Sustainable Sensibilities:

Exploring approaches to supporting and developing sustainability focused learning for textile design higher education at the Glasgow School of Art

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Abstract

Against a call for holistic approaches to change within the fashion and textiles industry, this research project responds to the lack of action from textile design higher education, notably from the Glasgow School of Art. Current approaches to sustainability-focused teaching of textile design are limited to material-centred solutions that continue to function within harmful capitalist systems of overproduction and consumption. Shifting focus to embrace the sensibilities, tactility, and social nature of textile design could promote new practices of social innovation that encourage attitudes of care and consideration towards textile items and facilitate long lasting change.

This research project gathers perspectives from current GSA textile design students, educators, recent graduates and textile practitioners in and around Glasgow to summarise a collective interpretation of sustainable textile design. It highlights that a lack of consistent and comprehensive teaching about sustainability and textiles acts as a barrier to student engagement with the environmental and social impacts of textile design practice.

The research investigates how students can be supported to explore and develop sustainable textile design practices by collecting insights from participants' lived experiences of studying at GSA. These insights revealed the significance of critical thinking and reflection when considering sustainable approaches to textile design and teaching and underline the importance of GSA developing a tailored curriculum that reflects the values of GSA students and staff.

This project explores the role of perception, imagination and future thinking through heuristic fieldwork and analysis, and insights informed the recommendation of utilising four 'Sustainable Sensibilities' as the foundations for future curriculum design within the GSA textile design department.

Declaration

I, Megan Allan, declare that this submission of full thesis for the degree of Master of Research meets the regulations as stated in the course handbook.

I declare that this submission is my own work and has not been submitted for any other academic award.

Megan Allan

The Glasgow School of Art, December 2022

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Glossary of Terms

Fast Fashion: clothing that is mass-produced at a low cost from low quality materials, predominantly synthetic fabrics. The designs replicate trends in high fashion and are intended to be affordable, mainly available on the high street or through online fashion retailers.

Greenwashing: a form of advertising; when a product producer misleadingly markets an item or service as having a low environmental impact when it does not. This thesis discusses greenwashing in relation to fashion and textile retailers and manufacturers.

Higher Education (HE): academic education beyond school and further education which leads to a achieving an undergraduate or postgraduate degree.

Lifecycle Thinking: considering a materials relationship to the land. Understanding what it is made of, how it was made, how it will wear and how it can be disposed of.

Making Textiles: the act of constructing cloth or surface. The act of decorating or enhancing cloth or surface.

Sensibilities of Textiles: the conceptual, expressive qualities embodied in textiles through the process of making and use.

Sustainability: environmental and social justice, ecological balance, social equity. Humans co-existing with other living beings, protecting and preserving the natural resources of the planet.

Textile Design Practice: developing conceptual designs of textiles; woven, knitted, printed, embroidered or mix media.

United Nations Sustainable Development Goals (SDGs/Global Goals): a collection of 17 interlinked global goals designed to be a 'shared blueprint for peace and prosperity for people and the planet, now and into the future'.

SDG Accord: An agreement between universities and colleges to deliver the SDGs and report their progress.

Prelude

The idea for this research project began with my observations as an undergraduate textile design student at The Glasgow School of Art (GSA). I studied to develop my practice for three years, and the word 'sustainability' was often mentioned in our studio, but its definition was never discussed. My peers and I were encouraged to develop a 'responsible' design practice but rarely debated with course leaders on how they might manifest. There appeared to be hesitation around investigating the concept of sustainable textile design as a collective which fascinated me, as I was utterly preoccupied with the idea.

Textile supply chains are notoriously complex, lacking transparency and accountability for exploitation, waste and pollution. These issues must be addressed, but design students need help to navigate them. Additionally, in the Global North, capitalism attempts to shape 'sustainability' into a trend, and the word, alongside its associated terminology, has become problematic. The bombardment of vague 'green' terms employed interchangeably across the industry can be misleading; they impact our design-based decisions when we source materials, adopt techniques, and attempt to position our design practice.

For me, designing textiles is a sensory exploration of the world around me. It is a tool to research cultural histories, engage in intergenerational skills sharing and communicate my interests. Textiles hold stories of place, people, and identity and represent our values. They are to be cared for and appreciated. These principles are difficult to place in the context of today's consumer culture and I, like many of my peers, graduated feeling conflicted about joining the textiles industry.

It was a relief to discover that many thoughtful examples of sustainable approaches to textile design exist, including designers working exclusively with waste materials, natural dyes, and innovative recycling technologies. However, the landscape is complex, attitudes vary with techniques, and the process of developing an authentic approach is intricate.

This research project is not a vehicle for me to develop or present a sustainable solution to textile design. However, it provided an opportunity for me to explore an alternative approach to my practice through research and knowledge exchange; for that reason, I have written in the first person throughout this thesis.

Prior to this project I coordinated online lectures for students on behalf of GSA Sustainability, a detailed outline of this work can be found in Appendix 1. The lectures further provoked my interest in sustainability-focused teaching within higher education and through this project, I was able to better understand the complexities of sustainable textile design discourse and investigate how higher education can support new designers to engage with sustainability. The fieldwork was situated within the context of higher education at The Glasgow School of Art. It included participation from textile design students, who are at a fundamental stage of comprehending their responsibility as designers, and uncovered approaches to teaching and learning that support students exploring and developing sustainable textile design practices.

Chapter 1:
Introduction

In this chapter I will introduce the wider context, or backdrop, of this research project. I will then provide an overview of the place-specific context of the fieldwork and present the research question, aims and objectives.

Textiles are all around us, we come into contact with fabrics and fibres every day (Igoe 2021, Gale & Kaur 2002), yet the practice of textile design often hides behind the product it serves to enhance (Igoe 2021, Valentine et al. 2017). Undeniably, textiles and fashion are entangled in a symbiotic relationship that arguably becomes problematic when woven into the fabrics of 'fast fashion' (von Busch 2022, Tham 2016). The overproduction and underutilisation of clothing make textile waste the UK's largest growing waste stream (Thomas 2019). Furthermore, the exploitation of an unprotected workforce, predominantly in the East and Global South (Fashion Revolution 2022); reinforced by the majority of textile waste from the global north being exported to landfill in Sub-Saharan African countries (Ricketts 2021, WRAP 2019), stress the socio-cultural and economic implications of the industry's overarching neo-colonial supply chains. It is a system inflicting immeasurable amounts of environmental, social and ecological harm (WRAP 2022, Fletcher and Tham 2019).

As an estimated 80% of a product's environmental impacts are determined at the design stage (Ellen MacArthur Foundation 2017), designers and manufactures are developing new approaches to textile design and making, with the help of non-governmental organisations (WRAP 2030, 2022). While this work is vital, researchers implore us to think beyond ethically producing and consuming our way to sustainability (von Busch 2022, Barber 2021). By adopting a holistic approach to our fashion and textile design practices we can promote emotional attachment to textiles through care and considerate use (Manzini 2022, Fletcher and Tham 2019).

Fashion and textile designers are adopting new roles within their local communities; as facilitators, educators and activists (see ZWDO, ReMode). New competencies are required of designers to effectively embrace their new roles (von Busch 2022, Tham 2016) and for these new systems to thrive, collaboration from various invested stakeholders, including governmental bodies, external associations, local communities and educational institutions, is essential.

Research from London College of Fashion (Mazzarella 2020) has shown that design education institutions can play a pivotal role in instigating alternative, place-based systems for fashion and textile design and consumption. This practice-led research project aims to investigate this notion further by exploring how textile design education can support students to explore sustainability and re-imagining alternative practices through tools for reflection and critical thinking (Twigger Holroyd 2022, Vuletich 2015). It aims to develop a set of principles for textile design education, informed by the perspective of students, to provoke a re-alignment of values that support environmental and socio-cultural wellbeing.

1.1 Project Context: Textile Design at the Glasgow School of Art

Textile Design at the Glasgow School of Art (GSA) is a four year undergraduate Higher Education (HE) programme. The course aims to create 'assured and specialised textile design graduates,' a full outline of the course specifics can be found on the GSA website. The programme consists of projects which vary in length to enable practice-led enquiry through studio-based activity (GSA 2022). Students receive design briefs, which are occasionally live projects in collaboration with industry partners, and are required to utilise their drawing, colour exploration, contextual awareness, material awareness and design development skills to produce textile samples suitable for fashion or interiors. This structure intends to mimic the realities of a career in textile design and prepare students for industry employment, self-employment or further study. In the third year of study,

students specialise in one of four textile disciplines – embroidery, weave, knit or print and the course nurtures experimentation and individual creative development.

Studio-based learning is supplemented by theoretical studies led by a separate department, Design History and Theory (DH&T). One day a week is allocated to DH&T where students attend lectures and group discussions with peers from across the whole School of Design. The content of DH&T sessions is not always discipline specific but instead focus on wider design issues relating to political, socio-cultural and historic matters, aiming to underpin studio practice and encourage broad, critical thinking.

All GSA students and staff are supported by GSA Sustainability, a working group which collaborates with the curriculum and estate on environmental and social justice issues. Students can attend one-to-one discussion sessions about their practice with the Sustainability Coordinator and GSA Sustainability facilitate school-wide events focusing on the potential for art, design and architecture to create innovative solutions that tackle environmental and social issues.

GSA are currently forming a new Common Academic Framework (CAF) which involves revising all of the courses in 2023-24. The CAF aims to ensure equity of student experience through curriculum design and equip students with core literacies in social justice and climate action, digital literacy and collaboration for the 21st century world.

Textile design students are placed at the centre of this project, as illustrated in figure 1.1, and it offers a unique perspective from the students' lived experience of learning about sustainability and textile design. It has the potential to contribute to the future curriculum at GSA.

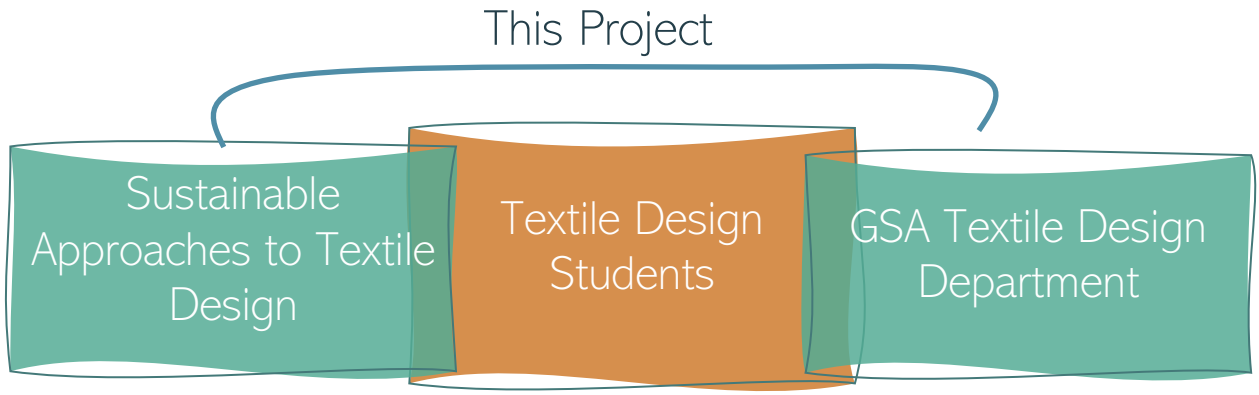

Figure 1.1 - Allan, M. (2022) Positioning the research project. Source: Author's own.

1.2 Research Question

This research project is emergent in nature and presents the question;

> How can textile design students be supported to explore and develop sustainable practices through examining and enhancing the learning experience at the Glasgow School of Art?

1.3 Aims and Objectives

This research aims to:

- Discover how textile design students at GSA define sustainability and sustainable approaches to textile design.
- Gain insight into the current barriers students face to engaging with sustainability through their learning experience.
- Provide an understanding of approaches to teaching and learning that could facilitate student explorations of sustainability.

The objectives are to:

- Conduct interviews to identify interpretations of sustainable textile design.
- Facilitate a focus group for GSA textile design students to engage in critical thinking and reflection; to gather insight into their learning experience at GSA.
- From the insights, understand the approaches to teaching and learning that could increase student explorations of sustainability and present principles for textile design education.

1.4 Summary

This chapter introduced the context of this research project, outlined the research question, aims and objectives. It defined the discipline of textile design, underlined the need for sustainable approaches to textile design and teaching and clarified the significance of GSA textile design department as the context for the fieldwork of this project.

Chapter 2:
Scope of Context

2.1 Introduction

This chapter will present an overview of the textile design discipline and its complicated relationship with 'sustainability.' It will highlight the competencies required of textile designers to successfully develop sustainable approaches to practice and underline the complexity of navigating the industry as a textile design student.

The remainder of the chapter will question the role of higher education institutions in supporting students to explore sustainability and present examples of best practice from universities in the UK and Denmark. Figure 2.1 illustrates the layered pieces of the scope of context.

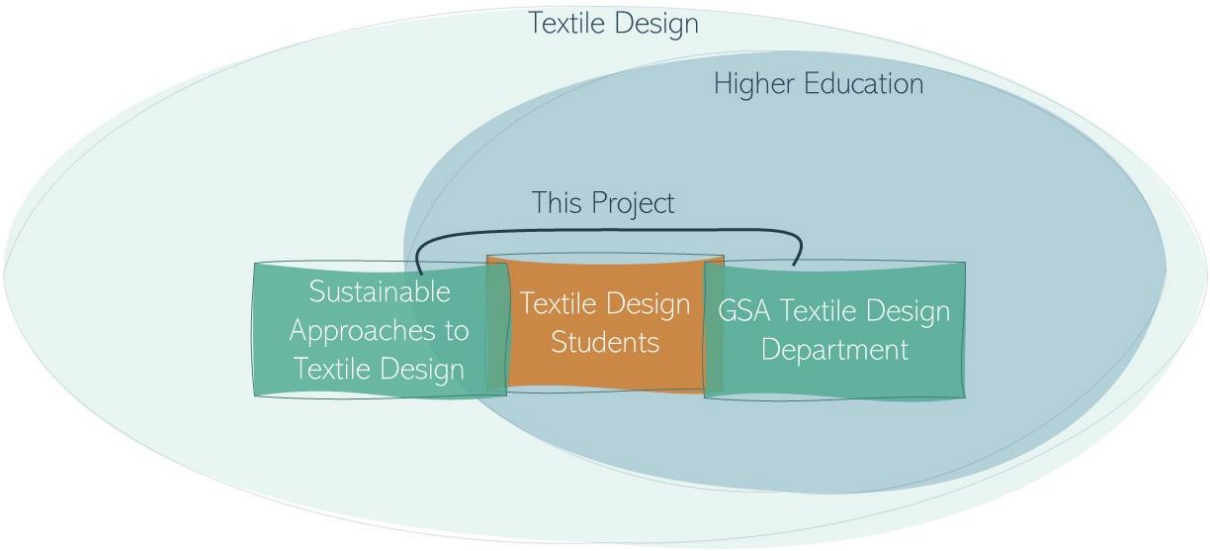

Figure 2.1 - Allan, M. (2022) The Scope of Context. Diagram. Source: Author's own.

2.2 Textile Design: a complex discipline

Since the industrial revolution, the commodification of textiles compelled the practice of design and making to migrate from domestic settings to factories participating in mass production and international trade (Thomas 2019, Fletcher 2008). The rise of capitalism in the Global North has resulted in efficient production, economic growth, and power becoming recognised measures of success (Walker 2020). Practices of colonialism, racism and misogyny are cornerstones of globalisation, and the textiles industry illustrates that capitalism is a patriarchal and white supremacist construct, relying predominantly on the skills of women and the natural resources of communities in the Global South (Fletcher and Tham 2019, Shreeve 1997).

In her seminal text, *Material Girls – Tacit Knowledge in Textile Crafts*, Shreeve (1997) claimed that the discipline of textile design lacks regard due to its association with 'women's work' and traditional domestic crafts. The language of making textiles is experiential, sensory and tactile (Nimkulrat 2021); the skills required to make them are often intuitive, relying on a form of 'tacit knowledge' (Polanyi 1958) as an 'alternative way of knowing' that is often ineffable and communicates visually (Nimkulrat 2021). Shreeve (1997) argues that this tacit knowledge has been undervalued since the Enlightenment, when written theory was the favoured method of legitimising knowledge. She further states, *'the construction of a western value system for practices of any kind is largely formed*

by the patriarchal structure of society in general.' Skills dependent on intuition are typically considered feminine or labelled 'spiritual' and associated with alternative relationships to the land and ways of living (Walker 2020). Fletcher, St Pierre and Tham (2019) remind us that Merchant (1982) once compared the oppression of women to that of nature, noting that both are utilised as resources for production, with notions of care and nurture frequently undervalued throughout society.

Friedman (2021) highlights that it is problematic to explicitly align textile making with femininity and gendered roles as this undermines the lived experiences of queer designers and makers, they state,

> *…textiles cannot easily be confined within binary schemes; rather, they are a tool that can negotiate flexible matrices while engaging in a diversified range of production by a just as diversified range of makers… queer-making practices have found in textiles a way to explore identity in ways that speak to their histories and lived realities.*

Exploring the depths of textiles' association with gender roles and race is out with scope of this context, however, the discussion highlights the complexities of the textile design discipline and its ties to socio-cultural issues.

It could be argued that textile design is a complex discipline situated within a multidimensional industry which attempts to address environmental and social justice under the umbrella term of 'sustainability' (Vladimirova 2022). The concept of sustainable textile design is not new (von Busch 2022, Fletcher 2022). However, Tham (2016) indicates that sustainability and textiles are engaged in a 'flawed relationship,' with sustainability viewed as '*other*' because it does not align with the industry's pursuit of commercial and economic growth. Due to this strained relationship, short-term blanket approaches, which are not always the most effective or sincere, are viewed as viable solutions to complex issues and buzzwords are employed to mislead consumers, sustainability has become a contested term (Vladimirova 2022, Fletcher & Tham 2019).

Fletcher, St. Pierre & Tham (2019) state that design, in general, is a modern discipline set on problem-solving human-centred issues. Igoe (2021) reiterates Shreeve's (1997) claim, arguing that the lack of theorization of textile design has resulted in the discipline consistently facing 'ill-defined problems,' causing an absence of articulation surrounding why we design and instead emphasising aesthetics. With the rise of trends and fashion, has 'sustainability' become an ill-defined problem for a discipline with difficulties communicating its purpose?

Igoe (2021) asserts that textile designers are translators, utilising the language of their discipline to transform thoughts into tangible objects that communicate their interests, passions and tacit knowledge. Textiles' ability to communicate explorations of identity, place, race and cultural histories have been recognised by researchers for decades (see Friedman 2021, Wellesley-Smith 2020, Bailey 2021). Igoe (2021) questions *how* and *why* textile designers create 'communicative cloth', and this research project extends the question to ask, how do designers communicate sustainable values through textile design?

2.3 Sustainable Textile Design: a complex landscape

In 2015, Vuletich explored sustainable approaches to textile design in her PhD thesis, *Transitionary Textiles,* she employed the power of language by suggesting we re-define sustainability as 'transitions,' with the hope of shifting discussion beyond the current limitations of the phrase 'sustainability,' to focus on change, progression and future-oriented visions of sustainable textile deign. Vuletich developed a four stage table (see figure 2.2), to breakdown the approaches and levels of transition that textile design has, and continues, to evolve through.

Levels of Sustainable Design	Approach
Green Design	Single issue, product focused
Eco Design	Lifecycle approach, product focused
Sustainable Design	System approach, product and service focused
Design for Social Equity	Re-Design lifestyles, support social equity

Figure 2.2 - Vuletich (2015), Sustainable Design continuum adapted from Manzini & Vezzoli (2008). Source: Transitionary Textiles (PhD Thesis).

Aiming to articulate the intricate condition of the current landscape of sustainable textile design, I will now refer to Vuletich's framework to present brief examples of textile innovations and the debate surrounding their credibility as environmental and ethical solutions.

'Green Design' often manifests as designers working exclusively with natural and organic materials, for example, cotton yarns for weaving or knitting. Sourcing organic cotton is undeniably beneficial for environmental and human health as the cultivation process excludes the use of harmful pesticides, genetically modified seeds, and other synthetic inputs (Dhange, Landage & Moog 2022). However, switching to organic farming involves a lengthy and financially straining adjustment process and farmers must adopt new practices to attain organic certification (Habermann 2022). Fletcher & Tham (2019) suggest that the volume and speed of current large-scale western fashion systems undermine the success of this approach and that behind the label of 'organic cotton' hides new forms of discrimination and neo-colonial practices.

In the Global North, designers are embracing indigenous methods of textile making by exploring agricultural practices to grow native fibres (Sherrod 2022, Our Linen Stories 2022). Burgess (2019) developed the concept of a 'Fibershed' as a place-based regional fibre system that requires collaboration from farmers, manufacturers, designers, makers, wearers and more, to organise the progression of garments 'from farm to closet.' (figure 2.3, samples from a Fibreshed).

Figure 2.3 - Textiles from South East England Fibreshed - photo credit Deborah Barker (2019). Source: fibreshed.org website

Whilst explorations into the localised production of biodegradable and regenerative fibres is exciting, Tham (2016) reminds us that the function of the fibre is of equal importance and must be considered during the design process, emphasising the importance of collaboration between fashion/product designers, textile designers and manufacturers.

The second level of sustainable design proposed by Vuletich is 'Eco Design,' where designers engage in 'lifecycle thinking' (Fletcher 2008) to consider the environmental impacts of their textiles while they are in use, and determine opportunities for design to extend the products lifecycle.

An example of this is the use of recycled synthetic fibres to increase the durability of a textile. However, a limited number of successful textile recycling technologies exists (Wilson 2020). In their influential text *Cradle to Cradle*, Braungart and McDonough (2002) question the general efficiency of recycling processes altogether, stating, '*most recycling is actually downcycling; it reduces the quality of a material over time.*' Indeed, 'downcycling' often results in the creation of mixed fibre fabrics (see figure 2.4) as recycled fibres are supplemented with the strength of virgin fibres. Braungart refers to them as 'Frankenstein products,' as they are notoriously difficult, if not impossible, to break apart and recycle further or dispose of safely.

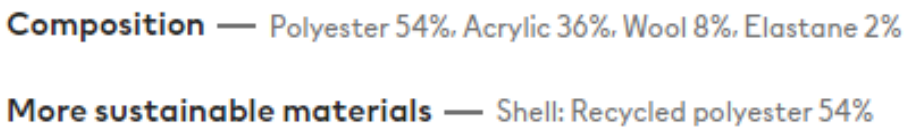

Figure 2.4 - H&M (2022) Product composition label. Source: hm.com website

An alternative to recycling is reusing, and many designers are diverting textile waste from landfills or incineration by utilising it as a raw material. Designers, including Phoebe English (figure 2.5) and Roberts Wood, source surplus fabrics from industry connections and use patchwork, quilting and zero-waste techniques to construct new textiles from old, often directly into the structure of a garment.

Figure 2.5 - The Wiggly Shirt, Phoebe English (2020) Made from reclaimed cotton and natural corozo buttons. Source: phoebeenglish.com website

Repurposing industrial textile waste is effective at a local level (Ballie, Smith & McHattie 2016) and provides opportunities for collaboration between place-based manufacturers and designers (see Dastardly Line). However, the credibility of this approach is questioned when it is applied at large scale and to the reuse of post-consumer waste (Ricketts 2019, Fletcher 2008). If fast fashion brands such as H&M develop a reliance on waste materials, these practices will inadvertently continue to fuel a market for product made from excess waste, and the over-production and underutilisation of textile items (Wilson 2020).

Arguably, the efficiency of adopting waste as a raw material, is relatable to Tham's critique of the 'logic of the system'(2016), disputing the inappropriate volume, speed and application of materials in mainstream industry (Fletcher & Tham 2019).

'Sustainable Design' is the third method proposed by Vuletich (2015), where designers look beyond the product's lifecycle to consider it's socio-cultural impacts, including attitudes and behaviours towards consumption and ownership. The recent 'wave of sustainability-focused activity' (Fletcher 2022) has seen an upsurge in textile designers embracing new roles as facilitators (Fletcher & Grose 2012), by sharing their mending tips and skills through workshops and tutorials (see Collingwood-Norris (figure 2.6), Repair What You Wear, ReJean).

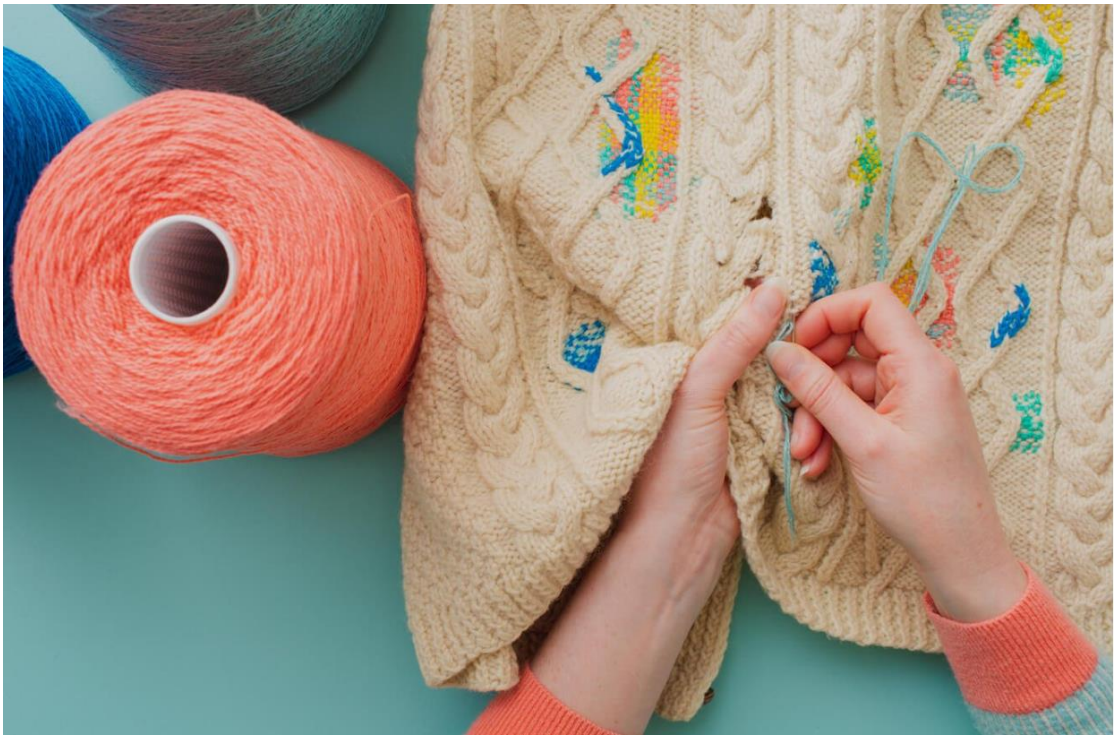

Figure 2.6 - Collingwood-Norris (2022) Visible Mending. Source: collingwoodnorrisdesign.com website

Von Busch (2022) argues that while promoting mindful consumption and ethical awareness is imperative to further sustainable behaviours towards fashion and textiles, focusing primarily on behavioural tweaks and limited industrial solutions risks 'systematically punishing the poor for their aspirations.' He reminds us

that fashion(and by association, textiles) is entangled in 'more complex and contested issues,' including globalisation, capitalism, inequality, and class dynamics. Indeed, for many, it is a tool for social mobility; access to an alternative way of life; intertwined with identity, community, and well-being. When considering the concept of sustainable fashion and textiles, von Busch (2022) raises the question *'what do we want to sustain?'*

Approaching textile design through the lens of a social practice coincides with Vuletich's final method of sustainable design, 'Design for Social Equity' (2015). Initially championed by Manzini & Vezzoli (2008), design for social equity, or 'Social Innovation,' consists of designers initiating projects at a local, place-based level to improve the well-being of particular individuals or community. It requires collaboration from all stakeholders: citizens, organisations, educational institutions, governmental bodies (Manzini 2015) and creates opportunities for sharing skills and knowledge. Social design theorist Thackara (2015) reiterates this point declaring that design for sustainability involves small scale solutions to tackle large scale problems.

Vuletich (2015) questions what 'social practice' might look like for textile design as Igoe (2013) argues it is difficult to situate textile design within the context of social design due to its association with 'amateur craft practices,' such as quilting and knitting groups. However, textile design researchers, including Mazzarella (2020) and Bailey (2021), are uncovering approaches to textile practice, past and present, that support the notion of sustainability within the realm of social innovation.

Sustainable design theorist Walker (2020) states that the benefits of a socially engaged design practice include the development of community-led, long lasting solutions, 'context based distinctiveness' and enhanced pride in community. He claims that our current metrics for success, such as GDP, are irrelevant and suggests that measuring access to education, social services and our proximity to nature would be a more appropriate way to progress and achieve social and environmental justice.

This section has outlined the complex landscape of sustainable textile design. The examples and the debate surrounding them are not exhaustive, and several innovative technologies have fallen out with this scope of context. However, this section aims to highlight textiles' entanglement in a complicated system that encompasses many socio-cultural and environmental issues and underline the nuances that new designers face when navigating the industry. The next section will explore the qualities required of textile designers, and ultimately students, to occupy new roles for sustainable futures.

2.3 The Responsible Designer

Design theorist Ezio Manzini declares that as we exist 'in a world in transformation' (2015), the role of the designer is evolving to accelerate the progression of design that tackles issues of social and environmental concern.

Within the field of textile design, researchers suggest positive change could be achieved by assessing and realigning the priorities of the textiles industry. Inspired by the work of environmental scientist Donella Meadows, Kate Fletcher pioneered the application of 'systems thinking' to the fashion and textiles industries; encouraging designers to look beyond isolated issues and better understand the intricate relationships between socio-political issues that support current textiles and fashion systems (2008). Tham (2016) suggests that systems thinking highlights the 'flaws in the logic of the system,' arguing that textiles' entanglement with the market economy and capitalism 'fails to give value to socio-cultural and natural world dimensions.'

McQuillan (2019) recommends that systems thinking should involve designers assessing their personal motivations and goals before making changes to their design process. Tham (2016) also suggests designers should develop a 'sensitivity to the context' (2016) as,

> *a way to counteract the harm caused by 'one-size-fits-all' or blanket approaches… and an encouragement to explore and draw upon values, interests, capabilities, vernacular practices in the local context.*

Manzini (2022) recommends that designers stop thinking of fashion and textiles as a system altogether and instead employ (perceived) feminine qualities of care, diversity, collaboration, communication, and respect to inspire alternative attitudes to textile production and use. Furthermore, von Busch (2022) condemns the elitist and competitive nature of the fashion industry and advocates that designers consider fashion and textiles as 'a *social practice beyond consumerism*.' This school of thought relies on an understanding of personal and societal values, and Walker (2020) suggests that design disciplines, including textiles, can develop values-based ways of working that utilise 'alternative ways of knowing,' including indigenous and tacit knowledge, that form respectful relationships with the land and local communities.

In 2019, Fletcher and Tham revealed their action research plan, *Earth Logic,* and presented 'Learning' as an area of interest that could progressively transform the fashion and textiles sector, suggesting that an examination of personal values and motivations is a process of 'unlearning and learning.'

Accompanying her argument to redefine 'sustainability' as 'transitions,' Vuletich (2015) presents 'The Transitionary Textile Designer' as the appropriately equipped role that designers might inhabit to successfully devise sustainable approaches to textile design. She explains that the Transitionary Textile Designer functions within two dimensions of sustainability, the 'inner' and 'outer' (Maiteny 2000). The 'inner' dimension refers to individuals' subjective experiences; values, interpretations, and impulses, constructed from the influence of the culture surrounding us. Vuletich states,

> *The designer will need to engage in 'inner work' such as reflective writing and meditation, to be able to support others in the 'outer' dimensions of local communities, industry contexts, and the global supply chain.*

Researchers suggest that 'inner work' will enable designers to form self-awareness and personal growth, allowing them to apply meaning to their design practice and for sustainability to become a learning process rather than a commodity (Walker 2020, Akama 2015).

If textile designers are required to engage in 'inner work' and utilising 'alternative ways of knowing' to better explore sustainability, how can textile design students be supported to do so? The next section will explore the role of higher education in supporting students to explore and develop sustainable approaches to textile design.

2.4 The Role of Textile Design Education

As design education institutions nurture the next generation of designers, creative educators must enable textile design students to build informed and pioneering practices. Industry and education must face a parallel critique to motivate one another in pursuing positive change (Ræbild & Riisberg 2018).

In *Oh no Not Another Framework!,* Bang (2020) stresses the importance of HE institutions developing tailored approaches to sustainability-focused teaching. As revealed in section 2.2, there is not a 'one-size-fits-all' solution to sustainable textile design and this notion extends to education and teaching.

Many HE institutions in the UK are aligning their whole school approach to sustainability with the United Nations Sustainable Development Goals (SDGs), by signing the SDG Accord. While the goals are admirable, Hickel (2019) suggests they prioritise economic growth over genuine, sustained support for the most vulnerable communities affected by the climate crisis. Furthermore, The SDG Accord Annual report 2022 revealed that while universities continue to integrate the SDGs into their strategies on paper, staff capacity for engagement, budget and training limit the success and effectiveness of the

SDGs within HE. A lack of reporting on the impact of integrating the SDGs may also highlight a lack of engagement, from staff and students (EAUC 2022).

Textile design courses, facilitated by art schools in the UK, typically follow similar structures to that of GSA; learning is studio based and practice-led which involves hands-on experimentation with colour, pattern, texture and form. Students investigate the surface and structure of cloth by studying the specialisms knit, weave, embroidery and print and the making is supplemented by separate theoretical studies. Short projects and design briefs are utilised by textile design departments to simulate the realities of professional practice and students are encouraged to take creative risks to produce textile samples suitable for fashion, interiors or exteriors (Manchester School of Art, Edinburgh College of Art, Leeds Arts University).

Several higher education institutions in the UK have formed approaches to encourage experimental sustainable textile design, mainly through the creation of postgraduate courses focusing on fibre and material innovations. An example is the MA Material Futures course at Central Saint Martins (CSM), University of Arts London, 'where science, technology and design collide' (CSM, Material Futures 2022). The course overview emphasises a multi-disciplinary future-focused approach and promotes materiality as the starting point of the design process. Arguably, this approach could be interpreted as 'solutionism' (Morozov 2013; von Busch 2022), applying technological fixes to complicated societal concerns.

Design education researchers note the importance of maintaining a 'hands-on' approach to learning (Shields 2021, Ræbild & Riisberg 2018, Ermer 2018), often referred to as 'learning-through-making' (Ingold 2010). Shreeve (1997) suggests that the skills required to design and making textiles are 'acquired tacitly,' further stating that, 'its meaning and appropriate use is gradually absorbed by example, discussion, critique and matching of visual and sensual data with verbal articulation.'

Bang (2020) suggests we focus on textiles' 'sensibility, contemplation and craftmanship' as the foundation for sustainable change. Making textiles is often a slow and intricate process, requiring consideration, diligence and knowledge of the aptitudes of our materials. Engaging in mindful making allows students to think critically about their practice and employ self-reflection to strengthen their ideas (Ermer 2018).

While there is no denying that developments in material design and place-based practice at postgraduate level are optimistic, little evidence exists of similar advances taking place at undergraduate level (Earley et al. 2016). Indeed, undergraduate students express concern towards unsustainable practices within the textiles industry, yet also display gaps in their knowledge of the fundamental provenance, characteristics, and properties of existing traditional fibres and fabrics (Shields 2021); alongside a lack of joined-up thinking relating to the socio-political issues of the industry (Østergaard 2019).

Educators and researchers have developed tools to assist textile design students in addressing the sustainability of their practice. Examples include the 'Textile Toolbox' developed by professionals at the University of Arts London (UAL) as part of the MISTRA Future Fashion project (2011-2015) and The Sustainable Design Cards created at Design School Kolding, an exploration of these examples can be found in appendix 2. However, these solutions approach the design process from a materials-based lens, and as previously explored, progressing beyond 'Green and Eco Design,' is essential to facilitate alternative ways of knowing and doing (Walker 2020, Vuletich 2015).

Undeniably, social and environmental destruction are heavy subjects to confront, and students often feel overwhelmed by the enormity of 'sustainability' as a concept (Shields 2021, Ermer 2018). These issues are entangled with sensitive notions of identity, cultural history and personal values, often causing students to experience guilt and withdraw from their creativity (Radclyffe-Thomas 2018). Valentine and Ballie (2018) believe designers must experience failure, test ideas, and

venture into the unknown in order to be 'social innovators.' Higher education must offer a supportive and safe environment for students to investigate their creative practice alongside their identity without costing the earth.

In 2014, Akama et al. presented the 'Designing Re-connectedness' framework, see figure 2.7. Through research and development, Akama et al. identified 'six spheres of sustainability;' social, political, economic, environmental, technological and spiritual. They designed the framework as a visual tool for students to consider how their design practice intertwines with each sphere and the framework aims to provoke critical thinking and reflection.

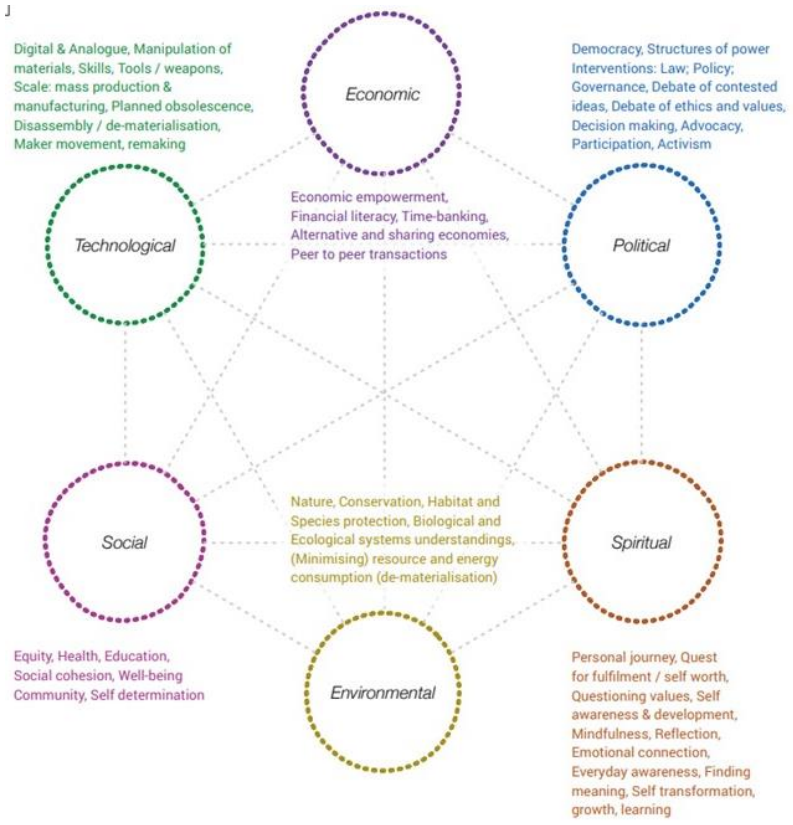

Figure 2.7 - Akama et al. (2014). Designing Re-connectedness Framework. Source: Designing Future Designers (2014).

Philosopher Donald Schön stressed the importance of developing a reflective practice in his formative text *The Reflective Practitioner* (1983). Schön defines a proactive design process as one where the designer participates in 'a reflective conversation with the situation,' utilising their tacit knowledge and experience to think on their feet and respond within the moment, which he also referred to as 'reflection-in-action.' On the other hand, 'reflection-on-action' involves reflecting on an experience, action, or situation after it has happened, supporting designers to consider how they might have done things differently. Schön believed reflective practice is a process that makes knowledge explicit and allows designers to communicate their rationale with others (Schön 1983).

Notions of communication and knowledge exchange return to the concept of collaboration and the development of collective understandings of solutions to complex problems (Ballie & McHattie 2018, Akama 2015). Fletcher and Tham (2019) present 'Plural' as another alternative landscape for sustainable fashion and textile design, proposing a decolonization of the industry to shift the centre from economic growth; to foster new ways of thinking influenced by Indigenous, inclusive and ecological perspectives. Thinking of and working with others through our design process, avoids introverted and self-serving unsustainable practices (Akama 2015).

The literature suggest that the most successful approaches to sustainability-focused teaching for textile design include a balance of theoretical and practical study alongside consistent opportunities for reflection, knowledge exchange and collaboration. The next section will explore examples of best practice.

2.5 Sustainability-focused Approaches to Textile Design in Higher Education

Educators at the Design School Kolding, Denmark, have developed and integrated 'The Design for Change' course into their undergraduate textile design programme (Design School Kolding 2022). This is a positive example of a course that consists of theoretical and studio-based studies with lectures and teaching exploring three areas of interest; Past, Present and Future, to support a comprehensive understanding of the textiles industry. It is mandatory for students to engage with current literature surrounding concepts of sustainable design such as circularity, lifecycle thinking, emotional design and wardrobe studies, positioning the course within the contemporary discourse of sustainable textile design (Ræbild & Riisberg 2018). Ræbild & Riisberg (2018) observe that students have displayed greater awareness and interest in issues of sustainability. They claim that students have obtained key design competencies including 'resilient creative thinking' (Tham 2016) and note that as the holistic brief involves group work, discussion and collaboration, a collective awareness and sense of community, counting staff and students, has developed over time.

Adopting a collaborative approach to learning allows educational institutions to create co-learning environments for staff and students, where flexible, honest, open-ended conversations and critical thinking can thrive (Bang 2020). Ermer (2018) argues that group-based learning facilitates critical discussion and allows 'out-of-the-box ideas' to evolve into innovative concepts; she states,

> *Successful learning about sustainability is a mix of fields that enables a constant change of different competence requirements, different learning situations and a high relation to the learners' own requirements.*

Holistic learning for sustainable textile design must support students to understand their personal values and competencies better; foster the development of social competencies; facilitate knowledge exchange by crafting conversations that enable critical thinking and reflection (Ballie & McHattie 2018, Ermer 2018). Developing 'disciplinary articulation' (Bang 2020) and participating in cross-disciplinary knowledge exchange empowers students to think beyond individual perspectives, beyond the self, and shifts mindsets towards collective thinking (Bang 2020, Ermer 2018, Akama et al. 2014).

The concept of collective thinking and collaboration for sustainable change extends further than student, or student and staff, affiliations when it is combined with the notion of 'localism' (Fletcher & Tham 2019). In *Earth Logic,* Fletcher and Tham present 'Local' as an alternative landscape through which a sustainable fashion and textiles sector can progress, they clarify,

> *Localism favours the use of nearby resources, place-specific knowledge, community self-reliance. It gives expression to practices shaped by traditions, necessity, climate, imagination and a distributed form of authority, leadership and political power.*

Exploring localism allows design educational institutions to connect with their immediate geographical community, out-with the 'art school bubble,' and also increases opportunities for social innovation (Manzini 2015). The *Making for Change: Waltham Forest* (2019-20) project is an example of an innovative partnership between London College of Fashion (LCF) and London Borough of Waltham Forest. The research and education team from LCF facilitated educational and participatory events focusing on sustainable fashion design and making with local schools, businesses and residents. The project addressed issues affecting the local community including skills

shortage, the decline of local fashion manufacturing, rise in unemployment and deprived youth, with the hope of inspiring and retaining local creative talent (Mazzarella 2020). As an example, the project highlights that it is possible for fashion and textile design education to cut ties with current unsustainable industry practices and explore alternative place-based solutions through social innovation.

Practicing at a place-specific, local scale allows designers to explore social fabrics and local histories, position themselves within a community and instigate conversations around consumer habits, textile waste and clothing underutilization (Fletcher and Tham 2019). Localism also provides opportunities for participatory design involving 'the wearer' (Hirscher, Mazzarella and Fuad-Luke 2019, Archibald 2020), with the hope of extending the lifecycle of a garment through the emotional attachment and nostalgia formed by being part of the design process (Niinimäki 2018). Valentine and Ballie (2018) agree, asserting we must 'design systems which includes consumers and takes their role in the lifecycle of clothing seriously' if we want to see long-term, genuine change in attitudes towards overproduction and consumption.

A final example of best practice is a new project titled *SLOW,* pioneered by textile design educators at Edinburgh College of Art (ECA, 2022). Staff and students are nurturing flax plants planted across the ECA campus to grown, harvest, spin and weave the fibres into Scottish produced linen. They are documenting and sharing their process over social media, figure 2.8 shows a sample of woven, ECA grown flax.

Figure 2.8 - SLOW (2022) Locally grown flax, woven. Edinburgh College of Art Textile Design department. Source: @_slow_ed instagram.

While some of these examples are project-based and do not require a complete re-design of entire curricula, the literature indicates that holistic approaches to sustainability-focused teaching of textile design that incorporate place-based collaborations with a balance of theoretical and practical study are most successful in supporting student explorations of sustainability.

2.6 Summary

This scope of context has presented an overview of textile designs complex relationship with sustainability. It has highlighted the diversity of the current sustainable textile design landscape and underlined the competencies required of textile designers, and students, to successfully develop sustainable practices. Through this scope of context I have explored the role of higher education in supporting students to explore sustainability and emphasised the need for holistic change as tweaks to business-as-usual will not suffice. Research has demonstrated that with the support of all stakeholders, design education institutions can form relationships with their local community to embrace opportunities for social innovation and develop small scale solutions to large scale problems. Furthermore, by supporting students to engage in creative resilient thinking, reflection and collaboration, design education institutions could enable them to explore and develop sustainable approaches to textile design.

Chapter 3:
Methodology

3.1 Introduction

Through this chapter I will situate my position alongside the epistemology and theoretical perspective that underpin this research project. The chapter also explains the relevance of employing a Situational Analysis methodology and outlines the methods that were applied during the fieldwork. This research project involved recruiting textile designers with a range of experience including industry professionals, educators, and students. This chapter will present a rationale for this recruitment and will explain how I ensured ethical rigor. Figure 3.1 summarises the research design.

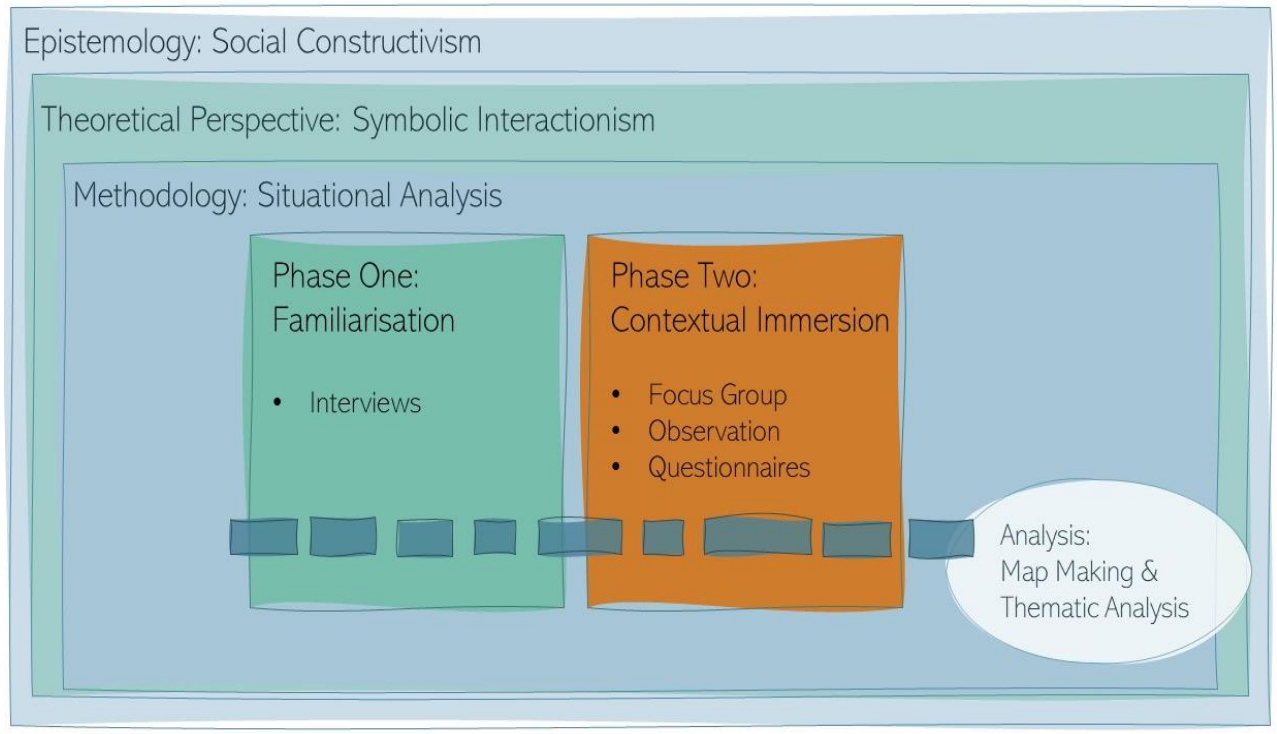

Figure 3.1 - Allan, M. (2022) Summary of research design. Diagram. Source: Author's own

3.2 Designer/Researcher - Communicator-Educator/Researcher

To embrace their social and environmental responsibilities, textile designers are considering new strategic approaches to their practice, and the role of the designer has changed (Earley 2016, Fletcher & Grose 2012). To conduct this research project, I have occupied the role of 'Designer as Communicator-Educator' (Fletcher & Grose 2012) alongside the role of researcher. When discussing this new role for the designer Fletcher & Grose state,

> *...the role of the designer as a communicator is to take abstract information, which is often ineffective at prompting action, and make it real and appropriate, to trigger new behaviour.*

This practice-led research draws on my experience as a textile design student to inform and locate opportunities for 'design interventions' (Ballie 2014) that challenge current unsustainable approaches to textile design teaching. By 'moving beyond the swatch' (Vuletich 2015) I am redefining my practice and utilising my design skills to identify and develop resources, tools and methods.

Practice-led research leads to new knowledge, or understandings, of practice; is concerned with the nature of practice; can progress knowledge within practice (Candy 2006). In this study, practices of teaching and designing textile design inform the analysis of a situation and a subsequent theoretical positioning (Douglas et al. 2000). As this research is situated within the context of higher education and includes participation from current undergraduate textile design students, it has the potential to generate insights that may contribute to the development of pedagogical approaches (Candy 2006).

3.3 Epistemology – Social Constructivism

Social constructivism is a theory established on the concept that as individuals we construct our knowledge through social interaction and the culture surrounding us (Lincoln and Guba, 2013). This research project follows this epistemological perspective as it intends to gather interpretations of sustainable textile design from participants who vary in age, background, professional experience and gender. A social constructivist approach recognises that these individual interpretations have been influenced by conversations with peers, social media content and consumer culture (Vladimirova 2022) and is beneficial when observing participants' attitudes and values concerning sustainable textile design.

A social constructivist approach compliments the context of textile design, in which this project sits. Igoe (2021) reminds us that textile design has its own complex epistemology, with origins in materials-led thinking-through-making (Ingold 2010) and skills sharing. Townsend and Niedderer (2021) commend crafts' ability to act as a 'meeting place' for communities of makers and to prompt connections through visual and tactile language. Lave & Wenger (1991) state that social interaction plays a vital role in learning and community encourages participants to develop meaning in what they do, and how they do it.

This research asks participants to share ideas, thoughts and concerns regarding sustainable textile design in a group setting. A social constructivist approach is relevant to observe the development of a community that engages in knowledge exchange and highlights the importance of conversation.

3.4 Theoretical Perspective – Symbolic Interactionism

The theoretical perspective of symbolic interactionism suggests that as individuals, we interact with things based on the meaning we have assigned to them, and that this meaning was developed through social interactions and adapted through personal experience (Blumer 1969). The 'things' we interact with include, but are not limited to, physical objects, people, the natural world, abstract ideas and concepts, situations (Clarke 2005).

Blumer (1969) proclaimed that although we view the world through an individual lens, we cannot separate individuals from society, as society has formed them, and believed that symbolic interactionism could be utilised to investigate social problems by studying the influence of small sections of society on wider social structures. This perspective is appropriate to this project as issues of environmental and social justice; 'sustainability,' are affected by the way societies interact with them. Furthermore, as this project aims to gather the voice of students and staff at GSA, applying the perspective of symbolic interactionism allows me to represent my participants 'on their own terms/through their own perspectives' (Clarke 2005).

3.5 Methodology – Situational Analysis

Clarke (2005) developed Situational Analysis as an extension of Grounded Theory. Glaser & Strauss (1965) presented grounded theory as a structured yet flexible framework for collecting and analysing qualitative data to construct theories from the data in the context of social research.

Situational analysis emphasises the adaptive nature of grounded theory methodology and pushes it further by acknowledging the complexities, irregularities, and localities, often of global situations, to explore possibilities in social settings (Clarke 2003; Usher 1997). Situational analysis is an appropriate methodological approach for this investigative research project as it aims to better understand how textile design students define sustainable approaches to textile design alongside their experience of learning about and exploring sustainability as GSA students.

Clarke (2003) states that the 'postmodern turn' questioned the authority of research and the researcher, requiring a 'de/repositioning of the researcher from 'all-knowing analyst' to 'acknowledged participant'''. A constructivist approach recognises the researcher's 'position, privileges, perspectives and interactions' (Charmaz 2014:13). Employing situational analysis allowed me to utilise my experience as a textile design graduate, alongside findings from fieldwork and literature, to examine current approaches to teaching and learning within the textile design department at GSA.

Employing situational analysis enabled me to conduct an iterative research process and engage with the literature at an early stage; moving from data collection, to analysis, to the literature and back again, supplemented by memoing and map making (Clarke 2005), as figure 3.2 illustrates. The purpose of map making is to 'open up the data' (Clarke 2003) and prompt deeper analysis. Clarke (2005) presents three mapping techniques; 'situational maps' to recognise the human, non-human, and discursive elements of the situation, to study how they relate to each other; 'social worlds/arena maps' to position the critical actors in the arenas in which they are situated and observe the contributing levels of the situation; 'positional maps' to include numerous positions on issues within the situation of interest.
While analysing the data from phase one of my fieldwork, I created situational and relational maps that informed social worlds/arenas maps. The maps captured the 'messy complexities' (Clarke 2003) of the situation and helped me to identify particular points of interest within the data.

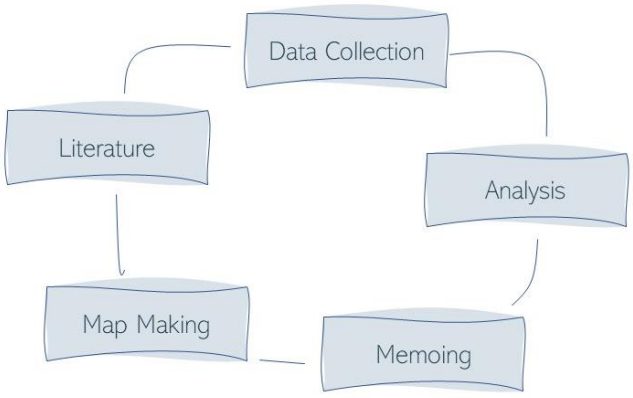

Figure 3.2 - Allan, M. (2022) Research process. Diagram. Source: Author's own

The reflexive nature of this approach allowed me to engage in 'reflection-in-action'(Schön 1983); to have a conversation with the situation and attempt to articulate the '*sites of silence*' (Clarke 2003) in the data.

3.6 Justification

Other methodological frameworks were considered for this research project, including Grounded Theory as it presents a 'systematic, yet flexible' approach to collecting and analysing data (Charmaz 2014). Unlike traditional grounded theory, situational analysis allowed me to acknowledge and consider the human and nonhuman elements, and the complexities of the context that this project is situated within (Clarke 2005). This approach was appropriate for this research project as it was concerned with environmental, ecological and socio-cultural issues. It also considered the materiality of designing and making textiles, alongside the intangible 'tacit' knowledge relating to why and how we develop practice.

Action Research was also considered as a possible methodological approach for this project as it enables the researcher to work with participants to create direct change (McIntyre 2008). Action research offers a cynical, iterative approach to research (Kemmis and McTaggart 1988) not dissimilar to situational analysis; however, the main aim of an action research project is to initiate interventions and to provide substantial solutions to a problem that instigate change (McIntyre 2008). Participatory Action Research was also considered, particularly for its 'feminine' approach to inclusive participatory research design (Maguire 1987), which might have complimented the 'feminine' disposition of the context of this textiles-focused project. However, the main aim of this research was to gain an understanding of the current situation relating to the teaching and learning of sustainability within the GSA textile design department.

3.7 Research Design

Employing situational analysis enabled me to immerse myself within the two contexts of this project through stages, and navigate between them with points for reflection, as illustrated in figure 3.3. I consulted the literature early in the process to better understand the sustainable textile design landscape. The first phase of the fieldwork allowed me to familiarise myself with the context of the GSA textile design department, from the perspective of a researcher, not a student. The second phase allowed me to fully immerse in the context.

Figure 3.3 - Allan, M. (2022) Research Design. Diagram. Source: Author's own

3.8 Methods

The methods used during the fieldwork include, semi-structured interviews, focus groups, observation and questionnaires, as represented in figure 3.4.

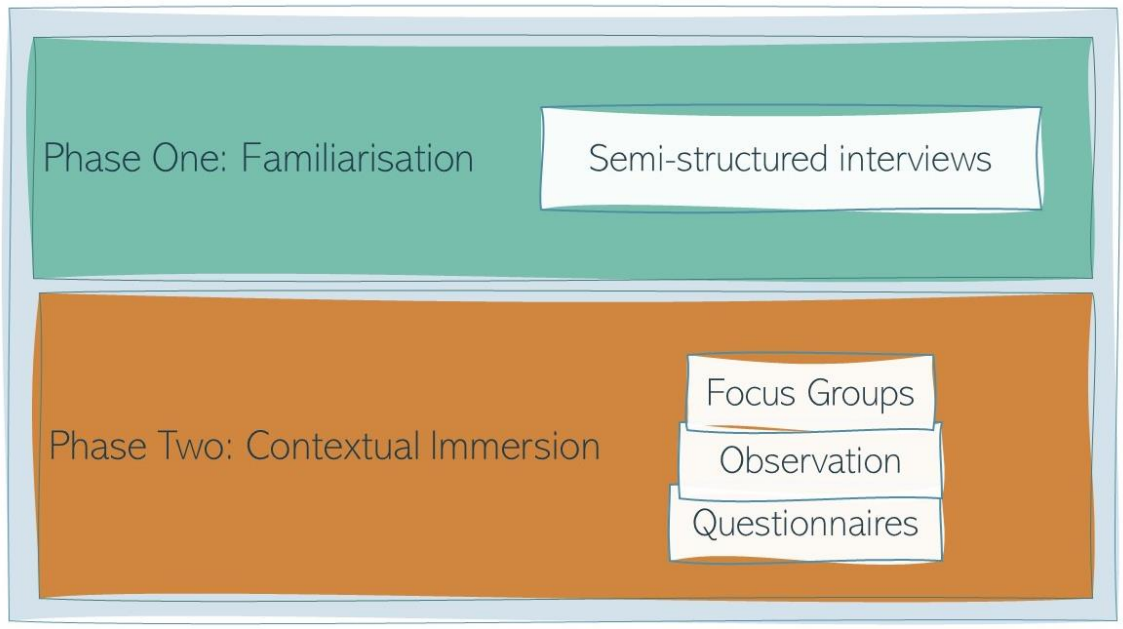

Figure 3.4 - Allan, M. (2022) Outline of Methods. Diagram. Source: Author's own

3.8.1 Semi-structured interviews

During the 'Familiarisation' phase of the fieldwork, one-to-one semi-structured interviews were conducted with undergraduate textile design students, textile design educators, art and design higher education sustainability coordinators, and professionals working within the textiles industry, including designers, makers, a community engagement facilitator, and a sustainability manager.

The purpose of phase one was threefold. Firstly, interviews allowed me to better understand how professionals in the field interpret 'sustainable', textile design. Secondly, participants described how these interpretations influence their practice. Thirdly, the interviews granted me the opportunity to observe how participants engage in critical thinking and reflection regarding the social and environmental impact of their practice. Interviewing students also provided insight into their learning experience and reflections on their journey at GSA.

The flexible nature of semi-structured interviews allowed a conversation to flow and evoked an atmosphere similar to an informal conversation (McCracken 1988). I prepared an interview guide that prompted participants to share their thoughts and feelings about sustainable approaches to textile design. The interview structure permitted participants to focus on areas of particular interest and share their genuine view (Bryman 2012). In keeping with the iterative approach of situational analysis, following the analysis of the first round of interviews, the interview guide was adapted slightly.

The format of semi-structured interviews can result in conversations going off-topic, making the data difficult to analyse (McCracken 1988). The interviews took place on Zoom, and were recorded with

the participants' consent, this allowed me to listen back multiple times and transcribe the data, supplemented with memo writing.

3.8.2 Focus Group

For the second phase of the fieldwork I designed a focus group and invited GSA textile design students to participate. The focus group provided space for peer interaction and discussion (Smithson 2007) and generated insights that contributed to the findings of this project.

As the focus group was attended by the same textile design students for a period of four weeks, it was also an opportunity to form a community of practice (Wenger 2000). Communities of practice are groups of people who share a similar interest, or concern, and engage in collective learning to develop their knowledge or skills pertaining to the shared interest (Wenger 2008). Social interaction plays a vital role in learning and as typical to a symbolic interactionist perspective, community inspires participants to develop meaning in what they do, and how they do it (Lave & Wenger 1991).

While the focus group provided me with another opportunity to gather data, the participants we also presented with an opportunity to take part in knowledge exchange, skills sharing and peer-led learning. This approach compliments the nature of the learning textile design and making, echoing the notion of 'craft as a meeting place' (Townsend & Niedderer 2021). Wenger and *Wenger-Trayner (2015) state* 'true communities of practice are informal' and to reflect this, the structure of the focus group was flexible to input from the participants.

3.8.3 Observational Field notes

During phase two of the fieldwork, the focus group, I generated observational field notes, with informed consent from the participants. I documented the topics of conversation, tone and delivery of speech, and any other particular points of interest. I did not include reflections on the group dynamic. I aimed to facilitate a safe space for the participants to freely share accounts of their lived experience, and therefore did not video or audio record any of the conversations. Observational field notes allowed me to record the participants opinions in a non-invasive manner (Holmes 2020).

The first two focus group sessions took place in a communal refectory at GSA, the final two took place in a private room. Observational fieldnotes allowed me to note the participants responses to the different locations.

3.8.4 Questionnaires

Questionnaires were used for two purposes during the second phase of the fieldwork. The first was as activities throughout the first and last sessions which involved gathering accounts of the participants' experiences of exploring sustainability as GSA textile design students. The second purpose was a method for gathering feedback at the end of each session, in the shape of written evaluation forms.

Developing questionnaires enabled me to cover all of the points of interest with every participant (McCracken 1988). Employing the questions as a topic guide, to structure the focus group sessions, supported me to keep the conversations on track. Utilising written questionnaires ensured the participants had time to give feedback and the data functioned as validation for the focus group.

3.9 Analysis – Map Making & Thematic Analysis

As situational analysis is an extension of grounded theory, this research project 'adopts and adapts' a grounded theory coding and categorising approach to data analysis (Glaser 2010). Interviews were conducted during phase one of the fieldwork and transcribed. The transcriptions were coded, following an 'open coding' method, followed by 'axial coding' to draw connections between the codes, creating categories (Strauss & Corbin 1990). Three rounds of coding were conducted throughout phase one of the fieldwork, followed by two more incorporating the data extracted from phase two, which was gathered through written questionnaires. A final round of 'selective coding' brought the categories together to form core categories. The codes and categories from the analysis were supplemented by insights from the literature and fed into the map making exercises previously mentioned.

Positional maps were then compared during a final round of thematic analysis to identify themes across the data set and generate a set of 'Sustainable Sensibilities'. Utilising thematic analysis allowed me to quickly, but precisely, recognise patterns across insights that were gathered through multiple methods of data collection (Clarke and Braun, 2006).

3.10 Participants & Recruitment

The recruitment process for this research project occurred twice to correspond with two phases of fieldwork.

Recruitment for phase one required participants to be textile designers, including students and educators, or to be working within the textiles industry. It was vital for participants to have a professional interest in textile design or experience in producing textile items as gathering the opinions of this particular demographic is the focus of this research project. As Earley (2016) claimed, designers can instigate positive change through design-based decision making. Participants of any age, gender and background were invited to take part.

The recruitment approach was developed to align with the safety guidelines of the COVID-19 pandemic, set out by the Scottish Government and reiterated by The Glasgow School of Art (GSA). As in-person interactions were restricted, practicing textile designers were contacted via email. A social media post to target textile designers and students was also successful in gaining interest from recent textile design graduates and practitioners. Utilising my position as a recent graduate from the textile design department at GSA, emails were sent directly to the faculty, including textile design subject leaders and technicians. As COVID-19 restrictions eased, posters were also distributed around the textile design studio at GSA to attract the attention of undergraduate textile design students.

The designers who consented as participants were all based in Glasgow, most having studied at GSA. This was not a requirement of participation.

The participants of phase one varied in professional experience and approach, this was welcomed, but the data suggested filtering the requirements of participation for phase two to focus on undergraduate textile design students, as a form of theoretical sampling typical of the situational analysis methodology.

Undergraduate textile design students are at an early stage of developing their design practice, they often struggle to recognise their power as designers to make positive change (Leerberg et al. 2010) and seek opportunities to reflect on the value of their practice. To recruit current GSA textile design students, I placed an announcement directly to students on Canvas, GSA's online course

management platform. The textile design programme leader also circulated the announcement on my behalf and included the call out in the programme's start of year induction presentation.

3.11 Ethical Implications

Ethical approval and confirmation for this research project was received from the GSA Ethics Committee before the initiation of fieldwork. Information sheets were given to participants at every stage of recruitment, outlining the project, their role as a participant and my role as researcher and facilitator, examples can be found if Appendix 3.1. Participants were asked to complete and sign consent forms at every stage of recruitment and example consent forms can be found in Appendix 3.2.

Participation in phase one of the research was anonymous and for the purpose of data protection participants were given pseudonyms throughout this thesis.

Participants were ensured that taking part in this project was completely voluntary and that they could withdraw at any moment. GSA students were ensured that their participation was extracurricular and had no impact or association with their coursework at GSA. Participants had opportunities to ask me questions about the research before and during participation.

3.12 Summary

This chapter has presented the positioning of my role as 'Designer as Educator/Communicator' alongside researcher for the purpose of this project. It outlined Social Constructivism as the epistemology of this project and Symbolic Interactionism as the theoretical perspective. This chapter also provided a rationale for employing the methodological approach of Situational Analysis and outlined the methods that were applied during the fieldwork and analysis, including semi-structured interviews, situationally mapping and memo writing, focus group and questionnaires. The remainder of the chapter outlined the ethical implications of conducting this research and described the steps that were taken to ensure ethical rigour throughout the project, including the recruitment process.

The next chapter will present phase one of the fieldwork for this project.

Chapter 4:
Fieldwork Phase One: Familiarisation

4.1 Introduction

In this chapter, I will describe phase one of the fieldwork: Familiarisation, and present the emergent insights that informed the development of the second fieldwork phase.

The Familiarisation phase involved 19 one-to-one semi-structured interviews carried out remotely over Zoom. Each interview lasted around 30-45 minutes, was audio-recorded and later transcribed.

Participants were assigned pseudonyms for this thesis. All participants have a professional connection to textile design through work or study. Figure 4.1 illustrates the participants' professional role, student status, and area of expertise relating to textiles and/or sustainability. Excluding one, all live and/or work in Glasgow; most have experience working or studying at GSA; most were female, with two identifying as male. Consulting with this demographic emphasised the contextual significance of the textile design department at GSA for this research project.

Due to the large sample size, three rounds of interviews took place; this allowed me to conduct analysis at three points during phase one, also illustrated in figure 4.1, which is in keeping with the methodology of this project.

	NAME	ROLE
Round 1	Jane	Sustainability Manager at HE Institution
	Caitlin	Textile design graduate – specialised in embroidery
	Poppy	Textile design graduate – specialised in print
	Martin	Sustainability Coordinator at HE Institution
Analysis	Olivia	Fashion designer & community engagement officer
	Charlotte	Textile designer/maker – weaver & quilter
	Peter	Surplus textile retailer
Round 2	Sophia	Textile designer/maker - weaver
	Hannah	Subject Lead – textile design at HE institution
Analysis	Ava	Textile designer & researcher
	Ellie	Textile design student – specialising in weave
	Siobhan	Textile design student –specialising in print
	Maya	Textile design student – specialising in embroidery
	Sadie	Textile designer & researcher
Round 3	Flora	Textile design student – specialising in embroidery
	Agnes	Subject Lead – textile design at HE institution
	Phoebe	Textile design student – specialising in print
	Sarah	Workshop technician – textile design at HE institution
Analysis	Penelope	Textile Designer – natural dyeing and printing

Figure 4.1 - Allan, M. (2022) Outline of Familiarisation phase. Table. Source: Author's own.

Phase one provided insights into the participants' interpretations of sustainability and gathered accounts of how these interpretations influence their professional practice and learning experience, which was an aim of this research project. Following the third round of analysis, a gap in the findings underlined the need to conduct the second phase of fieldwork focusing exclusively on the textile design department at GSA. This would allow me to address the research question; How can textile design students be supported to explore and develop sustainable practices through examining and enhancing the learning experience at the Glasgow School of Art?

4.2 The Interview Format

In keeping with the nature of semi-structured interviews, I created a topic guide to nurture a natural, flowing conversation. The topic guide comprised five points of interest: Benefits of Textiles, Sustainability, Practice, Learning Experience, and The Future. I assigned a question to each one, as illustrated in fig 4.2. The points of interest were informed by multiple scoping conversations with textile design students and educators and by the findings from the literature, as discussed in chapter 2.

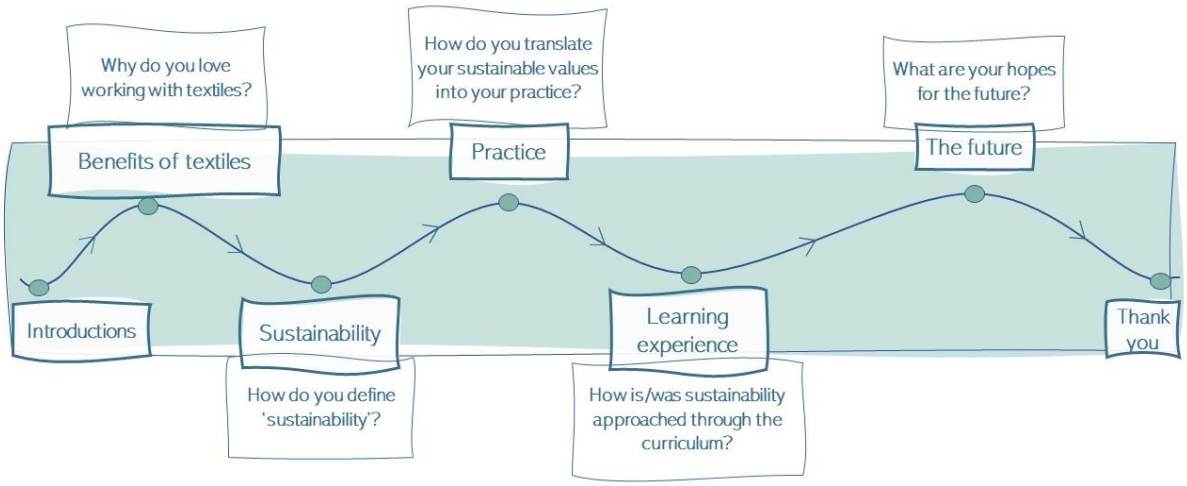

Figure 4.2 - Allan, M. (2022) Outline of the interview topic guide. Diagram. Source: Author's own.

As mentioned, I conducted three rounds of analysis during phase one; the first round revealed two additional points of interest relating to 'Learning Experience,' to which I assigned the labels Barriers and Access. For a full analysis, see Appendix 4.1. These findings informed the format of the subsequent interviews, and I amended the topic guide to include additional talking points, see fig 4.3.

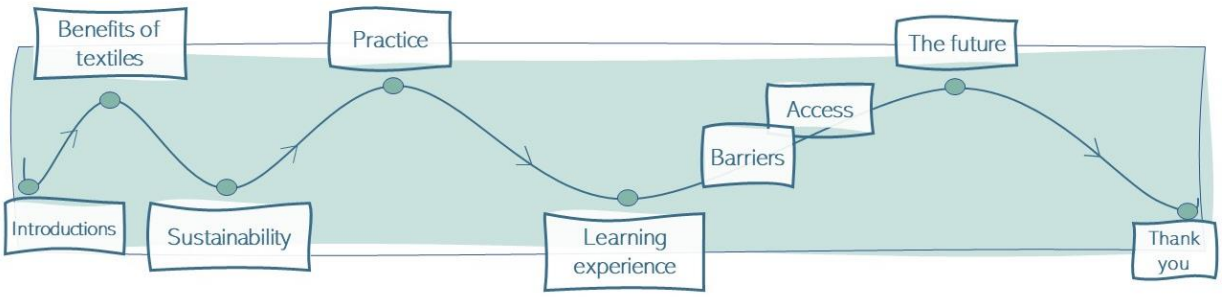

Figure 4.3 - Allan, M. (2022) Modified topic guide. Diagram. Source: Author's own.

I will now explain the significance of the points of interest and present the emergent insights from the Familiarisation phase.

4.3 Benefits of Textiles

Insights from scoping conversations emphasised the importance of beginning the conversation with a positive question, as 'sustainability' is often identified as an arduous topic to discuss. Asking the participants why they *love* working with textiles encouraged them to consider the benefits of making and using textiles in their lives and wider society. It also provided the participants with an opportunity to articulate tacit knowledge. The responses revealed that designing and making textiles can initiate personal, social and environmental benefits (illustrated in figure 4.4.), please find a full analysis of the findings in Appendix 4.2.

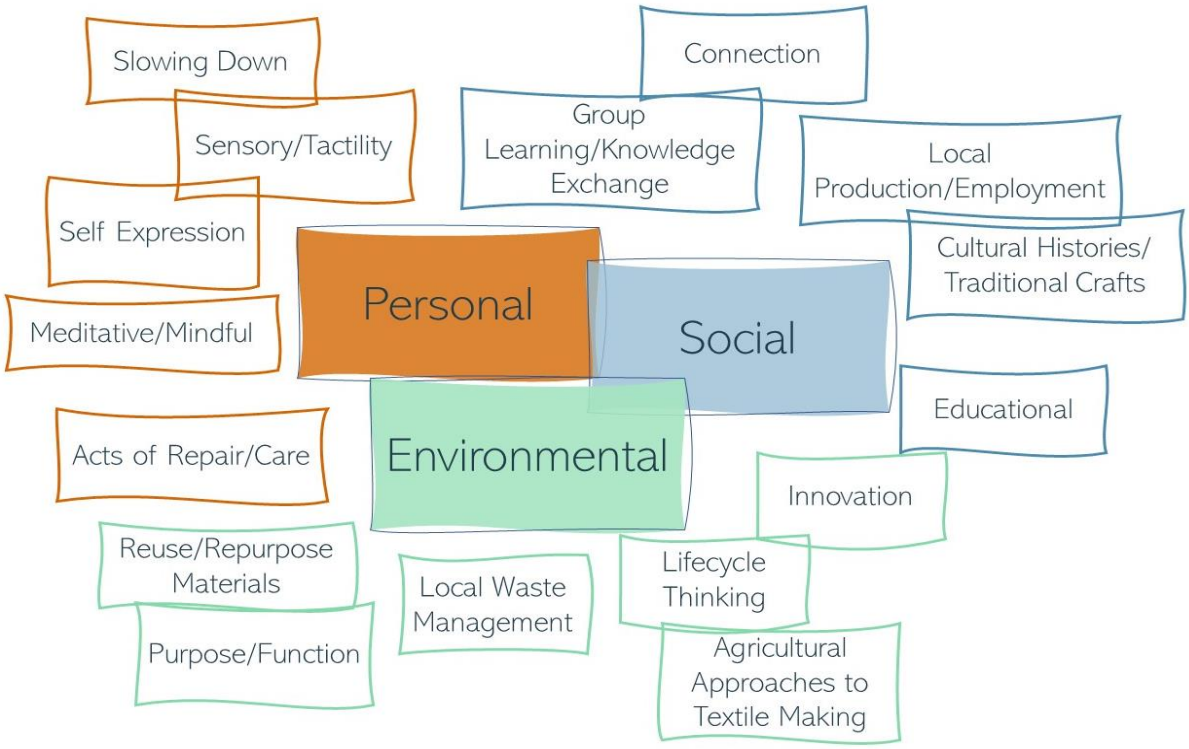

Figure 4.4 - Allan, M. (2022) The Benefits of Textiles. Diagram. Source: Author's own

Many participants were surprised by this question, expressed difficulty articulating their answers, and confessed that it was something they were rarely asked or considered. Sophia told me, 'I really enjoy weaving; I find it very therapeutic.… And yeah, it's just, I can't really explain it in words… it's not a hobby, it's not a career. it's just something that I do.'

The participants who are designers and makers spoke of experiencing benefits to their mental health and well-being through activities such as drawing, collaging, sewing and crocheting. Textiles' sensory nature and tactility were recurring points of interest as multiple participants expressed an intuitive attraction to textures, prints, colour, and hands-on making.

Caitlin suggested that making textiles presents opportunities for socialising, through intergenerational skills sharing and experiential knowledge exchange. Furthermore, multiple participants commented on textiles' role as a communication tool, sharing stories of identity, socio-cultural histories and place-based making.

Peter commented on the potential for artists and designers to work collaboratively with manufacturers and technicians to develop innovative solutions that tackle waste produced by the textiles industry. He noted that new forms of place-based waste management and textile production could generate employment opportunities and benefit community welfare.

4.4 Sustainability

As discussed in chapter 2, interpretations of sustainability, and sustainable textile design, are subjective and varied. Gathering the participants' perceptions was vital to this research project, and I aimed to illuminate this by asking them to provide their personal definitions of sustainability. The responses were wide-ranging, and analysis revealed the consistent opinion that 'sustainability' encompasses environmental, social, political, economic and personal issues (figure 4.5), please refer to in Appendix 4.3 for a full analysis of the data.

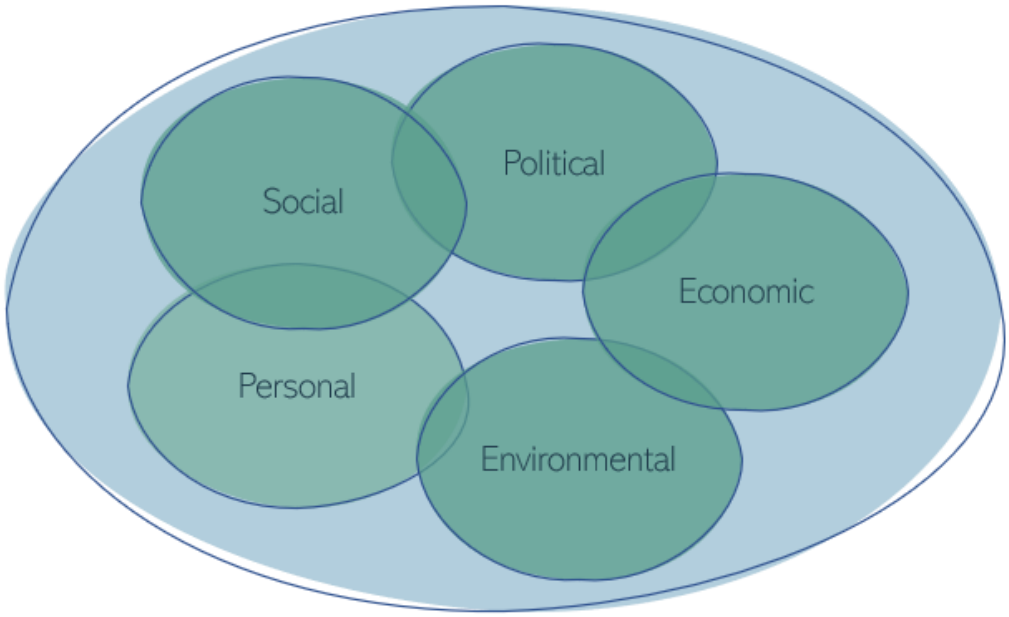

Figure 4.5 Allan, M. (2022) Defining Sustainability. Diagram. Source: Author's own

When discussing sustainability, the majority of participants expressed frustrations towards acts of greenwashing and misinformation, predominantly by high street fast fashion brands and 'big business.' They commented on the language and discourse surrounding sustainable textiles and fashion in broader society, Charlotte stated, '*I feel like sustainability... you see it everywhere. It's meaningless.*' Ava scrutinised the application of 'sustainable language' further by claiming,

> *There's always that threshold of, when does a word crossover from meaningful to meaningless? I think that the words associated in that area* [sustainability] *have originated*

from meaning and then as they've begun to feel more corporate, or more universal, it's not that they've lost meaning, it's just the meaning has become really muddled.

Many participants were of the opinion that sustainability 'should not be a thing,' instead, sustainable approaches to living and making should be ingrained in our everyday actions. Sophia shared her experience of visiting a village in Pakistan as an example of a holistic, sustainable approach to living and making. She told me,

> *One of the things that quite struck me was how they were using their waste… they had these onion skins and pomegranate skins that they were dying their cotton in. It felt like a craft village… like every house is a mini workshop.*

4.5 Practice

After establishing how the participants define sustainability, I wanted to gain a better understanding of how these interpretations impact their approaches to designing and making textiles. I asked them to share their methods and this request enabled the participants to discuss the processes, techniques and materials that they use in their practice. They also discussed the difficulties of adopting a sustainable approach. An analysis of the responses (which can be found in Appendix 4.4) unveiled the main approaches; Valuing Materials, Experimenting with Alternative Starting Points, Engaging in Knowledge Exchange and Raising Awareness, as illustrated in figure 4.6.

Figure 4.6 - Allan, M. (2022) Sustainable Approaches to Textile Design. Diagram. Source: Author's own

4.6 Learning Experience

An aim of this project was to better understand how textile design students at GSA are currently supported by the institution to explore sustainability through their creative practice and learning experience. I asked the participants who were current students and recent graduates of the textile design course to explain the ways sustainability is approached by the department. The insights exposed that while provisions are in place to enable students to engage with sustainable textile design in their own time, it is approached as extra-curricular to studio-based projects and barriers exist which restrict student engagement.

Figure 4.7 - Allan, M. (2022) Barriers and Access Points to student engagement with sustainability. Diagram. Source: Author's own

Appendix 4.5 presents a full analysis of the data which revealed the following insights that are represented in figure 4.7.

A number of provisions enable students to 'access' sustainable explorations of materials and theory. The findings revealed these to include; the facilitation of lectures and workshops led by practicing textile designers and alumni; school-wide events facilitated by GSA Sustainability; broad design briefs which encourage students to consider the sustainability of their process and outcomes; access to second-hand materials through 'scrap boxes' and donations from local textile manufacturers.

In particular, multiple participants praised 'Material Awareness' workshops that were facilitated by Sarah, a member of staff within the textile design department. The workshops were extra-curricular and open to students across the design school. They offered students the opportunity to engage in 'lifecycle thinking,' by interrogating the composition and origin of a selection of fibres provided by the facilitator. When discussing the development of the workshops Sarah told me,

> *I wanted something that was more in the essence of an art school, more in the essence of making, and using your hands… I also think there's less pressure in that sort of activity,.. because you're giving people the chance just to play with things and let ideas happen…we were just kind of experimenting.*

4.6.1 Barriers

Hannah described a lack of access to a wide range of affordable resources as a 'barrier to engaging with sustainability' for some students, alongside a lack of teaching about the environmental and

social impacts of the textiles industry. Many participants also commented that the fast pace of the curriculum restricts their time to research sustainability and explore alternative processes. A lack of knowledge exchange; raising awareness and discussion about sustainability was revealed to be the main barrier to student engagement. Sarah raised the opinion that everyday discussions can breakdown the magnitude of sustainability and enable staff and students to explore solutions openly, together.

Martin reminded me that senior academics and staff are learning about these issues parallel to students and often do not feel confident in their knowledge to officially address sustainability through the curriculum. He also claimed that a lack of time and funding restricts rigorous staff training on environmental and social justice issues. During phase one I discovered that GSA is providing school-wide climate literacy training for staff. Martin stressed the importance of staff receiving training on the information that is relevant and tailored to their subject, but also that this training has the potential to raise the question, '*what is the role of an art school?'*

I also asked the participants who are not current GSA textile design students to share how sustainability was approached during their time studying and they all expressed that it was not a prominent part of their learning experience.

4.7 The Future

Similar with the opening interview question, insights from the scoping conversations indicated that it would be beneficial to conclude the interview on a positive note. I asked the participants to share their hopes for the future and this provided them with the opportunity to share realistic plans for their professional practice or imaginative alternative futures for textile design, making and teaching.

The participants who work in the textiles industry, as designers, makers, researchers and retailers expressed an interest in promoting and facilitating local production and waste management of textiles; community focused practices; emotional engagement and value of textiles and textile making practices.

The student participants stressed that they are uncertain about the future of their careers, restating their discontent with the current unsustainable practices prominent in the industry contending with their hopes for employment. Multiple participants suggested that GSA should adopt a holistic approach to embedding sustainability at the core of the curricula; combining theoretical and practical studies; discussion, collaboration and cross-disciplinary learning, to explore alternative ways of practicing textile design. Maya said,

> *I think everything that GSA does about sustainability is a big song and dance… feel like if things were more casual, on a day-to-day basis, for example, discussed in a tutorial… it should be feeding through everything that you do when you're at uni. It's not just, Okay, I'll go to this one lecture and I'm a "Sustainable Queen," that's not how it works.*

4.8 Summary

The insights from phase one reveal that designing and making textiles can generate personal, social, and environmental benefits. They also highlight that defining sustainability within the context of textile design is complicated and the participants' diverse examples of subjective approaches to sustainable textile design and teaching echo those discussed in chapter 2.

The Familiarisation phase revealed that a lack of access to knowledge exchange, time and resources; for discussion, experimentation and exploration of sustainability within HE, and specifically the textile design department at GSA, results in students facing barriers to engaging with sustainability through their practice and learning experience.

By discussing 'the future,' participants revealed that opportunities for collaboration and open conversation could break down the barriers and increase student engagement with sustainability at GSA.

From these insights, I developed situational and relational maps (see Appendix 4.6), which exposed a gap in the data connecting 'Learning Experience' and 'The Future.' This analysis emphasised that further investigation was required to understand the specific barriers and possible solutions for student engagement with sustainability at GSA. The next chapter will present the second phase of fieldwork which enabled me to answer my research question comprehensively.

Chapter 5:
Fieldwork Phase Two: Contextual Immersion

5.1 Introduction

In this chapter, I will present phase two of the fieldwork: Contextual Immersion and the insights that it produced.

The Contextual Immersion phase had two main aims; to better understand the specific barriers that GSA textile design students face when engaging with sustainability; to better understand the possible solutions that could enable students to explore sustainability and textile design. This phase also provided an opportunity to test the effectiveness of facilitating a sustainability focus group within an HE textile design department; to enhance student engagement with sustainability.

The insights from this phase reveal the participants' interpretations of sustainable textile design, alongside accounts of their experience learning about sustainability as current textile design students at GSA and their opinions on the role of HE in supporting explorations of sustainability.

Eight current textile design students attended the focus group sessions and were assigned pseudonyms for the purpose of this thesis. Figure 5.1 provides further details on the participants' specific year of study, textile design specialism and record of attendance to the focus group.

NAME	YEAR	SPECIALISM	WEEK 1	WEEK 2	WEEK 3	WEEK 4
Juliet	2	Not yet specialised	√	√		
Lisa	2	Not yet specialised	√	√		
Laura	2	Not yet specialised	√	√		
Rebecca	3	Print	√	√	√	√
Maeve	3	Embroidery	√	√	√	√
Emma	3	Embroidery	√		√	
Sam	4	Weave		√	√	
June	4	Print		√	√	√

Figure 5.1 - Allan, M. (2022) Focus Group Participation. Table. Source: Author's own

The focus group sessions were not video, or audio recorded as I intended to facilitate a safe space for participants to speak freely about their learning experience. With the participants consent, I took observational fieldnotes throughout all of the sessions.

5.2 Focus Group Format

Each session was assigned a specific purpose to maintain the group's concentration and guide the conversation. The four sessions were labelled: Introductory, Exploration 1, Exploration 2, and Future Focused, represented in figure 5.2.

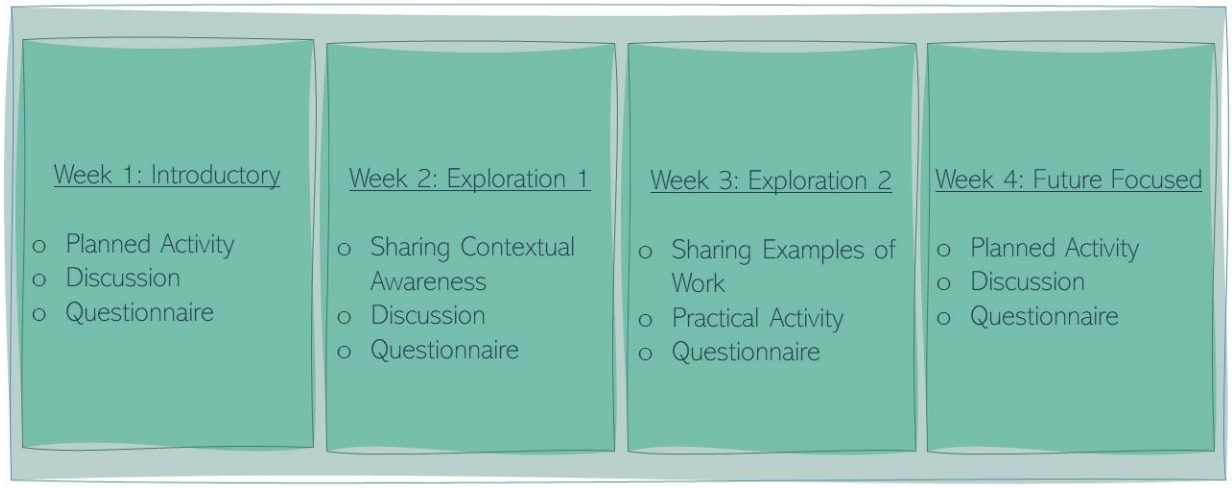

Figure 5.2 Allan, M. (2022) Focus Group Format. Diagram. Source: Author's own

As an aim of the focus group was to understand the barriers that GSA textile design students face when engaging with sustainability, it was integral to incorporate the student voice into the planning of this fieldwork. A discussion took place during the Introductory session, which shaped the format of the following two Exploration sessions. I also asked the participants to complete evaluation feedback forms at the end of every session and the findings influenced planning for the following week. Prioritising participant input provided opportunities for student-led knowledge exchange and skills sharing, factors that were signified to increase engagement with sustainability by the insights from phase one.

I will now present the activities and subsequent insights from each session.

5.3 Week 1 – Introductory

Following a round of introductions, I initiated a group activity I had planned before the event. An amended version of the topic guide from phase one informed the format of the activity. I provided the participants with 5 question/statement cards and asked them to write, draw or bullet point their answers. Figure 5.3 illustrates in detail how each question related to the points of interest in the topic guide and influenced the flow of the session.

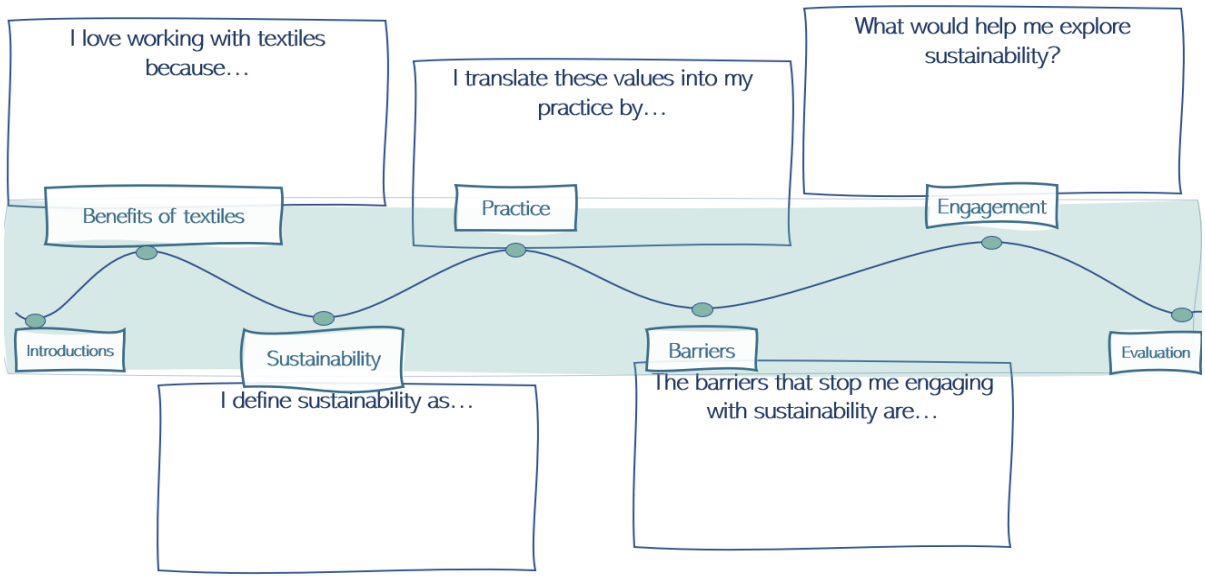

Figure 5.3 - Allan, M. (2022) Focus Group week 1 topic guide. Diagram. Source: Author's own

As a collective, we arranged the completed cards by topic, allowing the participants to share their interests, knowledge, and opinions with the group (figure 5.4). It also enabled us to define a collective understanding of 'sustainability,' highlight any common areas of concern or interest and draw attention to subjects for discussion later. The participants could expand or clarify their statements and were all engaged and willing to share their thoughts.

Figure 5.4 Allan, M. (2022) Focus Group participants week 1. Photograph. Source: Author's own

5.3.1 Insights

After the session I analysed the question cards and created situational maps for each point of interest (see appendix 5.1).

In addition to reiterating the perception that designing and making textiles can produce personal, social, and environmental benefits, the insights also restated that the term 'sustainability' encompasses social, political, economic and personal issues. Furthermore, concerning sustainability, the focus group participants spoke about the 'actions' designers and, more broadly, citizens can take to promote environmental and social justice. They discussed raising awareness through advocacy, activism, and the power of collective action to challenge societal mindsets.

Sourcing waste materials was once again the most popular approach to sustainably practicing textile design. However, the participants were interested in exploring and developing alternative, natural, slow and community engaged practices.

The comment cards revealed a lack of teaching and discussions about 'the problems' as the most prominent barrier to engagement within the GSA textile design department. A lack of opportunities for knowledge exchange, support from department staff and access to affordable, sustainable resources were also noted as barriers. A number of the participants also commented on the fast-paced nature of the curriculum as a barrier, as it restricts their time to explore alternative approaches to practice.

Lectures, workshops and resources about sustainability and textiles; knowledge exchange; group work; access to affordable, sustainable resources; time for experimentation; material awareness and exploration; examples of best practice were all outlined as solutions that could help the participants to explore sustainability further. These insights informed the structure of the following focus group session, we collectively agreed to share examples of best practice at the next meeting.

At the end of the Introductory session I gave the participants 'prompts for reflection' to use throughout the week. I did not specify the use of these prompts as a requirement for participation in the group as I aimed to be mindful of their students' busy workload. An example of the prompts can be found in appendix 5.2.

5.4 Week 2 – Exploration 1

As the participants expressed an interest in sharing examples of best practice: designers, artists, and makers whose textile practices they admire, this became the purpose of the second session. To facilitate sharing of web links and photos, I created a Padlet board, and as each participant presented their contextual awareness, I added the example to the platform (figure 5.5).

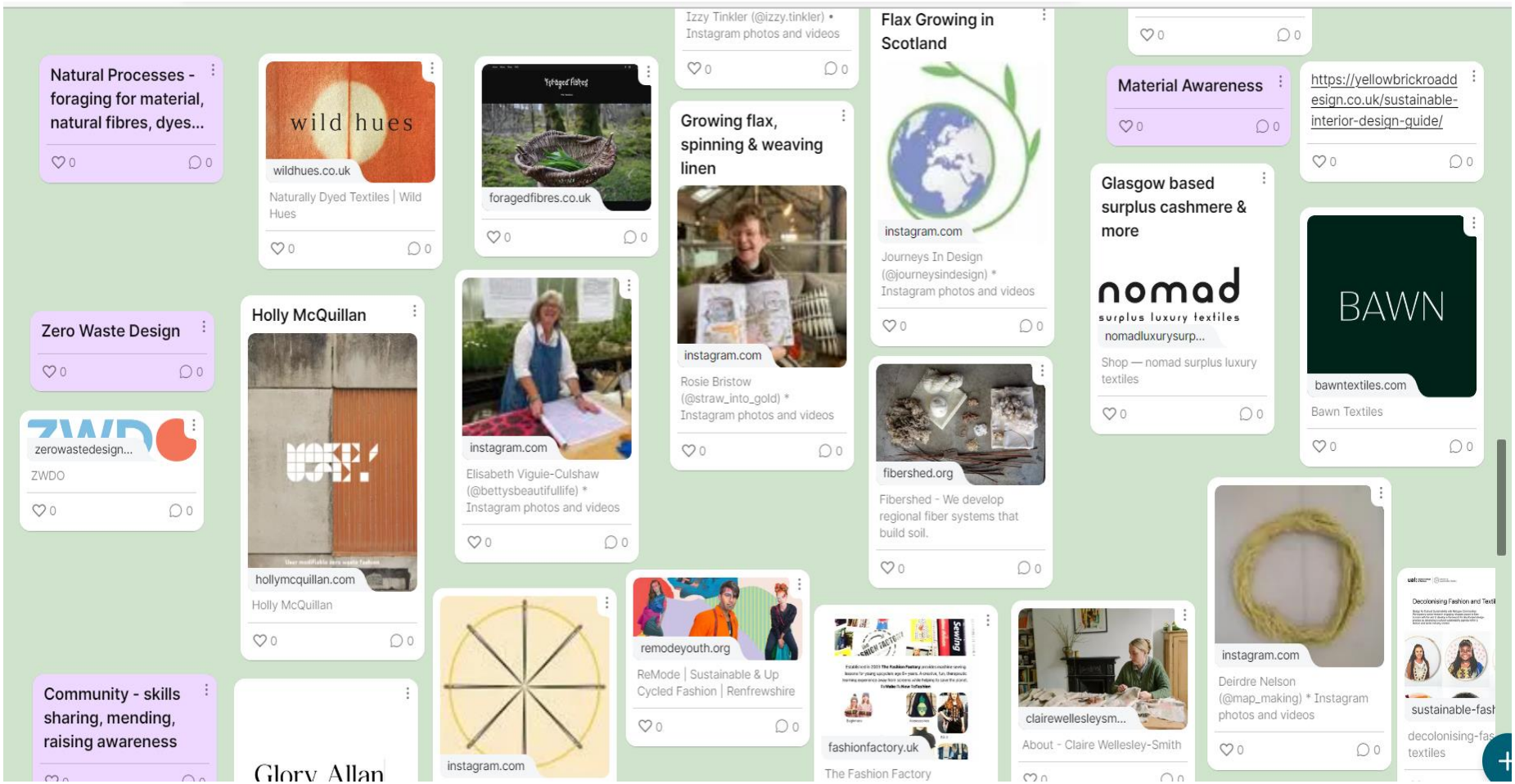

Figure 5.5 - Allan, M. (2022) Focus Group Padlet. Photograph. Source: Author's own

The textile design department at GSA provides students with opportunities to share examples of practice that they find inspiring; however, this activity delivered the time and space for open conversation and knowledge exchange specific to sustainability and textiles. It also uncovered insights into the participants' understandings of sustainable textile design practices; the specific materials, techniques, and processes that they find exciting.

5.4.1 Insights

The evaluation forms and field notes from the Exploration 1 session suggest that dedicating time to share examples of specifically sustainable approaches to textile design supplied the participants with examples of alternative ways of approaching the design process. For a complete analysis of the data, please refer to Appendix 5.3. Indeed, as the session progressed, Maeve confessed that they joined under the impression that it is challenging to discover textile designers practicing sustainably; however, she now feels like there are many examples out there.

The examples on the Padlet board demonstrate that the participants are interested in a wide range of sustainable approaches to textile design that include utilising waste materials, natural dyeing and printing process, foraging and growing fibres, and bio-based material innovations. Lisa suggested that there are many 'types of sustainability' and that it can feel overwhelming to decipher with who and what you align.

The participants agreed that they would share examples of their work at the next session to facilitate a 'sustainability focused group crit.' They also expressed an interest in doing something practical, and Sam volunteered to demonstrate to the group how to turn an old T-shirt into yarn.

5.5 Week 3 – Exploration 2

As planned, the participants shared examples of their textile design work, including drawings, material manipulations, colour swatches, embroidery, darning, prints and woven fabrics. This activity allowed the participants to express how they translate their interpretations of sustainability into their design practice.

During the second half of the session, Sam demonstrated to the group how to transform an old T-shirt into a new ball of yarn. This allowed the participants to engage in peer-to-peer learning and skills sharing, figures 5.6 – 5.10 document the process.

Figure 5.6 - Allan, M. (2022) Focus Group participants week 3. Photograph. Source: Author's own

Figures 5.7, 5.8, 5.9 - Allan, M. (2022) Focus Group participants week 3, T-shirt to yarn activity. Photographs. Source: Author's own

Figure 5.10 - Allan, M. (2022) Focus Group participants week 3 - participant's with their t-shirt yarn. Photograph. Source: Author's Own

5.5.1 Insights

The evaluation forms and field notes from the Exploration 2 session suggest that the participants were able to open and honestly discuss their approaches to sustainable textile design, including what they find accessible and what they find difficult, analysis of the data can be found in Appendix 5.4. By engaging in knowledge exchange and group discussion, the participants seized the opportunity to give each other advice and support to explore an area of interest that is often considered overwhelming.

By participating in a 'sustainability-focused group crit,' the students expressed interest in slow, natural, and socio-political engaged approaches to practice but stressed that exploring these approaches does not align with the fast-paced nature of the curriculum at GSA.

5.6 Week 4 – Future Focused

To conclude the focus group, I prepared an activity to instigate discussion about the participants' learning experience. I asked the participants to reflect on their learning experience at GSA, how sustainability is approached, taught, discussed, and actioned, and reflect on their experience of the focus group. With these things in mind, I asked them to share their dream learning experience, using the following task sheet as a prompt (figure 5.11). The participants wrote their responses on comment cards, and we discussed them as a group.

Figure 5.11 - Allan, M. (2022) Task sheet for focus group week 4. Photograph. Source: Author's own

This activity generated insights specific to the experience of students of the textile design department at GSA. It revealed what they would like to learn concerning sustainability and how they would like to learn, figure 5.12 presents images of the process.

5.6.1 Insights

The participants began discussing the disconnect between theoretical and practical learning at GSA. They expressed confusion about the structure of the Design, History and Theory (DH&T) component of their studies. They agreed that it would be beneficial for the lecture content to focus exclusively on the textiles and fashion industries. They also confessed that they sometimes find the language and format of DH&T inaccessible and off-putting.

June expressed that all learning for sustainability needs not to be theoretical and reiterated a desire for more hands-on, practical workshops about material awareness. She shared her positive experience of attending such a workshop (which was facilitated by a participant from phase one of this fieldwork) and believes this style of learning would be more appealing to textile design students.

The participants expressed an interest in learning from outside experts, such as local natural dyers. At this point, the conversation drifted into discussing GSA as an institution. Rebecca proclaimed that GSA has to consider the bigger picture, redefine its sustainable values and cut ties with unethical big businesses. However, she continued to deliberate, raising the questions; If GSA was to build partnerships with small businesses, would it risk its credibility? Would it risk losing funding? Could it sustain itself?

Attendance at the Future Focused session was low; therefore, tangible insights were limited. However, the session did facilitate a safe space for the participants to discuss their values and motivations.

To conclude the session, I gave the participants resources to take away. These included recommended reading/watching, tips on sourcing materials, a template email for sourcing waste materials from manufacturers, and parting advice; an example can be found in Appendix 5.5.

In keeping with the format of the previous sessions, I asked the participants to complete a written evaluation form specific to the final session and another requesting feedback on the focus group overall. An analysis of this data can be found in Appendix 5.6, and revealed that the focus group was a positive experience for students and increased their confidence to explore sustainability.

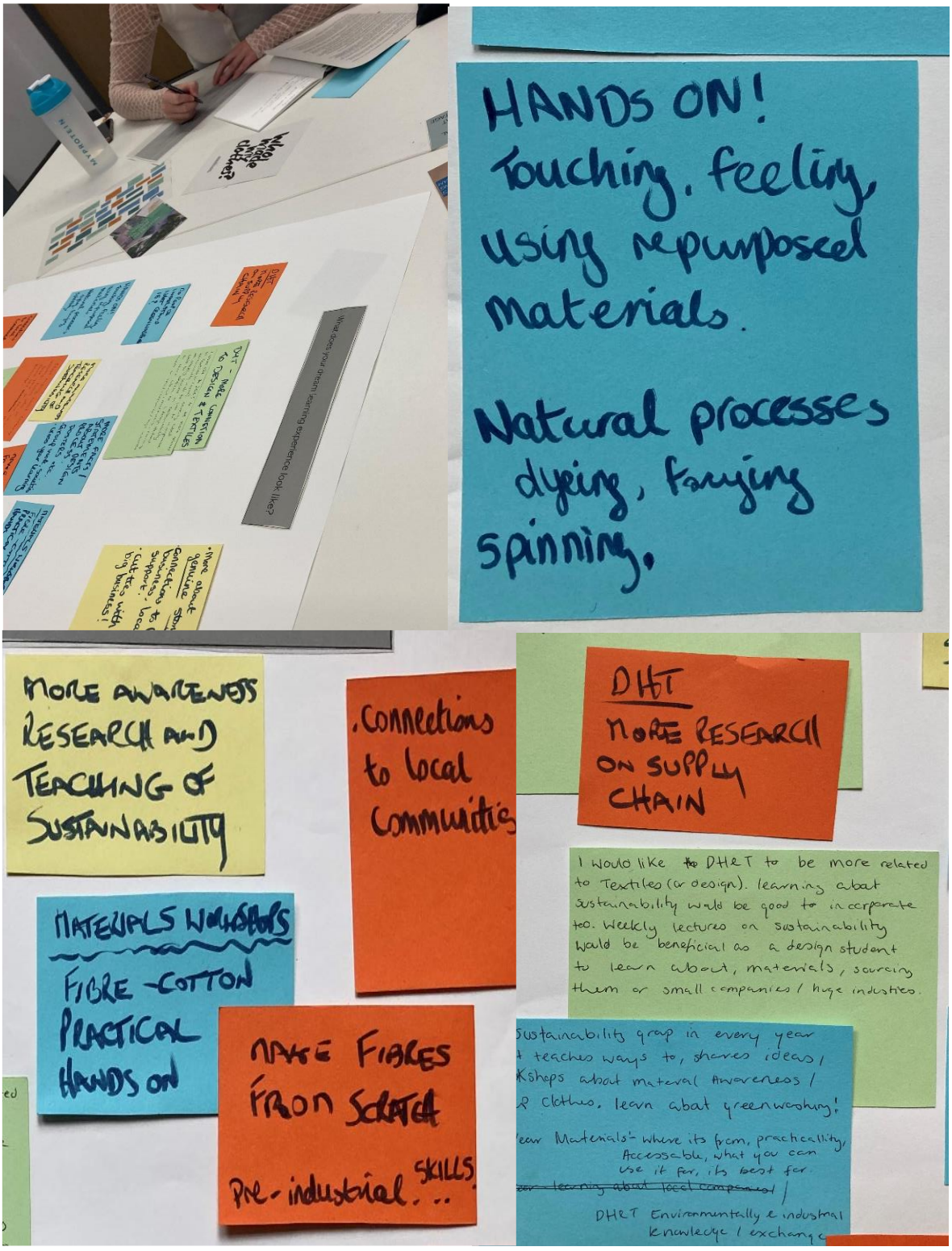

Figure 5.12 - Allan, M. (2022) Focus Group week 4, Dream Leaning Experience Activity. Photograph. Source: Author's own

5.7 Comprehensive Summary of the Fieldwork

The fieldwork was a heuristic process of regular data gathering and analysis. A final round of analysis was conducted to compare the data from both phases and the details of the process can be found in Appendix 5.7.

Insights from the fieldwork revealed;

- designing and making textiles can generate personal, social and environmental benefits.

- sustainability relates to environmental, social, political, economic and personal issues.

- definitions of sustainable approaches to textile design are subjective, the central approaches presented by the participants were; Valuing Materials, Experimenting with Alternative Starting Points, Engaging in Knowledge Exchange and Raising Awareness.

- a lack of coherent and comprehensive teaching about sustainability and textiles, opportunities for knowledge exchange, access to affordable resources, examples of best practice; and a demanding course structure were emphasised as barriers to student engagement with sustainability.

- opportunities to develop material awareness, and to engage in knowledge exchange and collaboration were suggested to have the potential to support student explorations of sustainability.

The following chapter will present the comprehensive analysis of the data gathered from the fieldwork and present the findings.

Chapter 6:
Analysis

6.1 Introduction

In this chapter, I will present the analysis of the data gathered from the fieldwork, which I described in the previous two chapters.

In keeping with the methodology of this project, I conducted analysis at five points throughout the fieldwork, as illustrated in figure 6.1; this allowed me to iteratively compare the insights from both phases of fieldwork and the literature. As discussed in chapter 3, I developed a fieldwork topic guide that included five points of interest; Benefits of Textiles, Sustainability, Practice, Learning Experience, and The Future. I used these points of interest to separate the data into manageable segments and analysed them individually before comparing the findings, as illustrated in figure 6.2.

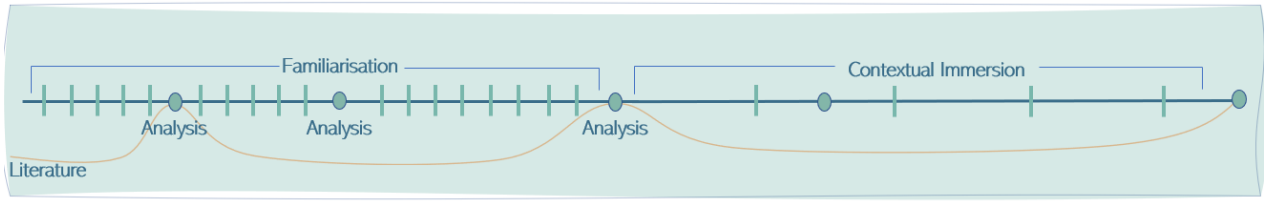

Figure 6.1 - Allan, M. (2022) Points of Analysis. Diagram. Source: Author's own

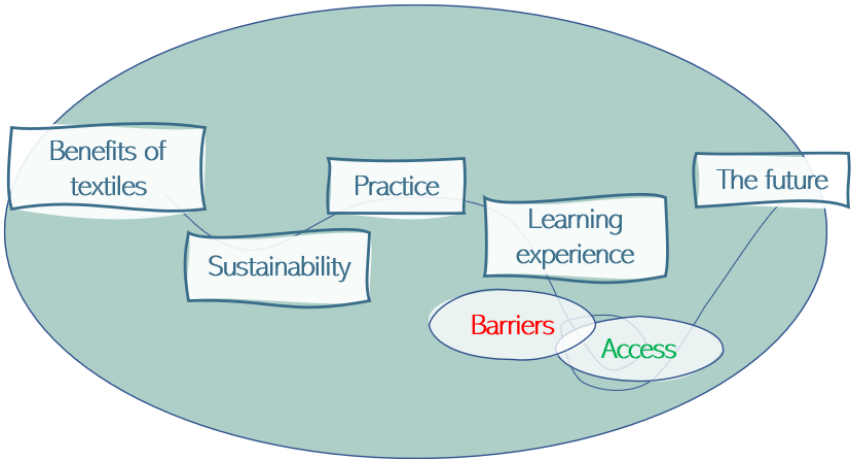

Figure 6.2 - Allan, M. (2022) Analysis Structure. Diagram. Source: Author's own

The first four rounds of analysis were mentioned throughout the fieldwork chapters and can be found in Appendixes 4 & 5. To summarise, through a coding and categorising process I created situational and relational maps which revealed a set of insights:

- designing and making textiles can generate personal, social, and environmental benefits.
- sustainability relates to environmental, social, political, economic, and personal issues.
- definitions of sustainable approaches to textile design are subjective, the central approaches presented by the participants were; Valuing Materials, Experimenting with Alternative Starting Points, Engaging in Knowledge Exchange and Raising Awareness.

- a lack of coherent and comprehensive teaching about sustainability and textiles, opportunities for knowledge exchange, access to affordable resources, examples of best practice; and a demanding course structure were emphasised as barriers to student engagement with sustainability.

- opportunities to develop material awareness, and to engage in knowledge exchange and collaboration were suggested to have the potential to support student explorations of sustainability.

An analysis of the final relational map resulted in two positional scales; 'Defining Sustainable Textile Design' and 'Supporting Student Explorations of Sustainable Textile Design.' A comparison of the positional scales revealed four sustainable sensibilities of textiles (figure 6.3) which informed the creation of recommendations and speculative future scenarios that I will discuss in the following chapter.

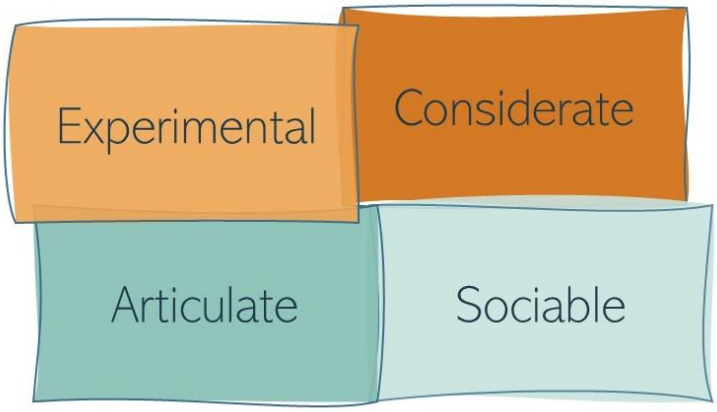

Figure 6.3 Allan, M. (2022) The Sustainable Sensibilities of Textiles. Diagram. Source: Author's own

I will now present the analysis which was a thorough assessment of all of the data from both phases of the fieldwork.

6.2 Defining Sustainable Textile Design

This research project aimed to better understand how textile design students at GSA interpret sustainability and how these interpretations have the potential to impact their learning experience and design practice. Insights from the fieldwork reveal that attempting to define sustainability within the context of textile design is complex, as interpretations are formed through subjective experiences and priorities. Throughout the fieldwork, the participants discussed three main approaches to sustainable textile design; Valuing Materials, Experimenting with Alternative Starting Points, Engaging in Knowledge Exchange and Raising Awareness (figure 6.4) A full analysis can be found in Appendix 6.1.

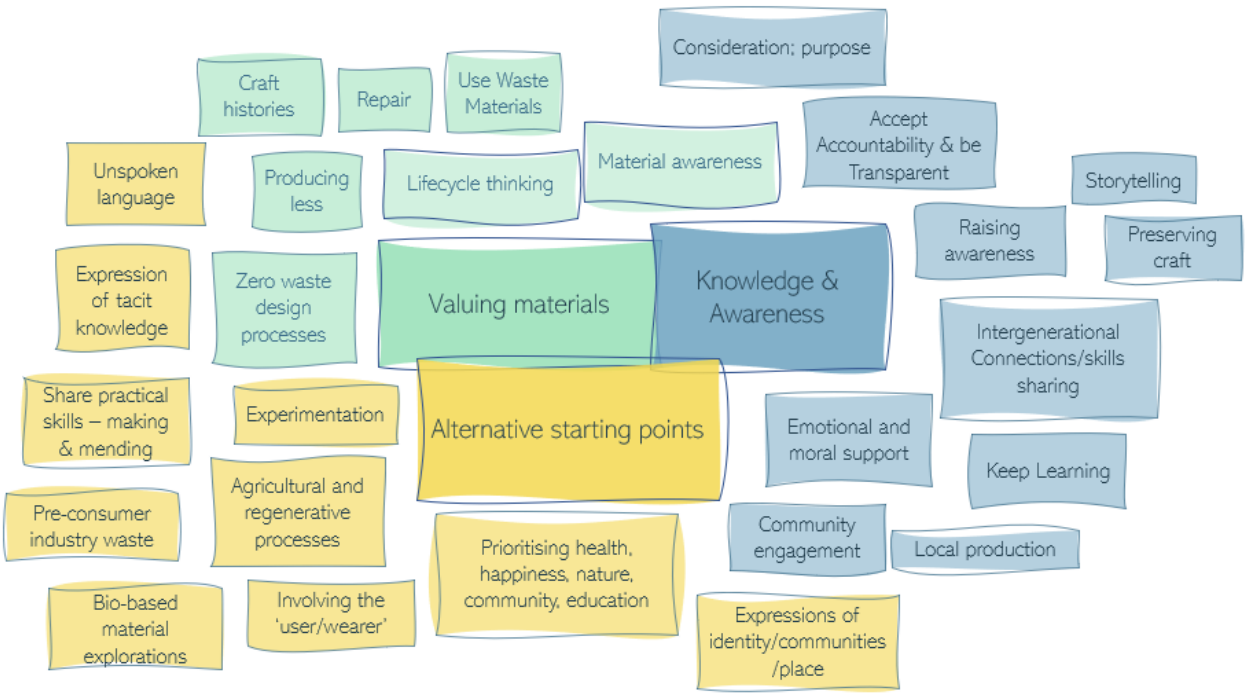

Figure 6.4 - Allan, M. (2022) Sustainable Approaches to Textile Design. Diagram. Source: Author's own

The situational maps revealed that the students predominantly approach their practice through a material-based lens. The maps identify a general lack of supply chain transparency as the main barrier to sourcing affordable, ethically produced materials, which are also often expensive. Most participants discussed sourcing post-consumer 'waste materials' as an accessible solution to this problem. During separate interviews, Martin and Ava voiced concern about the popularity of 'waste as a raw material,' suggesting that re-purposing unsustainable materials is a limited solution that communicates a dependency and demand for resources with negative environmental and social impacts.

Siobhan told me that she sources organic, natural fabrics to lessen the environmental impact of her practice. Multiple participants stressed the importance of consideration and 'lifecycle thinking' when selecting materials. Ava discussed experimenting with an alternative starting point by working to create textiles informed by their potential to decompose. She spoke of textiles' complex relationship to the land, stating,

> *When we think of textiles, it affects the land on both the front end and the back end, especially in the sustainability community… often associated with linen and organic cottons... those are agricultural products. So if that's the direction that a sustainable community is going to consider… you're going to have to learn about what influences the environments for those products to grow and to be harvested.*

Several participants from both phases of the fieldwork expressed an interest in exploring 'slower' approaches to making textiles; through growing, harvesting, spinning and weaving fibres. The focus group participants were particularly interested in experimenting with natural dyeing and printing techniques. During a discussion, they collectively agreed that sustainable approaches to textile design should go beyond utilising waste or second-hand materials. Laura said, '*I always try to think where each object I use originated from; what is it made of? Using found, pre-made objects is one thing, but I like to dig deeper beyond that.*'

During an interview, Phoebe shared her alternative approach to textile design which involves including 'the wearer' in the design process. to encourage emotional attachment and promote care and longevity of textiles. The participants spoke about the notion of care in relation to textiles in three forms: making as self-care, textiles as objects that express care, and caring for textiles to prolong use and prevent disposal.

Throughout the fieldwork, the participants stressed the importance of understanding and utilising their values as motivation for sustainable approaches to textile design, as evidenced below;

> Ella: *The act of crafting slows the creative process down. Knitting, weave, crochet… you spend so long with a sample/garment and invest so much emotion and energy in it. The outcome feels spiritual.*
>
> Emma: *Embracing imperfections rather than discarding damaged things – mending, recycling, nurturing.*
>
> Isla: *I think it is about really valuing what we've got, not always trying to create more. And encouraging people to work in their own way to challenge the way the industry is set up at the moment.*

Particularly at the focus group, the students deliberated on societal and personal mindsets, ways of thinking and appreciating craft and textiles that impact actions. They discussed the benefits of working within local communities to share sewing and mending skills and foster an appreciation of textiles.

Unsustainable societal mindsets and attitudes towards fashion and textiles were repeatedly referred to as barriers to practicing sustainably by the participants. Emma said, '*…not everyone cares about sustainability, which means I may not be able to pursue sustainability in my career to make a living.'* Multiple participants also stressed frustration towards unsustainable practices being normalised throughout the mainstream fashion and textiles industry. Isla claimed,

> *…there is a kind of set way of working where textiles and fashion houses want to come and see thousands of print designs, and they want to be able to just select ten out of that. And it's like, what happens to the rest of that? And then you have to produce the next collection for the following season. I don't think it should work like that.*

Hannah expressed similar concerns and the desire to 'produce less' as a textile designer. Many participants stressed feelings of hypocrisy and guilty towards their involvement in an industry that is notoriously wasteful and polluting, resulting in a lack of motivation and a 'creative block.' Other participants explained that the current cost of living crisis is placing strain on their design and career decisions and those who were students discussed the pressures to find employment after graduating. This quote from Sophia highlights the complexities,

> *Fast fashion, that irritates me so much. I think it was H&M, really got my blood boiling… just this greenwashing. And I kind of felt a little bit embarrassed… if I was to graduate right now and get offered a print design job for H&M, I'd probably take it because I'm so desperate for work. There's that battle for me right now, the hypocritical.*

These insights show that textile design students are influenced by many internal and external factors, an analysis of these factors can be found in Appendix 6.2.

Several participants mentioned 'raising awareness' and engaging in knowledge exchange as 'a way around' the financial barriers to practicing sustainably. Poppy stressed the importance of accepting accountability for the negative impacts of her practice and stated that she aims to be fully transparent about where and how she sources her materials and how her textiles are made.

An analysis of the situational maps revealed overlaps in the data relating to the Benefits of Textiles, Sustainability, and Practice; this informed a relational map and a positional scale presented below (figure 6.5), please refer to Appendix 6.3 for a full analysis.

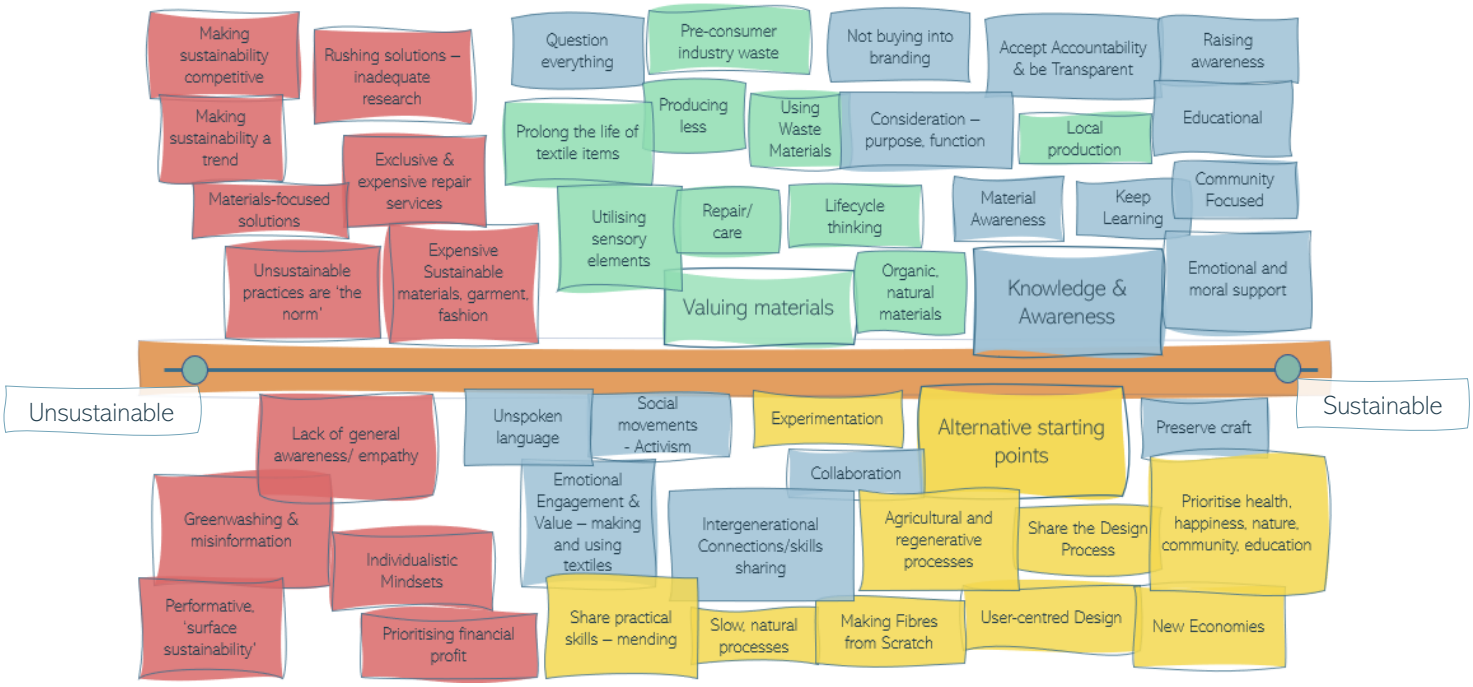

Figure 6.5 - Allan, M. (2022) Defining Sustainable Textile Design - Scale. Diagram. Source: Author's own

The positional scale revealed that the participants believe some approaches to sustainable textile design are more effective than others. It also highlights the importance of establishing sustainable values and mindsets. The holistic approaches that involve community engagement, local production, and agricultural explorations of textile making sit at a point on the scale that suggests they are more likely to generate positive, long-lasting change. The scale also highlights the techniques and approaches to textile design that GSA students would like to explore further. The next section will present analysis of the data, which contains insights into how textile design students can be supported to explore and develop sustainable practices at GSA.

6.3 Supporting Student Explorations of Sustainable Textile Design

As mentioned previously, insight from the data revealed that the main barrier to student explorations of sustainability in the textile design department at GSA is a need for more consistent and comprehensive teaching about the possible solutions to the environmental and social impacts of the textiles industry.

During both phases of the fieldwork, multiple GSA textile design students and graduates commented on a disconnect between the DH&T modules and their studio projects. They suggested that the DH&T department could better utilise lectures to discuss the environmental, social, economic and political aspects of the textiles, and fashion, industry.

Focus group participants suggested it would be beneficial to attend weekly lectures about the history of global textiles trade; to learn about practices of environmental racism and gender

discrimination relating to supply chains. They also advocated for more education on historic Scottish agricultural practices of making textiles, how businesses are structured, how to spot greenwashing, and discussion surrounding possible career trajectories.

These insights reveal that a holistic approach that successfully balances theoretical and practical studies would assist students in exploring sustainability through their learning experience.

During the focus group, the participants stressed that the fast-paced nature of their studio-based learning, consisting of short and intense projects, does not allow them time to research and experiment with alternative, sustainable approaches to their practice. They suggested that the curriculum mimics the unsustainable pace and habits of 'big industry' and does not challenge current mindsets and attitudes towards appreciations of textiles. When I asked them to share what they perceive to be barriers to exploring sustainability, they said,

> Lisa: *Education, the term sustainability is thrown around but barely any active work done to facilitate it… the curriculum isn't set up for sustainable practices.*
>
> Emma: *Time within our course… getting away from the mindset of new everything all the time… getting everyone on board.*

Sam and June shared their experiences participating in a design competition that the GSA textile design department facilitated in collaboration with an external high street retailer. They praised the retailer and the textile department for encouraging sustainable practice. They said the retailer was very open to students asking, 'If I were to work for you, how would you take on board my values? Would they fit within a role at your company?'

While the participants said the competition offered an opportunity to present their work to a large company, they still felt conflicted surrounding the scale and reputation of the retailer. This conversation inspired a discussion where the participants raised the questions; why does the department partner with certain external companies? Who makes those decisions? Does that particular retailer have admirable sustainable credentials? These questions suggest scepticism from the participants towards the retailer's priorities and by association GSA.

During an interview, Agnes, a textile design subject leader, reminded me that the purpose of the textile design course at GSA is 'to teach the students to be designers and prepare them for future employment in the industry.' When discussing the possibilities of integrating alternative approaches to practice into the curriculum, such as natural dyeing, Agnes said,

> *I think it's interesting. I don't know how it would particularly be embedded in what we do at the art school… we do occasionally have students that are really interested in that, and it almost feels like it's too much to try and get them to explore within the short time that they've got.*

Agnes elaborated, stating that it would be exciting to see students collaborate with external experts on projects that explore alternative, natural processes to textile design, nevertheless reiterating that the main focus of the course at GSA is to align with mainstream approaches. The focus group participants also expressed an interest in connecting with local practitioners. During an interview, Peter commented on the potential for art schools and local textile manufacturers to form partnerships that generate opportunities for material and knowledge exchange.

A lack of opportunities for knowledge exchange and group discussion about sustainability and textiles was also revealed to be a barrier to sustainable explorations within the department. Reflecting on her learning experience, Flora told me,

> *I feel like there wasn't really in depth discussions…. it wasn't like we had proper conversations. So maybe having a space to do that, like having a crit that's directly focused on sustainability, or things where everybody has to reengage and reflect on their practice could have been useful.*

Agnes confirmed that students often need encouragement to express the intentions of their design work and articulate their motivations. She said,

> *I think there's still education needed around that. And you still have to discuss with the student, what it is that you're trying to get from your textiles and to give with your textiles? …But if you were to have a conversation with them about what they were doing and why they were doing it and who the textiles were for, actually, they do have the knowledge it's just they don't really understand how to communicate it.*

Poppy suggested assigning a sustainability-focused tutor within the staff body to run lectures, workshops, critical reviews, and one-to-one tutorials with the students and assist them in articulating their sustainable values and approaches to design. Agnes confirmed that education is still required to highlight why transparency is important in designing textiles.

Most participants suggested that group learning, across the textile disciplines and school-wide, could provide opportunities for knowledge exchange and collaboration and generate innovative approaches to textile practice. One focus group participant, June, shared r positive experience attending a Materials Awareness workshop that a technician within the department facilitated. She claimed that touching and physically exploring materials is a style of learning that is most appealing to textile design students. Hannah, a textile design subject leader, echoed this sentiment by claiming that students tend to be 'visual learners.'

The second phase of the fieldwork for this project provided an opportunity to assess the effectiveness of facilitating a sustainability focus group within the textile design department at GSA. The group offered its participants a community environment; to discuss their concerns about current unsustainable textile design practices and their learning experience, explore examples of best practice, and share their sustainable approaches to design.

The evaluation feedback forms reveal that the focus group successfully provided a safe space for honest conversations and that the participants gained confidence, inspiration, and a sense of supportive community through their involvement. Three participants intended to invite more of their peers and continue the weekly focus group after our last session. The following diagram presents a sample of the focus group feedback (figure 6.6).

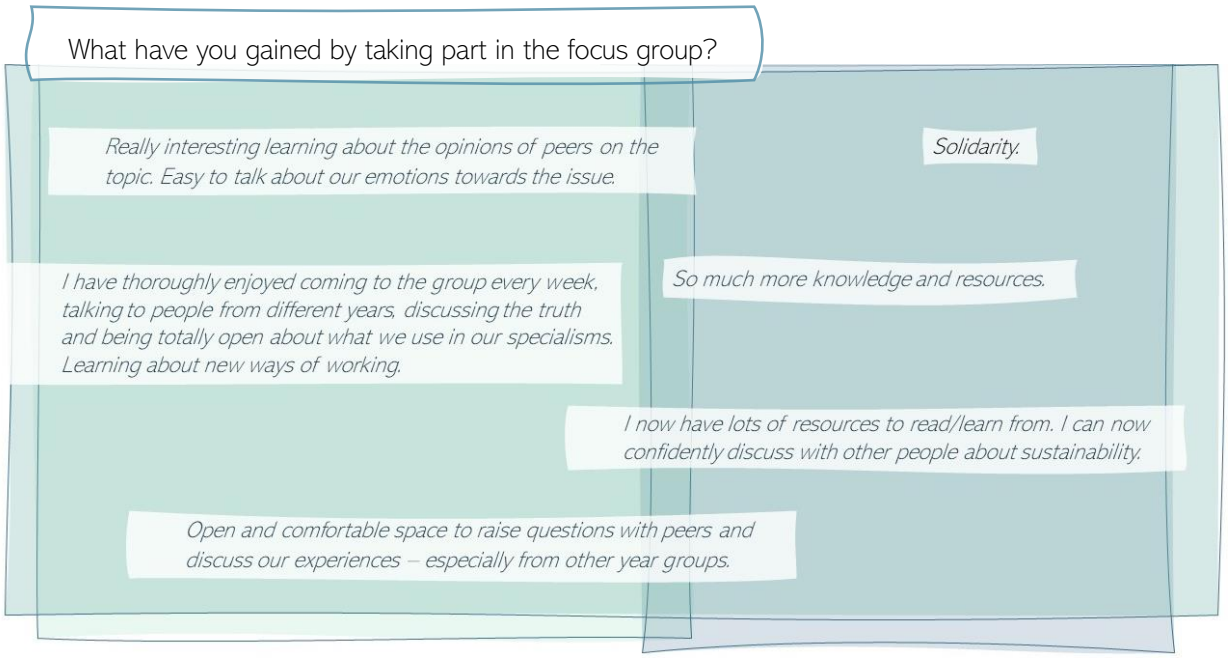

Figure 6.6 - Allan, M. (2022) Focus Group Feedback Comments. Diagram. Source: Author's own

By analysing the data, I produced a positional scale that represents the participants' experience as a 'Barrier' or 'Access' to engage with sustainability, see figure 6.7 Please find a full account of the analysis in Appendix 6.4.

The positional scale highlights that some approaches to teaching, such as holistically incorporating theoretical and practical teaching alongside experimentation, are considered more effective than others at enabling students to explore sustainability.

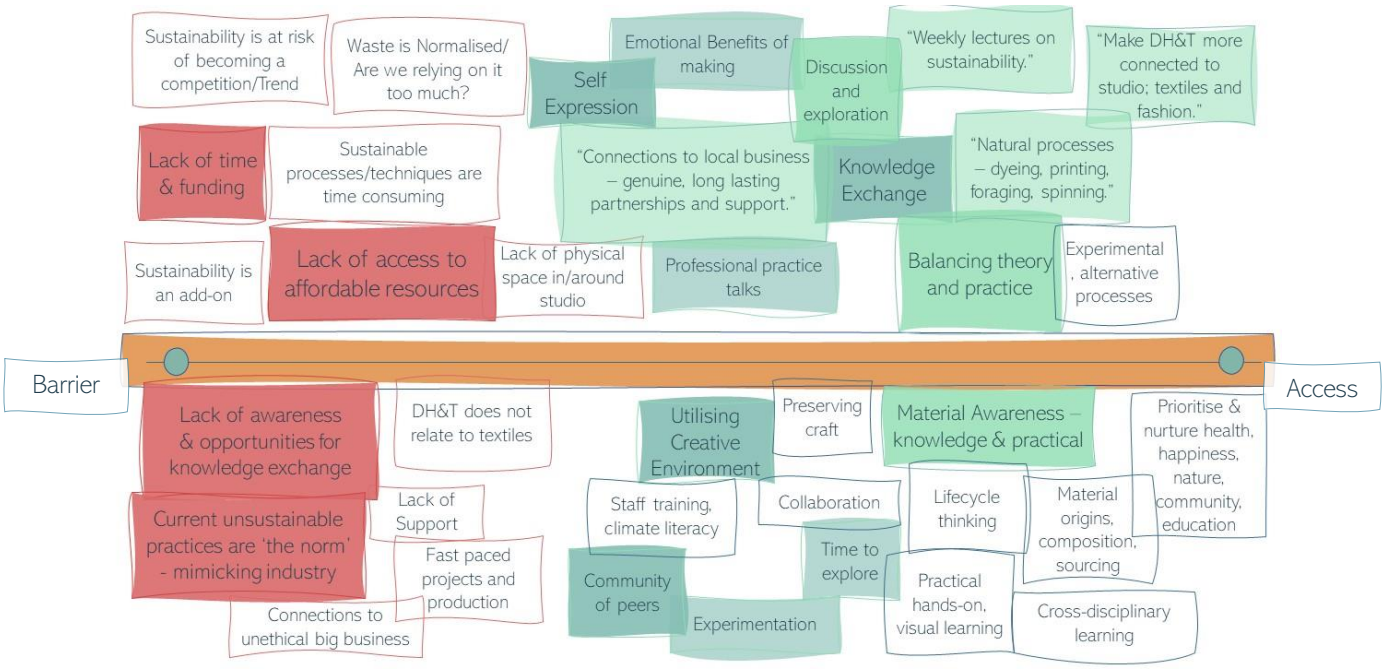

Figure 6.7 Allan, M. (2022) Supporting Student Explorations of Sustainable Textile Design - Scale. Diagram. Source: Author's own

6.4 Sustainable Sensibilities of Textiles

As figure 6.8 illustrates, comparing the positional scales exposed four reoccurring themes at the 'most sustainable' ends of the scales; detailed analysis can be found in Appendix 6.5. I will refer to these themes as 'Sustainable Sensibilities of Textiles.' The repetition of each sensibility suggests they are key to developing successful approaches to teaching for sustainability and textiles. In the following chapter, I will discuss their significance and explore how they can be utilised.

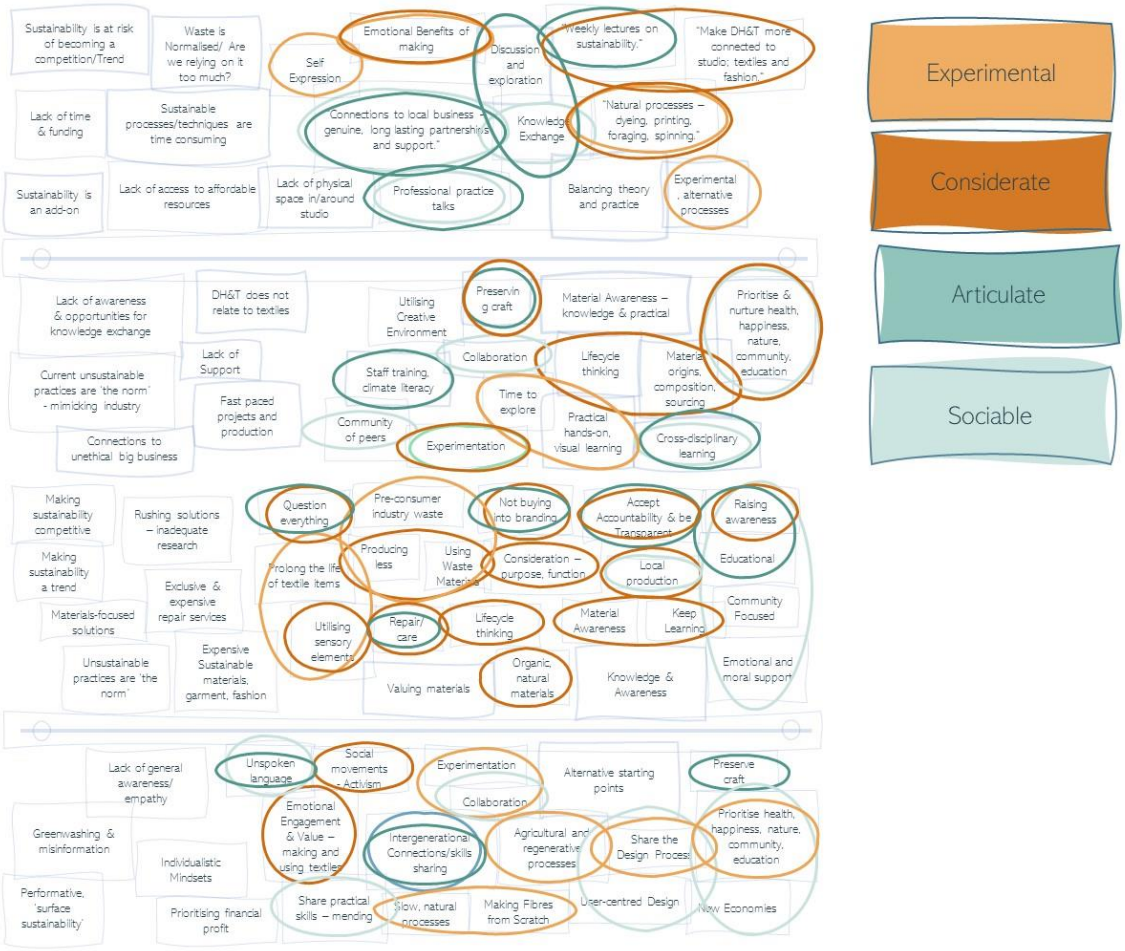

Figure 6.8 - Allan, M. (2022) Comparison on positional scales, revealing 4 'sustainable sensibilities'. Diagram. Source: Author's own

6.5 Summary

A full analysis of the data from both rounds of the fieldwork revealed that textile design students at GSA consider sustainable textile design practices to involve:

- Valuing materials

- Exploring alternative starting points

- Engaging in knowledge exchange and raising awareness

The insights also uncovered the main barriers to student engagement with sustainability. They revealed that holistic approaches to teaching that incorporate theoretical and practical studies and prioritise

experimentation and community engagement are most effective at empowering student explorations of sustainability.

A final analysis of these findings uncovered four reoccurring 'Sustainable Sensibilities' fundamental to developing sustainability-focused teaching of textile design. In the next chapter, I will discuss the significance of each sensibility and their potential to act as building blocks for future curriculum design.

Chapter 7:

Discussion

7.1 Introduction

In this chapter I will discuss the findings from the analysis of the fieldwork which was presented in chapter 6.

This research project aimed to answer the question; How can textile design students be supported to explore and develop sustainable practices through examining and enhancing the learning experience at the Glasgow School of Art?

In response to this question, I recommend that the textile design department at GSA utilise four Sustainable Sensibilities (see figure 7.1), as principles and foundations for the development of future curriculum design. The value of these sensibilities was revealed in the fieldwork findings. To illustrate their potential to influence curriculum design I have created three speculative future scenarios which I will present in the final part of this chapter. I will now discuss the significance of each sensibility.

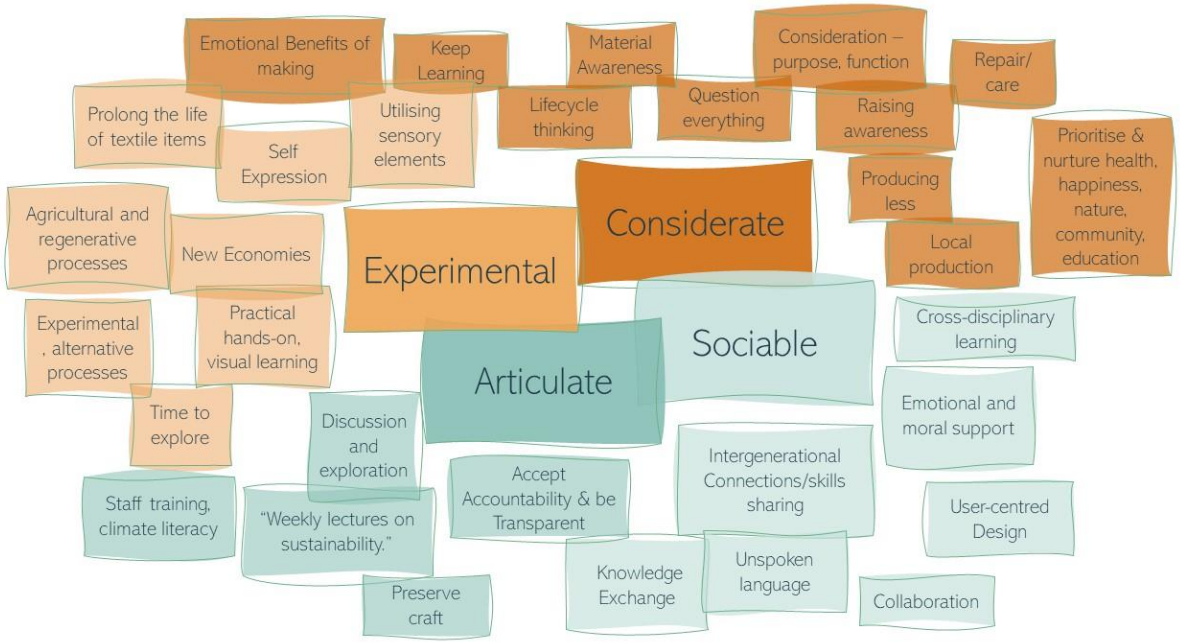

Figure 7.1 - Allan, M. (2022) 'Sustainable Sensibilities of Textiles'. Diagram. Source: Author's own

7.2 Considerate

The physicality of making: repetitive stitching and rhythmic weaving, were discussed with the highest regard as the participants considered the benefit of textiles, reiterating that these actions are an unspoken conversation with materials that require consideration and tacit knowledge (Wellesley-Smith 2021, Nimkulrat 2021, Shreeve 1997).

The participants emphasised 'valuing materials; lifecycle thinking and material awareness' as a key sustainable approach to textile design, evidencing that textile design students must develop an understanding of their materials that looks beyond the physical to include an awareness of its composition and origin. Lifecycle thinking encourages respect for the land and deeper emotional engagement with making and using textiles (Shields 2021, Fletcher 2008). Facilitating mandatory guided explorations of material properties could support the development of students' knowledge and ability to consider the appropriate application of materials and use of their textile designs. Indeed, developing a contextual understanding of mainstream textile production would also enable students to

consider the negative sociocultural and environmental issues concerning the textiles industry and why it is essential to explore sustainable solutions. The findings prove that a course structure that facilitates lectures and group discussions that connect DH&T and studio projects would be a successful teaching approach, breaking down the complexities of 'the problems' into manageable segments.

Insights from the fieldwork also confirmed that many external and conflicting factors influence societal mindsets and attitudes towards textile clothing and consumption habits, including the cost of living crisis. Fashion (and by association, textiles) as we know it, based on trends and aesthetics, is a tool for social mobility and inclusion for many, and designers have a responsibility to respect the diverse lived experiences of the societies they work within (von Busch 2022). Opportunities to engage with local communities, or 'the wearer,' could enable students to better consider whom they are designing for, the purpose and use of their designs, and develop meaningful approaches to design (Archibald 2020, Hirscher, Mazzarella and Fuad-Luke 2019).

Through research, knowledge exchange, and a balance of coherent, theoretical and practical teachings, the GSA textile design department could motivate students to carefully consider and challenge the textiles industry's current sociocultural and environmental impacts.

7.3 Experimental

Textiles can enhance many other industries; fashion, medical, automotive and more (Igoe 2021, Gale and Kaur 2002). The versatile nature of cloth permits playful experimentations of materiality; colour, texture and pattern, yet the industry's profit-focused priorities often limit time for tentative explorations into alternative approaches to making and use (Fletcher & Tham 2019). Evidence from the fieldwork suggests that the textile design course at GSA mimics the fast paced, product-focused structure of mainstream industry, a format that is demanding and places pressure on students and staff (Shields 2021, Ermer 2018). Furthermore, by employing 'the brief,' educators risk simplifying symptoms of unsustainable practice by presenting them to students as 'a problem from the client' (Akama et al. 2014). Students are required to resolve these problems by creating commodifiable textile samples, limiting their opportunities to think beyond current modes of practice and to consider alternative solutions and approaches to design.

As von Busch (2022) declared, tapping into the personal and social benefits of textiles, by utilising sensory explorations into alternative ways of knowing and doing, fosters appreciative attitudes towards textile crafts. Insights from the fieldwork propose that exploring alternative starting points to the design process could empower students to engage with sustainability. Suggestions included agricultural practices of growing, harvesting, spinning and naturally dyeing fibres, repurposing 'waste' materials and co-designing textiles with participants. To create innovations, students need time, space and freedom to fail (Valentine and Ballie 2018) and a course that prioritises experiential learning, experimentation and innovation.

By experimenting with an alternative course structure, the GSA textile design department could pioneer explorations into alternative approaches to textile design teaching and practice that represent the values of its students, staff and local community, such as *Making for Change: Waltham Forest* project (Mazzarella 2020). A place-based approach could support community well-being (Manzini 2022, Walker 202-) and communicate to the wider world that GSA are committed to challenging the current unsustainable practices of the mainstream textiles industry.

7.4 Articulate

The variety of approaches to sustainable textile design discussed throughout the fieldwork and in chapter 2, section 2.3, confirm textiles' ability to communicate the passions, interests and priorities of the designer (Friedman 2021, Igoe 2021, Vuletich 2015). Furthermore, the 'Defining Sustainability' scale also highlighted that discourse and practice surrounding sustainable textile design and making have reached a 'certain maturity' (Fletcher 2022) and that some approaches produce limited solutions. As the participants underlined 'engaging in knowledge exchange and raising awareness' as an integral approach to sustainable textile design, it is essential that students successfully investigate, define and articulate *why* they design. As the literature in chapter 2, section 2.4, advocates, articulating their personal values and motivations will allow students to develop an authentic and truly sustainable practice (Bang 2020, Vuletich 2015, Igoe 2021).

Evidence from the interviews suggested that students lack the ability to express their sustainable values and motivations because it is a form of tacit knowledge, similar to their knowledge of the skills required to design and make textiles. It is presumed that students have sustainable values and understandings of 'the problems' yet opportunities to articulate and discuss the importance of these values are limited, resulting in sustainability as a performative add-on. Insight from the fieldwork echoed the suggestion that cross-disciplinary collaboration and knowledge exchange offer textile design students opportunities to articulate their tacit knowledge and express what they aim to communicate through their textile designs (Bang 2020, Emer 2018).

Analysis reiterated that scrutinising the language we use to communicate our representations of sustainable textile design is worthwhile (Fletcher and Tham 2019), to enable critical thinking and discourage the use of buzzwords (Bang 2020, Akama et al. 2014). Facilitating cross-discipline communication and learning, within the textile design department and school-wide, would benefit students and staff aiming to explore sustainability. Indeed, evidence from an interview emphasised the importance of staff climate literacy to increase the subject leaders' ability to support and guide students.

By acknowledging the significance of tacit knowledge and textiles' ability to communicate sustainable values, the textile design department, and GSA as an institution, could affirm the importance of holistic, cross-disciplinary approaches to teaching.

7.5 Sociable

Insights from the fieldwork reveal that students find it overwhelming to define their approach to sustainable textile design as interpretations are subjective and influenced by many conflicting priorities. As the participants of the focus group stressed that a 'supportive community of peers' offers emotional and moral support, evidently it is vital that GSA utilise the social environment of studio-based learning to foster the development of a compassionate, sustainability-focused community.

The literature in chapter 2 condemns the competitive and elitist temperament of the textiles (and fashion) industry (von Busch 2022), and the fieldwork from this project demonstrates that the next generation of textile designers prefer to prioritise collaboration and skills sharing. Learning to make textiles offers opportunities for social connection through experiential skills sharing (Townsend and Niedderer 2021), and has the potential to facilitate communities of practice (Wenger 2000).

The findings suggest that the concept of community can also extend out-with GSA, to include collaborations and sustained partnerships with local textile manufacturers; increasing opportunities for knowledge exchange, access to affordable materials and employment. Furthermore, a focus group participant displayed an interest in developing a socially engaged practice, aiming to work within their local civic to promote the emotional benefits of creativity alongside the care and repair of clothing. Prioritising community, people and their local environment allows designers to occupy new roles (Earley 2016, Manzini 2008) and explore possibilities for textiles to facilitate social innovation (Mazzarella

2020). By collaborating with their local communities designers can develop a 'sensitivity to the context' (Tham 2016) and create community-led, robust and longer lasting solutions which are distinct to the people and places they are formed, increasing community pride and a sense of belonging (Walker 2020).

By prioritising notions of 'community,' the GSA textile design department could nurture an empowered, sustainability-focused community of students and strengthen its relationship with its immediate local community through continuous engagement.

7.6 Speculative Scenarios

As discussed in chapter 2, a blueprint for sustainability-focused teaching of textile design in HE does not, and should not, exist (Bang 2020). Institutions must develop unique approaches that represent the values of their students, staff and local community. As the fieldwork of this project focused on the lived experience of textile design students at The Glasgow School of Art, I have created speculative future scenarios for the department, informed by the opinions of the students. The scenarios are not intended to be guidelines, but instead ideas, something to consider, as GSA develops a new common academic framework.

I have utilised the previously discussed 'Sustainable Sensibilities' as building blocks for the scenarios, and will now present each one.

7.6.1 Scenario One: Balancing Theory & Practice

The fieldwork confirms that the textile design department at GSA inspires and enables students to utilise their individual creativity, push artistic boundaries and engage in self-expression by exploring the materiality of textiles. Creating opportunities for hands-on experimentation is a strength of the department's approach to teaching and it could utilise a materials-based lens to facilitate student, and staff, explorations of sustainability by better balancing theoretical and practical studies.

If teaching remains divided between two departments; Textile Design (studio) and Design History & Theory (DH&T), the findings of this research project suggest that both departments must make a considered effort to meet in the middle and bridge the gap in content.

As displayed in figure 7.2, Studio learning could instigate explorations of sustainability by facilitating mandatory Material Awareness workshops. Indeed, as discussed in chapter 2, a member of staff within the GSA textile department has developed successful Material Awareness workshops which were tried and tested with GSA students. Developing and integrating these workshops into the main curriculum would provide opportunities for students to acquire appropriate material knowledge by questioning what fibres are made of, where they comes from, how they are made and what it can be used for (Shields 2021).

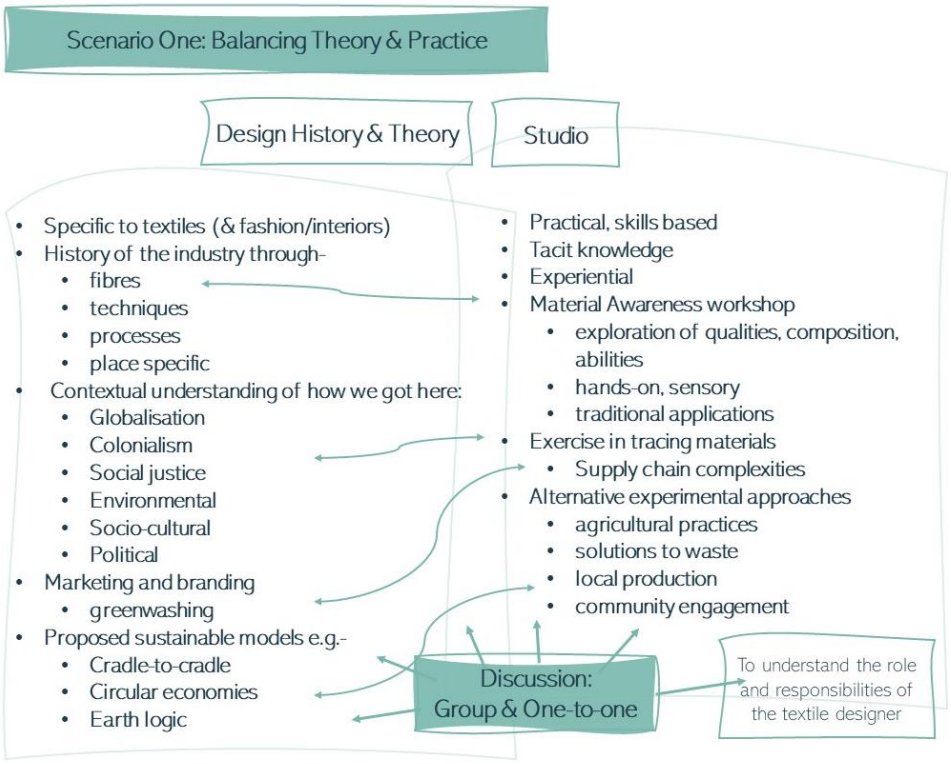

Figure 7.2 - Allan, M. (2022) Speculative Scenario 1. Diagram. Source: Author's own

These physical explorations could be enhanced by DH&T content that investigates the historic, cultural, political and economic significance of the fibres and the processes used to produce them. Acknowledging the people, land and techniques involved in creating textiles could instigate opportunities to examine globalisation, practices of colonialism and the social justice and environmental issues relating to the textiles industry, leading to better understandings of 'the problems.'

Studio and DH&T could facilitate a collaborative exercise in 'tracing materials,' motivating students to trace the origin of a chosen material back to its raw state (e.g. cotton back to seed). This would highlight the complexities of current textile supply chains and offer opportunities for critical thinking surrounding the current language used within industry to represent sustainability.

Scrutinising mainstream approaches to sustainable textile design will enable students to discover examples of best practice. The fieldwork confirms that students would benefit from more time to research theoretical and practical approaches to sustainable textile design, Studio and DH&T could facilitate this and enhance this learning with opportunities for group discussions. Investigating theoretical approaches, such as circular economies or 'localism,' could also boost the students' understandings of possible career trajectories and help them to consider suitable approaches to their practice. Defining these approaches could lead to occasions for collaboration with external experts or local communities and explorations into alternative ways of making textiles.

Scenario one would require a slower, more considered and inquisitive approach to learning and teaching at GSA and insights from the fieldwork suggest this approach would particularly suit first year learning.

7.6.2 Scenario Two: Defining GSA's Sustainable Values

Insights from the fieldwork indicate that the GSA textile design department does not present clear sustainable values, as students feel sustainability is approached as an add-on to current practice. Sustainability is an area of study that has not been claimed or appropriately explored by the textile design department or DH&T.

Working with students to clearly define and articulate collective sustainable values could provide GSA staff an opportunity to align the textile design department with sustainable approaches to textile design and develop a unique approach to teaching and learning that best represents GSA students and staff.

Identifying a collective definition of sustainable values could be described as doing 'inner work,' as discussed in chapter 2. To successfully participate in collective inner work, students and staff would first benefit from personal inner work, to determine their professional motivations (Vuletich 2015). This would require opportunities for self-reflection alongside training in climate literacy to ensure an understanding of the broader socio-cultural and environmental issues that textile design is entangled with. As suggested by a fieldwork participant, the department could commission external experts from other disciplines, such as linguists, historians and psychologists, to delve into the entangled intricacies of textiles.

As figure 7.3 demonstrates, this work centres around knowledge exchange, and requires multiple opportunities for discussion; in groups, one-to-one, amongst students and staff in respective peer groups, and all together. It would be essential for the department to nurture a supportive and empathetic community environment, of students and staff, to effectively conduct collective inner work.

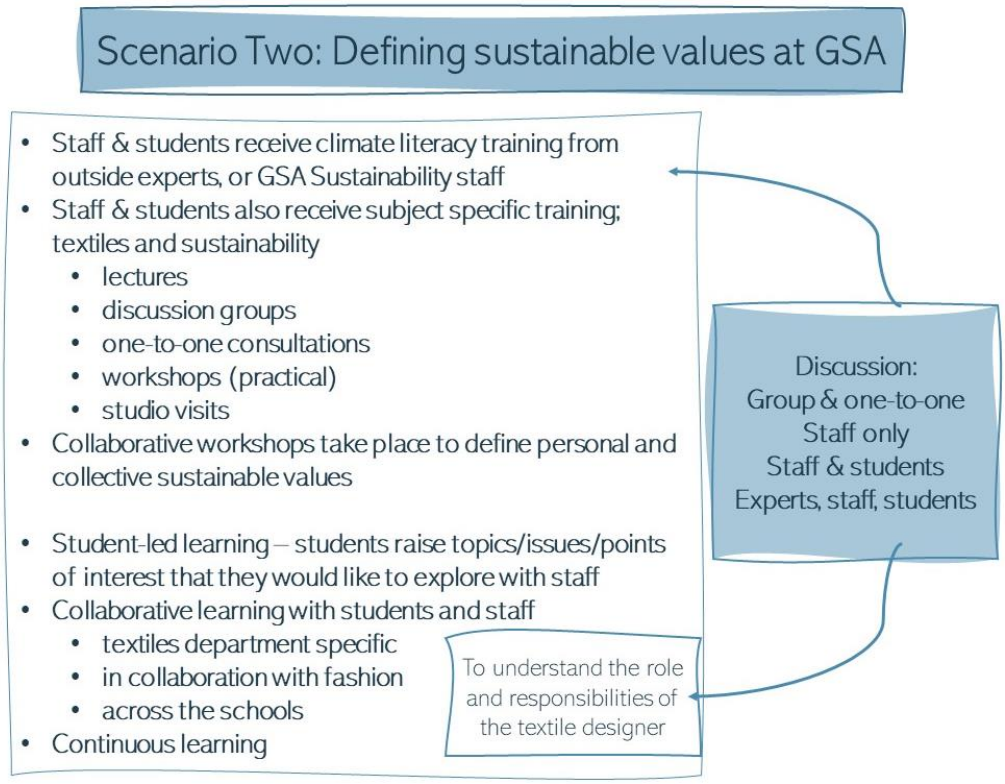

Figure 7.3 Allan, M. (2022) Speculative Scenario 2. Diagram. Source: Author's own

A thriving, supportive community could also prompt two-way knowledge exchange between staff and students and present occasions for student-led learning, as discovered through the Contextual Immersion phase of this research project (chapter 5). Students could instigate explorations into specific materials, techniques or processes and influence the development of a curriculum that reflects their ideas and interests. This would require of the department a flexible and responsive approach to curriculum design.

The department could collaborate with other disciplines across the school to define school-wide sustainable values and facilitate opportunities for students to take part in cross-disciplinary learning. Students from across the disciplines could present their sustainable values to each other, through written, verbal or visual communication, offering chances to participate in the exchange and articulation of tacit knowledge.

This scenario would requires that the GSA textile design department carefully consider the opinions of students and staff to inspire a new curriculum that prioritises a collective approach to sustainability-focused teaching and learning and articulates their sustainable values to wider society.

7.6.3 Scenario Three: Sustainable Priorities

The findings of this research project suggest that textile design students at GSA are predominantly interested in three approaches to sustainable textile design; Valuing Materials, Engaging in Knowledge Exchange and Raising Awareness, and Exploring Alternative Starting Points. As figure 7.4 illustrates, each approach points towards a style of learning that would support student explorations of sustainability and the department could align with any one, as proposed below.

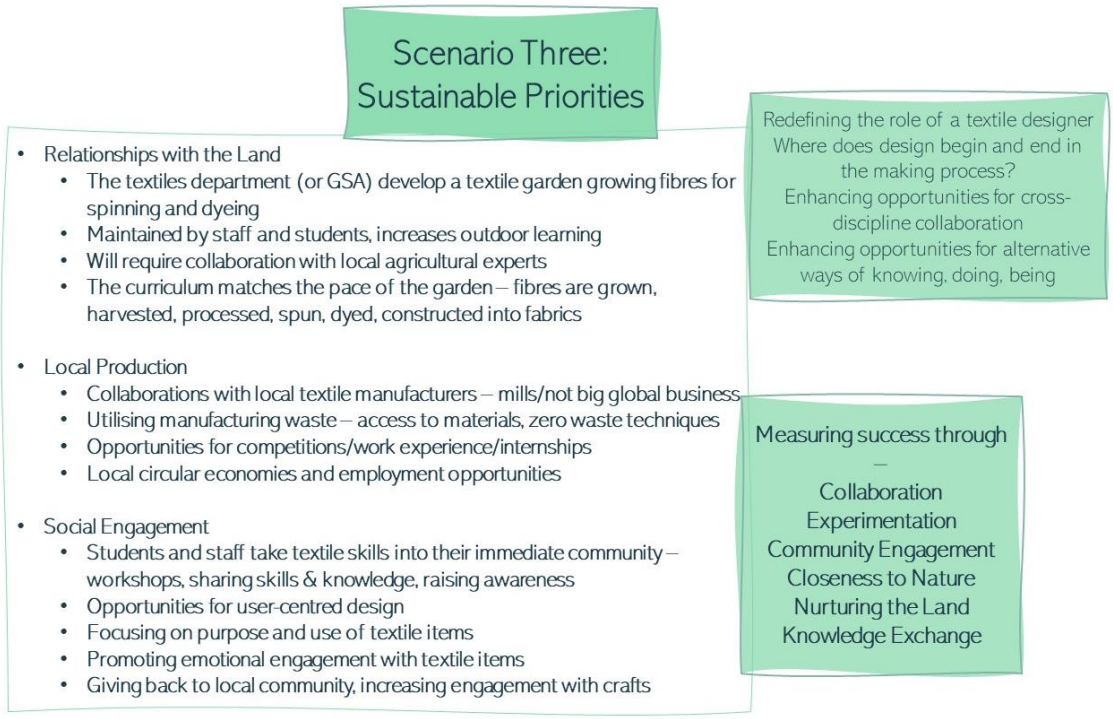

Figure 7.4 - Allan, M. (2022) Speculative Scenario 3. Diagram. Source: Author's own

7.6.3.1 Relationships with the Land

Multiple fieldwork participants expressed an interest in 'natural' approaches to making textiles and suggested the GSA textile design department could create a textile garden on, or close by, campus. An example of this approach is discussed in chapter 2. Students and staff could explore regenerative agricultural practices to textile making that are relevant to each discipline as natural fibres can be used to knit, weave and stitch and pigments from plants can be used for dyeing and printing fabrics.

As one interview participant stressed, this approach would require continued collaboration with agricultural experts and a garden would demand constant maintenance which is laborious and time consuming. This approach is vastly experimental and does not guarantee tangible results. The structure and pace of the course would need to be much slower and prioritise experiential learning, collaboration and nurturing the land over the fast production of textile items. Agricultural experiments could be supplemented by theoretical study and creative exercises such as drawing and technical workshops.

7.6.3.2 Local Production

The fieldwork revealed that the students' main approach to sustainable textile design is utilising waste materials and underscored their desire for access to affordable second-hand or surplus materials. By working in collaboration with local textile manufactures, the department could increase opportunities for students to source surplus fabrics or yarns that would otherwise be going to waste and instigate explorations into local waste management. Long lasting partnerships could also increase knowledge exchange and collaboration between local industry and education, through work experience placements or internships for students and possible future employment.

7.6.3.3 Community Engaged Practice

A number of participants expressed an interest in developing 'socially engaged' practices; working within local communities to skills that promote the care and prolonged use of textile items. The department could initiate relationships with members of the local Garnethill community, or wider Glasgow, and create opportunities for students to articulate and promote the value of their skills through workshops and events. This could also present opportunities for students to engage in co-design and making with 'the wearer' and preserve appreciations of local craft.

The decision to adopt an approach similar to one of the three presented could be devised through the implementation of scenario two. All three of the approaches could easily compliment scenario one.

7.7 Summary

In this chapter I have discussed the findings of the analysis that was presented in the previous chapter. The analysis revealed that the GSA textile design department should aim to utilise four 'Sustainable Sensibilities' of textiles, to design a curriculum that is Considerate, Experimental, Articulate and Sociable. I then presented three speculative future scenarios for the department, underpinned by the sustainable sensibilities.

I will conclude this thesis in the next chapter by presenting a summary of the findings, an outline of the limitations and constraints of the project, the impact and suggestions for future research.

Chapter 8:

Conclusion

To conclude, I will reflect on the process of this research project and its outcomes and discuss the limitations and constraints that occurred. I will also discuss the project's impact and present the potential areas for future research.

8.1 Reflections

To answer the research question;

How can textile design students be supported to explore and develop sustainable practices through examining and enhancing the learning experience at the Glasgow School of Art?

I first intended to gain an understanding of definitions of sustainable approaches to textile design, and the fieldwork revealed that interpretations are subjective and informed by individual experience and priorities. I also aimed to understand the situation within the GSA textile design department and, through a 'familiarisation' phase of interviews, gathered accounts of past students' lived experiences of studying there alongside those of staff members. The Familiarisation phase failed to provide adequate insights into how students could be supported to explore and develop sustainable practices. However, it highlighted the potential for a focus group to reveal more. Moreover, insights suggested that group discussion was suitable for enhancing student engagement with sustainability.

The Contextual Immersion phase facilitated a focus group with current students, and the heuristic methodological approach of this project uncovered the 'barriers' they face to engaging with sustainability. Insights from the focus group also revealed possible practical approaches to teaching and learning that could support students in exploring and developing sustainable textile design practices. However, an analysis of the situation ultimately revealed that the GSA textile design department should work collectively with students to design a tailored approach to sustainability-focused teaching and learning that reflects the values of the students and staff.

Observing and interacting with the focus group participants led me to suggest that the department should aim to be Considerate, Experimental, Articulate, and Sociable in their approach to future curriculum design. The department could prioritise student experience and sustainable values by utilising these four core 'Sustainable Sensibilities' and successfully support students to explore and develop sustainable textile design practices.

8.2 Limitations and Constraints of the project

As with many projects that require sustained participation over several weeks, a lack of consistent participation during the Contextual Immersion phase of the fieldwork was one of the main constraints of this project. However, they also have busy schedules and workloads. While I followed the advice of the textile design programme leader to schedule the focus group at a quiet point across the year group timetables, it clashed with technical workshops for year two students, causing three participants to cease attending after two sessions. Two participants maintained full attendance over four weeks.

The participants were given the opportunity to contribute to the content of two focus group sessions, which acted as an incentive to sustained participation, alongside the chance to learn from peers across year groups.

Another limitation of the project is that the participants of the focus group and interviews, who were students, had an interest and basic knowledge of sustainability and the textiles industry's connections to environmental and social justice issues. Students who do not engage with

sustainability did not engage with this project and their contributions would have contributed to a cohesive representation of the student body.

The interviews during the Familiarisation stage had to take place over Zoom due to COVID-19 mitigations. The digital format restricted the flow of some of the conversations, which I perceived as a small constraint; however, with practice, the interviews became easier. The online facilitation made it easier to navigate the participants' busy diaries.

I also consider my hesitations towards my position and role within this project a constraint. I struggled to comfortably refer to myself as an 'educator' throughout this project and often felt tentative towards examining the teaching at GSA, which impacted the positioning of this project at multiple points. Support from my tutors remedied this as they reminded me that the nature of Situational Analysis allowed me to utilise and recognise my experience as a recent GSA textile design graduate.

8.3 Impact

Multiple participants of the focus group told me that the experience of participating in the project had inspired them to create a sustainability-focused textile and fashion society at GSA. They also confirmed that participation increased their confidence in exploring and discussing sustainability.

This project was also mentioned in the GSA textile design department's programme monitoring and annual report, as an example of good practice and for its potential to influence the curriculum in the future.

8.4 Future Research

This project has shown the potential to explore further the GSA textile design department's relationship with sustainable approaches to teaching and design. A particular area of interest would be to continue working with the textile design students and staff through participatory approaches, to define collective sustainable values and further contribute to future curriculum design.

Insights from the fieldwork suggest that the department could explore several sustainability-focused approaches to teaching, including engagement with local communities. Future research into how textile design students at GSA could be supported to develop social and politically engaged practices would be another area of interest.

The methodological approach of this project could be applied to other art schools and higher or further education design institutions to understand their relationships and attitudes toward sustainability.

8.5 Concluding Remarks

Conducting this research project allowed me to explore an alternative approach to my professional practice and investigate an area of interest that I am deeply passionate about. This project has the potential to act as a call to action to higher education and in particular to the academic professionals who design the textile design curriculum at GSA. The findings and outcomes present as recommendations for the department with the potential to contribute to future curriculum and support explorations of sustainable approaches to textile design through learning experience.

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