

Understanding Students' Perceptions of Sustainability in Global Fashion Education

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ABSTRACT

In response to the urgent climate crisis and evolving demands of the global fashion industry, educational institutions must integrate sustainability into their curricula. By aligning fashion programs with student perspectives and the United Nations Sustainability Development Goals (SDGs), future professionals can acquire the necessary knowledge and skills. Addressing social and environmental concerns in fashion education remains paramount.

This study explores global student perceptions of sustainability within fashion curricula, exploring how educational practices influence attitudes towards sustainable fashion in consumer and producer countries. Building on collaborative research between RMIT University Vietnam and the University of Portsmouth in 2023, the project has been extended to involve student cohorts from Istituto Marangoni London, RMIT University Melbourne, and the University of Lisbon.

Through survey data analysis, the research identifies factors shaping student views on sustainability and assesses pedagogical effectiveness. By understanding these influences, educators can enhance student engagement and promote sustainable practices within the industry. This approach underscores the importance of active learning pedagogies in fostering sustainable commitments. The research contributes

to ongoing conversations about education's role in shaping the fashion industry's future. By conducting a comparative analysis across diverse student cohorts and programs globally, it offers insights into effective sustainable education practices in various cultural and educational settings.

Integrating sustainability into higher education benefits students, academics, and industry professionals alike. Students gain specialized skills for evolving industries, boosting employability and sustainability contributions. Academics benefit from flexible curricula supporting innovative practices and industry connections. Industry professionals can leverage academic collaborations to stay updated on sustainability trends and recruit new talent.

Advocating for a student-centred approach to sustainable fashion education, this study emphasizes the importance of creative research and practical applications for shaping a forward-thinking industry-aligned educational framework.

Keywords: Creative Pedagogy; Design Education; Fashion Curriculum; Social Responsibility; Sustainability

INTRODUCTION & CONTEXT

It is now more crucial than ever for universities to incorporate sustainability into their curricula to respond to the climate emergency and global fashion industry needs. Aligning the fashion and textiles curriculum with student perspectives and the UN Sustainable Development Goals (SDGs) ensures that the next generation of fashion professionals are equipped with knowledge and skills to thrive in an evolving industry. Although some fashion and textiles programs have made significant strides, there is more to achieve when addressing both social and environmental considerations in education.

For more than a decade, the project initiators have concentrated on fashion education with a sustainability lens at various international universities. An observed transformation in students' attitudes towards sustainability is evident: a decade ago, they often questioned the necessity of learning about sustainability, now, its integration into the curriculum is increasingly expected. This evolving mindset aligns with the current trend of youth-led climate demonstrations that are actively engaging educational institutions throughout Europe (Gayle, 2023).

Through shared dialogue, it has been recognised that adopting a student-centred approach in a curriculum development is required to have a better understanding of students' perceptions and expectations. This realisation led to the rationale for this research project, which aims to establish an understanding of what students have learned about sustainability and what they want to learn more about. Drawing on the

author’s academic network, a team of seven was built, across five universities in four countries and across three continents (Table 1).

Name of Institution	Country	Fashion Academic
Istituto Marangoni London	United Kingdom	Noorin Khamisani
University of Portsmouth	United Kingdom	Karen Ryan, Dr. Lara Torres
University of Lisbon	Portugal	Dr. Graziela Sousa
RMIT Vietnam	Vietnam	Corinna Erken
RMIT Melbourne	Australia	Dr. Daphne Mohajer va Pesaran, Dr Carolina Quintero Rodriguez

Table 1. Participating Institutions and academics.

Particularly significant for us will be exploring the perceptions of students from diverse cultural backgrounds, studying fashion situated in countries with vastly different parts of the fashion industry’s global supply chain and therefore differently affected by climate change. For example, according to UNICEF Vietnam is one of the world’s most vulnerable countries to climate change (2024). As a leading fashion manufacturing country, it faces significant challenges due to rising temperatures, extreme weather events and water scarcity which pose threats to their textile and garment industries and its population. In contrast, the UK is one of the largest fashion consumers globally and a high contributor to negative environmental impacts overseas where most of the garments are produced (Institute of Positive Fashion, n.d).

LITERATURE REVIEW

The integration of sustainability into design education has been a focal point for design educators, as evidenced by Sala (2019), Brass and Mazzarella (2015), Williams (2016), and Papanek (1995). The Earth Logic Action Research Plan, emphasizes the necessity for a paradigm shift towards degrowth, highlighting the importance of new perspectives among fashion designers (Fletcher & Tham, 2019). It underscores the need for new knowledge and mindsets, advocating for teaching methods that prioritize student-centred approaches and view teaching as a reciprocal process. Earth Logic proposes "co-learning" as a means to challenge the prevailing growth-centric knowledge hierarchy, promoting more collaborative learning.

John Dewey's educational philosophy stresses bridging the gap between learning and lived experiences to nurture socially responsible citizens (Dewey, 1938 cited in Williams, 2017, 99). Co-creating curricula with students is increasingly recognized as essential, given that students possess firsthand learning experiences that educators may lack (Bovill et al., 2016). Petty's concept of teaching as a reciprocal process

serves as a guiding principle, emphasizing feedback mechanisms, appropriate task levels, and the nuanced dynamics within educational settings (2004).

The focus on sustainability in fashion and textiles education has been a global trend, with ongoing efforts. Notably, the Vietnam Textile and Apparel Association (VITAS) emphasizes the significance of education and training in advancing sustainability within industry. Following the Rana Plaza disaster, UK educators and industry professionals have increasingly drawn on resources provided by activist groups and charities, such as Fashion Revolution and the Ellen MacArthur Foundation, to improve global sustainability practices and standards, including concepts like circularity and supply chain transparency.

The literature underscores the critical role of collaboration between educators and students in addressing the complexities of the climate crisis within higher education. By embracing co-learning and co-creation approaches, institutions can challenge existing knowledge hierarchies and foster environments conducive to sustainable practices and socially responsible citizenship.

Existing research sources are focussed on sustainable fashion education specifically are predominantly educator-led hence our focus here on gathering data specifically from students to inform our future curriculum development strategies and pedagogies. The current scholarly discourse surrounding sustainability integration in design education has been predominantly instructor centric. Notably absent is direct engagement with students, a gap we aim to address in our study. By employing a methodology centred on direct student feedback through questionnaires capturing both quantitative and qualitative data, we seek to uncover students' comprehension across various sustainability facets in fashion, their familiarity with sustainable design and business concepts, perceived importance, and areas for further exploration. This approach, novel in its student-focused nature, diverges from existing literature by prioritizing student perspectives to enrich our understanding and inform future pedagogical strategies and curriculum development in the field.

METHODOLOGY

In this exploratory phase of the research, online surveys were employed to gather insights into students' perceptions of sustainability within the fashion and textiles curriculum. This methodology allows for the collection of both qualitative and quantitative data, which is essential for a comprehensive understanding of students' experiences. The surveys were distributed to students across various levels and courses, this was crucial for uncovering overlooked areas that may not have been previously considered by educators. Purnama et al (2022), indicated the importance of embedding sustainability in fashion education to shape student attitudes effectively. The research team aimed to identify pivotal factors that influence students'

perceptions and assess the efficacy of existing pedagogical methods. This aligns with Birdsall (2015), who argued that educators must develop a robust understanding of sustainability concepts to effectively integrate them into their teaching. Furthermore, the study's focus on evaluating the influence of diverse educational environments on students' perspectives is supported by Hur and Cassidy (2019), who highlighted the challenges and opportunities in implementing sustainability in fashion education. The mixed-methods approach utilized in this study, which involved both qualitative open-ended questions and quantitative data collection, is consistent with contemporary research practices in sustainability education. For instance, the integration of qualitative insights into students' attitudes towards sustainability, as explored by Sammalisto et al. (2016), underscores the necessity of understanding students' self-perceived sustainability actions post-education. This comprehensive methodology not only facilitates a deeper understanding of students' perceptions but also helps in identifying effective pedagogical strategies that can enhance sustainability literacy among fashion students.

FINDINGS

Academics from each university have individually created a summary of the initial findings from the data collected.

The initial findings from RMIT Vietnam provide an insight into general trends of the respondents representing 20% of the student cohort of the Bachelor of Fashion (Enterprise). A holistic degree, focusing on forming students into creative leaders equipped with problem-solving skills in design, retail, and ethical business practices for impactful contributions to the fashion industry.

The educator's hopeful expectations correlated to students' desires for curriculum development: 93% of students found it important to integrate sustainability into their curriculum and 90% wanted to learn more.

The responses regarding their understanding of sustainable design strategies and business models revealed a clear correlation between the concepts taught within the program and a lower level of awareness concerning models not explicitly covered. More abstract frameworks such as degrowth, digital design and NFTs showed the lowest results, whereas concrete methods such as zero waste and modular design showed much higher awareness.

Students emphasized the importance of practical knowledge, particularly in areas like sustainability in the supply chain, applied business practices, upcycling, and materials and techniques. A notable interest in digital fashion emerged, with half of the respondents recognizing it as an underexplored opportunity. Overall, the students emphasized the importance of integrating sustainability into their education to address

the detrimental environmental impacts of the fashion industry, highlighting the urgent necessity to promote environmental stewardship in Vietnam.

The initial findings from the University of Portsmouth offer valuable insights into students' perceptions and learning priorities. The respondents, representing various academic levels across fashion design and marketing courses, emphasised the importance of sustainability, with 100% rating it as 'important' or 'very important' to their education. Similarly, 91% expressed an ardent desire to learn more about sustainability, particularly practical applications.

Students showed familiarity with tangible concepts like zero waste, design for longevity, and circular fashion design. However, awareness was noticeably lower for more abstract or emerging frameworks such as regenerative fashion and degrowth. Similarly, practical sustainable business models like rental services and take-back schemes resonated more strongly than less explored ideas like digital fashion houses. When asked about integration into the curriculum, 91% of students rated it as 'well' or 'very well' integrated, though many highlighted areas for improvement. The student feedback points to a demand for more actionable knowledge in areas such as sustainable supply chains, upcycling techniques, and applied business practices. Overall, these findings underscore the importance of embedding both conceptual knowledge and practical and innovative approaches in the curriculum to prepare students as responsible contributors to the evolving fashion industry.

The courses at Istituto Marangoni London (IML) follow the philosophy of the international private institution which has a focus on luxury and a constant dialogue with industry. Sustainability is integrated across the courses although in a variety of approaches and often linked to industry projects. There is a new MA in Sustainable Fashion & Systems which offers students an opportunity to focus on in-depth research to evolve fashion practice and business although currently enrolment is low.

At IML, both fashion design and fashion business students were surveyed, we gathered 58 responses from MA and 73 from BA, a total of 131 responses (from the cohort of 745). Students are predominantly international rather than from the UK. Most students felt that it was very important or important for sustainability to be integrated into the curriculum at both undergraduate and postgraduate levels. Positively they also felt that sustainability had been well integrated into the curriculum, although they still want to learn more 46% at BA and 75% at MA. The students evidenced strong familiarity with practical design approaches like design for longevity, zero waste, and circular fashion design. Knowledge around newer concepts such as regenerative fashion and modular design were significantly lower. Sustainable business models including take-back schemes and rental services were more familiar to students than more emerging explored ideas like digital fashion houses and degrowth.

From a cohort of 220 students from the Fashion Design Bachelor and Master

at the University of Lisbon, 60 responses were collected making up 28% of the cohort (39 from BA and 22 from MA). The respondents showed a familiarity with most of the sustainable design strategies, except for regenerative fashion design. The most familiar business models, as expected, were second hand/resale models, which is a feature of Gen X's profile and this generation's consumption habits. Degrowth strategies were less familiar.

Most of the students (68%) stated it is 'Very Important' to learn about sustainability in their curriculum, and while 55% stated that these topics are 'well integrated' in their curriculum, 77% feel they need to learn more. Students mentioned the need to learn more about sustainable fabrics and more industry connections. Given Portugal's strong textile industry, this could be actioned easily and effectively. They showed a strong commitment, as well as a real concern about the unsustainable practices of the fashion industry. Acknowledging their role, one participant stated:

"As fashion designers taking into account the pressing issues regarding the industry's impact on the environment and society, it is necessary to understand how we can contribute positively to solving these problems."

The curriculum, although addressing sustainability holistically, currently does not address specific subjects in the bachelor's degree. The new MA curriculum has a specialized sustainability track in the second year. Surprisingly, from the 13 students enrolled, none has chosen this track.

At RMIT Melbourne, multiple cohorts in the School of Fashion and Textiles provided insights. 78 responses were collected: 5% responses from students in the Bachelor of Textiles (Design), 13% in Bachelor of Fashion and Textiles (Sustainable Innovation), 32% in the Bachelor of Fashion (Enterprise), and 50% in the Bachelor of Fashion (Design). Like others in this study, data showed that students felt more familiar with material-led design strategies such as Upcycling (3.38 average score), sustainable fabrics (3.19) and Zero waste approaches to material usage (3.06). None of these however exceeds 4 on the scale, so overall the confidence level remains low. The least familiar design strategies were the use of mono-materials (1.55) and modular design (1.71). Upcycling, repair, and rental services were the most known sustainable fashion business practices. The least known were degrowth and NFT's. 90% of the participants responded that it is important (29%) or very important (61%) to integrate sustainability in their education and it is highlighted through these participant's comments:

"We need to learn that capitalism isn't set up for sustainability, we can't just do our bit, we need radical change"

"I believe sustainability shouldn't just be an "add on" in any type of business or

practice but an inherent requirement”

It is important to highlight that 64% of students believe that sustainability has been integrated well or very well into the curriculum, with 58% of participants believing they need to learn more, 31% were unsure about it and 10% believing that sustainability has not been integrated into the curriculum enough.

CONCLUSION

These findings from the initial round of analysis conducted individually, requires more in-depth analysis, conducted collaboratively among the academics to enhance and build on the constant comparative data analysis method utilised.

Across all the universities, students expressed a desire for sustainability to be integrated into their curricula, in both fashion consumer and producer locations. Another notable insight was the need for both practical knowledge and industry connections. Students expressed a desire to learn more about sustainable material, supply chains integration and applied business practices. This highlights the importance of having connections with industry partners and indicates a growing recognition among students of the importance of bridging theory with real-world industry innovation.

Our findings emphasise the need for innovative teaching methods that will inspire students to become advocates for change within the fashion system. This could involve teaching beyond the classroom by integrating real-world industry challenges, enacting industry and cultural change through hands-on workshops or fostering a comprehensive approach to fashion pedagogy that responds to the environmental and social impacts of the industry.

Reflecting on this first phase, the implications of integrating sustainability into curricula extends to students, academics, and industry professionals. For students, this equips them with the knowledge and skills to pursue specialist graduate roles in an evolving industry, enhances their employability and prepares them to be proactive in the advancement of sustainable fashion. For academics, adopting a structured approach to sustainability-led curricula allows for the integration of innovative practices and methodologies. Enabling academics to establish and strengthen industry networks, thereby enriching the academic experience with real-world applications and insights related to sustainability. For industry, the study highlights the importance of collaboration with academia to stay ahead of sustainability compliance and leverage new talent.

Future plans involve enhancing the curriculum to focus on Industry Partnered Learning (IPL) projects, that provide students with real-world context and agency for action.

Universities must invest in staff training on sustainability and industry innovation. This could evolve into co-designing curricula with students (Fletcher & Tham, 2019). To advance student-centred education, we must establish clear sustainability-linked objectives not only in the learning outcomes, but in learning and teaching strategies. A future expansion of the project may involve alumni as well as teaching staff to further understand how to holistically integrate sustainability and enable all stakeholders to close the circle of integration. Fostering international collaborations and ongoing research initiatives can empower teachers and students to envision and create sustainable fashion futures together.

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