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CONTEXTUAL REVIEW OF THE PEDAGOGIC DESIGN STUDIO.

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DESIGN EDUCATION, CONTEXTUAL STUDY OF PEDAGOGIC DESIGN STUDIO**

ABSTRACT | In Higher Education the design studio has evolved as an intimate space of learning that facilitates experimentation, discovery and personal growth as an enduring typology within creative education. When design departments are incorporated within larger institutions where most subjects are taught through lectures and seminars a difficulty can arise trying to create a studio culture within a classroom setting. The classroom has developed through a different educational philosophy that conflicts with the design studio model and compromises the design student experience. This study explores the distinctive character of the design studio and design pedagogy to develop recommendations for institutions and educators as to how to provide and manage studio spaces that will strengthen their students' creative skills, aspirations and access to global design professions.

Applying Henri Lefebvre's position that space is never neutral but is constructed through multiple inter-related social and political dynamics. This study examines five key spheres of influence on the studio as a signature space of learning: the geographic location, the socio-economic status of the area; the pedagogic philosophy; the spatial configuration; and the digital strategy developed for the learning environment. The investigation seeks to explore how these spheres combine with cultural perceptions of the studio space to influence the student experience and their aspirations.

To create a theoretical framework that can consider the relationships between the multiple variables that shape the student experience, the thesis references the work of sociologist Pierre Bourdieu and his work on habitus, field, and capitals. The framework is developed by applying Doreen Massey's theories that geography shapes social relations and power dynamics, Donna Haraway's work on situated knowledges and the work of bell hooks and Paulo Freire in relation to educational equality.

The methodology undertakes case studies of different institutions that offer design starting with the institutions where the researcher teaches. Adopting a user-centred, mixed methods approach, the research draws on the experience of the multiple stakeholders who shape the values of the studio: tutors, students, management and architects. It analyses their opinions and experiences with reference to theorists in pedagogy, sociology and architecture and draws on the knowledge and best practice of a case study analysis. As this is a practice-based investigation, the insights will be used to develop new spatial and pedagogic models which will be tested and evaluated at the host institution with design and creative media students.

It is anticipated that the outcomes of the analysis and the new recommendations will consist of guidelines that enable institutions to create studio spaces which can be configured to their specific socio-geographic contexts and to digital transformations in pedagogy.

1. Introduction

“In the first half of the twentieth century, there were 180 Art Schools in the UK, and there were 28 universities. By 2011 there were 11 Art Schools and 119 universities (Beck and Cornford 2014).” (Orr and Shreeve 2018, p.11)

The ‘academic turn’ and trend to absorb design education into university campuses, which emerged in the early 1970s in the UK and Ireland, has created challenges in many institutions (Orr and Shreeve 2018, Houghton 2016). The enduring studio pedagogy of design education is not easily adopted in more traditional lecture and classroom spaces of learning. This research aims to investigate the role of the design studio and its associated pedagogy, to discover how these can be strengthened. Although proposed before the coronavirus outbreak, this study has become more urgent in the wake of the pandemic. The physical space of design learning was lost in the pivot to online learning, however, new educational practices were developed with fresh approaches to student-centered education. This seismic shift has caused questioning and re-evaluation of the studio as a signature pedagogic space (Shulman 2005) and the assumptions on where teaching is based. These conditions have led to the central research question: can the enduring typology of the pedagogic design studio accommodate emerging curricula to support the aspirations and creativity of the students?

This paper condenses the initial contextual review of the history of the pedagogic design studio and introduces the five key spheres of influence identified in the PhD study.

2. Historical Outline of the Pedagogic Design Studio and Design Pedagogy

Acknowledging the importance of context, this section offers a brief historical outline of the development of the design studio to identify the multiple strands that contribute to its present-day pedagogic and spatial characteristics and contribute to its enduring character. The outline encompasses the design studio as a physical place as well as the site of many cognitive and social practices and values. As such, the term studio represents the space, the activities within it, and the teaching approach.

The artist’s studio and architectural studio have received most academic attention (Beck and Cornford 2014, Cole 1983, Cret 1941, Culotta 2020, Green and Bonollo 2003, Houghton 2016, Pevsner 1940, Souleles 2013) and inform this research but it is Nicholas Houghton 2016 paper that the study adopts and adapts. Houghton defined six periods or ‘historical curricula’: Apprentice, Academic, Formalist, Expressive, Conceptual and Professional. Figures 1-3 illustrate the changes in practice, principles and relationships within the design studio and the legacy of each of these historical curricula on the contemporary pedagogic design studio.

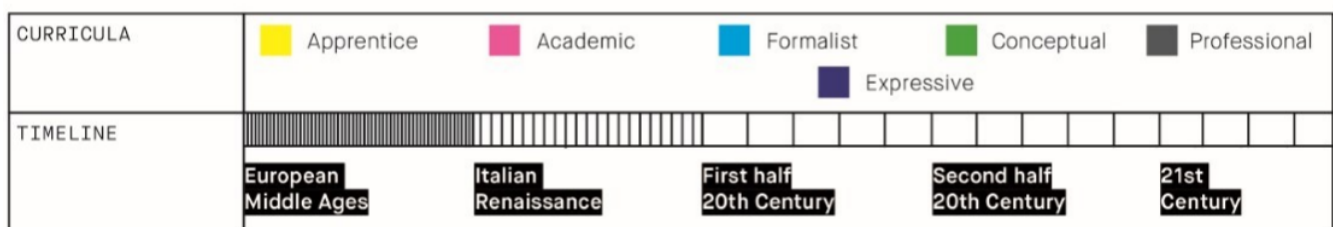


Figure 1. Timeline adapted from Houghton’s (2016) Six Historical Curricula.

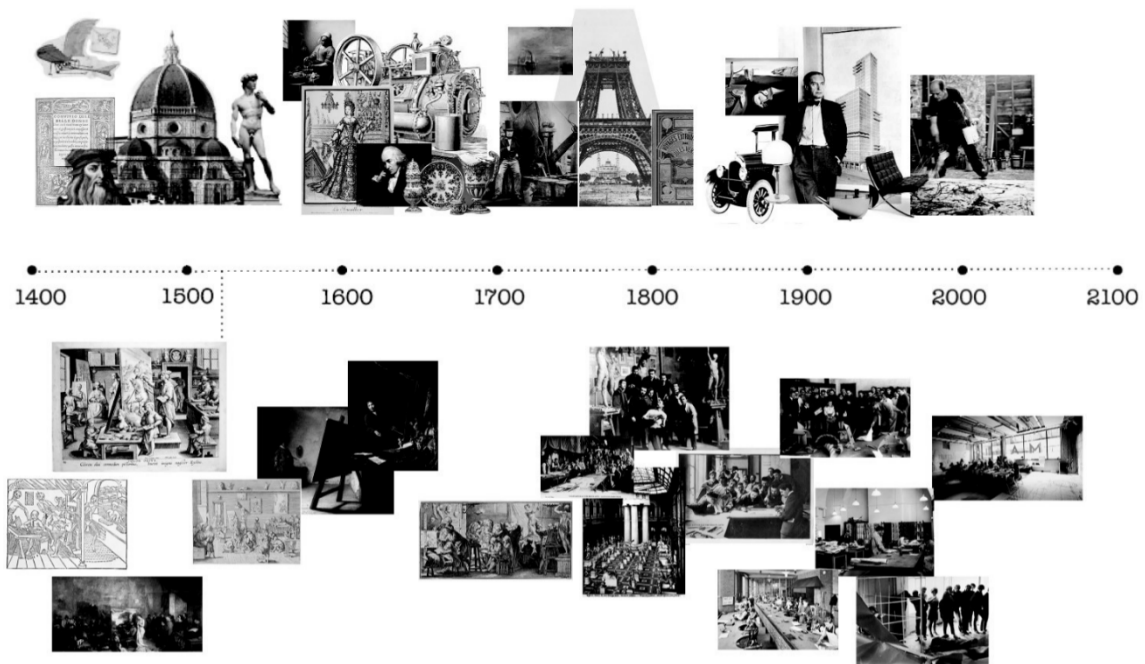


Figure 2. An illustrated timeline of key thinkers, innovations, artistic practices and studios from the 16th to 20th century based on Houghton's curricula.

For this abbreviated paper the different priorities of each curriculum are summarised in figure 3. This is a simplified analysis of Houghton's findings, with an emphasis on what was most valued rather than the only attributes honed.

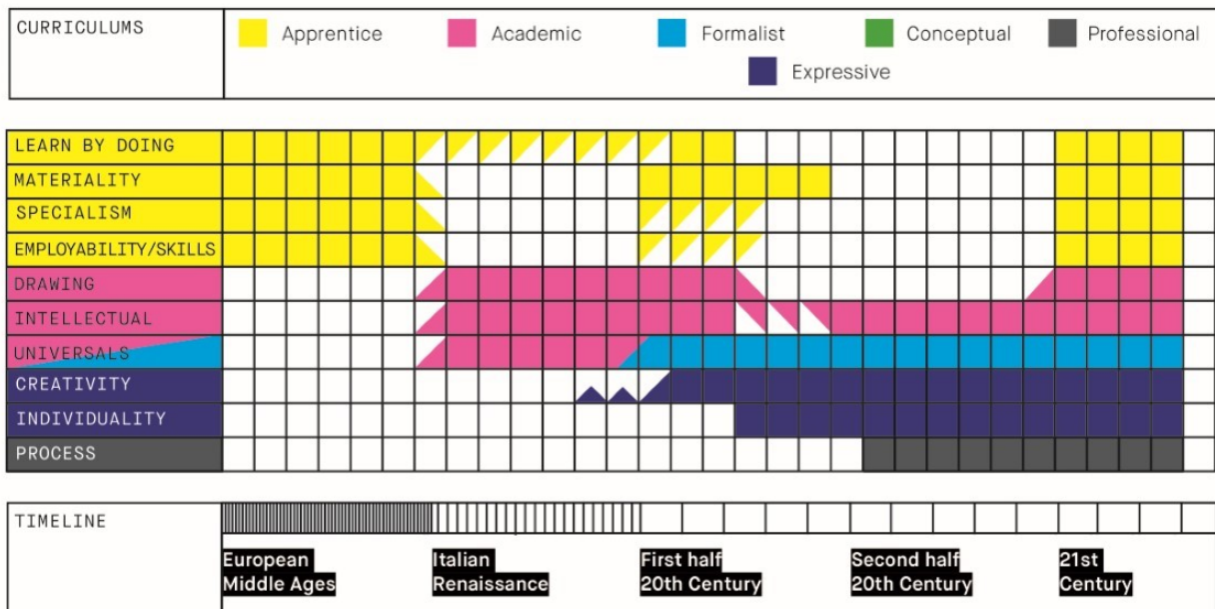


Figure 3. Identifies key attributes that emerged from Houghton's (2016) six curricula, some fall out of favour to reemerge in later periods. Others are unique for their combination of previous curricula.

Applying Houghton's six periods to the design studio reveals the complexity and often contradictory affordances necessary in the space: head-down quiet work, group work, making, prototyping and presentations, these have been further explored by design researchers: Thoring et al (2018)¹; Williams (2009)²; Groves and Marlow (2016)³; Doorley and Witthoft (2012)⁴; Velthoen (2005)⁵.

These strands have been organised into a studio hierarchy of needs-based Abraham Maslow's 1943 study on motivations for human behaviour, the Hierarchy of Needs Pyramid. Although criticised by some for the 'hierarchical' nature of his stages and the singular basis for the categorisation (Méndez and Rojas 2023) (Wahba and Bridwell 1976), the holistic approach Maslow takes to the physiological and psychological well-being of a person resonates with the student-centred, embodied ethos of this study and the scaffolding nature of design education (Orr and Shreeve 2018).

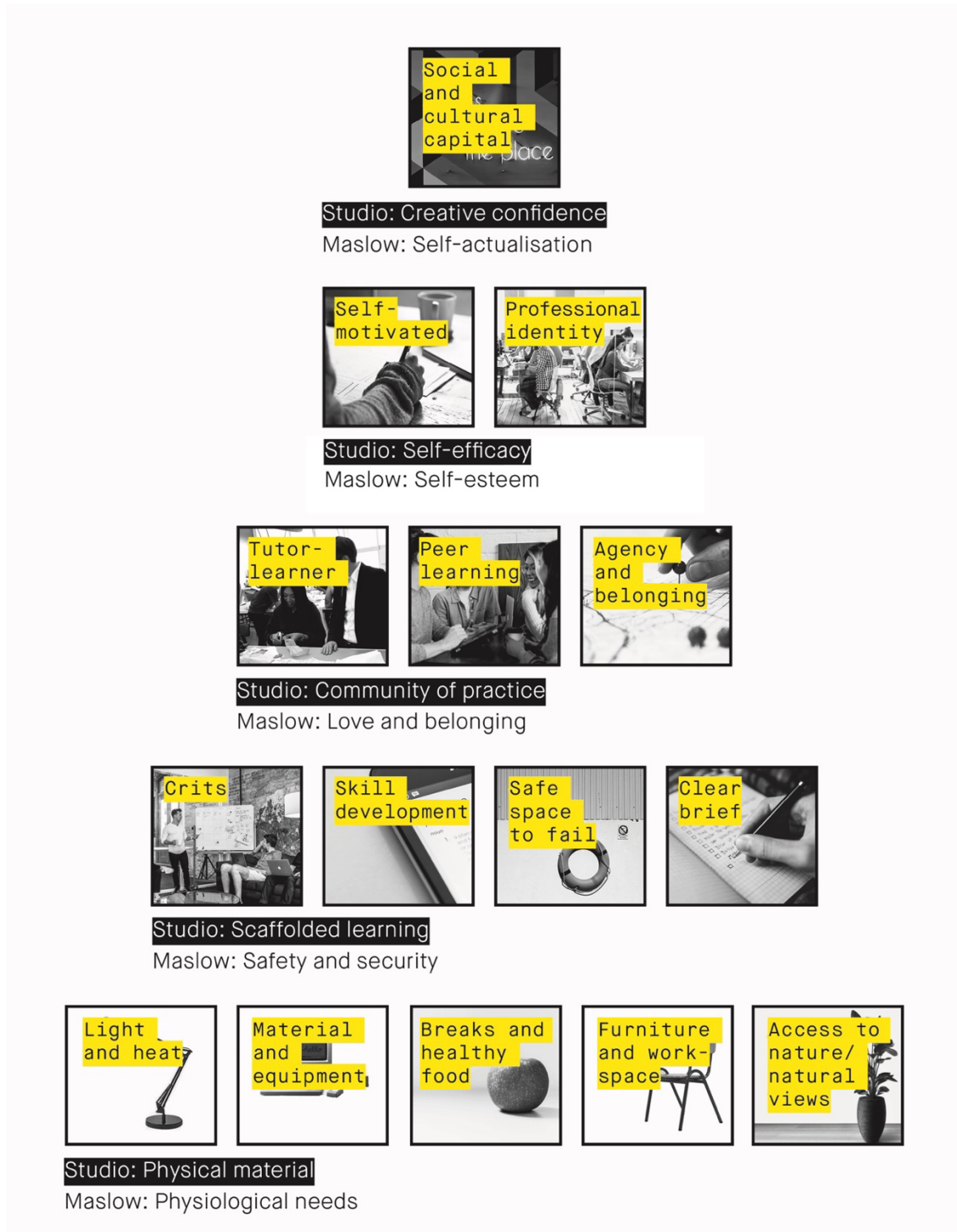


Figure 4. Learner's Hierarchy of Needs of the Studio, created by the researcher.

This diagram encompasses a student-centred, practically based, industry-led, experiential, socially driven approach to education which creates unique relationships between tutor and learner and demands a tailored teaching environment. It also recognises the external factors that envelope the studio which will be explored next.

3. Spheres of Influence

The contexts refer to the multiple intersecting strands that shape the experience of the pedagogic studio. These dimensions were identified as the spatial, the space of the studio, the architecture of the building and the campus; the geographic, the location of the institution, regional employment and enterprise; the pedagogic, the embodied practices of teaching and learning design; the socio-economic demography of the area and the student profile; and the digital, its particular infrastructure and practices in the institution. At the core of all these lenses is the students' educational experience and the impact of these variables on their learning and motivation.

3.1 Spatial Dimension

There is an argument and evidence that education can occur anywhere, and indeed design pedagogy happens in many spaces, but a key focus of this study is to explore the perception and therefore impact of the enduring typology of the pedagogic studio. Architect Peter Carl's reflections on the difference between type and typical assist in this exploration.

“For example, the type “bedroom” tends to solicit a medium-sized room with a bed, side-table, window, closet, and access to a WC; whereas the typical situations of sleep, dreams, sex, illness, death, etc., open much more profound and rich possibilities of interpretation (evident, for example, in the sleeping-terrace beneath the canopy of Le Corbusier’s Villa Shodan, 1952).” (Carl 2011, p.3)

Considering the ‘space of’ opens greater possibilities and more authentic ways of viewing space. The spatial is the practical elements but as Lefebvre (1991) argued, space is not a neutral backdrop but is itself a product of social relations and plays a crucial role in shaping them. More than just an area to work in, the studio is a learning culture and ‘space of’ learning, experimentation, expression, safety etc., affords a regular classroom cannot nurture as effectively (Boys 2011, Spruce 2007). This was born out at creative educators’ workshop, March 2023.

The pedagogic design studio - a space of...



Figure 5. Responses from creative educators, March 2023 via Mentimeter on what they felt the pedagogic studio was a ‘space of’.

Carl recognises the “tension between the conceptual field for types and the concrete topographies which we inhabit.” (Carl, 2011, p 3). This is taken to mean how a person teaches, how the students respond, their expectations are influenced by the physical configuration and the cultural values of the space and the appropriateness of the space for the activity being undertaken.

Critical theorist Homi Bhabha urges that we examine the way we theorise and historicise architectural production with a contemporary lens of cultural interrelatedness (Hernandez 2010). He reminds us that ‘in a world of increasing transnational traffic, the signature of specificity and locality – the productive signs of difference – often inhere in the telling detail that provides a narrative of the dialogue between tradition and social change’ (Bhabha 2007).

3.2 Geographic and Socio-Economic Dimension

To create a theoretical framework that can consider the relationships between the spatial and the other variables that shape the student experience, the study turns first to sociologist Pierre Bourdieu. Bourdieu (1984) observed that a person’s standing in society does not simply depend on their material worth, their economic capital but also on symbolic capital (social and cultural capital). Bourdieu suggests capital equals power and this thesis argues the studio may be seen as a symbolic form of capital that may have the potential to empower students. In Richardson (1986) Bourdieu notes that unlike economic capital, embodied cultural capital cannot be accumulated from someone else. “The worth of acquisition is work on oneself (self-improvement) an effort that presupposes a personal cost” (p 244). It can be described as their *habitus*.

“Habitus is the learned set of preferences or dispositions by which a person orients to the social world. It is a system of durable, transposable, cognitive 'schemata or structures of perception, conception and action'.” (Bourdieu 2002, p.27)

This is of particular significance for this study as it points to an opportunity to contribute to students’ embodied cultural capital through the tacit knowledge exchange and an opportunity to introduce students to objectified cultural capital through the studio.

Donna Haraway (1991) also explored the power and legacy that visuals have on how we perceive something and notes that these are often not formed locally or organically but are tied “to militarism, capitalism, colonialism and male supremacy” (p 188). She argues that this produces specific visions of difference and hierarchy (Rose 2012, p 9). This links to the perception of the studio and the inherited cultural capital it represents. Further to this Haraway’s work on situated knowledge (1988) suggests that knowledge is situated in specific social contexts, and that our understanding of the world is shaped by our positionality within those contexts. She advocates that knowledge is not a universal, objective truth, but rather is situated within specific social and historical contexts. In the context of higher education, this means that students’ experiences and outcomes are shaped by the spatial and cultural context in which they are learning.

Social geographer Doreen Massey echoes Haraway’s position asserting that, knowledge is always located and partial; it is always the product of a particular set of social relations and practices and reflects the interests and concerns of particular social groups (Massey 1994). Bourdieu argues that individuals from higher socio-economic backgrounds have access to cultural resources such as knowledge, skills, and networks (capitals) that can help them succeed in educational institutions. This leads to the “geography of opportunity” theory (Briggs 2005, Reece 2019, Brain and Prieto 2021). An investigation in the ‘potent impact of ‘place’’. This theory also suggests that the location of a student’s university can provide them with unique opportunities that may not be available in other regions e.g. universities in metropolitan areas may offer students greater access to internships, research opportunities, and networking events.

Educationalist and feminist writer bell hooks argues that the current neoliberal model of education is deeply flawed, as it reinforces rather than disrupts societal inequalities (1994). She envisages education as a tool for social change, "a practice of freedom" that enables students to "transgress" societal boundaries and challenge the status quo (hooks 1994, p. 12). For hooks, the role of education is not just to provide students with technical skills or information, but also to create critical thinkers who can challenge the dominant narratives that perpetuate the inequalities she observed. Educational reformist Paulo Freire had an impact on hooks' philosophical position. Freire argues that higher education is often seen as a means for upward mobility perpetuating existing socio-economic inequalities rather than a tool for social transformation.

3.3 Pedagogic and Digital Dimension

The pedagogic design studio can enact Freire's approach of "the problem-posing concept of education as an instrument for liberation" (Freire 2005 p 71). Orr and Shreeve (2018), Tovey (2015) and Boys (2011) note the ownership and individuality of open-ended briefs, traditionally used in studio pedagogy, afford the learner this agency and are very motivating for the student.

Although computers have been ubiquitous in universities since 1990's the shift to online delivery necessitated by the pandemic further cemented the digital into the fabric of the university (Lamb et al. 2022). This study will examine some of the legacies of the imposed transition online. The positive aspects include greater access to educational resources (online libraries, digital books, industry-standard applications), the ability to visit cultural and educational institutions online and explore their digitised collections, the development of more extensive and geographically spread social and industry connections (equating to greater diversity of voices and experiences), and as a result better understanding of potential future opportunities. These initiatives go some way to lessening the differential between rural universities and their urban counterparts. The internet allows students to accumulate Bourdieu's symbolic capital (1987) by gaining access to cultural and educational resources that were once out of reach (Ignatow and Robinson 2016) of quality internet and digital hardware are not accessible to all and as with physical spaces joining digital spaces can also seem alienating.

The hands-on learning-by-doing approach is more difficult to mediate and feedback on in a digital environment. Research continues (Marshalsey and Sclater 2018, 2020) on how to incorporate ways of online delivery that can facilitate or encourage tacit knowledge exchange, peer learning and even serendipitous moments (Jones et al 2020, Baynes et al 2013; Lotz et al 2015, Makri et al 2014). Post phenomenology theorists Ihde (2009) and Veerbeek (2006) view the digital in similar terms to many of the spatial theorist mentioned previously, particularly with regards affordances and embodiment. Ihde illustrates this relationship as:

(human – technology) —> world

The technology facilitates the interactions, but it also alters them. Just as space is not neutral, neither are digital interfaces and spaces.

4. Conclusion

This paper sought to outline the central components and contexts that have led to the Western pedagogic design studio typology. It encourages an approach that looks at learning environments not simply as places of learning but to recognise the rich and multiple activities it can encourage and the need to reflect these in the properties and affordances of the space. These may need to alter in response to the five spheres of influence noted in this paper: the physical space, geographic location, socio-economic demographic, and the digital and pedagogic strategies of the institution. It is intended to conduct further research into these spheres to develop guidance and recommendations that enable institutions to create studio spaces that can be configured to their specific socio-geographic contexts and to digital transformations in pedagogy.

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