more practical image of how their learning can be advantageous on a professional level. After revisiting recorded interview materials, two key ideas arose from re-analysing the ways that the educators sought to meet these needs: 'communication' and 'collaboration'. The drawn link between these ideas reflects this thought process.

Fig.9 Sustainability & its Baggage + Transformative Teaching Strategies

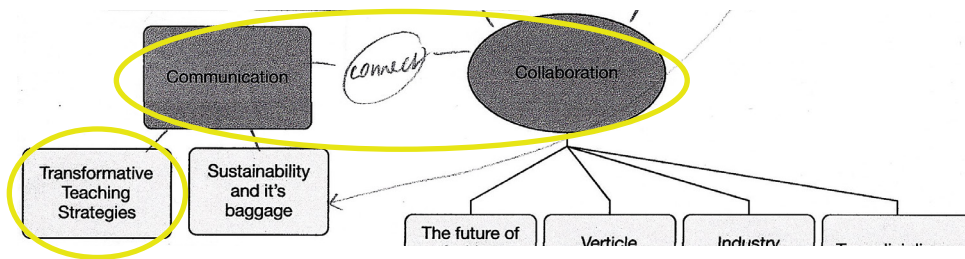


The idea labelled 'Sustainability and its Baggage' was developed to reference a common interview finding regarding student perspectives on sustainability. During the interview series most educators discussed the preconceived ideas about sustainability students brought with them into the classroom. For the most part the educators interviewed described sustainability in fashion as having a reputation associated with restraint amongst students, a perspective that has been supported by existing theory on education for sustainability. Anne Chick and Paul Micklethwaite (2011) discuss the problematic concept of the 'S' word in their work, *Design for Sustainable Change: How Design and Designers Can Drive the Sustainability Agenda*. Chick and Micklethwaite (2011) note that using the word sustainability can often cause confusion and present as restrictive, acting to "mystify more than illuminate our thoughts on where we want our society to go" (p 5).

Findeli (2001), as discussed in Chapter 2, proposes a new 'logical' structure for the design process as an alternative to what he calls an 'outdated' knowledge of design practice and intelligence,

... inherited from the nineteenth century; [with an] overemphasis upon the material product; an aesthetics based almost exclusively on material shapes and qualities; a code of ethics originating in a culture of business contracts and agreements; a cosmology restricted to the marketplace; a sense of history conditioned by the concept of material progress; and a sense of time limited to the cycles of fashion and technological innovations or obsolescence. All these aspects have contributed to the current state of design... there is no reason to resign ourselves to them any longer (p 6).

Fig.10 Communication + Connection + Collaboration



The reason that ‘Transformative Teaching Strategies’ as an idea has been connected with ‘Collaboration’ through the above diagram (Fig.10), is because these teaching approaches rely on the nurturing of a connection and understanding between students, educators and students, educators and educators from other disciplines, educators and students with industry professionals, and so on. The fundamental ideas of ‘Communication’ and ‘Collaboration’ are used to identify the implementation of transformative teaching strategies.

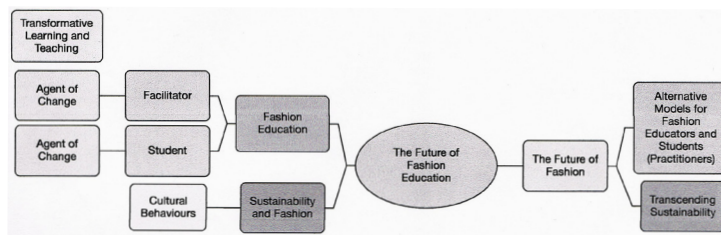
In his case for design education reform, Alain Findeli (2001) discusses its development by taking readers on a journey through design history, beginning with the original contexts for which initial design studies were created. In doing so, he proposes that design education should look beyond its own field in order to grow. This idea of transcendence evokes possibilities of collaboration through transdisciplinary practice, educating students about their responsibility not only as designers but also as global citizens. Findeli adds that design students should be asked, “to which meta-project does a design project and a design curriculum contribute? For what end is design a means?” (p. 8). These questions, Findeli admits, concern the ethical elements of design. In addressing these questions, it might be argued that the designer must collaborate not only with those outside the field of design but also with stakeholders involved in the designer’s journey, including the user. Through collaboration, in various forms, the design student is exposed to varying perspectives, skill sets, values and systems. This exposure would help to equip them with a more holistic understanding of their practice and broader opportunities for how that practice might be manifested.

3.3.6.2 Illustrating on the Map

Editing the map by hand alleviated an unnecessary degree of permanency and perfectionism, which in turn allowed for greater flexibility and experimentation with the positioning of ideas and the relationships that had emerged between them. Taking the initial Fig.5 mapping structure and editing it manually helped to visualise how the ideas were starting to evolve in respect to one another and provided a clearer sense of how the research project was developing. Upon reflection the data gathered clarified not only that transformative learning theory and its associated teaching strategies were being engaged with by educators, but also that there were similar views shared amongst the participants principally in reference to the role, and the responsibility of the educator. The development of these nuanced processes of analysis illustrates the extent to which employing multiple methods has impacted on this research and on the understanding of its contribution to the field of fashion education research.

The below image in Fig. 11 presents a new iteration of the map initially presented in Fig.5. The structure has shifted from its top down format into a more refined linear interpretation of the same ideas and their relationship to one another. This change in axis, from vertical to horizontal, helps establish a less hierarchical flow in ideas. In the below map ‘The Future of Fashion Education’ presents as the central idea from which the others stem. These additional ideas have been condensed into broader topics for the purpose of this new iteration. Whilst refining the ideas has created an informative visual tool for the analysis, upon reflection there are key ideas and relationships that may have been lost in the refinement process. As a result, this below iteration of the map was not taken any further than this stage.

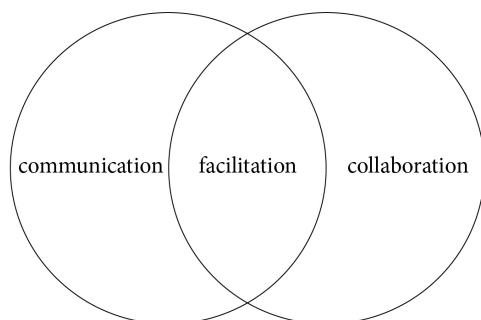
Fig.11 Experimenting with Map Structure- Linear



3.3.7 Venn Diagram

Shortly after the interviews had been completed and transcribed, a Venn Diagram model was sketched up in order to document the key themes that were evolving from these interviews. This illustration documented the reflective process that had commenced in response to the immersive nature of the data analysis process. The early Venn Diagram captured below (Fig. 12) illustrates the primary ideas that emerged, and how they were being considered in relation to each other based on information collected from both educator and student responses.

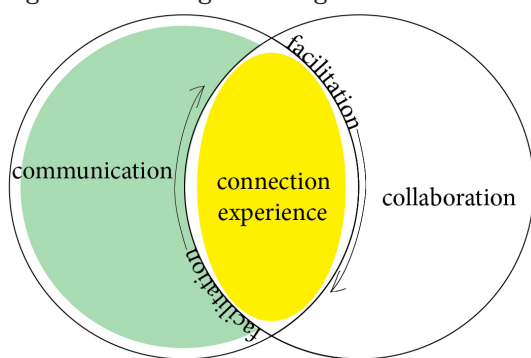
Fig. 12 Venn Diagram. Stage 1.



Documented in the diagram above are the words ‘Communication’ and ‘Collaboration’ in the two main circles, the overlap of which is enabled by ‘Facilitation’. At this stage of the diagram’s evolution, communication and collaboration had emerged as descriptors for key concepts that were repeated across all interviews. The third idea presented in this diagram, facilitation, was established as a way to connect communication and collaboration and is indicative of an early finding proposed as a result of this work, concerning how we conceive of the identity of the educator. At this stage of the data analysis process, what was slowly evolving was an understanding that the educator’s role was based in both collaboration and communication *with* the student, as well as other stakeholders such as the community and industry, in contrast to a traditional teacher-led dynamic.

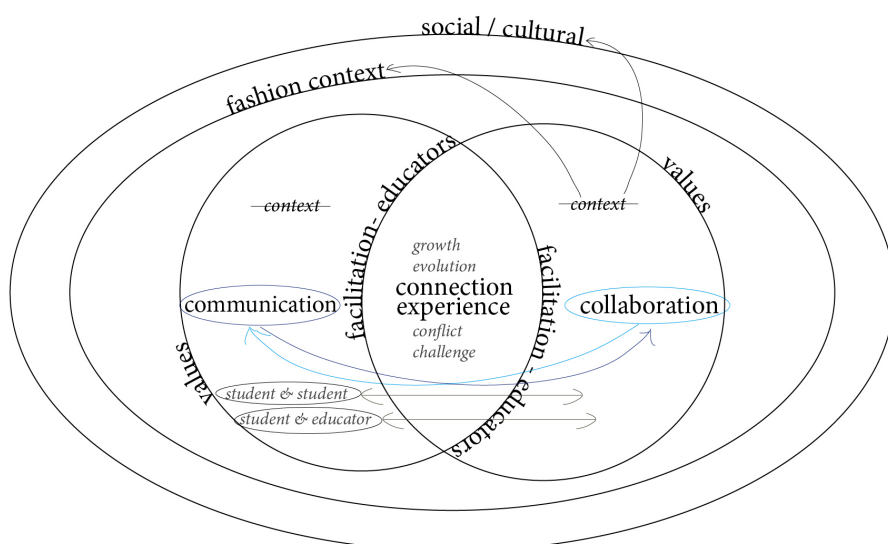
Colour was introduced to the diagram to differentiate between each idea and to help visualise the zones surrounding these as potential spaces for additional ideas to occupy. The rationale behind turning facilitation from a 'field' into an 'arrow' is to indicate that the relationship is dynamic rather than static; both communication and collaboration need to be (constantly) enacted by means of one another. In the below illustration (Fig.13) the central concept is described through the words 'Connection' and 'Experience', which is demonstrative of what impact the merging of these two outer concepts would have for both the educator and student; this diagram speaks of a 'connective experience' through the nurturing of 'communication' and 'collaboration', the outcome of a carefully facilitated journey.

Fig. 13 Venn Diagram. Stage 2.



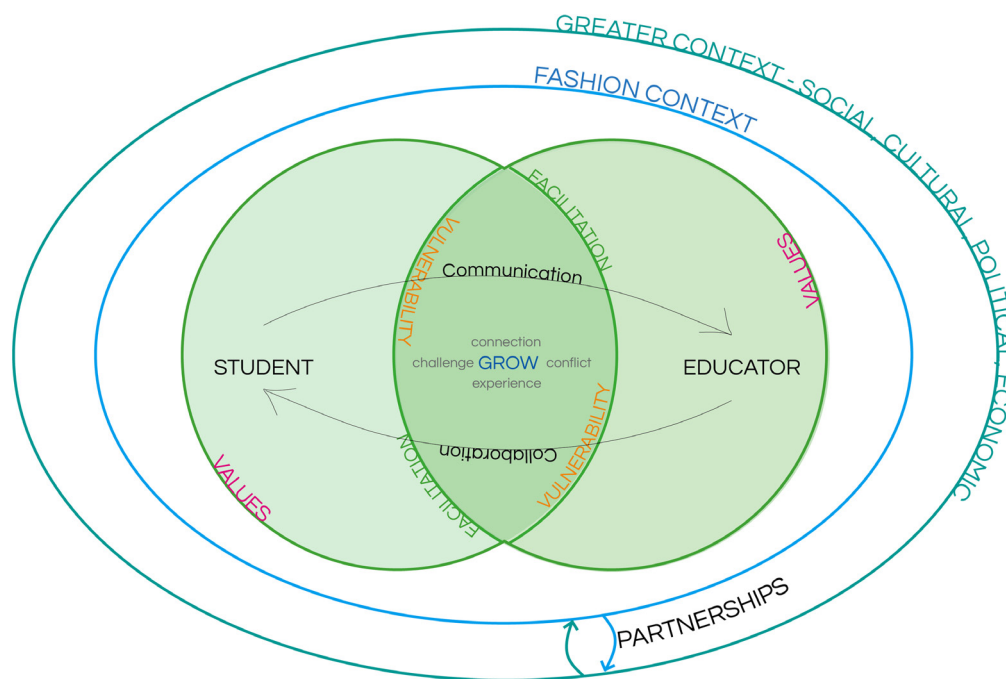
Moving beyond the two variations presented in Fig.12 and Fig.13, a more critical perspective was required to properly realise how the diagram could be effectively used to situate the findings of the research in dialogue with the contexts in which communication and collaboration take place. The gradual nature of the coding process supported the emergence of concepts which could be used to more accurately and clearly connect these themes. These terms identified through the coding process ('values', 'growth' and 'evolution', 'conflict' and 'challenge') assist in clarifying the nature of the relationships between 'communication', 'collaboration' and 'experience'. 'Values' identifies that collaboration and communication are common goods; the other four are ways in which the relationship between the collaboration and communication is enacted or unfolds.

Fig. 14 Venn Diagram. Stage 3.



Through consideration of ways to integrate these concepts into the previous diagram (Fig.14), additional ideas concerning context emerged, which brought into question the wider implications of these ideas. An addition to the preceding diagram (Fig.14) is the indicated movement of the arrows from student to educator, which are titles 'collaboration' and 'communication' seen in the below Fig.15. Similarly, the same movement through arrow placement is marked between the immediate 'fashion context' and the broader 'social, cultural, political and economic context' within which these relationships sit within and talk to.

Fig. 15 Venn Diagram. Stage 4.



In the final iteration of the Venn Diagram structure above, the ideas have been refined and articulated with the introduction of more colour to differentiate each idea. This version of the diagram helps to visually connect similar concepts. The movement between ideas within Fig. 15 has been expressed through the addition of arrows. In particular, 'Partnerships' signifies the relationship between the immediate and broader contexts, connecting fashion institutions and industry partners and therefore education with real-world experiences.

This final iteration of the Venn Diagram implies that the transformative fashion education experience culminates in an experience of growth or evolution (as noted in the centre), through the sharing and communicating of values as well as the realisation and capacity to acknowledge vulnerability in this experience. It is through nurturing an environment that values and fosters collaboration and communication between students, and between students and educators, that the adoption of new perspectives can be achieved.

3.3.8 Concluding the Mapping Series

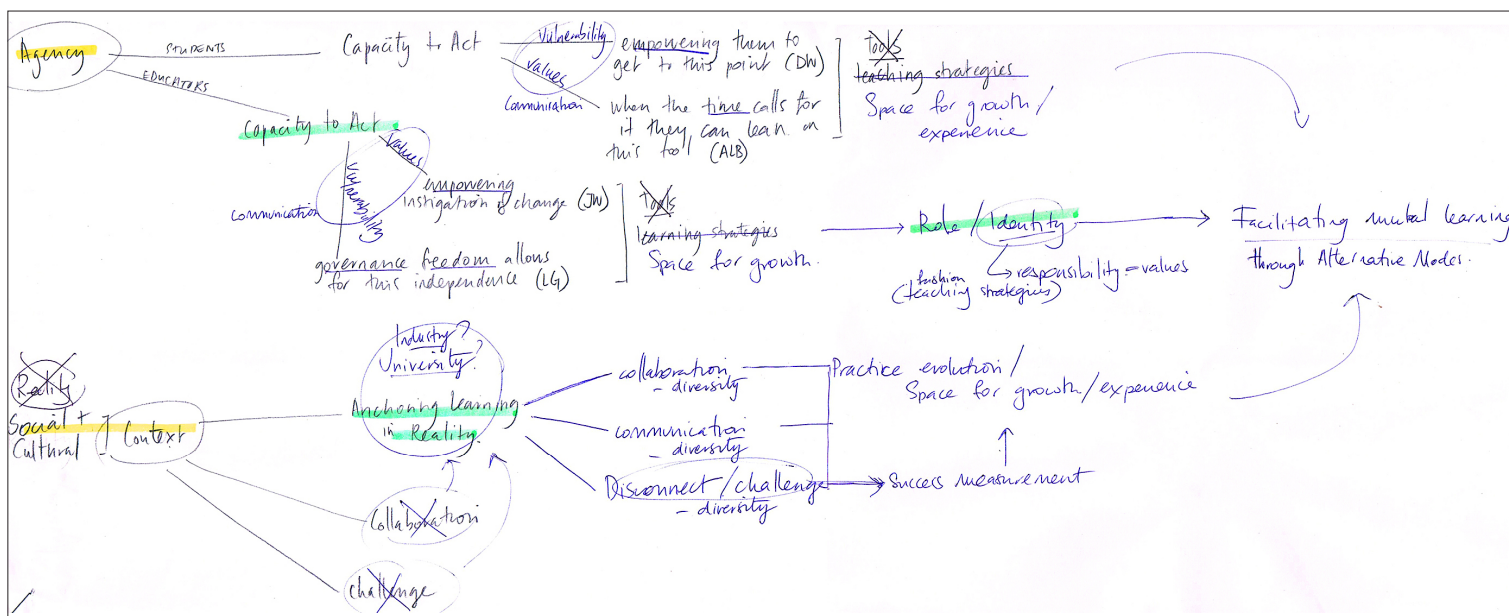
The various data analysis processes discussed in detail in this chapter have demonstrated that the interview series data has been deeply thought provoking regarding the importance of communication and collaboration as means for establishing, preserving and strengthening the educator and student relationship. Furthermore, the data analysis indicates that

through the use of these methods, supported by theory established in the literature review, a potentially transformative experience is enabled for students and educators alike, through a connective experience that includes conflict, challenge, and the sharing of knowledge. In addition, the research findings indicate that this activity lives in continuous exchange with both fashion and wider socio-cultural contexts.

Further points concerning these relationships will be discussed in Chapter's 4 and 5.

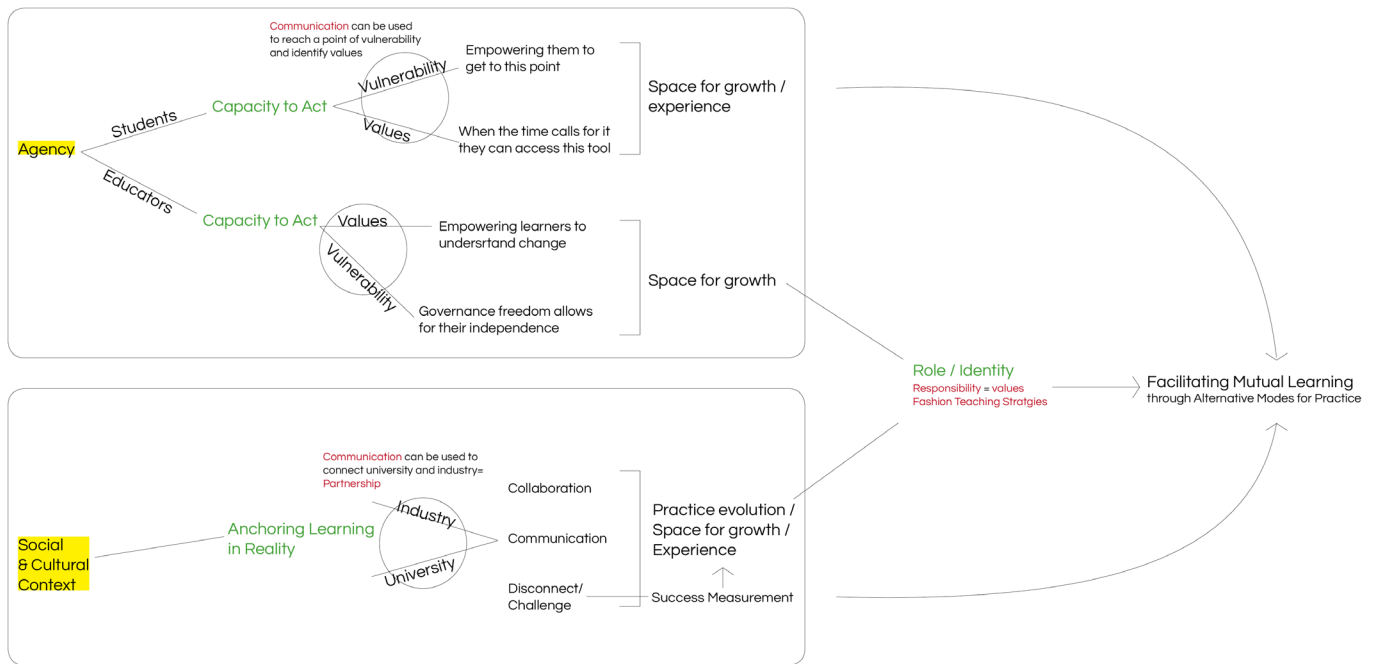
After completing the Venn Diagram series, a clearer picture of the central findings from this research emerged. As a result, further mapping of these ideas was conducted via the creation of a series of horizontal maps. These maps, documented in this section (Fig.16 and Fig.17), were developed to understand how the relationships between the ideas could be arranged to make the connections more explicit to the reader. The hand drawn map below, Fig. 16, indicates how the two themes, 'agency' and 'context', have emerged as significant contributions to the findings of the study. The generation of the term 'agency' has been used in the below map as an umbrella term encompassing the capacity of both the educator and student in the learning process.

Fig. 16 Collating Findings from Conceptual Maps and Venn Diagrams



This above diagram illustrates how key ideas and relations have been refined in more explicit ways than those captured through the Venn diagram process. This map was initially hand drawn in pen to maintain a blueprint for how an understanding of the ideas and their relationships started to shift, removing the editorial desire to respond to these changes by erasing their history. Maintaining the map in this form has allowed for the understanding of dominant themes to emerge. This hand drawn map was then converted to a digitally drawn map to clearly communicate the key ideas and their relationships with one another. This has been captured in Fig.17 on the following page.

Fig. 17 Collating Findings from Conceptual Maps and Venn Diagrams Digitally



The use of colour aids in tracking the key themes ‘capacity to act’, ‘anchoring learning in reality’ and ‘role/identity’. A discussion of the relationship between the findings that have emerged from this mapping process are presented in the Chapter 5 of this thesis.

3.4 Research Phases: The Online Student Survey

3.4.1 Introducing the Student Perspective

The limitations of the methods employed to analyse data from the interview series, presented in detail in section 3.4.3 of this chapter, made it clear that the interpretation of existing theory and practice would greatly benefit from the inclusion of the student perspective. The decision to incorporate quantitative data through the involvement of a student survey was driven by two factors: firstly, by a desire to strengthen the qualitative interview findings with accounts of the student experience, and secondly by the difficulty in obtaining qualitative data from the students. Once the educator interview responses had been analysed, they were then compared with the limited number of online survey responses collected from the students of the selected courses. This additional stage in the data analysis process has been included to establish whether the comparison of these perspectives confirmed the similarities and/or differences in each studio experience identified through the interviews. This process also served to develop an understanding of the student reactions to certain teaching styles and methods.

The student survey questionnaire was circulated at various times between 2016 and 2017 by the educator liaisons; when approved by the liaisons, the survey was emailed by the researcher directly to participants. The data collected from the survey questionnaire was done so anonymously through online survey development software Survey Monkey.

3.4.2 Survey Participants

The survey participants were drawn from a sample pool comprised of the class members from each of the courses selected for comparative analysis. Each of the course leaders was contacted via email and agreement was sought to distribute the online survey link to all students who participated in the course. The number of respondents for this component of the study varied across the four universities; in most cases it was less than half the population of the class that chose to respond to the call to participate. As noted by Groves, with a higher response rate comes an assumption that the non response bias will be low (Groves,1989, p 209).

London College of Fashion <i>Nike Making Project</i>	3 respondents
Massey University <i>Fashion Activism: Space Between China</i>	5 respondents
California College of the Arts <i>Ecology of Clothing</i>	4 respondents
Kolding Design School <i>Design for Change</i>	2 respondents

All the respondents remained anonymous throughout the process of this research. Assuring the students that they would remain anonymous throughout the life of the research project was key to encouraging them to feel comfortable about responding honestly, without concern for judgement from their course leader. Gaining student participation in this survey was not always successful. For reasons of confidentiality in some cases, it was difficult to contact students who had already completed their degrees. Whilst course leaders were encouraging of their students' participation, obtaining high student participation rates was not a straightforward process. Expressing appreciation for respondent participation in

advance of distributing the survey did not seem to garner maximum response rates from each contacted population; potentially monetizing or providing tokens of appreciation may have guaranteed a higher rate of participation. For this reason, the student component of this study makes a limited contribution to the research, although in some cases it has helped to establish the presence of specific transformative teaching strategies whilst at the same time providing some insight into the student experience of those strategies.

Equivalence was ensured throughout the research process to establish a sound basis for the interpretation of cross-cultural and multi-lingual data. Survey questions were translated into Danish for the Kolding Design School's *Design for Change* course student participants and distributed by the course leader. However, students were asked to complete the survey in English as classes were held in English.

3.4.3 Quantitative Sampling

The sample group of students selected for this survey was defined using Denscombe's (2007) sampling frame survey technique. The sample size, depending on the population of each class, was defined by the total number of responses received at the conclusion of the survey. A minimum of 2 responses per course was set as the aim for the collection phase, which would bring a total of 8 responses from all courses surveyed. Fortunately, 14 responses were collected in total. The time set aside for this component of the study was approximately 18 months, spanning from the first half of the first year to the end of the second year of the research schedule. This timeline allowed for frequent communication with course leaders which was used to determine what would be appropriate timing for students to complete the survey. This timeframe also provided students with adequate opportunity to receive the survey, read about the research, and complete the online questionnaire.

The distribution of the online student survey took place after the educator interview series had been completed for that corresponding course. The reason for this was that, having made initial contact with the course leaders and utilising the interview as a moment to connect and share the research and its purpose, it was assumed that the course leaders would then be more likely to understand the significance of student participation.

Creating the quantitative questionnaire for this survey initially involved the identification of a thematic structure from which to understand what questions were in need of asking. The themes used to identify and formulate the questions were informed by the secondary research question driving this component of the study, '*Did participating in this course encourage a shift in the way emerging designers view the fashion industry and its systems? If so, in what way?*' In order to use the survey to respond to this query, the below themes were constructed from which questions were drafted and edited using feedback from the supervision team and research colleagues at RMIT University. The three key areas of interest, under which subsequent survey questions were created, were (the ethics approved questions are listed under each theme):

Student: Personal Context

This section of the questionnaire was used to identify characteristics about the student responding, such as what university they are from, whether they had completed any prior

learning around sustainability as a subject not in direct relation to fashion, and whether they experienced a shift in perspective as a result of participating in this course.

Q1 What is the name of the school you attended? e.g. Royal Melbourne Institute of Technology

Q2 How did you feel about ideas of sustainability in fashion before starting this class?

A. I had a comprehensive understanding of the issues surrounding sustainability in fashion but wanted to know how I could contribute in a practical sense to positive change.

B. I had a basic understanding but chose this class as a way of expanding on this knowledge.

C. I knew very little about the issues surrounding sustainability in fashion but wanted to develop my practice and considered this class to be a good first step.

D. I chose this class for other reasons unrelated to learning about sustainable fashion.

PLEASE BRIEFLY ELABORATE ON YOUR RESPONSE.

Learning Environment

Acknowledging the learner's environment is vital for the educator and key to creating a transformative learning experience for students. According to Mackintosh (2014), it has the ability to enhance the learner's interaction with content and thus influence their capacity to act in reaction to said environment (Walden, 2009). This key area of interest is explored in both the interview series and through the student survey questionnaire, as a way to analyse the intention of the educator in contrast with the students experience of their learning environment.

Q3 Did you find the brief to be open or structured and why?

PLEASE EXPLAIN WHY YOU SELECTED THE ABOVE RESPONSE. FOR EXAMPLE, WAS THERE FREEDOM TO CHANGE ASSESSMENT CRITERIA TO ACCOMMODATE YOUR LEARNING PREFERENCE?

Q4 Did the course increase your understanding and/or *critical thinking on sustainability?

PLEASE ELABORATE ON YOUR SELECTED RESPONSE HERE.*CRITICAL THINKING: OBJECTIVE ANALYSIS / EVALUATION OF AN ISSUE (SUSTAINABILITY) IN ORDER TO FORM A JUDGEMENT. THIS COULD BE DONE THROUGH: CLASS DISCUSSION, PERSONAL REFLECTIVE TASKS LIKE A CASE STUDY OR COMPARATIVE ANALYSIS. ANY ACTIVITY THAT MAKES YOU REFLECT CRITICALLY ON WHAT YOU ARE LEARNING.

Q6 Did you often work collaboratively to problem solve in class time?

A. Yes, please outline below how you found this experience.

B. No, please outline if you would have liked this to be included.

DISCUSS YOUR RESPONSE HERE.

Q9 How was the class structured? Feel free to choose more than one response and elaborate on your choice in the space below.

A. In a studio-style atelier (work tables, mannequins, all students in one room).

B. In a standard classroom format (desks facing teacher).

C. Openly, no chairs, just work benches scattered.

D. We often discussed topics in a large circle together in the classroom.

E. The class was not in a set location, it changed from week to week.

F. We worked mostly independently in our own personal workspaces.

G. The class involved excursions to industry locations, it was not often held in a classroom/studio.

HOW DID THE ABOVE SELECTION HELP YOUR LEARNING PROCESS?

Reflection

Within this section of questioning, students were asked to provide constructive feedback about the course, and to share key moments or ideas that they took away from the experience. Additionally, students were asked to describe how participation in the course affected

their broader perspective on the fashion industry. For this last section of the questionnaire multiple choice questions were integrated, accompanied by the inclusion of additional space to allow students to elaborate further and in more detail on their responses. Formatting questions this way helped when it came to analyse the student responses to this section, as it allowed for the grouping of popular choices whilst at the same time providing further text for clarity should that have been required.

Q5 Did the course transform your knowledge or understanding of anything else?
SHORT ANSWER RESPONSE.

Q7 How did you feel about ideas of sustainability in fashion after completing the course?
A. I felt as though I had gained valuable tools that helped me better understand ways of generating change in the industry.
B. I felt more aware of what was happening, but not empowered to make a change.
C. I felt more aware, but such insight left me feeling overwhelmed. How can I influence change?
D. This class did not change how I feel about these issues.

PLEASE BRIEFLY ELABORATE ON YOUR RESPONSE. IF YOU ANSWERED ONE OF THE FIRST THREE, HOW DID THIS CLASS CHANGE YOUR OPINION?

Q8 Please describe a time that you felt your ideas were challenged in class.
SHORT ANSWER RESPONSE.

Q10 What would you change about this class?
SHORT ANSWER RESPONSE.

Q11 What are three key points, ideas or memories you have taken away from this class?

Q12 How has participating in this class changed the way you view the fashion industry?
A. Radically. I now want to focus all my energy on pursuing more sustainable fashion practices.
B. Significantly. I would like to continue to learn more; I may consider changing my fashion practices.
C. Mildly. I don't feel the need to learn more, and do not want to change my fashion practices.
D. Not at all. I am still not interested in ways to make the fashion industry more sustainable.
PLEASE VERY BRIEFLY ELABORATE ON YOUR RESPONSE.

3.4.4 Data Analysis Process

The multiple-choice section of the survey produced clear findings for comparison. The nature of the line of questioning created for the student survey made for a clear and concise grouping and coding of responses. The program used for the creation and analysis of the online survey, Survey Monkey, generated quantitative information from the multiple-choice questions created for the survey. These responses are presented in both a pie and bar chart format. As a method for gaining further insight into the students' multiple-choice selection, short answer questions asking students to briefly elaborate on their multiple-choice response were included. Whilst the multiple-choice questions generated clearly differentiated results, responses to the additional short answer questions required the use of coding processes to comparatively analyse the results.

In total, of the 12 questions that were created, 9 were multiple choice questions. Of the 3 that were not multiple choice, 1 was a question asking students to state the name of their university, and the second was a question asking students to describe a time they felt they were challenged during the class. The third short answer question, also the last of the survey, was used to encourage students to provide constructive feedback regarding what they would change about the class. These short answer questions provided much needed data;

for example knowing the student’s university affiliation helps with understanding the context for each response (as well as measure the number of responses from each course), whilst the other questions allowed the students to share personal reflections and opinions and provided a sense of depth, clarity and insight. Each of the 14 student responses to these short answer questions has been analysed to provide additional findings. The short answer responses have also aided in contributing a student voice to this research project and to capture the sentiments and experiences students felt in response to these courses, something that information generated solely from the multiple-choice questions could not have provided.

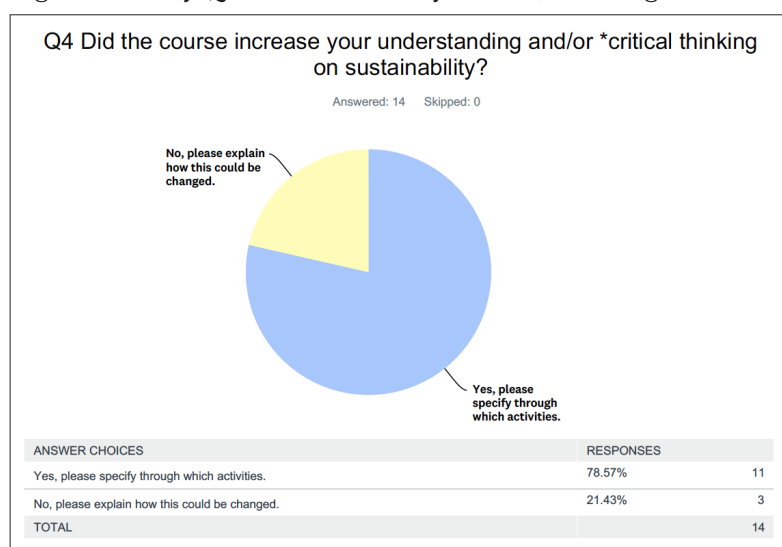
3.4.4.1 SurveyMonkey (CAQDAS)

The software program Survey Monkey provided a variety of tools useful to the analysis of the results collected from questionnaires. In regard to comparative analysis, the program is able to compare by Question and Answer or Compare by A/B Test (an option which was not available for this survey). An additional feature of the program allows for text analysis, which searches and tags comments to create word clouds from frequent words and phrases. As the short answer responses were analysed manually through coding processes, this feature was not required, however for larger and more time-consuming surveys the text analysis feature would be an appropriate means of analysis.

For the analysis, Survey Monkey was used to filter the data collected from student responses. While not overly helpful when comparatively analysing the results, it is beneficial to understanding how students from a particular university can be grouped by their responses. This filter was also useful when searching for direct quotes from students who attended a specific university in order to provide a supportive or contrary perspective to that communicated by their educator.

Using the Question Summaries filter was the chosen method for reading the data comparatively. Whilst there was the option to format the multiple-choice questions into a range of different charts, pie charts were chosen to provide a clear visual representation of the comparative results for each question. This allowed the findings to be represented as percentages, while respondent figures accompanying each answer choice provided insight into how the respondents answered as a collective.

Fig. 18 Filter by Question Summary format, selecting data to be presented in a pie chart.



3.4.4.2 Coding Process: Short Answer Questions

In order to analyse the short answer responses provided by students, qualitative analysis has been conducted by developing themes using Denscombe's (2007) interpretative techniques. Grouping the interview questions under three key themes: personal experience, learning environment and reflection helped when labelling the data in the coding process. The qualitative data analysis portion of this analysis has been conducted in three stages:

1. Key thematic coding, using the three initial overarching themes
2. Question related coding, informed by the context created by the question
3. Comparative coding, using data gathered from the interview series in contrast with themes that had evolved from written student responses

The final stage of the analysis of the qualitative data provided through the online survey questionnaire is a discussion of the studio project analysis findings, as well as the implications these findings have on fashion teaching practice, in Chapters 4 and 5. Furthermore, the limitations posed by the methodology are reflected upon in Chapter 1.

3.4.4.3 Discussing the results

When considering the results generated by the student survey method, it is worth noting that the study would have benefitted from a greater response rate. Denscombe (2007) notes that sample sizes should not be fewer than 30 people, although the anonymous quality of the study combined with the international nature of the courses, meant it was hard to ensure participation from the students. Singleton & Straits (2012) note that monetising the survey or even providing respondents with a token gift can generate better results, though this cannot be confirmed in retrospect.

In total, 14 respondents provided this body of work with valuable findings, the most critical being that 78.57% (11 out of 14) of students felt that their participation in the selected course increased their understanding of and / or critical thinking on sustainability. That result indicates that the courses selected for analysis and the educators interviewed for this study have been successful in effectively engaging and enhancing their students' thinking on sustainability. In addition, 13 of the 14 respondents recorded that these courses helped them feel more aware of what was happening in the industry, and 8 out the 14 felt empowered, as a result, to make a change. The reality is that with an increased response rate comes the opportunity for greater depth and subtlety to the findings. However, this reality need not undermine the meaningfulness of the data generated by this study, since the research has shown that the courses examined have made a significant contribution to the design thinking of students around the world.

3.5 Conclusion

This research into the study and practice of fashion education for sustainability has revealed a number of individuals mobilised by their passion for working to develop such curriculum, and the dynamism of their shared professional and personal values was evident during the expert educator interview series. Each respondent spoke of a sense of community within the context of both academic and industry practice connected by a strong interest in sustainable fashion practice, and a commitment to educating students about the implications of current un-sustainable fashion practices on their local and global environments. In particular the mapping process, discussed in section 3.3, generated as a by-product of the interview analysis, helped to structure a framework from which findings started to emerge. The nature of this mapping process allowed for the emergence and evolution of key themes and critiques around the benefits and challenges associated with adopting a more transformative approach to teaching fashion and sustainability. It was through the adoption of this method that a clearer understanding of how current fashion teaching practice relates to transformative learning theory was highlighted, as well as how this may contribute to fashion education practice for sustainability.

Upon reflection, alternative approaches could have been utilised in order to encourage more participation from student respondents. Perhaps as Singleton & Straits (2012) point out, a higher rate of cooperation could have been achieved had the survey been based on a social exchange theory of human behaviour, according to which “the greater the perceived rewards relative to the perceived costs of complying with an interview request, the more likely it is that a householder will cooperate” (Singleton et al., 2012 citing Dillman et al., 2009; p. 77).

Regardless, whilst this may indicate room for further investigation into the student experience, a deeper analysis of this experience is beyond the scope of this study. The developed methodology applied to the analysis of the educator interview data has been sufficient to provide knowledge of the current practice and future possibilities for fashion teaching practice for sustainability. With a greater awareness of the ways existing learning and teaching theory contributes to fashion pedagogy, more progressive student learning experiences will be given the space to evolve.

4
A STUDY OF TRANSFORMATIVE FASHION EDUCATION IN PRACTICE

4.1 Introduction

This chapter is dedicated to reviewing a selection of fashion studio projects that are widely acknowledged as leading examples of best teaching practice within sustainable design education. Theodore Schatzki's theory of transformation in social practice is presented in this chapter as a basis for comparison between existing theories and practices of transformative learning and actual instances of fashion teaching practice. In this chapter, the *Local Wisdom Project* provides a lens through which to consider course design and curriculum within sustainable fashion in relation to this thesis. A series of semi-structured interviews helps to establish the similarities between existing theory and current practices of expert teachers within the discipline. This is supported by a limited survey of past course participants from the relevant studio projects. The aim is to understand this space from a teaching perspective, but additionally student perspectives are taken into consideration. Based on these criteria, interrogating existing examples of teaching practice from acknowledged leaders of sustainable fashion education will establish the presence of transformative teaching practice within the discipline of fashion design.

The chapter is presented in several parts. The first outlines key details about the study including a discussion of the selection criteria used to decide which fashion programs and their corresponding projects would form the basis for this analysis. This section introduces all the relevant course background information gathered in relation to each program, utilizing both a review of existing literature combined with written observations and data gathered from semi-structured interviews to do so. The chapter then progresses to primary research around the data collected through the expert interviews to provide first-hand perspectives for teaching fashion for sustainability.

Theory surrounding transformative learning and teaching defines the experience from the perspective of the teacher and the student (Kasworm & Bowles, 2012; Taylor & Cranton, 2012). Theodore Schatzki extends this idea, suggesting that a transformation in social practice can occur in two different ways (in Robinson, 2010) by:

1. Creating new ways of completing existing projects, and/or
2. Combining new and existing ways of completing new projects.

While Schatzki (2002) is not directly referring to an education context, his ideas still provide a useful theoretical framework to analyse this field. Extending his work, Todd Robinson (2010) discusses how Schatzki's ideas of transformation and change can perhaps be applied in an educational context. Selection criteria were developed from their work and have been used to identify the five key fashion university courses that form the basis for this comparative study. The *Local Wisdom Project*, established by Kate Fletcher¹⁹ in 2009, has also been used to scope the study within the growing field of design for sustainability and to identify courses with similar objectives, in this case by engaging with the concept of Craft of Use.

19. Founder of the *Local Wisdom Project*, and Professor of Sustainability, Design and Fashion at the Centre for Sustainable Fashion.

4.1.1 The *Local Wisdom Project* - Background

The *Local Wisdom Project* explores the concept of the Craft of Use by creating a network of global partners who participated in gathering local stories and images about how people

use their clothes. The project aimed to explore emotional relationships between garments and their owners, and in doing so, offer a new vision for fashion that extends beyond perpetual buying and selling (CCA, 2012). In total, seven universities contributed to collecting these stories and images in successive events or symposia as a part of the *Local Wisdom Project* International Network across nine different countries including: UK (2009, 2012, 2013), USA (2011, 2012), Canada (2012, 2013), Denmark (2012), Australia (2013) and New Zealand (2013).²⁰ The universities who participated in the project presented here (London College of Fashion, Kolding Design School, Massey University and California College of the Arts) were encouraged to use the stories and images gathered through the research in the development of their course design.²¹

20. Germany, Ireland and Norway also participated in the *Local Wisdom* International Network running Festival events not connected to a specific university course and are therefore not included here. These dates were acquired from the *Local Wisdom* website (www.localwisdom.info)

Kate Fletcher explains the concept of the Craft of Use within the *Local Wisdom Project* in this way:

Most people are familiar with -- and highly prize -- the craft or expert skill of making things like garments. What is valued is an expert's touch, honed over years of training and a process of constant refinement of technique necessary to create superior pieces. We think that similarly skilful, cultivated, and ingenious practices also exist associated with the tending and using of garments. We call them the Craft of Use. (Fletcher, 2017, para 1)

21. To avoid bias RMIT University has been excluded from the study as discussed in Chapter 1.

The Craft of Use concept provided a novel way for researchers to engage with design for sustainability and in doing so, offered the same opportunity to teachers interested in innovating their courses. The important aspect of viewing sustainable design through the lens of Use has been to understand that emerging designers would benefit from this knowledge during their undergraduate learning journey. It became clear that, through their participation, the fashion educators at the selected universities were open to challenging their current methods for integrating sustainability content into their courses. This is supported by the accounts of the expert educators who led the delivery of these studio projects, documented through a series of semi-structured interviews.

The California College of the Arts has shared their perception of the opportunities afforded by the project, affirming that learning about individual use and connection with garments encourages educators and students to discuss alternative ways to “create, wear and think about fashion”, ways that were “...appropriate for an interdependent world with limited resources” (CCA, 2012). Fashion Design Chair at California College of the Arts, Amy Williams states:

At CCA, we train thinkers. We're asking people to think about fashion design. About product development. About the methods and the practice of using that work. So Local Wisdom is a perfect project because it's all about 'how we can repose the question of what fashion design should be? ... And that will make a big difference (CCA, 2012).

This view is supported by Anne-Louise Bang, who states in an interview that taking part in Fletcher's *Local Wisdom Project* has had a lasting impact on the evolution of the sustainability curriculum at the Kolding Design School. Participating was the catalyst for the conception of *Design for Change*, according to Bang, who goes on to discuss how the initial project concept has resulted in the development of another, collaborative project across multiple disciplines within the Kolding Design School (Bang, 2016, Interview).

For Jennifer Whitty of Massey University, participating in the *Local Wisdom Project* has also had an immense impact on her professional domain. Whitty discusses during her interview the pioneering nature of Kate Fletcher's research project, illuminating an area in fashion that has previously had little attention (Whitty, 2015, Interview). Just as Fletcher's work "...challenged the dependency of the fashion industry on increasing material throughput" (Whitty, 2015, Interview), it also inspired the fashion practitioners, researchers and educators who interacted with the project. By addressing questions around how to enable and empower users of clothing to create positive and satisfying relationships with their garments, Whitty's research project entitled *The Space Between* interacts with an emerging field of research, that of the user experience of fashion in the post-production and post-retail sector. In her interview Whitty also recognizes that the *Local Wisdom Project*, of which the NZ iteration was launched by Fletcher in 2013, has had a 'huge impact on... [her] ...work" (Whitty, 2015, Interview).

Lynda Grose also confirms that taking part in the *Local Wisdom Project* in 2012 has had a lasting impact on her fashion teaching practice. Grose was the lead investigator at CCA on the project and has integrated the concepts associated with the experience into several CCA courses.

CCA is an ideal platform for *Local Wisdom* because the values the project explores sit right within our mission. Both *Local Wisdom* and CCA foster an active engagement to influence cultural change (Grose, 2016, Interview).

The *Local Wisdom Project* is a great example of how the sharing of research through practice can affect course design, curriculum and teaching practice, inspiring explorations of best practice for teaching sustainability in fashion. Whilst Dilys Williams of the *Nike Making Project* does not talk explicitly of the connection this project has had to the ideas expressed through the *Local Wisdom Project*, Kate Fletcher's relationship with the CSF as its Professor of Sustainability, Design and Fashion means that "her strategic leadership on fashion-sustainability research permeates the Centre's activities" (CSF, 2008).

These four universities, as a result of their participation in the *Local Wisdom Project*, each designed and delivered studio courses built around the central concepts expressed through the Craft of Use. The research presented here, which has been collected from expert educators, offers an opportunity to assess whether correlations between projects exist regarding course aims, the selection of student participants, the availability and provision of funding, and the place of the studio project within the overall program of the institution. How each of the studio projects has been designed and delivered provides insight into the context within which the projects operate and extend the original format, created by Fletcher, based on local insight.

4.2 Project Specifics

4.2.1 Introducing the Projects

The following section introduces key details about each of the studio projects based on course and program materials, supporting documentation provided by some of the participants, and firsthand accounts. The aim is to establish any variances in the underlying courses across the different universities that may impact the data analysis. These are supported by personal interviews and the student surveys conducted between 2014 and 2018. For the purposes here, information will be presented separately for each project in their *Local Wisdom Project* order.

Nike Materials Sustainability Index Project (2009): London College of Fashion / Centre for Sustainable Fashion

London College of Fashion (LCF) is one of the leading fashion design institutes delivering curriculum with consideration of the fashion industry's changing landscape and is the only college in the UK to specialize in fashion education, research and consultancy (Duff, 2014). The Centre for Sustainable Fashion (CSF), a world leading research centre, places importance on partnering with industry as the foundation for many of the courses it offers to its students. In 2009 the college hosted the *Nike Materials Sustainability Index Project* [The *Nike Making Project*], where the brand partnered with students, researchers and educators to create a resource; something informative, innovative and aesthetically relevant, to enable and encourage fashion designers to be more critical and conscious within their own design process. The college offers many different degree level fashion programs. Frances Corner explains that "one of the major businesses CSF have worked with is Nike, who came to CSF with a question: How can we de-couple successful design from the degradation of nature? They [Nike] wanted to improve their material choices to decrease the effect they have on the environment, while still maintaining their honed aesthetic" (Corner, 2015). The *Nike Making Project* was not considered as part of the LCF set student curriculum, as students were not awarded credit points towards their degree. However, they did gain invaluable industry experience and a global platform to showcase their work (Williams, 2016, Interview).

This collaborative project culminated in the creation of an app-based platform, the *Nike MAKING Application*, which was created with the hope of streamlining the fashion designers' making processes by providing easier access to material sourcing information. This project was made up of a select number of students chosen from the college's Design, Business and Media Communications disciplines. Much like the *Local Wisdom Project's* Craft of Use, the *Nike Making Project* engages designers to work together on a cooperative sustainable design project.

As a result of its partnership with the Centre for Sustainable Fashion, LCF has been able to pioneer innovative classes to encourage students to engage with sustainable fashion theory in a practical and thought-provoking way. Linking students with large industry players such as the Kering group (owners of Gucci, YSL, Balenciaga, Alexander McQueen and other brands) and Nike allows students to discover how to use collaborative practice in a 'real-world' context while being encouraged to critically reflect on their impact from both personal and professional perspectives. Through participation in these classes, students are

encouraged to take “their skills, knowledge and experience and change industry for the better” (Corner, 2015). Furthermore, this mode of teaching illustrates the change-oriented nature of these students engaging with curriculum around sustainable fashion practice.

Ecology of Clothing, Seminar Class (re-occurring): California College of the Arts

22. Linda Grose has run the *Ecology of Clothing* course at CCA since 1999.

A second learning-inspired iteration of the *Local Wisdom Project* was Lynda Grose’s *Ecology of Clothing* course (2011, 2012).²² Education for sustainability within the fashion program at California College of the Arts (CCA) is covered by two classes, the *Ecology of Clothing* studio class and seminar class. Both of these are offered annually at CCA by the school’s fashion program. These classes were developed by Grose who applied her professional experience as a designer and consultant in order to develop curriculum which she feels addresses the “impact of textiles and the constraints and ethics of working with artisans” (Grose, 2016, Interview).

The first version of these classes was a single course created in 1999, at the request of the then founding chair who asked Grose to teach students about her work as a practitioner within the fashion industry. Since then, the course has undergone structural changes as CCA has developed its pedagogical approach to education for sustainability. Whilst initially it was taught by Grose as a one-off class, under the college’s second chair the class developed into a required learning component for all 2nd and 3rd year students. This changed again under the third chair who split the course into the current format: a seminar class and a studio class, which are both required learning components. Students at CCA have the option to take the *Ecology of Clothing* classes in their 2nd or 3rd year, though most tend to take it in the 3rd year (Grose, 2016, Interview). This research will be focusing on the structure, teachings and student experiences of the sustainability seminar class only, as the sustainability studio component of the course was undergoing curriculum changes in 2017 and unable to be included in the analysis.

Grose, who delivers both the studio and seminar classes, notes that the greatest assistance in the ongoing development of this stream has been the support she has received from the various heads of the fashion programs over the years (Grose, 2016, Interview). CCA is an institution that “integrates sustainability into its mission and so accepts and supports sustainability initiatives” (Grose, 2016, Interview). California College of the Arts does not consider itself a research university, according to Grose; the curriculum is developed and owned by the teaching staff, as is their own independent research. That is unless, Grose states, there is an initiative that is directly related to curricular development (Grose, 2016, Interview). Like other faculty members, Grose uses her own research to inform the growth of her teaching practice, folding her professional experience and research into the curriculum, and each year developing the course on the basis of student feedback. Grose recalls introducing ideas drawn from the *Local Wisdom Project* through her classes, noting “it was a really valuable project, [and] exciting because it was international” (Grose, 2016, Interview). She does add that the ethnographic nature of the research was challenging for students as they are accustomed to drawing on visual inspiration for their work. Despite this challenge Grose reflects that the experience was beneficial for both students and her own teaching practice.

Design for Change (re-occurring): Kolding Design School

The idea for the *Design for Change* studio course grew from a collaboration between Kolding Design School and Fletcher's *Local Wisdom Project* in 2012. After having participated in this collaboration, Vibeke Riisberg and Anne Louise Bang decided to maintain the focus on sustainability within the curriculum by creating a core studio that dealt with issues of sustainability in fashion, *Design for Change*.

Design for Change examines how clothing and fashion as phenomena can be transformed by considering the use phase during the design process. In addition, focus is on how to involve the user as an active participant in the transition to more sustainable behaviours. Thus, the project subscribes to an expanded notion into new business models and production as well as integrate it in the training of future designers (Design for Change, 2015).

The *Design for Change* course is a compulsory course at Kolding Design School, offered to 3rd year fashion and textile design students. The multidisciplinary nature of this course, combining fashion design students and textile design students, creates a dynamic working environment, in which students are exposed to different methods for working and responding to issues surrounding sustainability.

The course has been structured so to reflect the passage of time and its influence on fashion practice. Divided structurally into a focus on the past, present and future, the course studies each tense to understand what can be learnt from the approach of a maker, considering the social and cultural factors at play and their relationship to clothing in each temporal dimension. For example, Bang notes that when discussing ideas of fashion in reference to the past, she emphasises how the notion of designing for longevity was an important consideration for the designers. Highlighting the differences in needs and conditions being experienced by the people wearing the clothes helps students to contextualise the reasoning behind the practice of making. The component of the course focusing on the past is accompanied by a trip to the National Museum in Copenhagen where the archived garment collections provide a hands-on study for the students, helping them to realize ideas of technique and craftsmanship used to extend the lifespan of garments.

The present tense is introduced through a discussion with students on how designers can meet clothing demands with a consideration for sustainable practices. as Bang notes, "the industry is not ready to change the paradigm yet, so how can we then work with sustainability." Discussing the future tense with the students was concentrated around a design proposition querying what garments would be relevant for 50 years from now. This purpose of this task is to open students' minds to many wild possibilities, for example students speculated about what technological developments may occur in the future and then created outcomes that would be products of these developments (Bang, 2016, Interview).

Head of Fashion at Kolding Design School, Nadine Möllenkamp explains further that the course, and the way it is structured, encourages students to constantly question their research and development in order to challenge their preconceived ideas of fashion design. Multidisciplinary practice is taught for this reason, and students are encouraged to work

outside their comfort zones through the learning of different techniques and perspectives. This teaching practice seeks to challenge their development and also their ability to communicate as a designer (Möllenkamp, 2016, Interview).

Massey University in New Zealand similarly works to promote multidisciplinary practice within their College of Creative Arts, in particular through Jennifer Whitty's *Fashion Activism: Space Between China* course.

Fashion Activism, Space Between China (2015): Massey University

The final university studied in this research to take part in the *Local Wisdom Project*, in 2015, is located in New Zealand. Jennifer Whitty conceived of the *Fashion Activism: Space Between China* course from her experience co-founding the *Space Between Project*, an initiative of Massey University's College of Creative Arts that addresses the wastefulness of the current fashion system.

During the research and development period of *Space Between* (2013-2015) it became very clear that in order to create real change it is important to engage a variety of stakeholders/students from across the College of Creative Arts (Whitty, 2015, Interview).

The *Fashion Activism: Space Between China* course operated in 2015 as a culturally immersive experience for twelve of Massey University's College of Creative Arts 300 level (year 3) students. The project ran over six weeks in November and December in 2015, across China (Xi'an, Shanghai, Beijing) and New Zealand (Wellington, Lower Hutt). The course was supported by Massey University's College of Creative Arts, though driven by senior lecturer and researcher Jennifer Whitty's individual research (Whitty, 2015, Interview). This collaborative course was "about finding sustainable strategies, which is quite different to most of the other courses that they would do in the College...By allowing for it [sustainability] to be the actual topic the hope was that they [students] would understand how open and diverse and 'doable' sustainable activity is" (Whitty, 2015, Interview).

Whitty notes that the topic of sustainability is often embedded in courses offered at the college without being the explicit topic of focus. Whitty hoped that through explicitly affiliating the course with sustainability content, students would understand how workable, achievable and diverse sustainable fashion strategies might be applied. In her interview, Whitty identifies communication and consumer perception of fashion as key barriers to creating a more sustainable future (Whitty, 2015, Interview).

Whitty recalls the desire to engage more stakeholders in order to achieve real change through her project, stating that "by involving photographers, visual communication, textile, fashion and industrial designers, as well as Maori Visual artists all together, opens up a platform for dialogue and strategies for sustainable futures" (Whitty, 2015, Interview). Through engaging students from across the college, the focus of the course was to understand and explore design activism and sustainability from a fashion and textiles perspective, culminating in the creation of a *Manifesto for Design Innovation* tailored to each student's individual practice (Whitty, 2015, Interview).

4.2.2 Course Aims

Each of the four courses selected for comparative analysis were similar in that they aspired to shift student thinking around what fashion design processes could look like by focusing on sustainable alternatives for fashion practice. The teaching practiced within these courses combines critical reflection with immersive collaborative activities to aid in developing the students' understanding of the direct and indirect impacts of their design process. Through trans-disciplinary or inter-year collaborations students are exposed to a more complex perspective on the multi-faceted nature of fashion production, including broader and more varied methods for addressing issues of sustainable practice that apply to both the textile and fashion design fields. This range of teaching methods and perspectives allows for a more comprehensive approach to sustainability.

Furthermore, Nike's app-based platform *MAKING* was created to help designers and product creators make more informed decisions about the materials they use in their design processes by incorporating, as stated on their website, "tips for improving the environmental impact of designs and a powerful comparison tool that allows you to compare the sustainability attributes of the materials." *The Nike Materials Sustainability Index*, which powers the *MAKING* application, was created using "publicly available" data on the environmental impacts of materials (MAKING, 2013). This information is used to enable the *MAKING* app users to make "real-time, predictive decisions," helping transform the process behind their design practice. Utilising and developing a familiar platform such as this affords students the opportunity to engage with content about sustainability in an accessible, relevant and practical way.

As stated on Nike's *MAKING* website, it is not always easy for designers to make "informed choices" and so partnering with London College of Fashion's design students not only helped develop the usability of the application, but also highlighted areas in need of improvement. Furthermore, the collaboration enlightened students about the sustainable options available to them as designers, by educating them about the important environmental impacts of their choices. Commenting on the project, a student stated that "the app really helped in terms of letting you find different fabrics, and fabrics that you may not have heard of before like polypropylene, so the more I used it, the more knowledge I gained" (LCF, 2013).

In addition to the *Nike Making Project*, and its focus on transforming the design process, Jennifer Whitty's *Fashion Activism* course was developed with the aim to "shift the students' thinking so they are aware and empowered to enact change in their future careers as creatives." Whitty hoped participation in the course would also encourage students to alter their behaviours as consumers (Whitty, 2015, Interview).

Similarly, the Kolding Design School's *Design for Change* course echoed a desire to shift students thinking around fashion practice, to provide them with the tools they will need to practice sustainably in the future. Researcher and project co-manager Anne Louise Bang states that the goal for this course is to support "students [in knowing] how to find and access knowledge [on sustainable practice] when they need it... For the students, remembering everything [they learn] is not the aim of this course. Instead, I think remembering that there is extensive information out there and knowing how to find it is the key" (Bang, 2016, Interview).

Regarding long-term teaching objectives, California College of the Arts' Lynda Grose states that her hope is for the students to develop a sense of ease through working alongside professionals from other disciplines to solve design problems. Grose adds that her goal for the course is to ensure students leave feeling optimistic about their possible contribution to the industry and understand how to apply their newly found knowledge through practice and for further exploration beyond the current system of fashion.

We build solid awareness of ecological principles, the ecological and social impacts of fashion/textiles, the ability to use methodologies to identify impacts, ability to deploy appropriate design strategies based on identified impacts, awareness of the culture of consumption and new fashion businesses that decouple revenue from declining resources (Grose, 2016, Interview).

In summary, each course aims to enact or facilitate change – in this case for more sustainable design practice – through informing students' design decisions and enabling students to act on these decisions.

4.2.3 Administrative Variances

Each studio project leader has their own process for selecting their student population, administering and financing their courses. For the purposes of the research the following information is presented to provide clarity and to demonstrate how each university has the freedom to structure their project in line with their own institutional and program framework. The information has the added advantage of outlining four possible variations on how to establish a sustainable design project.

Student Selection

In order to achieve diversity within their student cohort for the *Nike Making Project*, The Centre for Sustainable Fashion put a call out to students of LCF's Design, Business and Media Communications Schools, asking only 'Do you want to change the game?' This simple call out resulted in 350 students attending the initial briefing, which was held by Nike in collaboration with CSF and LCF. Nike informed the students at the briefing that they were interested in creating something experimental but were unsure of what it would look like. Following this briefing, students who were interested applied, were interviewed separately and in groups, and 8 teams of 4 students from across all disciplines were selected. Gauging student interest levels in collaborative or participatory learning was a fundamental component to the selection process for the *Nike Making Project*.

Much like the LCF selection process, Massey University experienced a high number of applicants from which they selected their final number of students. Whilst there were over 50 applicants for the *Fashion Activism: Space Between China* course, from across a selection of creative disciplines at Massey University's College of Creative Arts, only 12 students were selected. Senior lecturer and course designer Jennifer Whitty, alongside the school's International Coordinator, selected students "based on grade-point average, and major" in order to ensure a diverse range of talents and perspectives within the group.

Unlike the above selection processes, Kolding Design Schools *Design for Change* course is a compulsory component of the 3rd year Bachelor in Fashion and Textiles program. All

students in both the fashion and textile departments within the school come together to take the course. *Design for Change* is led by both educators and researchers in the fields of fashion and textiles. The multidisciplinary approach to this course allows for students to build upon their skill set, through examining different forms of design practice in a unified classroom setting.

Similar to the *Design for Change* course, both the Sustainability Seminar and Studio classes associated with CCA's *Ecology of Clothing* course are compulsory learning components for all fashion design students, specifically 2nd and 3rd year students, and are offered as an elective to other disciplines. Whilst the CCA and Kolding Design Schools courses are compulsory for students to complete, the LCF and Massey courses use selection criteria from which they draw their final list of participants.

Coursework Value

Comparing additional administrative details, such as the method for crediting student participation, provides further context for each of these studio projects in relation to student motivation and incentive. Each of the four studio projects discussed credited their student participation in these particular courses differently. LCF's collaborative course with Nike was an extracurricular project, so the students were not credited in a traditional way. Instead students were rewarded with industry experience, networking and a global platform to communicate their work.

Whereas students partaking in *Fashion Activism: Space Between China* course received 15 credit points. This is the common point structure allocated to all elective courses at Massey University's College of Creative Arts. Whilst this course incorporated international travel, cross institutional and multidisciplinary student cooperation, it did not stray from the structural makeup of any other elective course on offer. Similarly, students of Kolding's *Design for Change* received credit points towards their overall degree for completing this course. This course is not considered as an elective but a core subject, open to all 3rd year students across the fashion and textiles departments. Whilst this course adopted a multidisciplinary approach, the credit points remained the same as any other core unit within the Bachelor in Fashion and Textiles program. Again, the CCA *Ecology of Clothing* Seminar was allotted 3 credit points. Similar to *Design for Change*, it is a core component of their fashion design education, students having the option to take it either in their 2nd year or 3rd year. It is important to keep in mind that 2 of these 4 studio projects were not compulsory components of a program of study.

Funding

Just as understanding the crediting system for these projects provides a basis for comparison, assessing how funding for these projects is governed affords understanding of the stakeholders invested in each project. There are commonalities that are similar to those in relation to the student crediting outcomes discussed above. The courses that were embedded into the larger school program as core subjects (Kolding and CCA) were funded by the home institution, whilst the others incorporated external funding. The *Nike Making Project* was funded by Nike as contract research that involved researchers and students. These students did not specifically gain credits towards their degrees.

23. This Scholarship is for the amount of \$60,000 NZD.

Massey University's *Fashion Activism: Space Between China* course received support from the Prime Minister's Scholarship Fund for Asia, a scholarship established to encourage cultural exchange between New Zealand and China. Receiving this fund meant that the course was able to cover travel, accommodation and meal costs of all their students.²³ Unlike LCF and Massey, Kolding Design School's *Design for Change* course is compulsory for fashion design students and, being a core subject, was funded by the university. Similarly, to Kolding Design School, CCA's *Ecology of Clothing* course is compulsory for fashion design students and is funded by the university.

In addition to examining information concerning the administrative aspects of each of these studio projects, during the expert interview series, each of the educators were asked about their personal and professional perspectives on fashion education and, in some cases, what they thought the future held for the sector. Each of the interviews provided valuable insights into how these experienced and specialist researchers viewed fashion teaching practice and their own contribution to this space. These insights validated and highlighted a range of feelings and opinions that I, a less experienced yet equally passionate fashion educator, held about how fashion education should be viewed and practised.

4.3 Perspectives on Fashion Education

Based on a series of expert interviews, this section identifies various approaches to fashion education and outlines key issues from the perspective of expert teachers. The information gathered provides insight into the experiences, perspectives and projections of what the future of sustainable fashion education may look like. Whilst each of the educators interviewed has a unique perspective based on their experience and the context for their teaching practice, there are common threads that can be drawn from their reflections on the practice of fashion education and its relation to the current state of the fashion industry.

London College of Fashion: Dilys Williams

In an interview conducted on 27 July 2016, when asked about her perspective on the current state of fashion education, Dilys Williams responded that she feels there is potentially too much of a focus on commercialisation in fashion education and there is a need to balance this with greater emphasis on conceptual thinking about fashion design as art practice. Williams added that “the idea of fashion’s identity-making as a philosophical view of how we represent ourselves in the world in these times, I think probably could be given more space and light.” Williams continued by discussing the duty fashion education has to its students, noting that as an educator she feels it is her role to think about what the world needs and wants beyond the specifics of a particular industry or role (Williams, 2016, Interview).

Massey University: Jennifer Whitty

Jennifer Whitty stated that in her opinion fashion design is currently in a time of transition, moving away from a system exclusively concerned with commerce. Considering the highly wasteful nature of the fashion industry, Whitty believes that combining our energy through collaboration is the key to rectifying the industry’s problems. Students taught by Whitty are encouraged to utilise strategic design thinking through their own design practices. Whitty uses her position as an educator to funnel her research on sustainable fashion practices into her classrooms, a place where educators can “test [ideas] and create a catalyst for change” (Whitty, 2015, Interview).

Through her ability to connect research with teaching, Whitty feels as though she has been able to add depth to her understanding of sustainability. Whitty expressed that through her research travel she has been exposed to sustainability teaching in other countries, enabling her to identify new pathways that exist for fashion design education globally. Whitty’s research and teaching seeks to ask educators, researchers and practitioners alike to question fashion in different and “larger” ways, and in doing so “enable future designers to become empowered to respond to these insights and enact change.” In her 2006 paper, ‘Reconnecting fashion design education: from the parts to the whole’, Whitty proposes new pathways for fashion design education. Drawing from her own teaching, research and enterprise, she employs theories of ecological design, meta-design, transition design and design activism in order to discuss the ways that educators can encourage future designers to ask different and larger questions of the industry.

Many of the greatest challenges experienced in any professional domain can be attributed to the constraints of time, more specifically to the need for more time to complete projects

or to sufficiently reflect upon a project. Time affords us the opportunity to assess as we go, to make well informed decisions and to trial alternative solutions.

When asked about the challenges of her role as an educator, Whitty admits that a lack of time and resources means not all ideas and activities can be sustained. Fashion students, generally, are not encouraged to seek answers to deeper questions about how design can “respond to issues as a transformational agent” in order to support our cultural, social, political, economic and environmental needs (Whitty, 2015, Interview). This point relates to Lidewij Edelkoort’s (2014) manifesto in which she argues that there is a need for greater conversation with the fashion design student rather than promoting design practice in isolation from collaboration. These students are independent creators who should be encouraged to work alongside rather than against each other. This idea of collaboration and connectedness is key to the way fashion education is delivered by Jennifer Whitty at Massey University.

Considering the amount of time a cross-institutional collaboration of this nature could involve logistically, allowing four weeks for the entire project seems like a very short period of time in which to complete visits to three different cities in addition to arranging and establishing the collaborative relationship, the learning activities, student reflection and project development. Whitty, in interview, discussed the difficulties that arose from this short time frame, and upon reflection, she said that she probably would not run the course again with only four weeks to cover such integral components of the subject. She added that, prior to starting the course, many of the Massey students did not know each other, which meant that they did not share the same level of experience when it came to collaborative practice. In response to this reflection, she continued that, should the course be run again, there would be more focus on team building exercises in order to increase confidence around collaborative practice.

Whitty also noted that, should the course be run again, it would not be open to as many different disciplines, that it would potentially be exclusively for visual communication and fashion design students. The reason she offered for this was that that through focusing only on two disciplines, coupled with the logistics involved in completing such an ambitious journey, it could work better to unify the group through common practice and vision rather than create division.

Kolding Design School: Anne Louise Bang & Nadine Möllenkamp

Much like the other educators, when asked about her perspective on fashion education Anne Louise Bang’s responses reflected her belief in the fashion industry’s its impending transition. Bang is of the opinion that the fashion industry is due to experience a paradigm shift in response to the overwhelming rapid growth the sector has experienced since the 1960s. Considering that the environment is not able to sustain its current rate of growth, the demand for alternative fashion systems that take into account the earth’s finite resources will continue to thrive (Bang, 2016, Interview).

Head of Fashion at Kolding Design School, Nadine Möllenkamp shares this perspective with Bang, pointing out that the school is focussed on educating students so that they feel relevant within an industry in transition (Möllenkamp, 2016, Interview). Whilst both

educators feel strongly about the inevitable transformation the fashion industry is due to undergo, both also acknowledge that this may take time and students need to feel prepared for finding work within the current industry. Bang notes that this can cause problems for students, who are learning and creating new tools for practicing sustainably but are still destined to work with companies that are not ready for this change to be effected. As a result, Bang has noticed an emerging disconnection between the students' educational experience and how they expect to practice professionally, a disconnection that can be challenging for the students to accept.

Whilst the reality of this 'disconnect' is problematic for the students in terms of mentally adjusting to life outside of university, it can also be considered as a blessing. The tools and methods that the *Design for Change* students develop will not go to waste, according to Möllenkamp and Bang, since they can be adapted to suit the current practices used in fashion production. And it is Möllenkamp who notes that in this moment of adaptation, students "become future designers, who are able to motivate change" (Möllenkamp, 2016, Interview).

Möllenkamp adds that students at Kolding Design School are encouraged to practice fashion with a clear idea of what their core values are, and this same approach is applied to the staff teaching philosophy. Meeting students eye to eye is key to the way that Möllenkamp encourages fashion to be taught at Kolding, and she emphasises that the instructors consider themselves as designers, not educators, teaching from the perspective that as designers "we are teaching future designers. It is very mutual" (Möllenkamp, 2016, Interview).

When asked about the final aspirations held by students walking away from the *Design for Change* course, Möllenkamp replied that she hoped that students felt as though they had developed the relevant tools to equip them for work within a "fashion system that is very much under pressure right now" (2016, Interview). Discussing her role and what she sees as her duty to the students as both a teacher and head of the school, she explained that "our education is occupied with providing students with the possibility to react a changing society, by equipping them with the tools and methods to do so" (Interview, 2016). In the interview, Möllenkamp noted that the school's priority is to discuss current environmental and social issues within their courses, that there is a particular emphasis on integrating education for sustainability into all courses. Talking to the educators involved with the *Design for Change* course at Kolding, one felt a sense of optimism combined with candid realism. Both Bang and Möllenkamp believe that the fashion industry is on the cusp of transformation. Their duty to the students is to prepare them for this change through developing a specific skill set that will serve them in their future practice scenarios, whilst also understanding that their responsibility is to educate them for the industry of today. These parallel agendas serve as the foundation for the content delivered within *Design for Change's* nine week cycle.

In reflecting on the state of fashion education, all the interviewees were asked what they felt was the greatest aid in developing their teaching practice. For Bang, the small-scale nature of Kolding Design School is its most important asset, allowing students to experience a closer relationship with their peers and teachers. In addition, Bang notes that the freedom she enjoys in her teaching practice allows her to harness possibilities to work as a change agent. She is able to decide what and how to present content, to ensure that she is present for the

students, able to find the motivation to develop curriculum, adjust the content or workshops based on student feedback, and involve students more in the delivery of content. This freedom, she claims, inspires and motivates her to work with the students and her colleagues to create coursework that is relevant and current (Bang, 2016, Interview).

California College of the Arts: Lynda Grose

Many of the perspectives on fashion education expressed by the interview participants highlighted the complexities associated with delivering education for sustainability, particularly those that arise within an industry that may not necessarily mirror the skills and values students are learning. Designer and educator at California College of the Arts Lynda Grose believes that education for sustainability should be the context for fashion design education generally, adding that the skills associated with this type of learning would better equip students for the challenges associated with working in the fashion industry as it currently exists (Grose, 2016, Interview). As an example of an existing challenge, Grose refers to the effects of climate change on the reliability of cotton fibre, the second most commonly produced fibre in the world, “due to increasingly erratic rainfall patterns” (Grose, 2016, Interview).

In her article ‘Lynda Grose: Two Decades of Eco-Fashion’, Kirsten Dirksen talks to Grose about her experience within the fashion system as a designer and an advocate for using fashion as a means of change. Reflecting on her teaching practice, Grose notes that “It is the most gratifying thing in the world as a teacher, to be acknowledged by your former student. One of the reasons I teach sustainable design is that I want to pass on what I have discovered and encourage young designers to develop their own eco guidelines based on their own research and discoveries, to be critical thinkers, and to inspire change in the industry in their own way” (Grose quoted by Dirksen, 2008, para. 27). Through educating students about contemporary issues confronting textile production, Grose seeks to encourage discussion about the future use of garments and how technology might enable designers to ‘harvest’ post-consumer textile waste, for example.

Whilst each of the educators shared a unique perspective which provided insight into their own approaches for navigating fashion education for sustainability, some commonalities can be drawn from these interviews. Almost all of the participants talked of how they hoped to use their teaching practice to empower change within their students’ thinking. In particular, Kolding Design School’s Bang and Möllenkamp discussed their shared belief in creating environments that support mutual learning so as to involve students more in the delivering of content. This is what Möllenkamp referred to as designers teaching future designers about the current and future context of their practice. In addition, Möllenkamp and Bang are accompanied by Massey’s Jennifer Whitty in sharing the opinion that their role as educators is to equip students with the relevant tools demanded of the industry in its current form that Williams adds could be skills beyond the specifics required of a particular industry or role, whilst simultaneously preparing them for a different future of practice. In response, however, Bang and Grose did reflect that students can feel disconnected from what they are learning, as its application in a real-world context can feel distant from their education and not immediate in its urgency. Other issues identified by the educators as barriers were lack of time, inadequate resources, overwhelming student workload, and the commercialisation of fashion education.

4.4 Perspectives on Teaching Practice

In addition to sharing their perspectives on fashion education and sustainability, these educators also discussed the advantages and challenges they encounter through their teaching practice, providing insight into what they believe to be effective teaching strategies. These insights, combined with additional reflections from these interviewees on the future of fashion design and the role of the designer, inform the following section of this Chapter.

Massey University: Jennifer Whitty

Fashion designers traditionally operate as “secondary players within a larger system, so that they become part of the problem rather than part of the solution” (Whitty, 2015, Interview). On the other hand, the art of teaching sustainability as an inherent part of good design practice, whilst encouraging students to believe they can be agents of change, is a contemporary and in some cases present reality in certain fashion programs such as Whitty’s *Fashion Activism: Space Between China* (Whitty, 2015, Interview).

In her interview Whitty shared many insights into her own teaching practices, most notably her thoughts on the role fashion education has in engaging its students with issues of sustainability. Whitty expressed the belief that in order for emerging designers to better engage with this information, fashion education needs to evolve so that this content is not considered an afterthought to the teaching planning process. At the same time, she added that offering sustainability studies as non-compulsory subject matter within a course load can “reinforce the perception that it [sustainability] is ‘extra’ rather than another part of ‘good design’”

California College of the Arts: Lynda Grose

When discussing specific methods for teaching practice, Lynda Grose emphasises the invaluable contribution her industry-based professional experiences and continued connections have afforded her teaching. Grose’s work in fashion and sustainability over the past two decades has covered many sectors of the industry. Prior to teaching at CCA, her professional practice included co-founding Esprit’s ‘E Collection’ in the early nineties and developing pioneering communication materials on viable options for cotton cultivation issues with the Sustainable Cotton Project. In addition to teaching, Grose co-authored the book *Fashion and Sustainability: Design for Change* (2012) with Kate Fletcher. Grose explains that maintaining active roles in the fashion industry whilst teaching is very important to her, as each position expands her outlook and ability to contribute innovative ideas to address sustainability issues.

After analysis of both her published research and the data gathered through the interview with Lynda Grose on her professional practice, a clear connection between Grose’s teaching practices and the transformative teaching strategies favoured by theorists Taylor and Cranton (2012) has become evident. The attention to individual learner development through guidance and facilitation by Grose is clearly visible in her description of key class activities, environmental contexts, and the setting of goals for her students. Grose emphasized on more than one occasion during the interview that she has not been a ‘career educator’, instead reiterating that her experience and professional development has taken place in the fashion industry. Not having engaged with any formal teaching training, Grose was invited

in 1999 to California College of the Arts to teach students about the impact of material choice based on her professional fashion design practice, working as an independent designer and consultant. Grose has since developed her teaching practice to include a variety of learning environments, regular reflective activities and a range of visiting speakers to allow students to test their knowledge and develop their own craft in response. Grose adds that she has directed her focus on evolving her curriculum to reflect the changing landscape of the fashion industry through incorporating new frameworks, advancements in technology and her own developing understanding of fashion and sustainability (Grose, 2016, Interview).

Sustainability is presented at CCA as a platform for fostering innovation; it is embraced as an opportunity for students to be highly creative and to question the context of their practice (Grose, 2016, Interview). Grose elaborates on this ideal, noting that the attitude of the school towards teaching implements this philosophy by challenging students through design grounded in real-world problems. This encourages students to explore “a shift in culture that has yet to be expressed through fashion.” For example, Grose explains that at one point she presented ten briefs to students at the beginning of a semester; this was to act as a menu from which students could choose their path for the rest of the course. According to Grose, this approach was well received by the students.

Throughout the interviews, a range of questions was posed to the teachers in order to understand how they employed a variety of different strategies for teaching fashion design for sustainability. One of the overarching questions driving the research was, “How can we, as fashion educators, prepare design students for future challenges without educating them about the impacts of the current fashion system?” Raising questions such as this helped to shed light on the philosophy Grose brings to her teaching practice, one that is intrinsically concerned with discussing the local and global implications of fashion design practice. Accordingly, the CCA teaching practice incorporates field trips to farms and ranches where students have the opportunity to put learning into practice through meeting farmers and experiencing their working landscape. These trips also include visits to goodwill stores and fashion clothing brands to bring the abstract nature of teaching theory to life, giving students a chance to ask questions directly and retain information more readily.

This focus on connecting students with real world practices creates a space for them to learn outside the classroom and gain different perspectives, which in turn allows them to connect with their community and potentially grow their understanding of the implications of their practice. With this newly gained understanding of what their impact may be on the wider community and having achieved awareness of what challenges they will face as designers in the future, students can begin to experiment with using design to problem-solve.

4.4.1 Challenges and Advantages

Each educator was also invited to share personal stories of their teaching practices relating to the advantages and challenges they have experienced to date in their role as educators of sustainability.

When asked what she identifies as challenging within the educational environment, Dilys Williams mentions difficulties she has encountered from students in reaction to the decision to move away from the learner-centred style of teaching. Williams explains that

“students in the UK are paying a lot of money to attend LCF and some of them arrive with an expectation, especially at the beginning of their course, to sit down and receive something” (Williams, 2016, Interview). Williams states that preferencing a mutual learning method can also be cause for trouble for some students who expected a learner-centred approach.

Williams discusses how she resolves this challenge within her own teaching practice. When particular strategies are met with resistance or challenge, conversations are generated about the reasons why certain methods are being used, and the ways which they are congruent with sustainability thinking. Beyond this, a broader, more participatory process is woven, wherein students are encouraged to reflect on their values, and the ways which these align with or are confronted by the materials, theories, or resources being explored. Williams maintains that knowledge in isolation is meaningless (Williams, 2016, Interview).

A commonality that arose from most of the educator interview responses was that delivering content on sustainable fashion practices is not always met with enthusiasm and positivity from students, that at some moment’s students feel powerless and overwhelmed as they uncover the local and global implications of the choices of the fashion designer. This negativity can sometimes be met with resistance from students who feel as though having chosen a career as a fashion designer in turn makes them responsible for the negative elements that come along with theory around sustainability and its relationship with the fashion industry. In discussing the negative elements of delivering such content to students, Whitty cites preconceived ideas of the aesthetic and making processes involved as the main difficulties faced by students. Students can let uninformed ideas of what sustainable fashion looks like cloud their vision, resulting in a lack of appreciation for what sustainable fashion processes and practices can involve (Whitty, 2015, Interview). Furthermore, Whitty says that more assistance from other staff would aid in the learning process, as there had been an increase in class sizes and no additional time allotted time to teach the course (12 weeks), which can add strain to the schedule. Finally, she states that the learning is often not measurable or immediately evident and thus it can be difficult to justify additional resources and assistance.

When asked to identify the challenging elements of teaching the *Design for Change* course, Bang refers to the unavoidable emotional toll education for sustainability can have on certain students, and how these reactions can affect the class dynamics. She explains that students can come into the classroom with the impression that they will be taught how to solve the problem of sustainability, however, this assumption leads to disappointment and a sense of overwhelming defeat in some cases, when students learn that there is no immediate fix or solution. This is a common sentiment echoed by many sustainability educators, and clearly a factor for the educators who were interviewed for this project. However, whilst this can be a challenge Bang adds that “when you get to this point of vulnerability, you know you have done your job” (Bang, 2016, Interview). Reaching a state of vulnerability as a student can indicate the beginning of the journey to understanding the complexity of sustainability and its relationship with fashion. This is a pivotal moment in a transformative learner’s journey, and often referred to as the ‘disorienting dilemma’ from which students can emerge with new insight - if facilitated to do so.

Grose admits that one of the greatest challenges she encounters in her teaching role is the way students perceive sustainability, which she considers as distinct from their perception

of fashion. Grose admits that it is challenging when students start the course with the opinion that sustainability is too technical or difficult to understand, as it can deter students from wanting to learn. However, Grose does confess that the technical language present in certain learning material about sustainability can pose a challenge to students for whom English is a second language (Grose, 2016, Interview).

Whilst all the aforementioned challenges can seem overwhelming at some points during the teaching cycle, especially when they result in a negative shift in morale amongst students, the advantages discussed by the educators were the highlight of the interview series. When Williams discusses the positive experiences she has gained from working within fashion education for sustainability, and especially when she offers her view of the impact that the *Nike Making Project* has had on the students, it is easy to be reminded of why teaching sustainability in fashion can be so rewarding. Williams attributes the success of her courses to the diversity of the cohort that enters the classroom, each bringing with them different cultural, political and economic experiences. This variety in background and life experience, Williams notes, offers an “amazing opportunity for all of us to learn from each other and contribute to strengthening the conversation” (Williams, 2016, Interview).

While teaching students about sustainability and its relationship with fashion practice at times can cause inner and outer conflict amongst the students, the results yielded by the learning journey can be extremely inspiring. In her interview, Whitty discusses in depth the ways that her student’s perspectives grow from the myopic, “driven only by the criterion of aesthetics, to thinking about the impacts of their decisions.” This eye-opening process in the student’s journey involves a shift in their perspective of the fashion industry, as they begin to reflect critically on the methods and processes that constitute design practice. This process, Whitty notes, encourages them to adopt more informed actions when it comes to developing their own practice, which for a teacher can be a rewarding development to be a part of (Whitty, 2015, Interview).

During the interview, Bang expressed gratification when recounting the successful nature of the outcomes documented from the *Design for Change* course. She noted that students experience success in many forms, but she specifically observed the enjoyment students expressed at acquiring skills and techniques. derived during the ‘past’ stage of the course (the course had three stages: past, present and future). Students were encouraged to develop an understanding of, and ability in, methods that are no longer commercially used, though they were considered new in the eyes of the students, who had never encountered particular hand working techniques before. Looking to the ‘future’, Bang explained, inspired various discussions amongst students who were placed in a group with a textile designer and were assigned the task of creating the fabric for the garment in collaboration with the members of their teams. This process inturn involved an unpacking of the various skills of each individual, encouraging shared experiences to unfold. The research took a hands-on practical approach for the students, who were learning about design and practice and their relationship with time whilst concurrently working in a design team and learning how to communicate and create as a collective (Bang, 2016, Interview).

From an educational standpoint Grose notes that the advantages of teaching sustainable fashion are associated with the “freedom to speculate and test things out” as a teacher at CCA, especially within the fashion college. Grose notes that the faculty of which she is part is challenging current fashion business models, exploring notions of shared economies and collaborative consumption (Grose, 2016, Interview).

Whilst most educators' responses linked the advantages of their teaching practice with student related scenarios or outcomes, Grose observes that it is the flexibility she enjoys from a governance perspective that affords her the freedom of choice, which is an asset to the development of her teaching practice. This freedom allows her to develop curriculum in line with her own research and professional practice as a designer and consultant, which in turn nurtures the mutual learning journey of both student and educator.

4.4.2 Future Fashion Practice

Two of the key questions posed to participants that speak explicitly to the future of fashion practice were: 1) *"What roles do you see as being available for the fashion designer in the future?"* and 2) *"What is your long-term hope for a project such as this?"* The open-ended nature of these questions encouraged a breadth in the scope of responses given, which allowed for unexpected themes to emerge indicating the importance of adopting more collaborative teaching practices for fashion design in the midst of significant change. Some teachers also identified the ability to learn from their own past practice (as a reflective practice) and continually develop and improve on the execution of their ideas.

In response to being asked what they foresee in terms of the impact of the project, CSF's Education for Sustainability Projects Manager Nina Stevenson replied, "we hope that the significant developments we have demonstrated can serve as best practice to build upon and give us a platform for our forthcoming endeavours. However, we believe that we must embrace complexity and change to deal with the ever-evolving challenge of sustainable development and behaviour change for an equitable future" (Stevenson, 2015).

When interviewed about the future of the fashion designer, Jennifer Whitty speculated that the jobs yet to establish themselves were those aligned with technological roles as well as the fashion service sector. Whitty also foresaw more roles developing for designers as social innovators, underlining the importance they will hold in deepening human engagement with fashion, that "the person, product and system is ripe for disruption" (Whitty, 2015). Whitty shares the view of other sustainable fashion advocates when expressing the need for design to act as a catalyst for transformation at a time of increasing complexity; fashion design education should require the supporting of higher levels of "synergy in collaborative practice" in order to safeguard and strengthen the industry for future practitioners.

It is within this sense of collective practice that the Kolding Design School believes the future of design will thrive. Bang discusses her vision for the future of fashion practice by outlining the change in mindset she would like to activate through her own teaching. Bang believes that there should be a more liberal approach to how fashion design practice is considered, not confining it simply to the industry of fashion (Bang, 2016, Interview). She believes the future of fashion practice will promote designers to work across various industries, increasing their ability to adapt to other disciplines through collaborative work, just as is practiced at Kolding Design School.

Similar to Bang, Grose is passionate about emergent roles for fashion designers that contribute to shaping society and culture (Local Wisdom, 2017). Grose emphasises that educating students about the current state of the fashion industry is important in the sense that it provides "a mechanism to provide them with something to push against" - a basis on which

they can develop their own design responses (Grose, 2016, Interview). Grose goes on to discuss the “arch of practice” from which she teaches, explaining that her responsibility as an educator is to help students understand “how they could fit within a fashion company in a present sense,” whilst also understanding how to imagine what they could do with potential models of future fashion (Grose, 2016, Interview). Furthermore, she believes in supporting and promoting the creation of new fashion systems that are not dependent on the increased sale of individual material units.

Whether the future of fashion practice lies in collaborative endeavours that serve to unite disciplines, in technological innovation, or even in contributing to the service sector, it is clear these expert educators, pioneering best practice in the field of sustainable fashion education, envision a future for fashion designers that contributes to the shaping of our community through the forming of new partnerships.

4.5 Conclusion

The collaborative nature of the four studio projects selected for this study, combined with the diverse experiences contributed by the participants (students, mentors, industry partners and educators alike), provides an ideal environment allowing students to challenge their perceptions and preconceptions of fashion design and the role of the fashion designer. The reflections stimulated by the interview discussions presented in this chapter can be drawn on by fashion educators to equip other emerging designers with the tools necessary to transform practice and thus sustain the future of the fashion industry.

As this chapter has illustrated, transformative learning theory and its associated teaching strategies are currently being applied globally by educators practising within the field of sustainable fashion. Whilst these strategies for delivering a transformative learning experience may be relatively commonplace practices in neighbouring fields such as architecture, they have yet to be consciously explored within and applied to the discipline of fashion. Through the explicit connection drawn between the two within this chapter, effective strategies for teaching approached to dealing with sustainability issues in the field of fashion have been uncovered, analysed and documented.

In the following chapter, an analysis of the data collected on the student and educator experience of the four selected studio projects will be presented, with a subsequent discussion of the findings that have emerged from a comparison of each of the learning and teaching contexts. From this process, the implications for fashion teaching practice that can be drawn from this work will be identified and discussed.



5
A SHARED NARRATIVE

5.1 Introduction

We are faced with an unprecedented and huge learning challenge at every level, in which educational policy and practice need to play a pivotal role. How do we ‘reorient our systems of knowledge creation and education’? (Aromer Revi, herein). How do we ensure that education for these extraordinary times can manifest a culture of critical commitment—engaged enough to make a real difference to social–ecological resilience and sustainability but reflexively critical enough to learn from experience and to keep options open into the future? (Sterling, 2016, p. 212)

Transformative learning education not only benefits from the learner being willing and open to change, it also requires the educator to lead by example, conveying open mindedness and receptivity to the challenges and experiences that may present themselves during the learning journey. Teaching through transformative learning theory “intensifies our responsibility to ourselves, and to our students” (Ettling, 2012), as the necessary learning environment required to teach for change can stimulate “strong emotional responses from students” (Ettling, 2012; Dirkx & Smith, 2009; Gravett & Petersen, 2009; Langan, Sheese, & Davidson, 2009). These responses can be both challenging for the educator to manage and also a point in the learners journey from which growth can be developed. As demonstrated by this study, expanding on a student’s learning experience through fostering their involvement in course design, delivery and evaluation is key to learner engagement and generally not prioritised in regard to teaching fashion sustainability.

This research has shown that an important aspect of transformative learning practice is that it encourages students to reflect on their own learning. This potentially valuable insight is currently limited to self-reflection and the students are not yet recognised as a primary source of information surrounding transformative teaching and learning. The insight provided by expert teachers who have been interviewed as a part of this study suggests that current perspectives of teaching practices within fashion sustainability are predominantly based on teacher perception and personal experience without adequate support from independent qualitative or quantitative data collected from student participants.²⁴ This could lead to incorrect assumptions being made about the effectiveness, or otherwise, of transformative teaching methods without corroboration with other practitioners within the field, from other disciplines and from the student perspective. In some of the cases examined for this research, it was noted by educators that student feedback was collected through qualitative data (survey) at the completion of course, with the idea that improvements would be made to any future instances of the course based on said feedback. The student’s documentation and reflection on the learning journey was not drawn upon in detail by the interviewees, other than through the recalling of anecdotal accounts. This chapter will present a case for reducing assumptions, that result from a lack of reliable data, by developing shared methods to evaluate learning experiences from both the teacher and learner perspectives. The nature of transformation would also suggest that a longitudinal study would be needed to determine the long-term level of transformation that could result from this approach to learning and teaching.

The main themes emanating from real-world examples, perspectives and advice for teaching sustainability in fashion, provide key insights and understanding for how to practice transformative fashion teaching. These can be linked to the strategies for transformative teaching outlined by Carol Kasworm and Tuere Bowles (2012), presented in

24. While the interview participants provide an indication of current practice within fashion sustainability they do not represent all teaching practice within the field of fashion and textiles.

the literature review found in Chapter 2. A discussion of the following themes is included in this chapter:

1. The student learning experience

In this section of the chapter, the student learning experience is discussed in order to improve our understanding of the importance of the environment and role of the educator in this process. Additionally, the research raises questions about how fashion educators consider student agency, especially in relation to course design.

2. Transformative teaching in sustainable fashion

This second section challenges the assumptions educators make when teaching sustainable fashion to understand how fashion education could enhance the quality of the student's learning experience.

3. A mutual learning journey

The final section of the chapter presents an argument for the reevaluation of the educator's role in the learner's journey by discussing the benefits that co-creating knowledge can have for both the educator and learner. In addition, this section questions how a possible lack of connection with emerging research within the discipline of education inhibits fashion teachers from advancing their studio teaching practice. This section discusses the missed opportunities of local wisdom to be a collaborative, multidisciplinary, global fashion education project.

5.2 The Student Learning Experience

The student learning experience is influenced by a variety of factors, a significant number of which can be managed by the educator. Consequently, assuming the role of the educator in a learner's journey is accompanied by its own unique responsibilities, of which creating a safe and trusting environment to cater for the diversity of needs presented by each learner is paramount. From the outset the educator should make explicit the role they intend to perform throughout this process, primarily to manage student expectations but additionally to aid in the student's comprehension of their own role in their learning experience.

In recent work published concerning the development of student learning experiences within tertiary design education, a discussion is evolving around the need for additional research and consideration to be given to revising existing pedagogy. The learning environment is being acknowledged as a crucial place within which learners, if guided correctly, can experience freedom to express themselves without judgement, whilst respecting others' ability to do the same. In their study documented in 'A Wide Lens on Learning.', Kidron et al. (2019) draw on Dewey's (1916) *Democracy and Education* to consider the benefits of learning communities based on free expression and stress the importance of setting up a safe environment in promoting such expression amongst the learning community (p. 741). Throughout this paper the need for the redesign of learning spaces as a main driver of educational change is emphasised as a challenge which has yet to be met, and requires "rigorous scholarship to further explore, understand, and guide this phenomenon" (Ellis & Goodyear as cited in Kali et al. 2019, p. 739).

In further commenting on the student learning environment, this thesis contends that a student's participation in their own learning process should not be a passive one, where they simply listen, take notes, and attempt to absorb information they are fed by a teacher. Students look to their teacher as a leader, and the way that course materials are packaged and provided to students is dependent on the educator's teaching style. Expertise or specialist knowledge of any field, such as sustainable fashion, is gained through the transfer of knowledge within a dialogue between teachers and learners. Again this supports the notion that the student's role in their own learning journey is an active one; an experience supported through the exchange of information within a safe and trusting environment. As a result of this practice, students are encouraged to engage with new experiences or ways of working as a means of generating new insight or innovative thinking about more sustainable fashion practices.

A discussion of active learner participation needs to recognise the continued relevance and current application of Paulo Freire's (1968) work on critical pedagogy. In their paper 'Transformative Learning: From Theory to Practice' (2019) Landry-Meyer et al. discuss how using the method and practice of teaching adult learners (andragogy) to guide pedagogy, helps learners to take control of their learning process. This idea of the co-creation of knowledge is one that Paulo Freire has discussed in his own work, in which he opposes the banking model for education that sees students as empty vessels in need of filling with knowledge. Through actively involving students in the teaching and learning process, Landry-Meyer et al. discuss how the view of *co-creation of knowledge* has contributed to the critical pedagogy movement founded by Freire, a movement concerned with the activation of learners in the building of their own knowledge, wherein "education becomes an act of cognition

rather than a transmittal of knowledge” (Landry-Meyer, 2019, p. 1). This point not only acknowledges the active role a student should play in their own learning but also encourages educators to consider the development of their own knowledge via the sharing of insights and skills with their students.

Through a discussion of the student’s learning journey, and through understanding more about the importance of the learning environment and role of the educator in this process, this research has raised questions about how fashion educators consider student agency, especially in relation to course design. Many of the educators interviewed for this research commented on the personal assessments that had been made in regard to the projects they designed and delivered. However, there was no explicit discussion concerning the formal methods for defining a successful student outcome within each course. Whilst these methods are surely in place at each university, it was not clear how each of these projects was improved by integrating student feedback about the course structure using these methods for assessing student outcomes. In considering a wide sample of student feedback when designing a new course or developing an existing one, educators are provided with vital information about and insight into the learner’s experience of their teaching practice. Using this information in conjunction with other professional development tools such as observation, peer collaboration and research, facilitates the advancement of fashion teaching practice by providing a greater understanding of the learners experience.

Whilst considering student agency when designing, reflecting and developing coursework, and acknowledging the valuable contribution that can be drawn from student feedback, a key component of transformative learning theory is dedicated to discussing the assumed value in dynamic learning environments, without proper consideration for its effect on student inclusivity. What happens if a student cannot cope with the variety in teaching approaches and environments that is adopted through dynamic teaching? This question implies that student insight and feedback, at the course delivery stage, is crucial in the creation of an inclusive, safe and functional learning environment.

A point that all educators indirectly discussed during interviews was their support for the practice of non-static teaching, with consideration for the ability to diversify their approach should a student feel excluded by any one format. The importance of dynamic teaching styles in transformative teaching practice is currently emerging in recent literature. Hudson (2019), in his book *Transformative Education for the Second Renaissance* favours dynamic environments that do not rely on one method of instruction, adding that static teaching presents “knowledge to be consumed” which, as he notes, is a style of teaching dominant in “historical, classic curriculum” (p.68). Hudson (2019) argues that if you can create a dynamic environment that favours the variable nature of learning, students will learn and thrive (p.101).

Participation in each of the *Local Wisdom Project*’s required flexibility on behalf of the learner as each learning environment varied, in some cases involving international travel, and in others a variety of local field trips. Whilst there are documented benefits associated with the practice of transformative learning theory, including the positive impact that diversity in environment can have on student comprehension (see Chapter 2.5), it could be argued that questions remain about the level of inclusivity this practice involves. Whilst these dynamic learning environments work for some students, for those who do not respond as well,

alternative strategies need to be considered in order to achieve an environment in which all participants feel secure. Anne Louise Bang shares her observation on this in her interview, noting that “we move rooms a lot, which sometimes students find irritating as they cannot leave their things in one place”. Without adequate consultation with students regarding their perspectives on dynamic learning, both in the design phase, during the learning journey and in a reflective capacity at the conclusion of the course, it is difficult to ascertain what is best for each student’s learning process. What may work really well for one cohort, may not be beneficial for the next, or even for students within the same course of study.

The educators interviewed all relied on their own experiences when reflecting on the course design and assessments of the effectiveness of their teaching practice. Although educators can with some reason assume to ‘know best’ due to the position they hold in the learning space, feedback from students and knowledge of their current capabilities, experience and learning aims would lead to more informed decisions with a potential to lead to better outcomes for teachers and students. By taking into consideration the kind of information that can be collected from their students regarding their experience of both the teaching and learning, and by reflecting on their responsibility within this learning environment, educators can also benefit from a re-examination of the way their role in the classroom might aid in advancing their professional practice.

Relying on personal experience with course design and knowledge of best practice rather than the theory and practice of education can lead to consequences where student needs are not fully addressed. As Faerm (2015) notes, “the future classroom will require faculty - largely trained as practitioners - to adopt advanced pedagogy skills and deeper awareness for student development” (p. 191). Faerm seeks to challenge current ideas about the pedagogical preparation for educators, by encouraging a re-evaluation of the role and responsibility of those facilitating the learning experience, and recent literature documents a link between student success and high investment in teaching training, evidenced in Finland and Singapore (Faerm, 2015, p.191). The adoption of advanced pedagogical skills will both enhance student learning and give educators the means to evaluate the contribution that students can make to their educational experience.

Agency, Vulnerability and Values

The following diagram is a visual representation of how student and educator agency, through effective communication, can enable participants to safely reach a point of vulnerability, which is also the potential space for transformation.

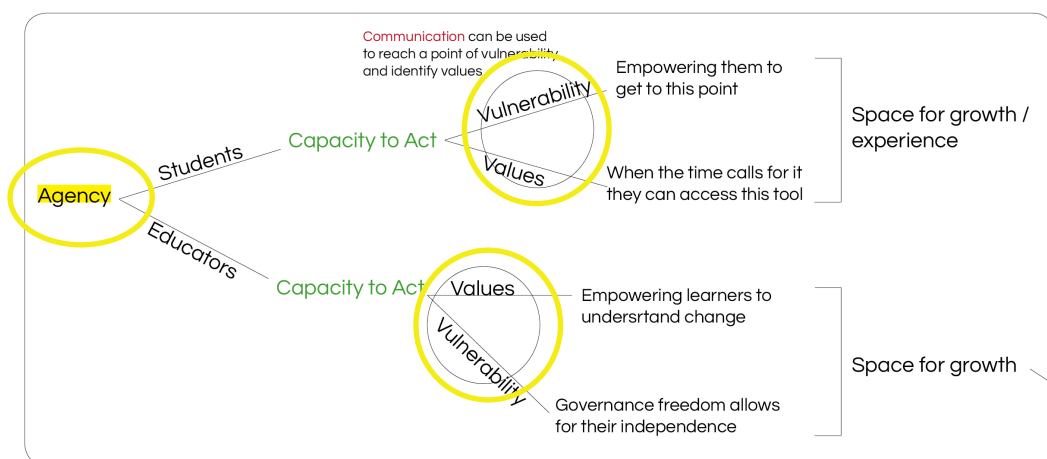


Fig 1. Illustrating the relationship between Agency, Vulnerability and Values

'Agency' refers to both the student and educator experience in the classroom and indicates how their 'capacity to act' as individuals is stimulated by an environment that acknowledges the importance of sharing 'values'. This point is supported by educator Anne-Louise Bang who states that enriching the learner's journey by delivering sustainability content that engages student values, provides them with an opportunity to develop meaningful tools that can be drawn upon throughout their career (Bang, 2016, Interview). It is important for the student and educator to embrace their 'vulnerability' through the facilitation of honest and open communication. This process, whereby openness and honesty allow participants to identify and acknowledge their shared values, ideally results in an experience of empowerment felt by both parties.

5.3 Transformative Teaching in Sustainable Fashion

In this study, key observations have been made about the fashion educator's role within a transformative learning journey. When asked what they found to be of the greatest assistance in their responsibilities, almost all of the interview participants placed importance on the role their colleagues and their management play in supporting the development of their teaching practice. The significance of this observation is that it highlights how the governance context can be responsible for promoting freedom of exploration within course development. Conversely, it also illuminates how the restriction of time, resources and support may hamper the development of innovative teaching methods that align with new theoretical perspectives. Despite the global diversity, the universal agreement on this point illustrates the influence that governance has on the effectiveness of teaching practice.

In a review of emerging literature on transformative teaching practice, Lanford (2020) has discussed the potential for long-term sustainable relationships presented through global higher education partnerships. Lanford notes that an environment that promotes both dialogue and opportunity for professional growth must be nurtured in order to help individuals feel connected within the partnerships they are forming (Lanford, 2020). This point can also be applied to the internal partnerships educators have within their own departments. Just as the student learning environment is fostered as a place for learners to share, grow and cultivate opportunity, so should be the teaching environment and network, in order to support the development and advancement of pedagogy in a particular field.

Another idea that has emerged from this research concerns how practitioner-teachers identify with their roles. Teachers of sustainability in fashion frequently consider themselves to be practitioners and, at least in this study, do not commonly identify as educators. Of seven interview participants across the four universities included in this research, only two identified explicitly as educators when asked to define their roles. When discussing their current positions, the remaining five interviewees chose terms such as: designer, researcher, practitioner, teaching into the field of fashion. This raises interesting questions about how these fashion educators see their role in the classroom and suggests that through this disassociation from their identity as educators, a sense of liberation from traditional models of teaching may be significant in the way these teachers communicate their knowledge and experience. While the designer/researcher/practitioner may consider this an advantage to developing potentially transformative strategies, it could equally be interpreted as a form of working in isolation and an approach less informed by pedagogical interests and skills.

Interestingly, Bhukhanwala (2016) has linked the teacher's sense of professional identity with their undertaking a transformative journey much like that of their student's, stating that "teacher identity is not simply an outcome of experience but is the construction created through negotiations and sense making of such disconnecting dilemmas. From this perspective, transformation underlies the process of becoming; it is in the discontinuity of acts, as well in the process of rehearsing and reframing identities of agency and through which teachers imagine new possibilities and change" (p. 613). Teachers also undergo something akin to Deleuze's process of becoming, the nurturing of transformative experiences, which are not dissimilar to the student's learning journey. Transformative experiences are not simply for the educator to instigate and the student to experience; they happen through a collaboration between both parties in an environment of mutual learning.

Many of the key strategies for transformative teaching discussed in this research (see Kasworm & Bowles, 2012, and Chapter 2 above), are common practice within the design disciplines, such as reflective practice, collaboration and skills-based instruction. Methods for reflective practice, such as group discussion and writing activities, are strategies that have been well documented in teacher education literature (Bhukhanwala, 2016). Through the teaching of design thinking Wrigley and Straker (2015) identify that the teaching of design thinking is a highly reflective process, encouraging students “to think critically about their value; and to reflect consciously and critically on different design approaches” (p.5). This reflective and critical approach to design thinking teaching aligns with the transformative teaching strategies outlined by Kasworm and Bowles (2012) and presented in this thesis. Wrigley and Straker (2015) propose a new model for teaching and learning in Design Thinking courses specifically; a model which encourages the adoption of strategies similar to those of transformative teaching. Wrigley and Straker also indicate that the teaching strategies put forward in their research, strategies that are significant in engaging fashion students and educators in transformative learning experiences, are identified by others as the changes that need to be made as education modes shift from teacher-led to learner-based (Biggs & Tang as cited by Wrigley & Straker, 2015, p.12).

However, whilst these methods may already be key foundational tools used in other design education disciplines, reflection on and discussion about how to harness these strategies to motivate change-oriented fashion practice is inadequate. Creative disciplines such as art and design are not free from critique, drawing heavily on review, reflective practice and action research as methods for generating new knowledge. Educators within these fields also bring a wealth of personal and professional knowledge to their teaching practice, experiences that are valued for the insight they shed on the relevant industry landscape. Transformative learning theory encourages the educator to engage with and validate the student’s experience of their teaching as well as the prior learning and knowledge of the student. The reason for this is that, through a sharing of experiences, more personal and mutual learning moments can be generated.

While the use of transformative teaching strategies can beneficially impact on student learning experiences, it is important to add that not all students will necessarily engage with these strategies enthusiastically. Student survey participants were asked to elaborate on how they felt about values of sustainability in fashion after completing their respective courses, from which a small number of students noted that their perspectives were significantly impacted, though the learning left them feeling helpless and in some cases unable to identify how they could contribute to change. In the literature on transformative learning, reference is made to feelings of despondency that can occur at the beginning of transformative learning from both the educator and learner; learners often question an approach that requires them to take responsibility for their learning, whilst educators can feel discouraged and be tempted to revert to old ways of teaching when they meet with resistance from students (Mezirow cited by Gravett, 2004, p. 268).

For this reason, it is important that course development concerning fashion sustainability embed student feedback from the design to the review stages. In order to prepare for the likelihood that there will be some students who feel overwhelmed at the completion of a fashion and sustainability course, educators should allow for the implementation of robust debriefing sessions throughout the duration of the course.²⁵ By being provided with multiple

25. The beneficial nature of these reflective conversations has been comprehensively documented in literature, and Hale & City (2006), Maritz & Jooste (2011), Mackenzie (2002), Wickers (2010) may be consulted further.

debriefing sessions throughout the life of the course, students can be assured that they will have the opportunity to talk through their learning experiences in a series of facilitated discussions, in a safe and supporting environment. These opportunities work to extend the strategies outlined by transformative learning theorists by considering the value in acknowledging the student's voice as well as ways of building on the student/educator relationship. They also help to develop more comprehensive means for mapping the occurrence of transformative experiences.

Teachers can be expected to learn from their students as well as from colleagues through a dialogue about shared experiences. As noted earlier, the idea of the celebrity fashion designer working in isolation and in competition with their peers has recently become a topic of debate. Lidewij Edelkoort's 2014 *Manifesto*, argues that there is a need for greater conversation with the fashion design student rather than promoting design as something practiced in isolation rather than collaboration. Disruption of preconceived ideas about fashion and the role of the designer provides the groundwork for future design practice built on and through mutual learning environments, a practice that explores the emerging spaces for design from both perspectives. Encouraging students to value collaboration with their peers and educators also implies the need to review the way educators approach their teaching practice, if collaboration is to encourage a sharing of values. At present, the emerging community of teachers in the area of sustainable fashion is not being sufficiently encouraged to develop or innovate education. Instead they generally work in relative isolation, teaching optional course material, sometimes in competition with their peers. That this study is the first to see the *Local Wisdom Project* as an opportunity to understand the possibilities for transformative fashion teaching practice is an indication of the disconnection that exists within the discipline.

The Governance Context

The below diagram illustrates the important way that the governance context affects the educator's experience and capacity to act on their learning.



Fig 2. Illustrating the governance context

The teachers interviewed noted that the level of freedom they experienced, in regard to how the governing entities such as schools, institutes and universities regulate curriculum development, aided in encouraging them to embrace a sense of independence, confidence and interest in experimentation with student engagement. A key observation was that educators need to be provided with creative space in order to allow for experimentation and development of their ideas, ideas which then are given the chance to further develop when applied and practiced within the classroom (Williams, 2016, Interview). Working within an environment that affords the freedom to test things out is also considered beneficial from an educational standpoint (Grose, 2016, Interview). The greatest impediment to developing fashion teaching practice in relation to sustainability is not having the resources or support available to assist in the learning process (Whitty, 2015, Interview). These views indicate that effective governance, in respect to education for sustainability in fashion, involves encouraging educators to experiment with their ideas both inside and outside of the classroom, and that this, when coupled with the support from appropriate educational resources in the form of funding or additional staff support, can create an environment capable of transforming student thinking.

‘Space for growth / experience’ identifies the scope for transformation and development in the learning journey that is a consequence of empowerment. This is a space that is fostered through the mutual learning exchange between educator and student, an exchange that relies on both vulnerability to change and identification of personal values through communication and collaboration. The development of these environments that empower both learners and educators is aided through the cooperation and accommodation of their governing institutions.

The Social and Cultural Context

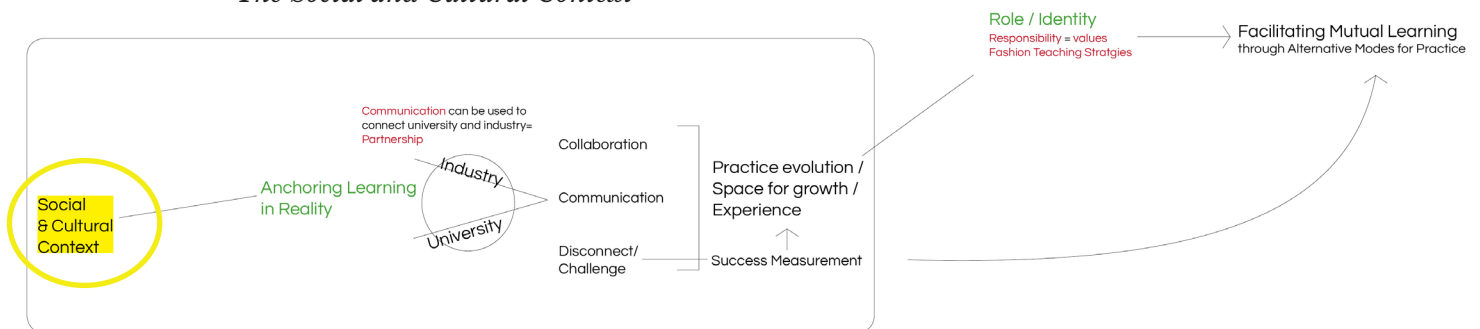


Fig 3. Illustrating the social and cultural context

The second group of ideas outlined in the diagram concern the relationship with the ‘social and cultural context.’ The role of this context is informed by teaching practice that ‘anchors learning in reality.’ This relationship has been illustrated by the educators interviewed who emphasised the value of basing their teachings on real world interaction. The precise understanding and implementation of this practice varied depending on interviewee, however some examples of teaching practice provided were:

1. Taking students on field trips to meet manufacturers or suppliers,
2. Engaging students in culturally immersive activities through travel and collaboration with foreign schools,
3. Cultivating discussions between students and key industry stakeholders,
4. Creating environmental experiences which enact collaborative cross-disciplinary practices.

This research has noted that the effective use of communication can work to connect university and industry bodies with students and educators, and in the process form partnerships that benefit the interests of all parties. This is not a new concept; it is generally acknowledged that strong communication tools are fundamental to effective collaboration. However, the research also found that fostering cross-industry partnerships (based on well-facilitated communication, allowing students to challenge and be challenged) was a key teaching strategy used by teachers within the field to help students achieve a shift in their perspective on sustainable fashion practice.

For example, a student from California College of the Arts recounted an instance where they felt tested by a situation they experienced while learning about genetically modified and organic cotton. This student described how they felt challenged having learnt and researched about the damage associated with the cultivation of GMO (genetically modified organism) cotton in class, only to be confronted with a contrary opinion from what they deemed to be a 'trustworthy source', a scientist advocating for the use of GMOs (Survey Question 8, Respondent 2). In this case the student had their beliefs challenged by someone they thought would provide clarity on the issue. Situations like these, most effectively when facilitated by educators, can be extremely impactful and lead to increased self-reflection. Challenging assumptions regarding the roles of student versus professional and the accuracy of assumed knowledge in the face of differences in opinion helps students to engage by encouraging them to undertake independent research and form their own opinion based on the evidence provided (both pro and con). This independence leads to their having the conviction of their beliefs and provides them with the sense of agency needed to enact change.

Collaboration can also act to benefit the industry side of the relationship. The *Nike Making Project* is a good example of how strong communication between industry collaborators, the Nike team, and educators from LCF and CSF as well as the students contributed to the successful development of an industry tool, the *Nike Making App*. The process leading to the development of this smartphone application provided Nike with access to an unusual combination of skilled individuals: graduates, students, educators, researchers and practitioners who came together to realise an outcome from which they all hoped to gain knowledge, skills and experience. In working through a successful partnership with industry, the students can become agents of change ahead of time, before their formal transition from education to the workplace, an education that itself can help transform the social or cultural context.

Evaluating Transformative Teaching Practice

Throughout the interview process conducted for this research, it became clear that the educators responding favoured the use of very similar teaching methods. Links have been established in previous chapters between these commonalities and strategies for teaching transformative learning (See Chapters 2 and 4). What was not as clear was how the educators interviewed evaluated the effectiveness of their courses in shifting student thinking about fashion practice. A comment made by Jennifer Whitty illustratea this issue: "It is difficult to fully ascertain how successful it [*Fashion Activism: Space Between China*] has been in the short term as I think some of the transformations may play out in the future" (Whitty, 2015, Interview). This uncertainty indicates that teachers are aware that their claims to provide transformative experiences for their students may be limited. Without informed methods

to measure the success of the project and promote discussion and comparison with other teachers within the field, claims for effective change can be premature. In the absence of means for assessing the effectiveness of these pedagogical methods, it is difficult for educators to confirm whether or not these projects have effected a shift in perspective amongst their students.

In their chapter ‘Evaluating Transformative Learning’, Patricia Cranton and Chad Hoggan (2012) note that “literature is oddly silent on the issue of evaluation of transformative learning” (p. 527). For this reason, Cranton and Hoggan present a brief overview of methods for evaluating transformative learning which include: self-evaluation, interviews, narratives, observations, surveys, checklists, journals, metaphor analysis, conceptual mapping and arts-based techniques (p. 524-527). The methods are not discussed in depth or presented in a format that could be adopted by teachers interested in evaluating their students’ experiences. Instead, they read more as suggestions rather than specific guides for educators, as the intention behind Cranton and Hoggan’s overview is to bring attention to the need to reflect on how and when educators can and should evaluate transformative learning (p. 532).

Without the use of appropriate methods for evaluation, educators can only make their own assumptions about whether or not the needs of learners are being met, whether a shift in perspective has occurred, or whether prior experiences of their learners have been sufficiently acknowledged. Cranton and Hoggan (2012) outline the importance of providing educators with guidance to encourage their understanding of the extent to which learners are engaging in the process of transformation (p. 532). The research methods adopted here — conducting retrospective interviews with participants about their experiences and identifying resulting themes that relate to the transformative process — provides an example of the potential for comparing teaching practices within fashion sustainability to identify the potential for transformative experiences. An important point to consider in creating an evaluation method is that a clear understanding of the characteristics of transformative learning is needed from the outset.

There were a few factors that contributed to the difficulty in measuring whether these courses were successful in this respect. In some cases, the courses were in early development, which meant that they had not yet not given the time and support to develop fully. This of course places a limitation of the reliance on metrics. Additionally, educators commented that it was nearly impossible to accurately measure the success of their projects as they did not adhere to traditional assessment outcomes. The only way to truly gauge the effectiveness and success of the project would be to develop a series of feedback sessions, including one planned for a few years after the students had exited the program, to determine whether student perspectives had shifted radically enough to positively impact the future course of their fashion practice. In the below illustration it is outlined that the space for growth within these courses is also the area of success measurement, and it is here that the challenge of understanding what successful learning experiences arising from innovative teaching practice is to be found.

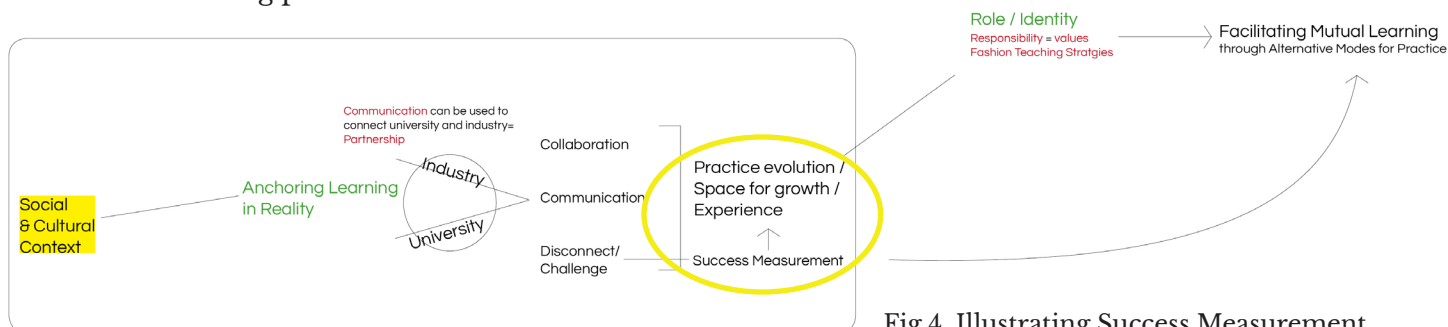


Fig 4. Illustrating Success Measurement

5.4 A Mutual Learning Journey

This research demonstrates that a combination of peer support and flexibility prioritised by some management teams enables educators to experiment with their delivery and apply new ways of thinking about fashion education. One of the most emphasised points discussed in this chapter is the need for educators to consider the learning experience of students, particularly when contemplating course design structure and assessment. Furthermore, the importance of the role of students, in terms of the experience and knowledge they can provide the educator, can also be applied to the relationship between the educator and their peers. Both the student/educator and the educator/educator relationships should be leveraged to enhance the learning experience for all, reiterating the point that the learning journey is not an experience that is unique to the student.

In a recent study undertaken at the University of the Arts, London, a similar approach to teaching has been adopted in order to learn from art and design teaching. Shreeve and Sims (2010) conceived of 'a kind of teaching' wherein learning is seen as a partnership through which the student experience is central to the teachers concern (p. 125). Shreeve and Sims note that this kind of teaching reflects this partnership through encouraging an exchange of "ideas, conversation, knowledge and expertise" between student and teacher (p.125). Again, these strategies for teaching practice are strongly aligned with the mutual learning methods that are prioritised by transformative learning theorists. This approach conceives the learning journey as an experience shared by both educator and learner, which, as Freire (1968) believed, was the foundation for the co-creation of knowledge, shifting the conception of education from the transmittal of knowledge to the act of cognition, in which neither participant is a passive recipient.

All educators interviewed for this research noted that they see themselves as learning in partnership with their students, a perspective that transformative learning theory encourages. Whether this is an intentional strategy adopted from day one or whether it develops as the course progresses is hard to gauge from the interview data. However, what has been made clear is that these educators understand that more can be gained by making themselves open to learning from, and alongside, their students. Whilst this has proven to be a popular method recommended by both educators interviewed and transformative learning theorists alike, Dilys Williams raises the additional point, that preferencing mutual learning can lead to disappointment for some students who prefer a learner-centred approach. There will be students who prefer teacher centred learning and feel more comfortable in a more passive role. Whilst this approach does not align with transformative teaching practice, it may be the preference of students who are unfamiliar with a mutual approach to learning, and who may not feel comfortable with sharing their own knowledge or experience with their teachers. For these students, it is important to communicate, at the start of the course, how mutually enhanced learning and teaching can be beneficial for them and what they might hope to achieve from this educational environment. Again, this relates to the importance of managing student expectations of the teaching and learning experience that the educator has envisioned for them, and consulting with learners prior to designing the course structure to foster an experience that is equitable for all.

The importance of the teacher being open to the possibility of learning from the learner is equally important, though there is an added layer of complexity when it comes to defining and measuring successful student outcomes within this context. Collaboration is key for

both student and educator growth, and one educator remarked that although their students expressed initial reluctance to work in groups, the outcomes that resulted from the collaborative task were very successful. Encouraging students to engage with activities they may initially dislike, knowing that they have generated good results in other instances, does call into question the extent to which educators consider student agency. Assumed knowledge about what educators understand to be in the best interests of students may not align with best teaching practice and even lead to a disconnection between teacher and students. Faerm (2015) supports this point, and his own research and teaching practice leads him to conclude that the awareness gained from undergraduate students helps to “inform faculty, program directors and institutions [on] how to best evolve and deliver fashion design education” (p.198).

A key observation drawn from this study is that teachers cannot assume to know better simply because of their position, and they need to value and even prioritise feedback from their students and professional colleagues over their personal beliefs. This partial surrender of authority leaves them open to the possibility of delivering a transformative experience by acknowledging that the learning journey is not an experience unique to the student. This is not to say that the educator cannot facilitate and mentor the journey for the student, though there appear to be clear benefits in re-examining the way educators frequently see their role within the classroom. Transformative teaching methods need to be applied to teaching as well as learning, so that the facilitator of the learning experience, the educator, can guide the student’s journey rather than limit its potential learning outcomes through an inflexible design and teaching practice.

There are still challenges to overcome when considering how transformative teaching practices can cater for the diversity of needs presented by learners. However, not relying on assumptions made about how teaching should look, and instead prioritising learning from and alongside colleagues and students, through a dialogue of shared experiences, is a start.

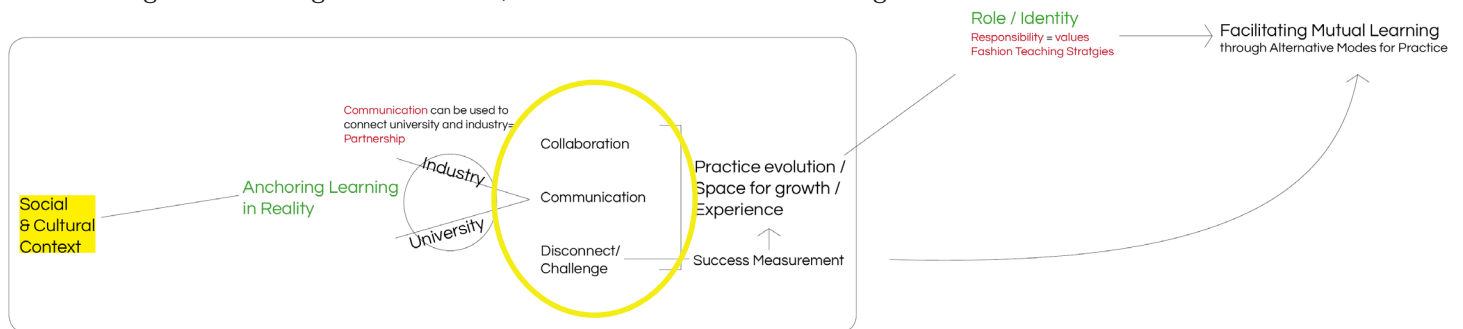
In consideration of the benefits and challenges met by the teachers leading the *Local Wisdom* projects, a reassessment of the methods currently used to measure a course’s success and their inability to effectively gauge outcomes from education for sustainability should become a priority for the discipline. A major challenge will be that the current methods of data analysis for student feedback within universities favour the evaluation of acute change, whereas the implications are that the changes that this type of teaching tends to develop or accumulate take place over a far longer period. A method for evaluating the transformative learning experience is needed to provide current educators with the knowledge that might motivate them to consider employing such strategies in their own teaching practice. These advances should be met with the development of new and diverse methods for evaluating teaching practices.

Collaboration – Communication – Challenge

In addition to prioritising communication skills in the learning experience, anchoring learning in reality helps to engage students in collaborative activities, forcing them to problem solve, communicate and create alongside others (this relationship has been illustrated on the adjoining page). Collaboration, combined with effective communication skills, helps students to embrace the challenges associated with working with others, including the need to accommodate diverse perspectives. During the interview series, educator Jennifer Whitty

explained how collaborative practice is nurtured and encouraged at the College of Creative Arts, especially within their School of Design. She believes it to be essential that students experience team work involving varying sized groups in order to be prepared for the industry (Whitty, 2015, Interview). As a result of this approach, 4 out of the 5 students who completed the survey from Massey University noted that participation in Whitty’s course had either radically or significantly shifted their view of the fashion industry, which is a significant indication of change. Whitty ended the interview by expressing that the long-term hope for the course is to achieve a shift in the student’s thinking, “so [that] they are aware and empowered to enact change in their future careers as creatives and also that they will behave differently as consumers” (Whitty, 2015, Interview).

Fig 5. Illustrating Collaboration, Communication and Challenge



Making sure that students are challenged is an important element in the transformative learning journey, used most impactfully when a challenge respectfully engages students in providing them the opportunity to fully express themselves. Challenging how a student relates to their values, in a respectful and supportive environment, can help stimulate personal growth and enable new experiences. Challenge in this context also helps students to decide which values are important to foster and express through their practice, and which have instead been entrenched through questionable cultural or social influences. The comparative analysis results indicate that through engaging students in activities that anchor learning in reality, issues such as sustainability in fashion become more valuable to them. This form of engagement also creates a space in which fashion education itself can be transformed.

5.5 Conclusion

This chapter identifies the extent to which a range of transformative learning and teaching methods play an important role in shaping, sharing and shifting student and educator perspectives on issues of sustainability in fashion. The re-evaluation of current fashion pedagogy supports a case for the need to advance common approaches to fashion teaching practice, from an internal facing, localised exercise to a global, external and collaborative endeavour. The use of teaching strategies aligned with transformative learning theory could also provide educators with the means to become more aware of their own role and responsibilities within the learning journey. As a result of this awareness, it is hoped that educators would seek to expand their knowledge and skills through further investigation of learning and teaching strategies that are in line with their own specific teaching practice. The final chapter of this thesis calls for further exploration into how educators can collaborate and develop strategies for embedding methods to measure the experience of their students, as well as how they might expand their knowledge of and reflection on various teaching practices to achieve improved or innovative course design.

6 A REFLEXIVE PROPOSITION

6.1 Introduction

This concluding chapter will not only present a traditional ‘bookend’ summary of what the research has accomplished and established; it will also conclude the thesis with a final discussion that seeks to look beyond this research in its current state. Additionally, the chapter will discuss the implications of the research presented through a series of reflexive propositions designed to inform how this research could be translated into a practical tool to encourage any fashion educators interested in experimenting with their own teaching practice to do so. Finally, the chapter will conclude with a short discussion of recommendations to guide further research beyond the scope of this study.

This thesis illustrates, through a study of four pedagogical models for best practice in education for sustainability in fashion, how engaging with transformative learning theory and its associated teaching strategies can act as a leverage point for shifting outdated and, in important ways, ineffective patterns for practising fashion education. As a result of a series of interviews with expert fashion educators and a survey of fashion students, this research has drawn important conclusions regarding the role and responsibility of the fashion educator and their potential impact on the future of fashion practice. This thesis contends that the insights of transformative learning theory can greatly advance a contemporary approach towards fashion education, leading to transformative learning experiences for students and educators in the delivery of education for sustainability. In doing so, this work encourages the conceptualisation of fashion education as a collaborative practice between teachers and students and involving diverse stakeholders across both fashion institutes and industry bodies.

Combining a variety of methods for collecting and analysing data throughout this research project has provided critical insight into the fashion educators’ experience, which in turn has illuminated the effect the identified teaching strategies have on fashion design students. The study of these key strategies associated with transformative learning theory and outlined in Chapters 2 and 5 of this research has been combined with research into existing fashion education practices, as well as literature on fashion education for sustainability, to inform the creation of a reflexive tool - a propositional framework - to enable teaching practitioners to develop their own educational transformative practice methods. The findings that have resulted from the case studies suggest ways for translating transformative teaching strategies into current fashion teaching practice, and these findings form the basis of the propositions developed from the research.

26. Student Online Survey created for this research collected responses from 14 students, of which 57.14% responded to Question 7 stating that participation in the selected course helped them better understand ways of generating change in the industry.

The research has found that employing transformative teaching strategies in an educational context can contribute to the overall effectiveness of students’ understanding of sustainability and contribute to a better understanding of ways to generate change in the fashion industry.²⁶ Furthermore, the study concludes that working towards transforming perspectives and encouraging informed practice amongst students requires the educator to adopt a specific role within the learners’ journey, namely, to work alongside the student in order to create a safe, trusting environment and when necessary challenge ideas and introduce new perspectives through partnerships and collaboration. Concurrently this research seeks to challenge assumptions of the role the fashion educator and their students can hold and to see them instead as working in collaboration with diverse actors to create a transformative space for learning and acting.

6.2 Why does Fashion need Education?

A Reflective Discussion of the Transformative Fashion Teaching Practitioner

Education should play an important role in enabling people to live together in ways that contribute to sustainable development. However, at present, education often contributes to unsustainable living. This can happen through a lack of opportunity for learners to question their own lifestyles and the systems and structures that promote those lifestyles. It also happens through reproducing unsustainable models and practices. The recasting of development, therefore, calls for the reorientation of education towards sustainable development (UNECE, 2012, p.6).

In studying the strategies employed by educators of the four courses selected for analysis, transformative teaching has been identified as the methods employed to educate fashion students about the ethical and environmental considerations of their practices. Whilst these methods were identified as a result of this comparative study, no formal communication of these teaching techniques had been shared prior to this research, with educators independently developing similar fashion education projects (inspired by the *Local Wisdom Project*) in order to develop pedagogical skills and enhance comprehension of fashion teaching for sustainability.

Perhaps, in response to this observation, the natural question to be asked is, how can the information generated through this research support the broader community of practitioners engaged with and interested in fashion pedagogy? This research could benefit fashion practitioners who have an interest in pedagogy but are without any teaching experience and thus feel out of their depths in the classroom; alternatively, it could be used by those individuals who choose to straddle both creative practice and teaching yet require a guide to understand which strategies will best engage their students when dealing with issues of ethics, values and design responsibility. Whether it be a personal or professional pursuit that motivates the use of this research, its main intention is to encourage educators to leverage the community within which they live and work, in order to innovate education in the field of sustainability through collaborative teaching and learning alongside their peers and students.

Whilst design educators may not explicitly relate their teaching methods to established pedagogical theories such as transformative learning theory, effective design education relies on educators understanding their role and its inherent responsibilities. Perhaps this understanding could evolve from a consideration for the theoretical context from which educators practice?

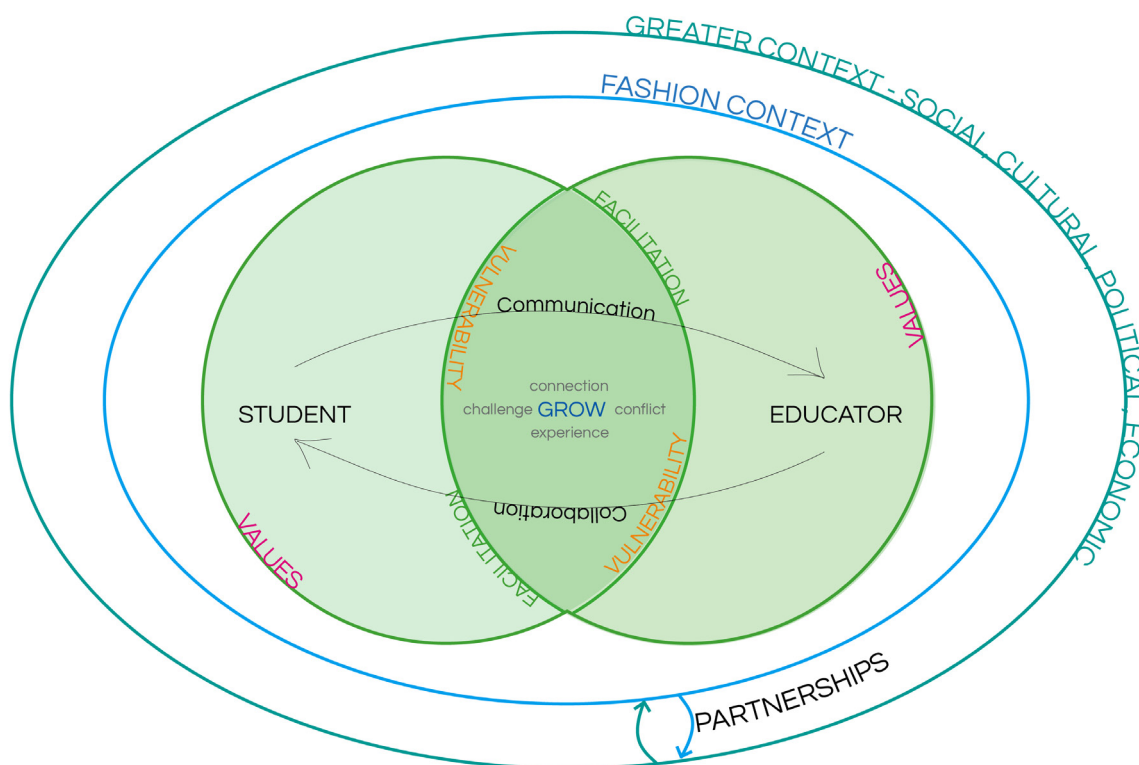
As Faerm (2015) observes, designing clothes and teaching students are two different skill sets (p.1). However, when brought together through inquiry and observation, the two connect to create an environment ready to challenge student perspective through critical reflection on both their personal and professional values in relation to fashion practice – this is one contention of this research.

Whilst models for fashion design education vary from program to program depending on their structure and focus, interesting similarities in regard to common teaching practice methods have emerged through this research, specifically within the context of education

for sustainability. It is from a mix of multiple professional identities (the academic, educator and practitioner) that the content and curriculum of each fashion program is informed, and together these identities influence the student’s learning experience. This research has remarked that it is through the acceptance and support of a mutual learning relationship between educator and learner that beneficial collaboration and communication is encouraged to flourish.

As a result of the analysis process, the below observations that evolved into findings specific to the context of transformative fashion teaching practice have been provided. These are not a set of recommendations but more a collection of assessments that seek to define the key strategies that are employed by the transformative fashion teaching practitioner. These points may as act as prompts for reflection, catalyst points from which a discussion might arise about fashion education practice and the role of the fashion educator in the emerging fashion designers’ journey. The broader context for these points of reflection is situated in the future of fashion practice and thus in the future of the fashion industry. The below image has been created to depict the relationship between the key ideas which have evolved from this research. This diagram will be analysed in closer detail in the ensuing discussion in order to clarify each point and illustrate and support its position within the larger body of ideas that has emerged through the course of the research.

Fig 1. Diagram of key research ideas and their relationships



Strategies to reflect upon, with specific reference to the adoption of transformative fashion teaching practice:

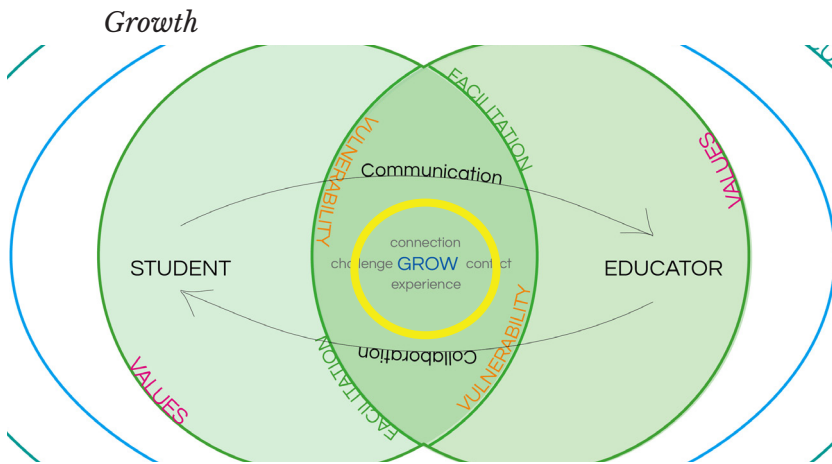


Fig 2. Mapping growth

Growth is achieved through the communication and collaboration between educator and student. This growth is enabled through the shared experience of vulnerability and mutual learning, both of which at a foundational level are underpinned by a sharing of values - an acknowledgement of who you are and what you bring to the learning exchange. Communication and collaboration can be achieved by updating the curriculum regularly while seeking feedback from students about what has and has not been successful in terms of the curriculum content and teaching methods. Additionally, allowing sufficient space and time to recognise students' prior experiences, which are not solely associated with learning, and the value these bring to all participants, can aid in developing knowledge and insight. Students do not only bring past learning experiences into the classroom, they also bring their prior life experience. This includes perspectives that have been informed by their experience of society and culture, but they also include the experiences and perspectives of those closest to them (family, friends etc). These perspectives are based on a diversity of values and have the ability to produce both discord and harmony in the classroom; regardless, each student presents an opportunity for others to learn, whether it be through patience, understanding, compromise or facilitated conflict. Customising the learning experience to cater for varied learning styles ensures that learners are not being neglected, and it enables their participation, collaboration and ability to challenge others as well as themselves.

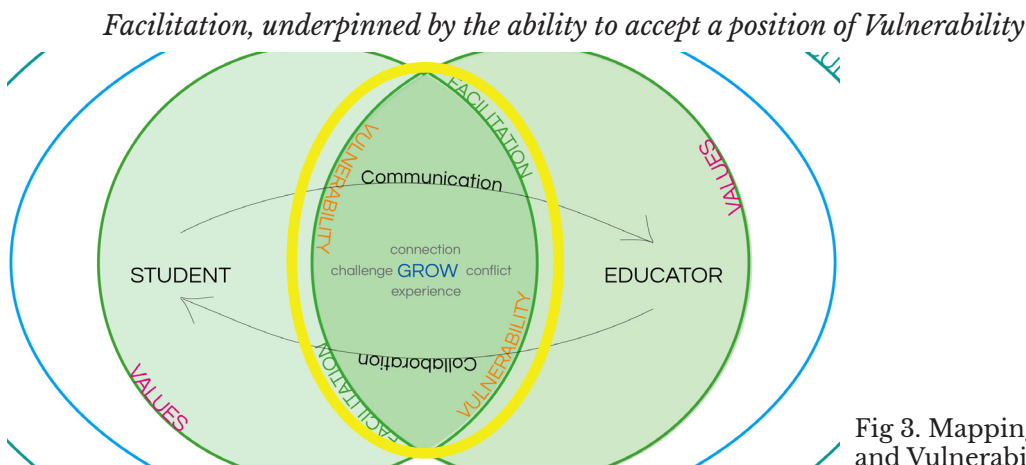


Fig 3. Mapping Facilitation and Vulnerability

This section of the diagram (on the previous page) refers to the shifting of the role of the teacher from transmitter to facilitator. This view of the mutual learning experience is discussed in this research in relation to Paulo Freire’s (1968) concept of co-creation of knowledge, according to which the sharing of experiences and skills between the educator and student are prioritised.

“Teacher trainers should embrace pedagogical practices that shift the role of the teacher from a knowledge transmitter to that of a guide/facilitator who engages learners through collaborative and individualized learning activities in which the teacher is also a learner. They should emphasize the need for the paradigm shift in order to influence the trainees to use the same pedagogical practices with their prospective learners in future” (Njui, 2017. p 498).

Collaboration and Communication, underpinned by the sharing of values

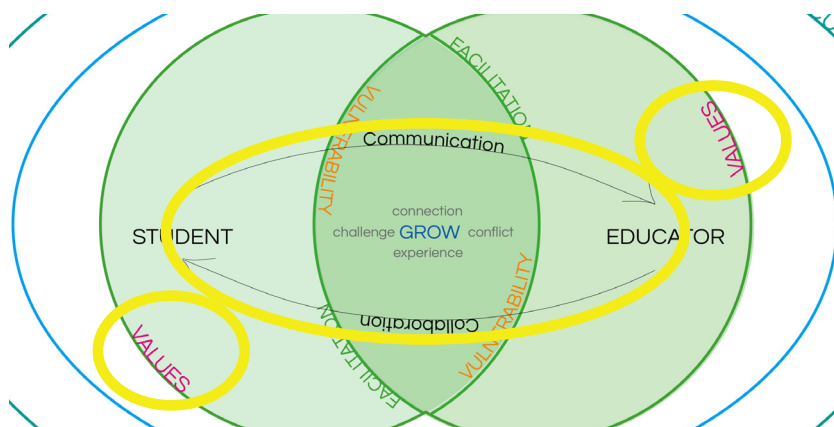


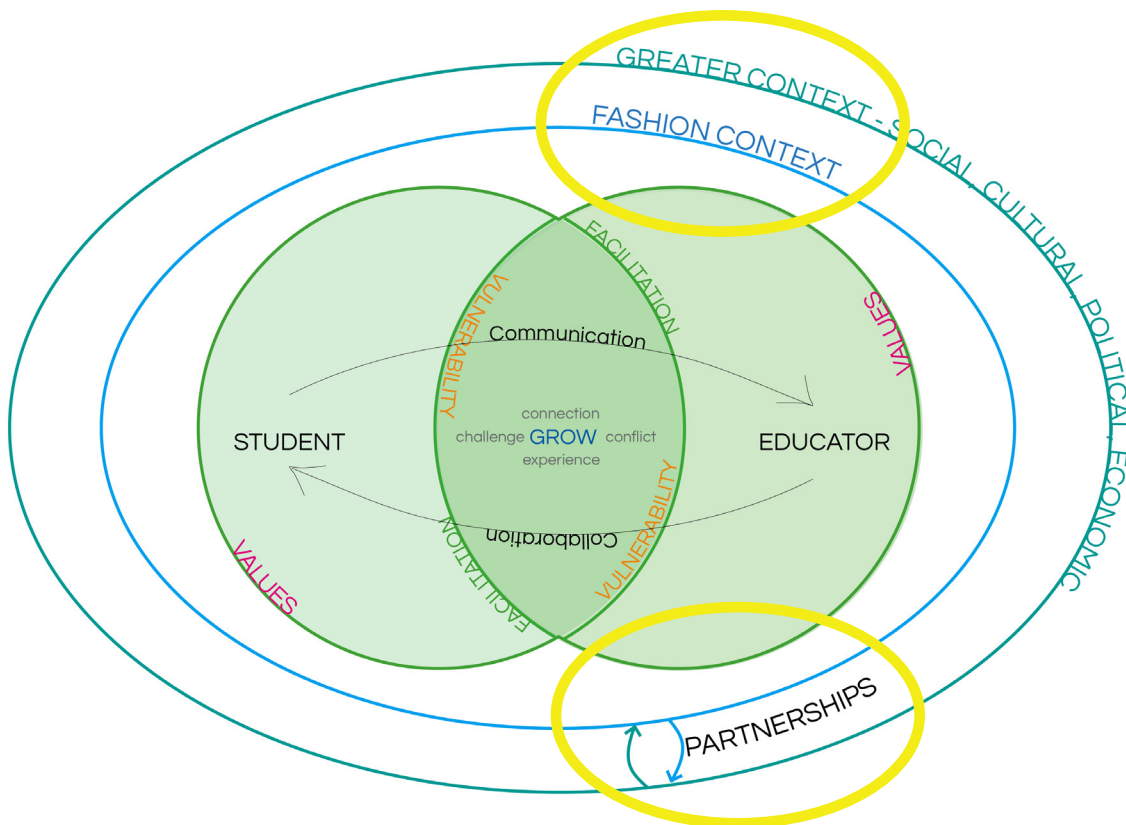
Fig 4. Mapping Communication, Collaboration and Values

This section of the diagram speaks to the importance of encouraging critical reflection through the discussion and exchanging of ideas and experiences between the educator and the student. This reflection is encouraged through a variety of methods, one of which would be through fostering collaboration in the classroom by employing activities focussed on engaging students in discussion of values and perspectives with their peers, class leaders, mentors and industry leaders. Providing students with opportunities from which they can learn and develop through questioning themselves and others leads to the development of a greater sense of self and purpose. Promoting the importance of communication in the design journey is key to the sharing of key ideas and experiences, and education through communication is also a likely responsibility of the future designer. Through this process students and educators are encouraged to take responsibility for their roles as designers, by drawing a connection between their personal values and design practices, and to do so from both a local and a global perspective.

Context

The highlighted elements of this diagram speak to the diversification of the learning environment, which may be facilitated through the inclusion of specialised workshops, industry visits, and guest lectures. The expansion of the environment of learning aims to encourage students to engage with the greater context of their education through a range of possibilities for participation. Students must feel safe in their learning environment and having a variety of tools in place to engage the diverse experiences they bring to the learning environment helps to create a sense of safety and security for the learner.

Fig 5. Mapping the context within which these ideas sit



6.3 A Propositional Framework

The evaluative framework outlined below has been developed following reflection on the study completed for this research. This final section seeks to provide those who are in search of a method for assessing their transformative teaching practices, with some suggestions for how to evaluate the impact of their teaching.

This guide has been created to enable more adequate measuring of student participation and experience in the evaluation process. All students and teachers participating in the course being evaluated should take part in all stages of the evaluation in order to provide a comprehensive perspective on the course. The evaluation may take any of the suggested forms outlined by Cranton and Hoggan (2012), however, online surveys have proven to be very affective for this study, provided that participation can be assured. The responses generated from the survey format were honest, detailed and insightful, qualities that can be attributed to its anonymity. The evaluation of responses should, for the most part, be anonymous to allow for respondents to answer honestly without fear of repercussion. This might require that the following stages be evaluated differently, with more or less detail, to ensure anonymity.

The evaluation should take place in four stages (minimum):

5. Prior to commencing the course,
6. Half-way through the duration of the course,
7. After the course has been completed,
8. A few months (if not more) after completion of the course.

By adhering to a similar evaluation structure, while taking into account the difference in these stages, participants would be given multiple opportunities to document their perspectives throughout the learning process, so that a shift in perspective could be more easily ascertained. Mezirow (1991) suggests that we can evaluate only the process of transformative learning, not the product (Taylor and Cranton, 2012). Simply questioning students before and after each course may well be an accurate measure of student experience, however, it is unlikely to take into account the application of any new shift in perspective. Proper evaluation would depend on further points of contact with each student beyond the course's formal timeline. The questions used for evaluation should seek to determine values and perspectives prior to, during and after completion of the course. Additional questions would be specific to the individual educator's requirements in order to grow their teaching practice.

6.4 Recommendations for Further Research

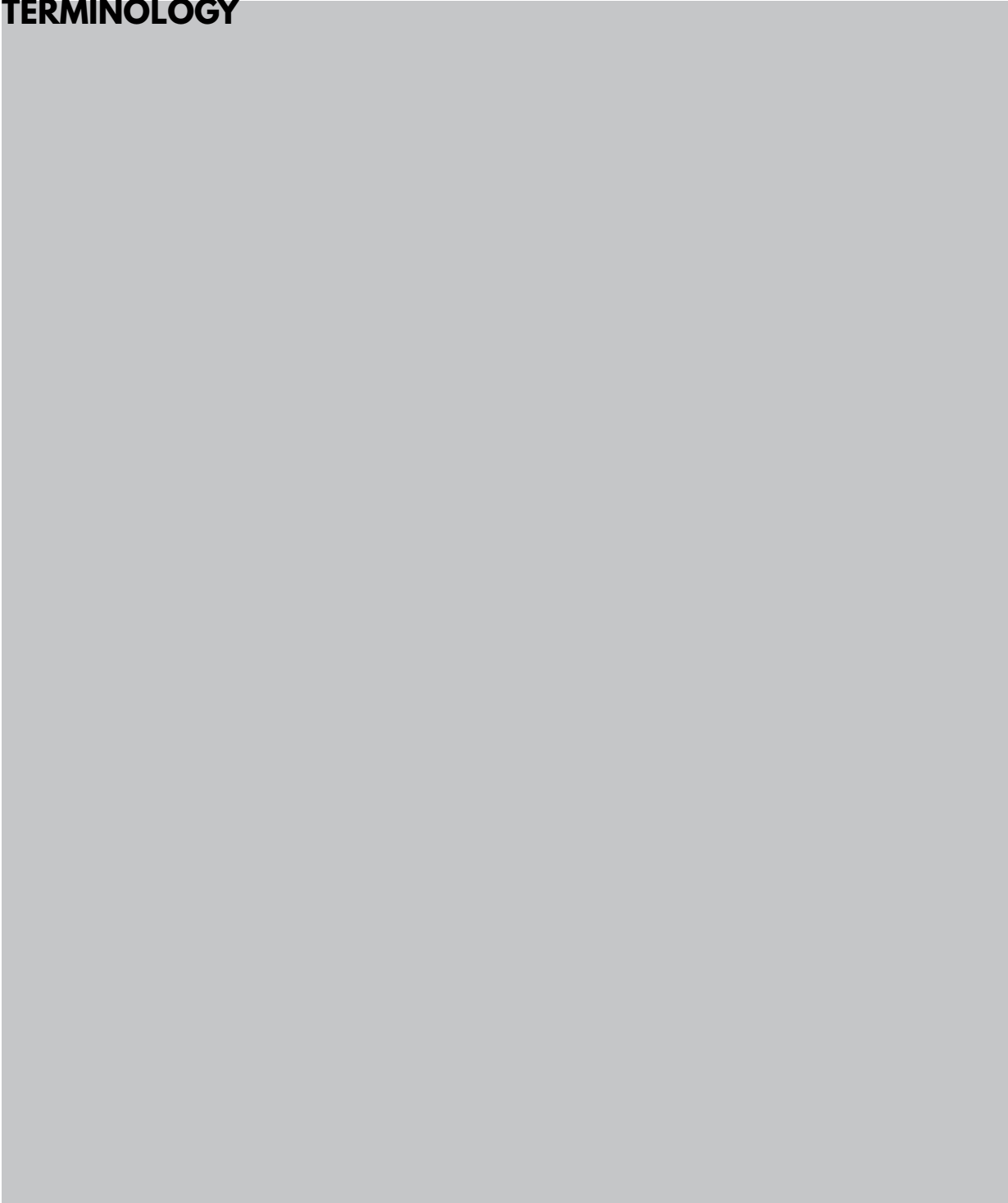
Through the process of conducting this research, specific areas of interest identified as sitting beyond the scope of this study have emerged. These areas would benefit greatly from further research, to develop our awareness of the impacts of transformative learning theory on students' and teachers' understanding and practice of sustainable fashion.

To better understand these implications, research is required to investigate the long-term influence that transformative learning and teaching has on both student and educator, beyond the initial instance of participation. For this to be achieved, a longitudinal study of participant experiences beyond the encounter with transformative teaching is needed, to gauge whether a shift in perspective has been achieved and how such shifts might have affected the participants' future decisions.

Within this research, it was discovered that most of the teachers interviewed for the study did not explicitly identify professionally with the role of educator. The research recommends that further study is undertaken to improve our understanding of the teachers' sense of identity, specifically within fashion education practice, in order to comprehend why there is a self-conscious disassociation between the role of the practitioner and that of the educator.

Finally, this project has devoted considerable discussion to the inadequacy of the tools currently available to measure students' experience of transformative learning and teaching. Upon reflection, the student experience of fashion learning is a crucial resource for cultivating further knowledge about best practice within fashion pedagogy. This area requires greater investigation and would profit from a series of research projects aimed at understanding in greater detail the impact of specific transformative strategies for teaching about sustainability in fashion, including their effectiveness and their ability to inspire more ethically and environmentally minded decisions concerning their present and future practice.

TERMINOLOGY



Fashion

Represented in both material and nonmaterial contexts, fashion is an expression of current collective behaviour representing popular styles at given times. (Daniels,1951; Horn,1968; Nystrom, 1928; Lang & Lang, 1961; Sproles, 1974.)

Fashion Design

The application of ideas and aesthetics in respect to fashion, resulting in concepts that are not exclusively defined by but often take the form of a garment.

Fashion Education

The act or process of imparting knowledge, skill and understanding (for the purpose of this research, at a tertiary level), in respect to disciplines related to the phenomenon of fashion. These can include, but are not limited to, fields such as: design, marketing, business, history, professional practice, production etc.

Fashion Practice

The measures and methods undertaken to realize a fashion orientated project or task. “An open, temporarily unfolding nexus of orientated action” (Robinson, 2101, p.3).

Sustainability

Sustainability describes the “rethinking and reframing [of] basic ideas about life itself” (Lange, 2012, p.197).

Sustainable Fashion Design

Designing with regard for the ethical and environmental, global and local, implications of fashion practice.

Transformation

Transformation occurs when there is a “shift in the way we view the world and its systems...” (Meadows, 2012).

Transformative Fashion Practice

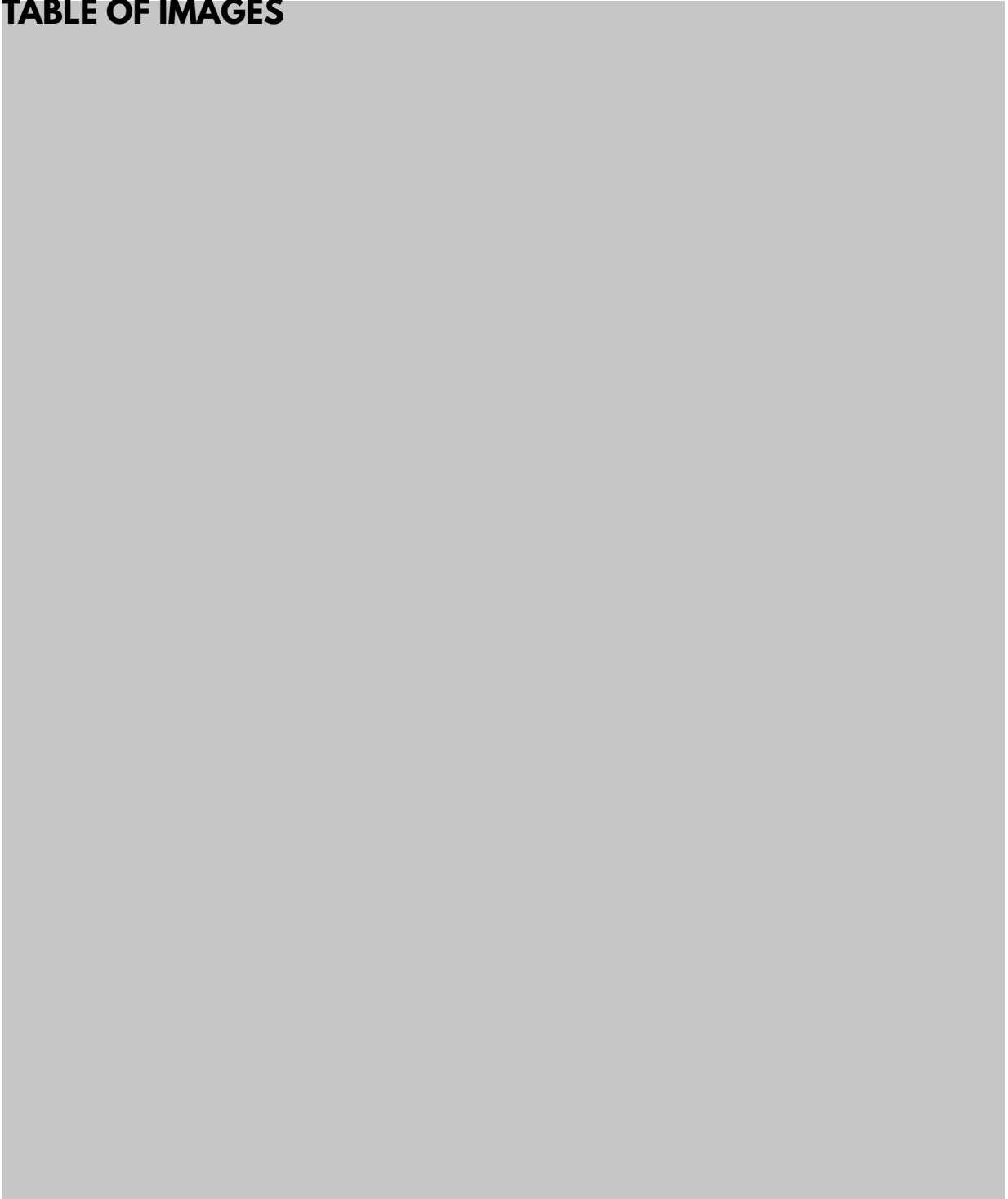
Transformative Fashion Practice’s focuses on generative, thriving forms of fashion practice. It is a practice that has moved beyond ideas of sustaining itself for the present or near future and is instead focused on the ability to develop as thriving. Transformative Fashion Practice seeks to align itself with the values and responsibilities of the fashion designer, with a focus on communication, collaboration and facilitation.

Transformative Fashion Teaching Practice²⁷

Teaching practices within the domain of fashion education that embody the key underpinnings of transformative learning theory at their core, seeking to create learning environments that empower students with the tools to critically reflect upon their perspective of the fashion industry and practices, emphasizing the practice of collaboration and communication throughout the creative process.

27. Read more about Transformative Fashion Teaching Practitioners in 1.2.2 The Role of The Future Fashion Designer

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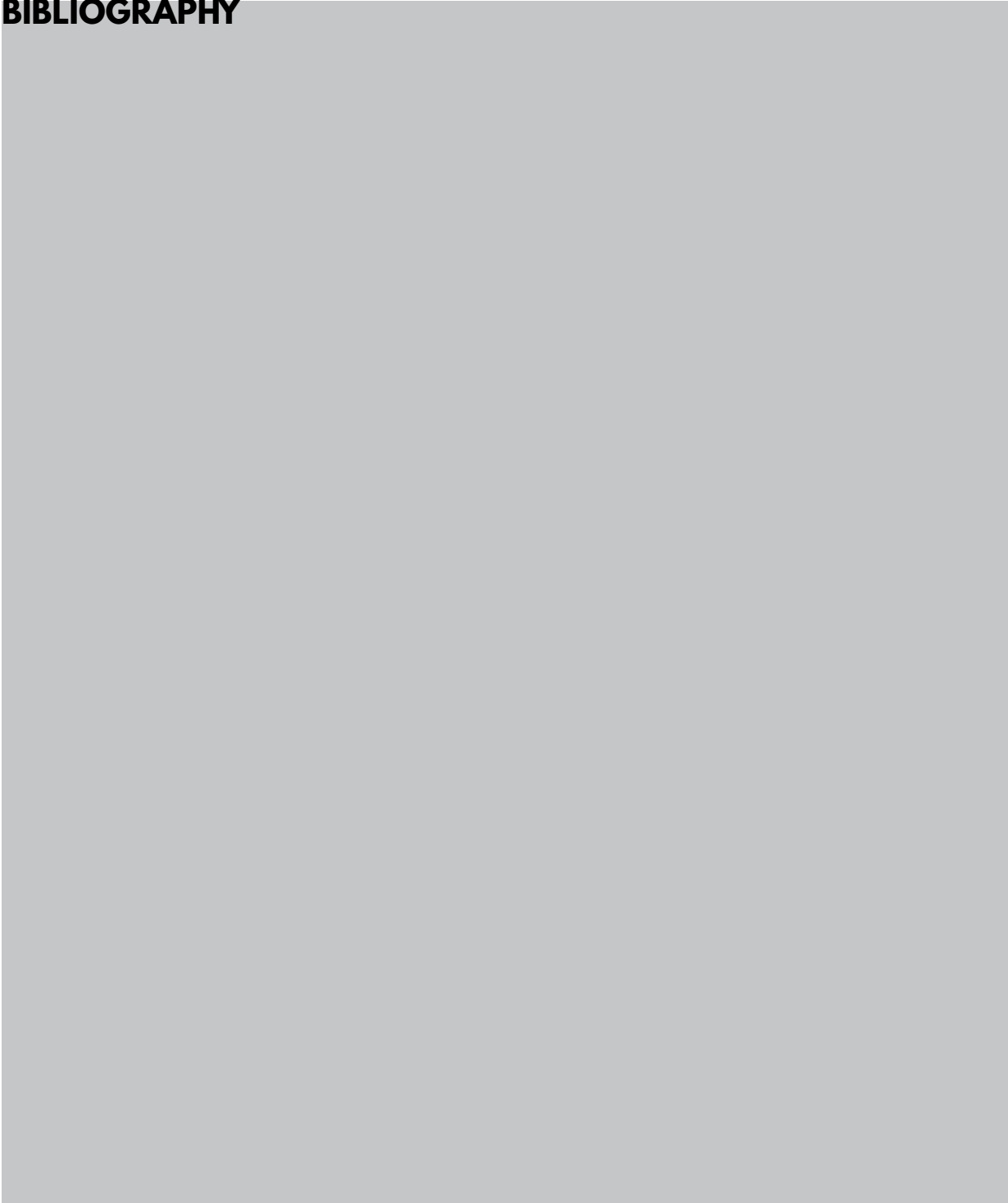
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ETHICS DOCUMENTATION

1. Letter of approval from an authorised RMIT committee for research with humans.	164-166
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ETHICS DOCUMENTATION



Notice of Approval

Date: 22 May 2015

Project number: CHEAN A 0000019340-04/15

Project title: Exploring the effects of context; sustainable fashion education and experiential design practice.

Risk classification: Low Risk

Investigator: Dr Sean Ryan and Ms Kate Sala

Approved: From: 22 May 2015 To: 03 January 2017

I am pleased to advise that your application has been granted ethics approval by the Design and Social Context College Human Ethics Advisory Network as a sub-committee of the RMIT Human Research Ethics Committee (HREC).

Terms of approval:

1. Responsibilities of investigator

It is the responsibility of the above investigator/s to ensure that all other investigators and staff on a project are aware of the terms of approval and to ensure that the project is conducted as approved by the CHEAN. Approval is only valid whilst the investigator/s holds a position at RMIT University.

2. Amendments

Approval must be sought from the CHEAN to amend any aspect of a project including approved documents. To apply for an amendment please use the 'Request for Amendment Form' that is available on the RMIT website. Amendments must not be implemented without first gaining approval from CHEAN.

3. Adverse events

You should notify HREC immediately of any serious or unexpected adverse effects on participants or unforeseen events affecting the ethical acceptability of the project.

4. Participant Information and Consent Form (PICF)

The PICF and any other material used to recruit and inform participants of the project must include the RMIT university logo. The PICF must contain a complaints clause including the project number.

5. Annual reports

Continued approval of this project is dependent on the submission of an annual report. This form can be located online on the human research ethics web page on the RMIT website.

6. Final report

A final report must be provided at the conclusion of the project. CHEAN must be notified if the project is discontinued before the expected date of completion.

7. Monitoring

Projects may be subject to an audit or any other form of monitoring by HREC at any time.

8. Retention and storage of data

The investigator is responsible for the storage and retention of original data pertaining to a project for a minimum period of five years.

In any future correspondence please quote the project number and project title.

On behalf of the DSC College Human Ethics Advisory Network I wish you well in your research.

Suzana Kovacevic

Research and Ethics Officer

College of Design and Social Context

RMIT University

Ph: 03 9925 2974

Email: suzana.kovacevic@rmit.edu.au

Website: www.rmit.edu.au/dsc

Notice of Approval

Date: 12th July 2016

Project number: CHEAN A 0000019340-04/15

Project title: Revisiting Fashion Education: Inspiring transformative learning experiences for fashion design students

Risk classification: Low Risk

Investigator: Dr Sean Ryan; Ms Kate Sala; Associate Professor Angela Finn

Approved: From: 22nd May 2015 To: 3rd January 2019

I am pleased to advise that your extension request has been granted ethics approval by the Design and Social Context College Human Ethics Advisory Network as a sub-committee of the RMIT Human Research Ethics Committee (HREC). Ethics approval is extended until 3rd January 2019.

The following amendments have also been approved:

- Change of Title from “Exploring the effects of context; sustainable fashion education and experiential design practice” to “Revisiting Fashion Education: Inspiring transformative learning experiences for fashion design students”
- The upgrade of the Student Researcher’s course of study from M Des (Fashion and Textiles) to PhD (Fashion and Textiles).
- Additional interviews with researchers at a) London College of Fashion; b) Kolding Design School, Denmark; c) Parsons School of Design, New York; d) Emily Carr University of Art & Design, Vancouver.
- And update of semi-structured interview questions to make them less institution specific and compatible with an expanded theoretical framework.

Terms of approval:

1. Responsibilities of investigator

It is the responsibility of the above investigator/s to ensure that all other investigators and staff on a project are aware of the terms of approval and to ensure that the project is conducted as approved by the CHEAN. Approval is only valid whilst the investigator/s holds a position at RMIT University.

2. Amendments

Approval must be sought from the CHEAN to amend any aspect of a project including approved documents. To apply for an amendment please use the ‘Request for Amendment Form’ that is available on the RMIT website. Amendments must not be implemented without first gaining approval from CHEAN.

3. Adverse events

You should notify HREC immediately of any serious or unexpected adverse effects on participants or unforeseen events affecting the ethical acceptability of the project.

4. Participant Information and Consent Form (PICF)

The PICF and any other material used to recruit and inform participants of the project must include the RMIT university logo. The PICF must contain a complaints clause including the project number.

5. Annual reports

Continued approval of this project is dependent on the submission of an annual report. This form can be located online on the human research ethics web page on the RMIT website.

6. Final report

A final report must be provided at the conclusion of the project. CHEAN must be notified if the project is discontinued before the expected date of completion.

7. Monitoring

Projects may be subject to an audit or any other form of monitoring by HREC at any time.

8. Retention and storage of data

The investigator is responsible for the storage and retention of original data pertaining to a project for a minimum period of five years.

In any future correspondence please quote the project number and project title.

On behalf of the DSC College Human Ethics Advisory Network I wish you well in your research.

Kevin Anslow

Acting Research and Ethics Officer

College of Design and Social Context

RMIT University

Ph: 03 9925 2974

Email: kevin.anslow@rmit.edu.au

Website: www.rmit.edu.au/dsc

Notice of Approval

Date: **19 August 2016**

Project number: **CHEAN A 000020346-07/16**

Project title: **Revisiting Fashion Education: Inspiring Transformative Learning Experiences for Fashion Design Students**

Risk classification: **Neg risk**

Chief investigator: **Dr Sean Ryan**

Status: **Approved**

Approval period: **From: 19 August 2016 To: 1 September 2019**

The following documents have been reviewed and approved:

Title	Version	Date
Risk Assessment and Application form	1	19 August 2016
Participant Information and Consent Form	1	19 August 2016
Participant Information and Consent Form (Danish Translation)	1	19 August 2016
Questionnaire	1	19 August 2016
Questionnaire (Danish Translation)	1	19 August 2016

The above application has been approved by the RMIT University CHEAN as it meets the requirements of the *National statement on ethical conduct in human research* (NH&MRC, 2007).

Terms of approval:

- 1. Responsibilities of chief investigator**
It is the responsibility of the above chief investigator to ensure that all other investigators and staff on a project are aware of the terms of approval and to ensure that the project is conducted as approved by CHEAN. Approval is valid only whilst the chief investigator holds a position at RMIT University.
- 2. Amendments**
Approval must be sought from CHEAN to amend any aspect of a project. To apply for an amendment use the request for amendment form, which is available on the HREC website and submitted to the CHEAN secretary. Amendments must not be implemented without first gaining approval from CHEAN.
- 3. Adverse events**
You should notify the CHEAN immediately (within 24 hours) of any serious or unanticipated adverse effects of their research on participants, and unforeseen events that might affect the ethical acceptability of the project.
- 4. Annual reports**
Continued approval of this project is dependent on the submission of an annual report. Annual reports must be submitted by the anniversary of approval of the project for each full year of the project. If the project is of less than 12 months duration then a final report only is required.
- 5. Final report**
A final report must be provided within six months of the end of the project. CHEAN must be notified if the project is discontinued before the expected date of completion.
- 6. Monitoring**
Projects may be subject to an audit or any other form of monitoring by the CHEAN at any time.
- 7. Retention and storage of data**
The investigator is responsible for the storage and retention of original data according to the requirements of the *Australian code for the responsible conduct of research* (section 2) and relevant RMIT policies.
- 8. Special conditions of approval**
The CHEAN approves this application subject to confirmation that appropriate procedures are followed at host institutions (London College of Fashion, Massey University, Kolding Design School and Parsons School of Design). For example, an additional translation may be required for Maori students. The CHEAN recognises that these procedures will be approved by heads of school/Deans/course coordinators of the relevant institution.

In any future correspondence please quote the project number and project title above.

Professor Joe Siracusa
Deputy Chairperson
RMIT DSC CHEAN A

cc: Dr David Blades (Research Governance and Compliance Advisor), Ms Kate Sala

END OF THESIS

