

Transdisciplinary Methodologies for Cultural Sustainability in Fashion Design

Metodologias Transdisciplinares para a Sustentabilidade Cultural no Design de Moda

Metodologías Transdisciplinarias para la Sostenibilidad Cultural em el Diseño de Moda

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Abstract

This article offers a theoretical-methodological reflection on the role of transdisciplinarity in fashion design education, with a focus on valuing artisanal practices, the relationships between designers and artisans, and cultural sustainability in fashion design through the development of culturally sensitive educational practices, that is, practices that recognise, respect, and incorporate the sociocultural contexts of the individuals involved. Drawing on the distinction between multidisciplinary and transdisciplinary approaches, the study adopts a qualitative and critical methodology to analyse four teaching methodologies: participatory design, cultural storytelling, project-based learning, and systemic learning, organised around three structuring axes: methodological, strategic, and validation. The systematisation of these approaches, presented via an analytical framework comprising design tools, modes of practical application, and expected outcomes, facilitates the integration of theory, practice, and craft. This articulation contributes to the education of socially engaged designers committed to fostering cultural sustainability as a response to the complexities faced by the fashion sector. It is concluded that transdisciplinary approaches, by repositioning fashion design education, promote processes of social innovation and cultural sustainability, providing foundations for a transformative design education rooted in ethical and identity-based cultural practices.

Keywords: Fashion Design. Transdisciplinary. Teaching methodologies. Cultural Sustainability. Textile crafts.

Resumo

Este artigo propõe uma reflexão teórica-metodológica sobre o papel da transdisciplinaridade no ensino do design de moda, com foco na valorização das práticas artesanais, nas relações entre designer e artesão e na sustentabilidade cultural no design de moda através da construção de práticas educativas culturalmente sensíveis, ou seja, práticas que reconhecem, respeitam e incorporam os contextos socioculturais dos sujeitos envolvidos. Partindo da distinção entre abordagens multidisciplinares e transdisciplinares, o estudo adota uma metodologia qualitativa e crítica para analisar quatro abordagens metodológicas de ensino: design participativo, storytelling cultural, aprendizagem baseada em projetos e aprendizagem sistêmica, organizadas em três eixos estruturantes: metodológico, estratégico e de validação. A sistematização dessas abordagens, apresentada por meio de um quadro analítico composto por ferramentas de design, formas de aplicação prática e resultados esperados, favorece a integração entre teoria, prática e artesanato. Essa articulação contribui para a formação de designers socialmente engajados e comprometidos com o desenvolvimento da sustentabilidade cultural como resposta às complexidades enfrentadas pelo setor da moda. Conclui-se que as abordagens transdisciplinares, ao reposicionarem o ensino do design de moda, favorecem processos de inovação social e sustentabilidade cultural, oferecendo fundamentos para uma educação em design transformadora e enraizada em práticas culturais éticas e identitárias.

Keywords: Design de moda. Transdisciplinaridade. Metodologias de ensino. Sustentabilidade cultural. Artesanato têxtil.

Resumen

Este artículo ofrece una reflexión teórico-metodológica sobre el papel de la transdisciplinariedad en la enseñanza del diseño de moda, con énfasis en la valorización de las prácticas artesanales, las relaciones entre diseñadores y artesanos, y la sostenibilidad cultural a través del desarrollo de prácticas pedagógicas culturalmente sensibles.

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A partir de la distinción entre enfoques multidisciplinares y transdisciplinares, el estudio adopta una metodología cualitativa y crítica para analizar cuatro estrategias educativas: diseño participativo, narrativas culturales, aprendizaje basado en proyectos y pensamiento sistémico. Estas se organizan en tres ejes estructurantes: metodológico, estratégico y de validación. La sistematización de estas metodologías, presentada mediante un marco analítico compuesto por herramientas de diseño, formas de aplicación práctica y resultados esperados, favorece la integración entre teoría, práctica y artesanía. Esta articulación contribuye a la formación de diseñadores socialmente comprometidos con el desarrollo de la sostenibilidad cultural como respuesta a las complejidades del sector de la moda. Se concluye que los enfoques transdisciplinares, al reconfigurar la enseñanza del diseño de moda, operan como dispositivos de innovación social y sostenibilidad cultural, ofreciendo fundamentos para una educación transformadora, arraigada en prácticas culturales éticas e identitarias..

Palabras clave: Diseño de Moda. Transdisciplinariedad. Metodologías de Enseñanza. Sostenibilidad Cultural. Artesanía Textil.

1 Introduction

In addressing the relationship between craft and design, the inherent complexity of the multiple, and often contradictory, meanings and uses that permeate both fields becomes evident. The paradox between the symbolic and creative values of craft and the methodologies and processes characteristic of design is deeply complex, requiring the construction of viable pathways for dialogue and practices that ensure craft receives the same recognition and respect afforded to design and art. In this context, it is essential to reinforce the historical ties between the two domains, established in the nineteenth century through the conceptual contributions of John Ruskin and William Morris. The Arts and Crafts movement, influenced by their ideas, represents one of the earliest manifestations of cooperation between craft and design, emerging as a response to the dehumanisation and mechanisation of industrial production (Sark, 2023).

In parallel, it is necessary to reflect on the conceptual duality between design and craft. The latter, often instrumentalised as the antithesis of “respectable” work—traditionally associated with men—has historically been relegated to an inferior position, particularly when linked to domestic production carried out by women (Sark, 2023). In discussing this negationist paradigm, which overlooks the creative, cultural, symbolic, historical, and economic dimensions of craft, the same author draws on the perspectives of Craftivism, as developed by scholars such as Betsy Greer (2014), Sarah Corbett (2019), and Julia Bryan-Wilson (2017). These approaches contribute to the understanding of craft as a tool of critique against corporate culture and mass consumption, highlighting its potential as a political and social act aimed at an ideological shift that prioritises people and the planet.

In constructing a broad and cooperative universe between craft and design, it becomes essential to reconsider the role of the designer. Beyond their creative ability to conceive new products, contemporary challenges related to environmental, social, cultural, and economic sustainability come to the fore. Thus, it is evident that the designer must transcend mere design-related skill, developing competencies that enable a critical analysis of global issues and the proposition of effective responses. In this regard, professionals must understand their transformative role, adopting methods and

procedures that incorporate multidisciplinary approaches, foster collaboration with specialists from diverse fields, including artisans and communities, and consider both local and global perspectives (Davis & Dubberly, 2023). Collaboration between designers and artisans, in this context, proves to be fundamental, as it enables a professional complementarity that not only addresses existing gaps in both fields but also enhances the revitalisation of craft and the role of the artisan, which is increasingly at risk of disappearing (Hu *et al.*, 2024). This articulation becomes even more significant when guided by contemporary approaches committed to the pillars of sustainability, contributing to cross-disciplinary, conscious, resilient, and socio-culturally relevant dialogues and practices. Contributing to this expanded understanding, Hu *et al.* (2024) identify three perspectives on the value of traditional craft in the current landscape: 1. They highlight craft's potential as a tool for local economic and social development, through the valorisation of singular identities, productive autonomy, and artisanal skills, making it competitive in both domestic and international markets; 2. They point to its role in strengthening regional social and identity bonds, promoting community cohesion and a sense of belonging; 3. They emphasise that, in partnership with design, craft can offer integrated responses to environmental, social, ethical, cultural, and economic sustainability challenges.

The valorisation of ancestral knowledge, particularly in the textile domain, has gained increasing visibility within public policies, cultural institutions, and international initiatives. Notable examples include: the *Crafting Futures* programme, which aims to support and promote global craft practices through cooperation and education (British Council, 2019); the UNESCO World Conference – MONDIACULT (UNESCO, 2025), which addresses cultural policies and sustainable development; and the Brazilian Craft Programme (*PAB*) (gov.br, 2025), which focuses on coordinating and developing actions to valorise Brazilian artisans and promote craft from an economic perspective, including reports on its national growth. These actions recognise the significance of manual traditions as intangible heritage and as sources of social, cultural, and economic innovation, expanding their presence in contemporary debates on sustainability and identity. However, regarding the inclusion of traditions, oral expressions, places, memories, knowledge, and traditional manifestations passed down through generations

(d'Oliveira Martins, 2020), significant gaps remain. Textile ancestries continue to be neglected in official lists of protected assets. In Portugal, for instance, although nine intangible heritage elements are registered on UNESCO's list (Comissão Nacional da Unesco, [s.d]), none relate to textile knowledge, despite its historical, cultural, and economic significance. A similar situation is observed in Brazil, where only five forms of traditional knowledge have been officially recognised as intangible cultural heritage, excluding textile traditions (Ministério do Turismo, 2016).

However, many of these processes of recognition and valorisation remain confined within a limited multidisciplinary logic, in which traditional knowledge is often revisited by society, governments, institutions, and design itself as decorative or merely illustrative resources, without real integration of their epistemologies. At the same time, the teaching of sustainability in design—particularly in fashion design—continues to be addressed in a sectoral and peripheral manner, hindering the development of a curriculum that aligns with contemporary challenges (Schulz et al., 2023). This situation highlights the lack of robust pedagogical methodologies that enable genuinely transdisciplinary approaches, capable of overcoming the divide between academic knowledge and traditional knowledge. It is, therefore, a matter of promoting a more equitable, collaborative, and locally grounded production of knowledge (Schulz et al., 2023; Schulz & Cunha, 2024).

Considering the above, this paper briefly revisits previous discussions², highlighting the conceptual debate between multidisciplinary and transdisciplinarity as applied to the articulation between design and traditional knowledge. The focus shifts from a purely conceptual distinction between multi- and transdisciplinary approaches to the presentation of a practical and replicable methodological framework. Accordingly, the article pursues two main objectives: first, to contribute to the development of new educational models in fashion design training that are capable of responding to the challenges and complexities of sustainability; and second, to expand upon earlier contributions to transdisciplinarity by proposing pedagogical tools, methodologies, and

² This study forms part of an ongoing research trajectory on fashion design education, in which the concepts of multidisciplinary and transdisciplinarity have already been explored in previous works by the author, duly referenced in this article.

design strategies applicable to teaching models that transcend the traditional boundaries of university structures. The article is organised into three sections: (1) a reflection on the relevance of transdisciplinarity in integrating ancestral and local knowledge into fashion design education; (2) the presentation of methodologies that support the training of designers, both as educational strategies and as professional practice; and (3) a final discussion that critically reviews the assumptions explored and identifies possible future directions for sustainable fashion, based on approaches that foster dialogue between global, local, and ancestral fashion systems.

2 The transdisciplinary approach

This section proposes a conceptual and practical reflection on the differences between multidisciplinary and transdisciplinarity as applied to fashion design education, in dialogue with ancestral textile knowledge and its respective actors. The aim is not to deepen the theoretical distinction between these two concepts, but rather to analyse how these approaches impact curricular integration, the role of artisans in educational processes, and the expected pedagogical outcomes. Higher education in design, historically anchored in segmented disciplinary models, now demands a structural reconfiguration. The contemporary context, particularly in the aftermath of the pandemic, has underscored the urgency of rethinking how design is taught and learned, incorporating non-traditional languages and experiences connected to territories, local knowledge, and ethical-social dimensions (Davis *et al.*, 2023).

To clarify the approach adopted in this study and establish its connection with fashion design education, we briefly revisit the meanings attributed to the notions of multidisciplinary and transdisciplinarity. Multidisciplinary is characterised by the ability to bring together different disciplines around a common project or objective, without fully integrating their epistemological foundation (Schulz & Cunha, 2024). Transdisciplinarity, on the other hand, entails the simultaneous fusion of multiple forms of knowledge—technical, philosophical, artistic, political, cultural, environmental, and social—through co-creative processes that transcend institutional boundaries and value transversal knowledge (Schulz *et al.*, 2023).

Based on these frameworks and the introductory premises, Table 1 summarises the contrasts between these two approaches, with a focus on educational practice in fashion design. The aim is to provide clear support for the development of pedagogical strategies that are more collaborative, sustainable, and effective, capable of contributing to the safeguarding of ancestral knowledge and addressing the challenges of contemporary fashion.

The table below (Table 1) provides an initial comparative framework; however, contrasts between the approaches gain depth when analysed considering pedagogical practices and the values of cultural sustainability in fashion design education. Initially, debates surrounding fashion and sustainability focused on mitigating the environmental harm caused by the industry, adopting a technocentric approach (Murzyn-Kupisz & Hołuj, 2021). Over time, however, this perspective has broadened to consider social, ethical, and cultural issues, incorporating the valorisation of craftsmanship as an identity repertoire and a driver of social innovation. This highlights the need to reconfigure design curricula based on ecocentric (design for sustainability) and structural approaches (Murzyn-Kupisz & Hołuj, 2021).

Table 1: Contrasts between Multidisciplinarity and Transdisciplinarity

	Multidisciplinarity	Transdisciplinarity
Level of integration at the curricular level	Disciplines contribute to the inclusion and development of craftsmanship from a design perspective, while maintaining their individual boundaries and characteristics.	Fusion of knowledge into a new method: integrating design, culture, artisans, education, disciplines, and sustainability.
Role of artisans involved in curricular development	Artisans seen merely as providers of technical and practical knowledge, labour only. No cultural involvement.	Artisans as co-creators and disseminators of cultural, practical, and ancestral knowledge. Teaching and learning through a transversal language, going beyond ancestral techniques and transcending cultural, social, economic, and environmental barriers, integrating design methodologies.

Practical example in fashion design	Development of collections within project disciplines, where students seek out artisans to apply a specific technique, such as garment embroidery.	Symbiosis of knowledge through creative, methodological, and cultural fusion workshops, where artisans and students collaborate in methodological activities aimed at expanding creativity and achieving innovative outcomes.
Expected outcomes	Development of products with cultural references only. There is no sustainable proposal for those involved and no methodological system that allows for knowledge development and replication.	Replicable knowledge system based on sustainability pillars. Development of cultural narratives through teaching materials, immersive experiences, transversal projects among others.

Source: Schulz,F.E., 2025.

Authors such as Paula Bertola (2018) advocate multidisciplinary as an initial step towards shifting the focus and emphasis from the “product and designer” to the “value and design process.” According to Kate Fletcher and Lynda Grose (2021), approximately 80% of a product’s environmental costs are determined at the design stage, thereby highlighting the need to reconfigure design from focusing on “shaping material goods for sale” to developing professionals who approach the design process with deeper levels of empathy, recognition of sociological patterns, innovation, and holistic vision. Nevertheless, even in fashion schools that have already incorporated sustainable principles in a multidisciplinary manner, disciplinary fragmentation persists, often reducing artisans to mere technical executors, detached from the cultural realities of students. This limitation underscores the urgency for broader curricula, rooted in territorial experiences and capable of integrating theory, practice, and ancestry (Davis *et al.*, 2023).

In this context, transdisciplinarity emerges as a transformative approach by fostering equitable dialogue between academic and ancestral knowledge. Artisans and designers cease to occupy hierarchical positions, becoming instead co-creative partners in educational processes that encompass culture, technique, and ethics. This perspective is supported by scholars such as Edgar Morin (2007), who recognises the complexity of educational systems, and Ezio Manzini (2008), who emphasises the role of social design in building fairer futures. Transdisciplinarity further contributes to cultural sustainability by

reactivating, rather than merely utilising, traditional techniques, as well as strengthening territorial identities as a foundation for the construction of distinctive design languages. Initiatives such as Crafting Futures (British Council, 2019) exemplify this potential by promoting exchanges grounded in shared practices and values between communities and educational institutions. Within this framework, adopting a transdisciplinary language in design education facilitates the training of professionals with multiple roles: designers as communicator-educators, capable of sharing knowledge within communities and organisations; as facilitators of change in production and consumption patterns through practices such as co-design; as activists engaged with governmental and community organisations; and as entrepreneurs of social and cultural innovation (Fletcher & Grase, 2021).

By emphasising the pedagogical value of transdisciplinarity, it is argued that the educational process must address cultural sustainability as a complex, systemic, and transdimensional issue, requiring transformations not only in content but also in organisational structures and modes of learning (Schulz & Cunha, 2024; Wubs et al., 2020). Although culture is not explicitly listed among the 17 Sustainable Development Goals - SDGs (United Nations, 2015), it is present in a transversal manner across various targets. Kovács (2020) highlights that, upon analysing the 2030 Agenda, culture is interpreted as an essential element for multiple fields of action, despite not being formally recognised in the UNESCO document, which nevertheless recommends the development of diverse and adaptable cultural models tailored to local contexts as a prerequisite for sustainable solutions.

This understanding is reinforced by Edge (2023), who points out that sustainable development strategies must be people-centred, employing cultural approaches that, by their humanistic and anthropological nature, foster a sense of belonging, individual and collective creativity, as well as the active participation of diverse social actors in support of sustainability. Kovács (2020) and Edge (2023) converge in recognising culture and creativity as dynamic processes intrinsically linked to imagination, the generation of new ideas, and the construction of novel ways of interpreting and acting in the world. In this regard, craft, as a cultural expression, is acknowledged by UNESCO as a fundamental part of history and collective identity. Moreover, it constitutes an

educational, creative, and social resource, significant for the development of sustainable practices and the promotion of responsible consumption of natural resources (Ionică, 2022).

Linking transdisciplinarity to the SDGs emphasises the urgent need for educational models that transcend the traditional boundaries of fashion design teaching, fostering innovative methodologies that are sensitive to ancestry and committed to inclusion and social justice. It is within this framework that the following section is situated, devoted to the reflection on design methodologies guided by a transdisciplinary logic, capable of integrating artisanal knowledge into the educational process in an ethical, contextualised, and replicable manner.

3 Design methodologies with transdisciplinary approaches

Given the complexity of the challenges facing fashion design education in diverse cultural contexts, the adoption of methodologies with a transdisciplinary focus becomes essential. Such approaches can recognise local narratives and historical knowledge as foundations for constructing alternative futures in design education (Noel *et al.*, 2023). These methodologies not only integrate academic and traditional knowledge but also reposition artisans as active agents in the educational process, fostering sustainable, collaborative, and culturally rooted pedagogical practices. This perspective is reinforced by an expanded understanding of the role of clothing and textiles in fashion, viewed not merely as aesthetic elements but as cultural records that function as spaces for sensory experience, identity, and meaning making (Sanches, 2017). Situated at the intersection of culture, everyday life, technology, and economy, fashion design therefore demands methods and methodologies capable of articulating diverse forms of knowledge and teaching (Sanches, 2017).

Based on the theoretical premises discussed previously, the methodologies presented herein operate under a logic of integration between theory, practice, and cultural territory. They are grounded in the valorisation of craftsmanship as living heritage and in the creation of learning environments that foster the recognition of multiple epistemologies (d'Oliveira Martins, 2020; Schulz & Cunha, 2024). Within this context,

three structuring axes are proposed, deemed highly applicable to fashion design education and aligned with the principles of transdisciplinarity:

I. Methodological Axis – Collaborative Mapping or Participatory Action Research (PAR):

This axis focuses on the application of design methodologies and proposes the documentation of techniques and processes through active listening and the direct participation of artisans, recognised as holders of technical, historical, symbolic, and social knowledge. Cultural mapping and PAR, therefore, involve activities that acknowledge the local and national cultural contexts of those involved (Martins et al., 2020; Murzyn-Kupisz & Hołuj, 2021). Tools such as cultural cartographies, visual narratives, and audiovisual records are frequently employed. A notable example is the *Saber Fazer Portugal* programme, which documents, preserves, and disseminates traditional Portuguese artisanal knowledge through interactive digital formats (Programa Saber Fazer, 2025).

II. Strategic Axis – Dialogue and Co-creation Laboratory:

Structured around strategic principles centred on human relations, this axis proposes workshops in which ancestral techniques are shared among artisans, students, and academic staff, fostering reinterpretations, prototypes, and hybrid forms of production. Beyond technical learning, these spaces facilitate cultural exchange through the sharing of experiences and knowledge (Brown & Vacca, 2022). This practice supports the awakening of students' interest in specific textile cultures, a process referred to by Brown and Vacca (2022) as *cultural appreciation*. Initiatives such as *Voces de la Artesanía* (Marinucci & et al., 2022) exemplify the effectiveness of this approach by encouraging mutual recognition among participants and the emergence of unique visual and methodological languages. These practices engage with the concepts of design-driven innovation and craft-based innovation, wherein craft is re-signified through processes of innovation, revalorisation, and contemporary recontextualization (Vacca et al., 2023).

III. Cultural Validation Axis:

This axis concerns the critical analysis of the impact of applied methodologies

on the preservation and activation of intangible heritage. Qualitative indicators, such as increased interest in artisanal textile techniques, the valorisation of traditional female-led practices, and the incorporation of such knowledge into student projects, serve as evidence of this process. Here, design is understood as a meaning-making agent, capable of promoting and valuing craftsmanship and its practitioners without distorting their identity (Vacca *et al.*, 2023). This logic also extends to the field of social and environmental responsibility within brands, as exemplified by the Brazilian initiative *Catarina Mina* (2023), which publishes impact reports reflecting the outcomes of collaborative work with female artisans.

These three axes represent, in simplified form, fundamental stages of the design process and provide a solid foundation for the development of educational proposals that are sensitive to place, culture, and ancestral practices. Nevertheless, for these principles (axes) to be effectively incorporated into the institutional context of higher education in fashion design, they must be translated into didactic methodologies that are applicable within the classroom setting. In this regard, Table 2 presents a systematisation of transdisciplinary approaches, aligning the axes outlined above with specific design tools, practical application strategies, and expected outcomes, based on the approaches studied and applied by the following authors: Vacca, Bertola and Colombi (2023); Brown and Vacca (2022); Martin *et al.* (2020); Murzyn-Kupisz and Hołuj (2021); and Schulz *et al.* (2023). The aim is to guide educators and institutions seeking to develop formative experiences grounded in disciplinary knowledge and integration of the theory, practice, and culture.

Table 2 – Design Methodologies with Transdisciplinary Approaches

Methodology axes	Examples of Design Tools	Practical Application	Expected Outcomes
Cultural Storytelling <i>I. Methodological Axis – Collaborative Mapping or Participatory Action Research (PAR)</i>	Visual narratives, digital platforms.	Documenting the stories of craftswomen; understanding the history of techniques and their cultural associations (technical visits and subjects such as fashion and dress history, anthropology, sustainability).	Preservation and safeguarding of intangible cultural heritage; emotional connection with students, designers, and consumers.
Participatory Design	Co-creation workshops,	Working with groups of craftswomen on collection development projects, either in	Prototypes combining ancestral techniques

II. Strategic Axis – Dialogue and Co- Creation Lab	mind maps, collaborative work.	the classroom or within cultural and local settings. E.g. design studio modules involving collaborative projects between students and artisans, immersive experiences through creative residencies and extracurricular programmes.	and contemporary design.
Project-Based Learning I. Methodological Axis – Collaborative Mapping or PAR; II. Strategic Axis – Dialogue and Co- Creation Lab	Creative briefing, idea prototyping, media exploration.	Workshops where students tackle real- world challenges. Subjects such as marketing, communication, and strategy. E.g. supporting the process of recognising a specific technique; assisting with communication and promotional strategies.	Development of educational and knowledge-sharing projects rooted in cultural heritage.
Systems Thinking III. Cultural Validation Axis	Relationship diagrams, strategic validation tools etc.	Analysing the impact of methodologies in relation to the SDGs, and how actions can effectively affect communities, cultures, the environment, industry, and consumers (measuring sustainability impacts across all dimensions).	Replicable educational models supported by previously tested guides and frameworks.

Source: Schulz,F.E., 2025.

The systematisation presented highlights that teaching methodologies with a transdisciplinary focus not only broaden the technical and creative repertoire of fashion design students but also serve as instruments for valuing and safeguarding ancestral textile knowledge. By integrating collaborative mapping, co-creation workshops, and processes of cultural validation, such approaches foster a critical, sensitive, and contextualised education. The methodological examples discussed, alongside the tools associated with each axis, demonstrate the feasibility of applying these models in real educational contexts, while respecting the cultural and territorial specificities of the communities involved. Davis and Dubberly (2023) emphasise the importance of design as an inclusive, responsive, and social practice, grounded in respect for communities, places, and cultures. Specifically, regarding systems learning linked to the axis of cultural validation, its contribution lies in developing students' sensitivity and analytical competence, enabling them to understand how different cultural elements interact within interconnected dynamics, both locally and globally (Hall, 2023).

More than merely didactic alternatives, these methodologies represent viable pathways towards a transformative education, aligned with the SDGs and guided by a vision of fashion that is sustainable, ethical, and rooted in the cultural realities of the territories in which design is practised. In this regard, the development of transdisciplinary methodological practices contributes to reconfiguring the role of the designer as a mediator of dialogues between textile cultural ancestries and innovation, between technique and culture, and between university and society (Schulz & Cunha, 2024).

4 Discussion and conclusion

The consolidation of transdisciplinary pedagogical practices in fashion design education is becoming increasingly necessary, considering the ethical, cultural, and environmental challenges that define contemporary society. By fostering the convergence of academic knowledge and artisanal traditions, particularly in textiles, such approaches create space for educational processes that are more attuned to territory, ancestry, and socio-cultural values.

The integration of methodologies grounded in transdisciplinarity, such as collaborative mapping, co-creation laboratories, and processes of cultural validation, contributes to a redefinition of the designer's role, preparing them to engage with the evolving paradigms of the profession and to better understand their function as cultural agents, knowledge mediators, and facilitators of social innovation (Davis & Dubberly, 2023). These approaches not only enrich the technical and creative repertoire of fashion design students but also value ancestral textile craftsmanship as intangible heritage and as a driver of intellectual, affective, and economic creation. As argued by Davis and Dubberly (2023) and Meyer and Norman (2020), it is essential that designers, understood here as both practitioners and educators, move beyond reliance on creative intuition and adopt methods and procedures informed by evidence and rooted in both local and global contexts.

The systematisation of methodologies proposed in this article constitutes a practical and replicable contribution, applicable to higher education and useful in addressing methodological challenges within the field of fashion design education research. By articulating tools, modes of application, and expected outcomes, the

methodological framework presented offers support for the development of curricula that are more inclusive, collaborative, and culturally aware. Nevertheless, it is acknowledged that the integration of cultural and ancestral methods into fashion design education adds layers of complexity for institutions, educators, and students, as noted by Matos *et al.* (Matos *et al.*, 2023) and Meyer and Norman (2020). Added to this is the necessity for continuous learning on the part of designers, which poses a further challenge: the construction of curricular pathways that promote lifelong professional development (2021).

This proposal, grounded in transdisciplinary principles, aligns with the imperative for fashion design education to generate cultural and economic value for society by connecting students, artisans, and professionals around viable solutions to the complexities of sustainability. In this regard, we emphasise the alignment with the SDGs, particularly SDG 4 (quality education), SDG 5 (gender equality) and SDG 10 (reduced inequalities) (United Nations, 2015). The inclusion of craftsmanship within design curricula thus constitutes a concrete contribution towards the achievement of these goals. As Ionică (2022) emphasises, integrating craftsmanship into formal education fosters a connection between academic training and society, while simultaneously offering pertinent responses to global challenges such as the overuse of natural resources, ecological imbalances, and the fragmentation between theoretical knowledge and experiential understanding.

Regarding future prospects, the importance of testing these methodologies in diverse and cross-disciplinary academic contexts is highlighted, alongside monitoring their implementation through indicators of pedagogical, cultural, and social impact. It is also suggested to develop adaptable teaching materials, consolidate enduring partnerships between educational institutions and artisanal communities, and expand dialogue with both national and international experiences. Manifestos focused on cultural sustainability, such as the Green Manifesto for Art, Craft and Design Education (Hall, 2023), directly contribute to recognising education in art, craft, and design as a foundation for social construction, qualified professional development, the valorisation of the designer's role as educator, and institutional commitment to creative local communities, thereby promoting an integrated approach to sustainability across its multiple dimensions.

By bringing together theoretical foundations, practical experiences, and an applicable methodological proposal, this article contributes not only to critical education in the field of fashion design but also to the construction of an educational ecosystem committed to epistemological diversity, cultural sustainability, and the valorisation of marginalised knowledge. Integrating these epistemologies into university teaching thus constitutes a humanising act, capable of underpinning ethical, plural, and socially transformative educational futures³.

³ Review conducted by Albertina Felisbino. Doctor of Letters, Federal University of Santa Catarina, 1996.
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Supplemental material

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