

HOW DO STUDENTS' PERSONAL AND CULTURAL BACKGROUNDS INFLUENCE THE DEVELOPMENT OF THEIR DESIGN IDENTITIES WITHIN UNDERGRADUATE PRODUCT DESIGN EDUCATION?

Maciej SIDOR, Krzysztof BORONIEC, Ceri ALMROTT, and Robert TULLY
Technological University Dublin, Ireland

ABSTRACT

Discussions of equality, diversity, and inclusion in design education often focus on institutional strategies or pedagogical interventions. Fewer accounts centre on students lived experiences of identity formation within diverse studio environments. This paper presents a structured reflective account authored by two final-year undergraduate Product Design students, developed through a facilitated dialogue guided by design lecturers and informed by the Describe–Interpret–Evaluate–Plan framework. The reflections explore how personal and cultural backgrounds shaped early assumptions about “good design,” particularly an emphasis on feasibility, efficiency, and outcome-driven resolution. Through sustained collaboration within a socially diverse studio cohort, peers challenged these assumptions by prioritising conceptual exploration, empathy, and speculative thinking. What initially appeared as differences in ability became recognisable as epistemic differences rooted in lived experience.

The paper suggests that diversity within design education operates not only demographically but cognitively, influencing how problems are framed and value is assigned. Structured reflective dialogue within the studio environment is shown to support the development of more adaptive and self-aware professional design identities.

Keywords: Design identity, reflective practice, cultural diversity, design education, student experience

1 INTRODUCTION

A designer's professional identity is not the sole product of the acquisition of technical skills. Rather, it develops through reflection, participation and interaction of communities of practice, where a gradual negotiation of values and ways of thinking is developed[1, 2]. Contemporary discussions of student-centred design education further emphasise professional identity as an evolving construct shaped through participation in studio culture and reflective engagement with practice[3]. Within design education, the studio serves as a formative environment where students can publicly test ideas, give and receive critique, and engage with peers who will likely hold different values about what good design is and how it should be achieved. It is for this reason that, in this context, it is important to know that a designer's identity is not fixed but evolving and is equally shaped by curriculum and lived experience. Increasingly, our class cohorts are becoming more diverse, bringing a mix of students with varied national, educational and cultural backgrounds. These differences allow briefs to be interpreted differently, change how critique is received, and alter how value can be assigned within work. On entry to a programme, a student's disposition is shaped by prior social and cultural experiences that frame early approaches to problem-solving as well as professional aspirations[4]. Learning is not simply a skill development for individuals, but socially mediated participation in shared and developing practice[5]. While discussions of equality, diversity and inclusion often focus on institutional strategies or different pedagogical interventions, fewer accounts centre on the lived experiences of students[6]. In this paper, “personal and cultural backgrounds” refers broadly to the constellation of lived experiences, educational pathways, familial influences, and socio-cultural contexts that shape individual value systems and approaches to design. With this framing, the authors begin to address this gap. The discussion is initiated voluntarily by two students in their final year of study and is developed through a facilitated reflective conversation guided by design lecturers. Within the text, the student authors explore how their personal

and cultural backgrounds shape their development as emerging designers within a diverse studio environment.

2 REFLECTIVE FRAMING

In design, identity often develops through implicit participation in studio practice. Assumptions and ideas about value, quality, authorship, and professional development may guide decisions without explicit articulation, shaping the interpretation and development of design output. Reflective practice offers a means of unearthing these tacit influences. Schön[1] posits that professional knowledge cannot be solely technical but must be reflective, and that practitioners need to examine the assumptions embedded in their actions to grow. In this regard, reflection is imperative to understanding professional identity, as it surfaces values and dispositions that shape practice and make them visible to the designer. The reflections presented here were formed from a voluntary, student-initiated dialogue prompted by the conference theme of *Exploring Diversity*. The conversation was facilitated by design lecturers familiar with reflective practice and structured using the Describe – Interpret – Evaluate – Plan (DIEP)[7] framework commonly employed within the programme to guide reflective practice.

This work is not empirical research but a reflective account from learners. Although supported by teaching staff, the interpretation and perspectives articulated remain those of the student authors. The aim is not to measure diversity but to convey how personal and cultural backgrounds have influenced their development as emerging designers in a shared studio environment. The reflections are primarily grounded in a facilitated dialogue between the student authors, informed by their cumulative studio experiences and supported by recollections of coursework, critiques, and informal reflective activities undertaken during the programme. While not based on systematically archived data, the dialogue enabled a structured articulation of lived experience rather than a retrospective reconstruction of events.

3 CONTEXTS

The student authors of this paper are emerging at the end of a four-year Bachelor of Science in Product Design programme. The degree, based in Ireland, is built around a platform of progressive development from foundational skills to independent practice, integrating a large number of studio-based design modules alongside technical and theoretical classes. Across the programme, there is a strong emphasis on iterative problem-based learning, research and problem framing, prototyping, physical making, and public presentation of outcomes. In the final year, students are expected to exercise much greater autonomy in defining and resolving design challenges within a capstone project, which accounts for more than 50% of their graduating grade.

Throughout the programme, much of the learning occurs within shared studio spaces characterised by regular formative critiques, peer discussions and public displays of work. The studio functions not only as a physical space but also as a cultural environment in which identity and belonging are negotiated [8]. Questioning and revisions are normalised as critical parts of the design process and are built around feedback shared by both lecturers and peers. Alongside independent projects, there are many collaborative projects that require students to negotiate ideas, roles, and interpretations within a group setting. This approach allows for informal learning to occur through proximity, observation and overheard dialogue.

The cohort includes students from varied national, educational, and socio-cultural backgrounds. Differences in prior exposure to design, familiarity with professional tools, assessment cultures, and attitudes toward critique contribute to a heterogeneous learning environment, a pattern also observed in work examining the influence of educational culture on undergraduate design practice[9]. Mixed gender representation and varied prior educational pathways further shape participation and expectations within the studio. These structural and interpersonal dynamics form the context within which individual design identities are developed and negotiated.

4 REFLECTIVE ANALYSES

4.1 How our journeys began, our assumptions towards design, the course and our expectations

The first design project immediately revealed that the programme was more challenging than anticipated. In response, a familiar sense of urgency has emerged within us and prompted us to tackle design projects literally and logically. Design constraints such as limited time and high expectations for

resolution reinforced this mindset, encouraging us to prioritise rapid progression towards a highly detailed, feasible design rather than exploratory divergence.

This approach was reinforced by the initial assumptions about what constituted good design, which we equated with primarily high polish and appeared effortless. These examples became our benchmark against which we measured ourselves. Due to the absence of skill in foundational areas in the early years of study, we often overcompensated by overdeveloping assigned tasks, prioritising finish and detail in other ways to assert competence with our internal value systems.

Throughout extensive group work, it became clear that our approach was not universally shared. Our primary concerns, such as how the product would function, how it would be manufactured or whether it was feasible, did not always align with the priorities of others. This misalignment generated frustration, as our emphasis on ‘Good Design’ appeared disconnected from peers who felt more attracted to abstract and speculative conceptualisation. At the time, these exploratory and conceptual strategies were seen as inefficient and detached from real-world constraints, reflecting our deeply embedded association between feasibility and value. These alternative design approaches challenged the logically wired, highly critical design decision-making that kept us in security throughout the early months of our design venture.

This outcome-driven mindset didn’t emerge in isolation; it can be traced to before entering higher education, where exploration was rarely pursued without a clear purpose or a predictable outcome. Within our home environments, which were shaped by risk aversion and efficiency, experimentation had to be preplanned or likely to succeed, to be considered viable or responsible. Failure was often strongly associated with incompetence, and external validation functioned as a source of security and acceptance. As a result, unstructured exploration felt not merely inefficient but misaligned with our internalised understanding of responsibility and productivity.

These values and assumptions carried into our early stages of design practice, greatly narrowing our tolerance for ambiguity and therefore limiting our creative potential by preventing us to pursue speculative or open-ended direction, where uncertainty translated to incompetence.

4.2 How diversity impacted our education – design attitudes and personalities, and what our approach was like to them at surface level

At the beginning of the Product Design course, the cohort entered the shared learning environment with a wide range of perspectives, backgrounds, and personalities. These differences quickly became visible in the ways students approached strategy, collaboration, and communication. Through the inexperienced lens of first-year students, such variations were often interpreted as differences in knowledge or skill.

However, as the course progressed and education deepened, technical knowledge and practical skills gradually levelled out. What remained were distinct design approaches. This shift helped students recognise that differing ideas, priorities, and working styles do not stem from unequal proficiency, but from the individual characteristics of each designer, shaped by personal experiences, values, and worldviews.

Each student's past has contributed to the formation of a unique design personality, guided by specific motivations that drive their work. From the examined course, the following generalised design personalities shown in **Figure 1** have been identified:



Figure 1. Emergent design personalities identified through reflective dialogue. These categories are reflective and interpretive in nature and are not intended to represent empirically validated or mutually exclusive typologies

The design personalities illustrated in Figure 1 are not intended as definitive classifications but as interpretive constructs emerging from the student authors' reflections on studio participation. While students often displayed traits associated with multiple orientations, one tendency frequently appeared more prominent in shaping individual approaches to design.

In turn, these design personalities naturally orient students toward one of three primary design approaches shown in **Figure 2**, which were identified within the course:

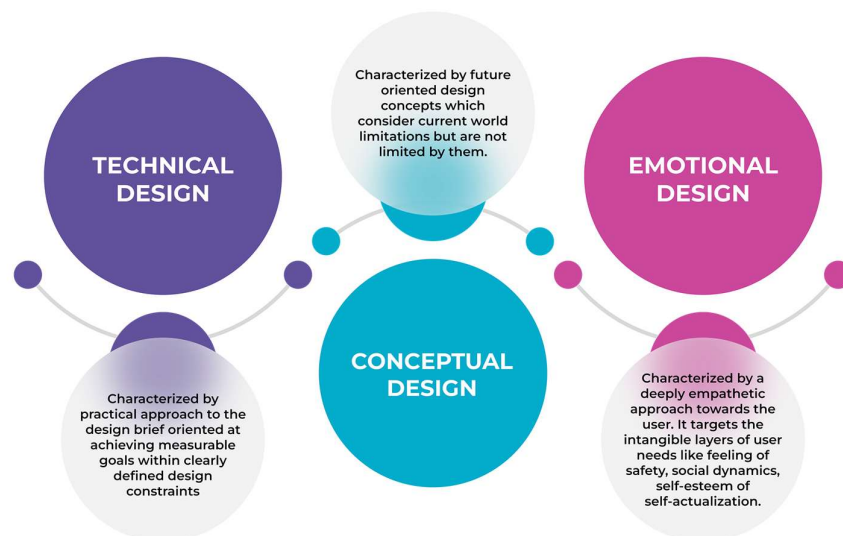


Figure 2. Dominant design approaches emerging from studio participation

Over years of individual and group projects in studios and classrooms, this diversity of personalities and approaches became increasingly evident. Throughout this process, each student gradually developed a distinct identity. Despite a shared curriculum, by the end of their educational journey, these identities proved even more varied than they had initially appeared.

4.3 How it shaped us to be better designers – more open to alternative approaches, which helped us define who we are and what we appreciate.

By the final year of the programme, perceived differences in technical proficiency appeared to diminish over time, yet our design approaches remained distinctly different. This contrast prompted a critical realisation: our outcome-driven mindset was not simply a strength, but also a limitation. While it enabled efficiency and feasibility, it often constrained exploration and emotional depth.

Working within a diverse studio environment challenged these assumptions. Exposure to peers who prioritised empathy, speculation, and conceptual divergence expanded our understanding of what constitutes good design. Their approaches revealed dimensions of meaning and user connection that our efficiency-oriented perspective had overlooked.

Without this diversity, our practice may have remained narrow and self-reinforcing. Instead, it encouraged reflection, adaptation, and growth. By engaging with alternative methodologies, we became more open and more self-aware. Ultimately, we've become more balanced designers who can navigate both practical constraints and human complexity.

5 DISCUSSIONS

The reflections of the student authors suggest that design identity develops as much through participation in a socially situated studio environment as through the curriculum. To that end, the undergraduate studio functions as more than a site of technical skill acquisition and is as important as a place of socio-cultural learning, providing a domain where assumptions, values and dispositions can be negotiated. This follows Vygotsky's [5] understanding of socially mediated learning, where identity formation occurs socially rather than in isolation.

Exposure to peers who prioritised conceptual speculation and emotional engagement disrupted the view that *feasibility* = *value*, and what initially appeared as differences in ability resolved into alternative ways of framing challenges and measuring success.

Within the context of a differentiated studio, diversity operates not as a demographic category but as a cognitive and interpretive one, providing variation, nuance, and growth. Learners bring different relationships to critique, failure, authorship and validation within the shared space. Rubin's [10] metaphor of creativity as a universal current filtered through lived experience provides a useful lens: each designer engages with creativity through a distinct personal-social history and set of values. When these co-exist in a collaborative space, they can generate tension as well as expansion.

It is important to note that the shift from frustration to appreciation was not automatic and required sustained collaboration and structured reflection. As with the facilitated dialogue underpinning this work, space to articulate previously implicit assumptions and internalised ideas of value and usefulness is a necessary pedagogical mechanism which allows differences to be examined and understood rather than just explored.

These reflections suggest that inclusive design education may depend less on aligning students to a single model of "good design" and more on recognising and engaging epistemic diversity. In this instance, it is this diversity which broadened tolerance for ambiguity and deepened appreciation for alternative methodologies, allowing for a more adaptive and adaptable design identity to emerge. While situated and personal, these insights indicate that structured reflective practice within the studio is imperative for the formation of robust, tolerant design professionals.

6 CONCLUSIONS

The reflections presented in this paper illustrate how professional design identity develops through sustained participation within a socially diverse studio environment. Over four years of shared education, differences in personal and cultural background shaped contrasting orientations toward feasibility, exploration, critique, and value. What initially appeared as misalignment between students gradually became recognisable as an epistemic difference rooted in lived experience.

Through collaboration and facilitated reflection, these differences were reframed from sources of frustration to sources of expansion. The early prioritisation of efficiency and outcome-driven resolution, while productive, was revealed as only one interpretation of “good design.” Exposure to alternative approaches broadened tolerance for ambiguity and deepened appreciation of conceptual and emotional dimensions of practice.

This case suggests that diversity within design education functions not only as demographic representation but as interpretive variation that shapes how problems are framed and resolved. When supported by structured reflective dialogue, such variation can contribute to more adaptive and self-aware professional identities. Although situated and non-generalisable, the account offered here indicates that inclusive studio environments benefit from mechanisms that surface and interrogate difference, allowing identity formation to evolve through engagement rather than assimilation.

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