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DIVERSITY IN FINAL YEAR PRODUCT DESIGN PROJECTS: WHO ARE WE DESIGNING FOR?

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ABSTRACT

This paper explores the diversity of final year product design projects completed from 2007 through to 2026 at Bournemouth University. By analysing approximately 450 projects, we examine not only the technical and creative breadth of topics but, crucially, the diversity of users and communities for whom students are designing. Are products primarily aimed at mainstream consumer markets, or do they increasingly address the needs of underrepresented groups such as ageing populations, people with disabilities, or marginalised communities? Through thematic coding of project briefs and outcomes, we map trends in inclusivity, empathy, and social impact within student-led innovation. The paper considers how this diversity of design focus reflects broader societal shifts and the growing recognition of design as a force for equity and wellbeing. We also discuss the implications for how future designers may shape more inclusive and sustainable practices within industry. In reflecting on whether these projects challenge conventional market priorities or reinforce them, the study highlights the role of education in expanding students' perspectives on who deserves to be designed for. Ultimately, the paper argues that encouraging greater diversity in project focus not only enriches the learning experience but also holds the potential to influence the future trajectory of product design, steering it towards more socially responsive and equitable outcomes.

Keywords: Diversity, design education, social impact, inclusive design

1 INTRODUCTION

Product design has historically centred a particular kind of user: able-bodied, economically empowered, geographically privileged, and culturally normative. While the rhetoric of user-centred design has long been embedded in educational and professional discourse, the question remains: *which* user is centred? Who is imagined, prioritised, and legitimised within the pedagogical structures that shape future designers?

This paper explores these questions through a longitudinal analysis of final year product design projects in which we examine not only the technical and creative range of topics but, crucially, the diversity of users and communities for whom students are designing. The final year project represents a significant moment in undergraduate design education: it is often the most self-directed, research-led and personally meaningful body of work that students undertake. As such, it offers insight into both the values embedded within the curriculum and the socio-cultural priorities students perceive as legitimate design concerns.

The study asks: Are projects primarily aimed at mainstream consumer markets? Do they increasingly address the needs of underrepresented or marginalised groups? How have patterns of user focus shifted over two decades? What does this reveal about the evolving relationship between design education and equity, diversity and inclusion (EDI)?

By mapping changes in user diversity and contextual awareness, the paper explores how design education may contribute to broader transformations in the discipline's social orientation. Ultimately, we contend that encouraging diversity in project focus not only enriches the student learning experience but may also influence the future trajectory of product design practice, steering it toward more inclusive and socially responsible outcomes.

2 DESIGN, POWER AND INCLUSION

2.1 The "Default User" and Normative Design

Design is never neutral. As scholars such as Winner [1] and Norman [2] have argued, technologies and products embody assumptions about users. Historically, many everyday objects—from medical devices to transport infrastructure—have been designed around a normative body and lifestyle, often marginalising those who fall outside this imagined centre.

The concept of the "default user" refers to this unexamined baseline: frequently able-bodied, male, economically secure and located in the Global North. Such normative design frameworks can perpetuate structural inequalities by rendering other users as exceptions rather than central stakeholders. From an EDI perspective, normative design education risks reproducing structural exclusion when standards of "good design" are implicitly aligned with dominant cultural and bodily norms. Dolmage [3] highlights how 'academic ableism' operates through institutional expectations, assessment practices and disciplinary cultures that privilege able-bodied, neurotypical and culturally dominant perspectives, thereby shaping what kinds of design projects are recognised as valuable or legitimate within design education.

2.2 Inclusive Design, Universal Design and Design Justice

Inclusive Design and Universal Design have sought to broaden participation and accessibility. Inclusive Design emphasises designing for the widest possible range of users, particularly those at the margins, while Universal Design promotes environments and products usable by all without adaptation.

More recently, Design Justice [4] has pushed the conversation further, foregrounding power, participation and structural inequity. Rather than merely accommodating difference, design justice calls for centring those most impacted by systems of oppression in design processes.

These frameworks are particularly relevant in educational contexts, where students' understanding of who "counts" as a user is being formed.

2.3 Design Education and Value Formation

Design education plays a formative role in shaping professional identity. Studio culture, project briefs, assessment criteria and tutor expertise all contribute to what can be described as the "hidden curriculum"—the implicit values conveyed through practice. Building on the work of Rossi [5], contemporary design education increasingly positions EDI not only as a curricular topic but as a value system embedded within studio pedagogy, assessment culture and project framing. This perspective supports the interpretation of final-year projects as expressions of how students internalise or challenge institutional values around equity, diversity and social responsibility in design practice.

Final year projects, typically self-initiated, provide a lens through which to examine how students interpret design responsibility. They reveal not only personal interests but also the boundaries of what is considered legitimate or valuable design work within a programme. This study therefore positions final year projects as artefacts of educational values, offering insight into how EDI principles manifest in practice over time.

3 METHODOLOGIES

3.1 Research Design and Sampling Strategy

This study adopts a longitudinal, retrospective content analysis of final year undergraduate product design projects at Bournemouth University. Rather than analysing every year between 2007 and 2026, projects were sampled across three consecutive-year clusters at defined intervals in order to capture temporal shifts while maintaining analytical depth. The sampled periods were:

- 2007–2009 (approx. 150 projects)
- 2017–2019 (approx. 150 projects)
- 2024–2026 (approx. 150 projects)

These clusters represent snapshots across the 19-year span, enabling comparison across distinct educational, social and global contexts.

The dataset comprises approximately 450 projects in total. For each project, the primary data source was the end-of-year degree show brochure, which included the student-authored project title and outline description. For 2026, where final projects were still in development at the time of writing, project proposals submitted for approval were used instead. While proposals may differ slightly from final

outcomes, they clearly articulate intended users and design focus, which are the primary variables under investigation.
All final year Product Design projects within the selected years were included, except where critical contextual information was missing.

3.2 Data Extraction and Coding Framework

Analysis focused on the declared design intention as expressed in project summaries. An inductive coding process identified recurring patterns across four analytical dimensions:

1. **Primary User Group**
   (e.g., general consumers, children, older adults, disabled users, occupational groups)
2. **Inclusion Dimension**
   (e.g., disability, age, gender-specific health, mental health, global development, socio-economic context)
3. **Market Context**
   (mainstream consumer, niche enthusiast, clinical/medical, humanitarian, occupational, environmental/systemic)
4. **Geographic Specificity**
   (generic/unspecified vs explicitly contextualised region)

Projects could register across more than one inclusion dimension (e.g., maternal health within low-resource contexts), but each project was assigned a single dominant thematic category for longitudinal comparison. Ten overarching themes emerged through clustering of coded data:

1. Inclusive & Assistive Design
2. Age-Specific Design
3. Cognitive & Mental Health
4. Chronic Illness & Medical Management
5. Maternal & Gender-Specific Health
6. Global Development & Low-Resource Contexts
7. Climate & Environmental Systems
8. Occupational & Context-Specific Tools
9. Sport & Performance Markets
10. Lifestyle & Consumer Convenience

These themes were applied consistently across all three-time clusters to enable structured comparison.

3.3 Analytical Approach

Following coding, projects were analysed chronologically to identify shifts in user focus and thematic prevalence across the three sampled periods. Rather than conducting statistical hypothesis testing, the study adopts a comparative descriptive approach suitable to educational trend analysis. Emphasis is placed on directional change (e.g., increasing specificity of user groups, growth of condition-specific health design, emergence of climate-adaptive systems) rather than precise quantitative modelling.

3.4 Limitations

The study relies on student-authored summaries rather than full dissertations, ethnographic documentation or evidence of participatory engagement. As such, findings reflect how projects were *framed* and communicated, rather than the depth of user involvement or real-world implementation. Additionally, topic selection is influenced by faculty expertise, institutional priorities, global events and prevailing discourse (e.g., sustainability, mental health awareness). The analysis therefore maps shifts in declared design focus within an educational context, rather than attributing causality to specific curricular interventions.
Despite these limitations, the dataset provides a rare longitudinal snapshot of how future designers conceptualise who design is for, offering insight into evolving value formation within product design education.

4 FINDINGS: SHIFTS IN WHO IS BEING DESIGNED FOR

4.1 2007–2009: Functional Consumer Focus

Projects in the late 2000s largely centred on domestic convenience, incremental efficiency and lifestyle enhancement. Examples included energy-saving kettles, portable shower units, bike accessories and

household cleaning tools. While assistive devices were present—such as mobility aids or tools for reduced dexterity—these tended to focus on physical function rather than broader social contexts. Sustainability projects largely addressed energy efficiency rather than systemic environmental concerns. User groups were often described generically ("over 65s," "homeowners," "cyclists"), suggesting a relatively broad and mainstream framing of design problems.

4.2 2017–2019: Expanding Inclusion and Global Awareness

Mid-decade projects show increased engagement with prosthetics, stroke rehabilitation, dementia support and water access in low-resource settings. Projects targeting specific global regions—Bangladesh, Tanzania, South Asia—become more common. Mental health begins to emerge as a theme, with breathing regulators, mindfulness tools and ADHD aids appearing more frequently. The user profile becomes more defined, and marginalised groups gain greater visibility.

4.3 2024–2026: Contextualised, Condition-Specific and Climate-Aware Design

The most recent decade shows a marked shift toward:

- Dementia management systems
- Neurodiversity and behavioural regulation tools
- Maternal and postpartum health devices
- Sensory inclusion for deaf and visually impaired users
- Climate adaptation technologies
- Environmental monitoring systems

Projects increasingly specify context ("under 2s in rural Bangladesh," "MS sufferers," "female soldiers in field conditions"), reflecting deeper engagement with lived realities. This period also sees a rise in condition-specific medical devices (e.g., Raynaud's relief, insulin storage for cold climates, chemotherapy-related devices), indicating granular attention to health diversity. Table 1 provides a summary illustrating the shift in project emphasis over the periods under review.

Table 1. Project Emphasis Summary

Period	Mainstream Consumer	Condition-Specific	Global/Low Resource	Climate/Systemic
2007–2009	High	Low	Rare	Limited
2017–2019	Moderate	Growing	Emerging	Moderate
2024–2026	Reduced	High	High	High

5 INTERPRETING THE SHIFTS

5.1 From Consumer Convenience to Socially Situated Design

Across the sampled periods, the most significant shift is from mainstream consumer optimisation toward socially situated and condition-specific design. Projects from 2007–2009 largely focused on convenience, efficiency and incremental product improvement. Assistive devices were present but typically framed in functional rather than systemic terms.

In later clusters, particularly 2024–2026, projects increasingly centre lived experience. Dementia management, neurodiversity, chronic illness and postpartum recovery become prominent themes. The emphasis moves from improving product typologies to improving conditions of living. Users are framed less as abstract consumers and more as individuals navigating complex health and social realities. The rise of invisible and chronic conditions further indicates greater specificity in identifying legitimate design users. Rather than broad demographic categories, later projects demonstrate nuanced attention to cognitive, behavioural and long-term health contexts.

5.2 Expanding Context: Climate, Gender and Globality

Recent projects also reflect widening contextual awareness. Sustainability evolves from incremental efficiency improvements to engagement with climate adaptation and environmental systems. Gender-specific and maternal health needs become more visible, suggesting attention to historically overlooked bodies. Geographic specificity increases, with projects more frequently identifying defined regions or socio-economic contexts rather than generic users. This shift from market segments to situated communities signals a broader understanding of design as embedded within social, environmental and cultural systems.

5.3 Market Logics and Their Limits

Despite this diversification, most projects remain framed as product-based solutions operating within existing market structures. Even socially oriented briefs are typically articulated as commercially viable artefacts. Explicit engagement with structural inequality or overtly political domains remains limited.

While integrating marginalised users into mainstream product design may represent progress, it also raises questions about whether product-led approaches sufficiently address systemic challenges. Students are expanding who they design for, but implicit limits may persist around how far design can interrogate dominant socio-economic frameworks.

6 EDUCATIONAL IMPLICATIONS

6.1 Curriculum, Studio Culture and Value Formation

Final year projects reflect value formation within design education. The observed shifts likely respond both to wider societal discourse and to evolving curricular priorities around sustainability and inclusion. As themes such as mental health and climate gain legitimacy, students appear increasingly motivated to pursue them.

Studio culture and assessment structures shape this trajectory. The growing visibility of marginalised users suggests that inclusion is no longer peripheral within the programme's implicit value system. At the same time, the relative absence of systemic critique highlights the need to embed critical and structural perspectives more explicitly within the curriculum.

6.2 Limits and Future Responsibilities

If inclusive design is to move beyond trend responsiveness, it must be structurally embedded rather than dependent on individual student initiative. This may involve integrating user-diversity criteria into briefs and assessment and introducing tools for stakeholder and power analysis earlier in the programme. Design education therefore carries responsibility not only for technical competence but for shaping assumptions about who design serves and how responsibility is framed.

7 CONCLUSIONS: EDUCATION, INDUSTRY AND FUTURE PRACTICE

Across two decades, final year projects reveal a clear expansion in who is being designed for. From mainstream consumer convenience, student work increasingly engages with marginalised communities, invisible conditions, gender-specific health needs and climate-related contexts.

Diversifying intended users may also reflect changing market conditions, as contemporary product markets are often saturated, making incremental innovation or aesthetic differentiation insufficient for strong unique selling points. For final-year students, whose projects often serve as portfolio highlights in a competitive job market, demonstrating originality is particularly important. Designing for mainstream consumer products can risk redundancy unless supported by significant technological innovation. In contrast, focusing on underrepresented communities, condition-specific health contexts, or geographically defined user groups can provide clearer differentiation and stronger narrative positioning. Engaging with niche or overlooked markets therefore supports both social impact and strategic advantage by addressing unmet needs in crowded design sectors.

These shifts suggest that design education can influence how future designers define relevance and value. Graduates trained to centre dementia patients, neurodivergent users or low-resource communities may broaden professional priorities within industry. However, sustaining this trajectory requires deeper integration of inclusive and critical thinking within curricula.

The central issue is not only who students are designing for, but how educational structures define legitimacy and responsibility in product design. In shaping these definitions, programmes contribute to the future orientation of the discipline itself.

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