

# **CRAFT EDUCATION AS A CATALYST FOR CULTURAL SUSTAINABILITY IN SAUDI DESIGN CURRICULA: A CASE STUDY OF DESIGN STUDENTS AT IMAM ABDULRAHMAN BIN FAISAL UNIVERISTY**

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## **ABSTRACT**

Design majors in Saudi Arabia often prioritise global and technological educational methods, which can limit the diversity of learning resources students can encounter. As traditional crafts embody cultural diversity, manual skills, sensory knowledge and community identity, which should be valued in design learning as a rich source of inspiration and cultural continuity. This study investigates how integrating craft-related courses influences students' cultural sustainability, their connection with local craftspeople, and the impact on their design practice.

Utilising a mixed-method approach – survey, semi-structured interviews, and a case study analysis of student design projects - the study compares students who completed craft-related courses with those who did not. Results show both groups demonstrated high interest in crafts but only moderate practical engagement with traditional crafts, indicating that appreciation does not always translate to sustained involvement. Students who had completed craft-related courses were more likely to integrate craft elements into their designs, although often driven by course obligation. Indeed, case study analysis shows that integration tended to reflect conceptual or aesthetic intentions rather than cultural embedment. Engagement with craftspeople remained limited overall, reflecting broader constraints. Qualitative insights highlighted barriers limiting deeper engagement, including limited time, insufficient exposure, and difficulty accessing artisans.

Findings highlight the importance of integrating craft-related subjects within design curricula to promote diverse knowledge systems, enabling access to cultural resources. It recommends more immersive and meaningful educational strategies to help students build lasting connections with local craft communities and develop culturally grounded design practices.

*Keywords: Cultural sustainability, craft education, design curriculum, craft community, cultural diversity*

## **1 INTRODUCTION**

Cultural sustainability, a key dimension of social sustainability, reflects the preservation and connection to cultural beliefs and traditions. Handicrafts contribute to these cultural and social dimensions by carrying embodied skills and community knowledge, making their presence within design education relevant to broader discussions on inclusive and culturally responsive learning. Although craft-related courses are included in the design curriculum, limited research examines how this learning influences students' cultural sustainability and how students engage with diverse forms of knowledge.

Accordingly, the study aims to evaluate how teaching craft-related courses affects students' by assessing their ability to adapt traditional crafting skills within modern design practices and their interaction with handicraft community. It examines how this exposure shapes students' connection to cultural heritage, their willingness to incorporate it in their design work, and the depth of their engagement with craftspeople, which provides insight into students' access to different cultural contexts and practices.

The research hypothesis implies that integrating craft learning into design curricula strengthens cultural sustainability by enhancing students' connection with crafts, encouraging the modern application of

traditional skills and fostering a deeper connection to cultural identity while supporting more inclusive and socially aware design practices. The study targets students from different design majors, including industrial, interior, and graphic design programmes, which differ in the extent to which craft-related courses are embedded in their curricula, allowing for a comparison between students who have completed these courses and those who have not.

## **2 LITERATURE REVIEW**

Craft education plays a significant role in supporting students' cultural sustainability through meaningful engagement, and skill development. Craft practices serve in preserving cultural identity while also fostering inclusivity and social cohesion within communities [1]. Research show that craft education plays a role in transmitting cultural knowledge and ensuring the continuity of heritage across generations. [2] [3]craft practicing in informal settings created a platform of social inclusion. Research also highlights that such environments encourage community building regardless of the language barriers and had led to meaningful engagement. [4]. Moreover, it was found that craft-based economy projects significantly contribute to preserving cultural identity, migrant integration, and cross-cultural connections. While migrant integration does not represent a social challenge in Saudi Arabia, such literature highlights the broader inclusive potential of craft practices. In this regard, studies emphasise the significances of collaborative workshops and entrepreneurship since they encourage knowledge exchange and intercultural relationships, contributing to the long-term sustainability of cultural heritage [5]. Such activities and the creation of cultural products was seen to increase market attractiveness, leading to more preservation of heritage and transmission of culture [6]

Craft spaces and workshops serve as inclusive environments for engagement, dialogue, and skill development, where cultural values and perceptions can be negotiated through hands-on practice [7]. Research indicates that craft education enhances technical skills, deepens awareness of cultural heritage, and supports the transmission of traditional knowledge when integrated into educational curricula [8], [9]. Moreover, inclusive pedagogical approaches that address diverse learner needs, connect student projects to market opportunities, and promote cross-institutional collaboration contribute to reducing structural barriers and building broader communities of practice [10].

To conclude, crafts behold a great cultural value, and though crafts, heritage may be preserved and cultural practices continue and sustain. Moreover, craft education was seen to open door for inclusive communication and meaningful engagement. The role of educational institutions stands as a platform for social inclusion, engagement, and skill exchange.

## **3 METHODOLOGIES**

### **3.1 Research Design**

This study adopted a mixed-method framework combining quantitative and qualitative approaches to examine the impact of craft education on design students' knowledge, exposure, engagement, and design practices. A non-probability sampling method was used, to access the defined population of female students enrolled in the College of Design at Imam Abdulrahman bin Faisal University. The general sample included 157 students across three majors-Graphic Design (n=68), Industrial Design (n=54), and Interior Design (n=35)- ranging from first year to graduation level. For comparative purposes, participants were divided into two groups based on their educational background: students who had studied craft-related courses (n=78) and those who had not (n=79). This grouping enabled the study to assess how formal craft education shapes cultural sustainability outcomes.

### **3.2 Data Collection**

Data was collected using three complementary tools. First, a digital survey distributed to the full sample, to gather quantitative data on students' knowledge of crafts, interest level, exposure through events and social media, engagement with craftspeople, and the integration of craft techniques into their design projects. Second, semi-structured interviews were conducted with 20 students, face-to-face and via Zoom. These interviews provided deeper qualitative insights into students' experiences, communication barriers with artisans, and motivations behind incorporating crafts in their design projects. The third tool was a case study analysis of 23 randomly selected students' graduation design projects. It examined how students translated craft knowledge and values into actual design outcomes. Ethical approval was granted by the IRB of Imam Abdulrahman bin Faisal University. Participation was voluntary, informed consent was obtained, and responses were kept confidential for academic use only.

### 3.3 Data Analysis

Data analysis was conducted in several stages, with various techniques. Survey data were analysed using descriptive, cross-tabulation and correlation analysis to explore relationships between key variables. Additionally, to capture the multidimensional nature of engagement, a composite Engagement Index was developed integrating cognitive, affective and behavioural dimensions. Variables were normalised and weighted based on theoretical relevance, with greater emphasis placed on behavioural engagement due to its role in embedding practice. To ensure validity, internal coherence was examined through positive associations among the three dimensions. Engagement levels were categorised into low, moderate, and high based on equal intervals of the engagement index (0-1 scale). Interview transcripts were analysed thematically to identify recurring patterns related to communication barriers, motivations, and perceptions of cultural sustainability. Finally, the case study projects were evaluated using predefined criteria related to craft integration, execution, and cultural sustainability. These criteria allowed the analysis to assess the depth of craft knowledge and embedment rather than surface-level aesthetic use. To ensure consistency, two researchers reviewed the projects, and inter-rater reliability confirmed agreement. Findings from all tools were then triangulated to produce a comprehensive understanding of how craft education contributes to cultural sustainability in design education.

## 4 ANALYSIS & DISCUSSION

### 4.1 Knowledge and Interest of Crafts

A central pattern that emerged is the gap between knowledge of crafts and interest in crafts. Overall students reported relatively higher levels of interest in crafts ( $M=3.71/5$ ,  $SD=1.13$ ) while knowledge levels were relatively lower ( $M=3.3/5$ ,  $SD=0.97$ ). Knowledge was moderately impacted by study of related courses ( $r=.20$ ) and the intensity of courses ( $r=.34$ ), though interest demonstrated no association to study ( $r=.02$ ). Also, there is a moderate positive correlation between knowledge and interest indicating that exposure enhances understanding and enthusiasm.

Further, interview insights clarify these patterns, particularly in relation to how and why students would be exposed to the educational opportunities. Students explained that their motivation to take craft-related courses often depended on whether the course was mandatory, aligned with their specialisation, or manageable as an academic workload. These structural constraints help explain why interest levels exceed knowledge levels, especially in majors where the course is perceived as less relevant.

*Table 1. Correlation matrix of study key variables related to knowledge, interest, exposure, design integration and overall engagement*

|                                   | 1                 | 2                 | 3                 | 4                 | 5                 | 6                 | 7    | 8                 | 9                 |
|-----------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|------|-------------------|-------------------|
| 1. Craft-Course Enrolment         | -                 | <b><u>.61</u></b> | <b><u>.20</u></b> | .02               | .06               | .10               | -.04 | .14               | <b><u>.17</u></b> |
| 2. Course Intensity               | <b><u>.61</u></b> | -                 | <b><u>.34</u></b> | -.01              | .02               | -.05              | .15  | -.11              | .14               |
| 3. Craft Knowledge Score          | <b><u>.20</u></b> | <b><u>.34</u></b> | -                 | <b><u>.35</u></b> | <b><u>.24</u></b> | <b>.18</b>        | .02  | .18               | <b><u>.67</u></b> |
| 4. Craft Interest Score           | .02               | -.01              | <b><u>.35</u></b> | -                 | <b><u>.26</u></b> | <b><u>.31</u></b> | -.01 | <b><u>.23</u></b> | <b><u>.79</u></b> |
| 5. Event Attendance Frequency     | .06               | .02               | <b><u>.24</u></b> | <b><u>.26</u></b> | -                 | .04               | .01  | <b><u>.39</u></b> | <b><u>.46</u></b> |
| 6. Design Integration Score       | .10               | -.05              | <b>.18</b>        | <b><u>.31</u></b> | .04               | -                 | -.11 | .14               | <b><u>.55</u></b> |
| 7. Craftspeople Contact Frequency | -.04              | .15               | .02               | -.01              | .01               | -.11              | -    | -.05              | -.03              |
| 8. Craft Social Media Following   | .14               | -.11              | .18               | <b><u>.23</u></b> | <b><u>.39</u></b> | .14               | -.05 | -                 | <b><u>.45</u></b> |
| 9. Composite Engagement Index     | <b><u>.17</u></b> | .14               | <b><u>.67</u></b> | <b><u>.79</u></b> | <b><u>.46</u></b> | <b><u>.55</u></b> | -.03 | <b><u>.45</u></b> | -                 |

Note: Cell background colour indicates correlation strength; formatting indicates significance (bold<.05, bold+underline<.01, bold+underline+italics<.001). Pearson's  $r$ ,  $N=157$

### 4.2 Exposure to Crafts

Exposure through events was modest and uneven, where many students attended only one or two craft-related events, and participation was far less common than attendance. Differences appeared between groups: students who studied craft-related courses were more likely to attend educational courses (19% vs. 11.4%), and craftsmen's meetings (20.3% vs. 7.6%), while attendance at festivals was similar across

groups (49.4 vs. 48.1%). Festival attendance therefore seems to function as an introductory gate to crafts awareness which can create a path to more active forms of engagement. These patterns indicate that formal study encourages exposure to more learning-oriented and practitioner-focused events, though overall experiential engagement remains limited. This aligns with interview comments where students described their exposure as mostly observational “I enjoyed viewing their work” and “I participated once in pottery work,” highlighting why exposure scores remain moderate despite high interest. Additionally, students in the Industrial Design programme—where craft-related courses are more intensively embedded—showed 15-20% higher participation rates in craft-related events and activities compared to the other disciplines, whose curricula include fewer craft-related requirements, where students majorly attended events without active participation.

### 4.3 Design Integration of Crafts

Design students show a moderate frequency of integrating crafts in their projects ( $M=2.5/5$ ) indicating that crafts appear in design work but not as a regular practice. What clarifies this pattern is the relationship between variables: interest shows a stronger correlation with design integration ( $r=.31$ ) than knowledge does ( $r=.18$ ). This suggests that students’ interest in crafts is the primary driver of whether they use them, while knowledge plays indirect role supporting integration by reinforcing interest.

Motivations of design integration further support this interpretation. Result shows that students mostly apply craft elements to support their design concepts (66%), and for aesthetical reasons (61%), while cultural preservation and supporting craftsmen community appears less (51%) and (27%) respectively. Thus, cultural value is acknowledged, but it is not the leading driver for students to bring crafts into their work. Taken together, these findings show that students value crafts, but primarily for their conceptual and aesthetic contribution rather than for cultural continuity.

The case analysis of design projects further clarifies this. Across all measured dimensions, Graphic Design projects demonstrated the highest overall incorporation ( $M=2.9/5$ ), followed by Interior Design ( $M=2.4/5$ ), while Industrial Design projects demonstrated lower integration ( $M=1.7/5$ ). Notably, even in the criterion of Execution and Making Techniques, Industrial Design project did not exceed other disciplines despite having mandatory crafts course. The strongest scores in all programmes are for Cultural and Sustainability Impact ( $M=3.1/5$ ), suggesting that crafts are often framed conceptually. This goes with the earlier note that interest, rather than curricular exposure, is the primary driver of integration.

#### 4.3.1 Saudi Craft Integration in Student Outcomes

Several students incorporated Saudi craft practices and cultural narratives into their design outcomes. In Interior Design, one student developed the *Saudi Visual Arts Centre in AlUla*, integrating locally inspired materials and storytelling within a contemporary setting. Graphic Design students created culturally driven work using visual storytelling, printed interaction tools, and social media content; for example, *Watad* project strengthened intergenerational relationships around elderly care through culturally inspired communication materials. In Industrial Design, a student developed an interactive storytelling application that integrated Saudi oral heritage through digital and physical interaction. These projects demonstrate how students reinterpret local heritage through contemporary design methods.

However, the findings show that craft references were often integrated conceptually rather than through deeper material experimentation and making processes. This reflects a gap between craft practices and educational structures, where fast-paced academic systems restrict sustained hands-on engagement and craft development. Although practical components exist, students often choose not to integrate crafts in major design projects, relying instead on conceptual or visual references.

### 4.4 Engagement with Craftspeople

Students’ actual contact with craftspeople is limited, uneven and largely functional. On average, students contacted a craftsman almost once a year ( $M=1.15$ ) with substantial variability among them ( $SD=2.04$ ). The highest reason for contact is design project implementation (49%), followed by learning and skill development (46%), then personal project implementation (33%). This pattern indicates that almost half students only contacted craftspeople when a course requirement pushes to do so, while far fewer students had initiate contact for personal exploration. Interestingly, the study of crafts-related courses influences the contact, but not uniformly. Students who studied craft-related courses show higher contact for design projects (59% vs 40%) but lower contact for personal projects (26% vs. 40%). The learning and

development were similar for both groups (46% vs 49%). This suggests that coursework encourages students to contact craftspeople when required but does not necessarily establish a long-term relationship. Interview data further illustrate this as many students stated they “have not communicated artisans,” or that “access is not always easy,” and some noting “do not know how to reach them.” Students’ digital engagement with craftspeople is noticeably higher than their direct interaction. Results show that students follow, on average, around 7 craft-related accounts, using social media as primary channel. While this expands exposure, it remains observational, offering inspiration but not hands-on knowledge that comes from working with craftspeople. This digital approach of engagement reinforces the gap between interest and actual cultural exchange.

#### **4.5 Composite Engagement Index:**

The engagement index was strongly correlated with interest in craft ( $r = .79$ ) and knowledge of crafts ( $r = .68$ ), indicating that affective and cognitive dimensions substantially contribute to the overall engagement. Moderate correlations with design practice integration ( $r = .56$ ) and event attendance ( $r = .46$ ) suggest that behavioural dimensions play a meaningful but secondary role. These correlation results support the construct validity of the index, as it aligns with the theoretical expectations. However, one notable deviation emerged as formal curriculum exposure showed a weak association with the index ( $r = .17$ ), still a programme-level comparison revealed that students enrolled in the programme where craft-related coursework was mandatory demonstrated a 10% higher proportion of high-engagement scores compared to programmes where such courses were elective or partially related. This suggests that structural curricular embedding may elevate overall engagement distribution, even if individual-level correlations remain weak. Indeed, interview insights support this pattern where students who studied craft-related courses described increased awareness “it enhanced my appreciation for handcrafts” and more exposure “it encouraged me to attend exhibitions.”

### **5 CONCLUSION AND RECOMMENDATIONS**

#### **5.1 Summary of Findings**

This study highlights the meaningful yet incomplete role of craft education in advancing cultural sustainability within design programmes. Students across majors’ express strong appreciation for traditional crafts and recognise their cultural and aesthetic value, yet this appreciation does not reflect in their practice. Knowledge levels remain moderate, and design integration is selective, with interest showing a stronger impact on application than knowledge. This suggests that emotional and creative attraction to crafts motivates use more than informational understanding alone.

Exposure to crafts is present but limited, with event attendance being modest and participation being rare, and most encounters are observational rather than hands-on. Yet, the impact of studying craft-related courses is evident, where students who studied these courses were more likely to attend educational workshops and craftsmen’s meetings, indicating that formal study encourages deeper forms on exposure. However, engagement with craftspeople remain the weakest link: interactions are infrequent, often driven by project requirements, and hindered by communication barriers and limited access. As a result, crafts are being used primarily as aesthetic or conceptual elements. This pattern reflects concerns raised in existing craft-education literature, where students often value traditional crafts symbolically but struggle translating this appreciation into sustained practical engagement.

#### **5.2 Interpretation of Findings**

These findings partially support the study’s hypothesis. Craft education increases awareness and expands exposure, but it does not yet lead to a sustainable relationship with craftspeople or cultural integration within design practices. Strengthening the structural and relational components of craft education is therefore essential. This study expands upon previous research by identifying a gap between students’ interest in crafts and their actual practice. It explains the reasons for this persistent gap, highlighting structural constraints, as well as limited interaction with artisans. Unlike earlier studies focus on heritage preservation or curriculum content, this study positions craft education as a relational and experiential process, emphasising the importance of sustained student-artisan interaction for achieving cultural sustainability within Saudi design programmes.

### 5.3 Recommendations

A set of improvements is needed to strengthen the role of craft education in cultural sustainability. First, the craft-related courses should be redesigned so that cultural identity, heritage and traditions are clearly embedded in its content, ensuring meaningful students' engagement. Also, tailoring the course to the need of each design specialisation would increase relevance and strengthen students' motivation. Additionally, longer-term and process-oriented craft engagement should be encouraged across multiple courses and academic levels, to support sustained practice and more inclusive learning. Second, universities should establish structured opportunities for direct interaction-through formal communication channel, workshops, co-teaching, field visits, or collaborative project briefs-to provide students with direct access to artisans' tacit knowledge. This responds to students' difficulty in approaching craftspeople individually; such institutional structures can ease communication barriers and create more supported interaction. Finally, expanding research and collaboration across institutions would help capture variations in craft traditions and build a broader network linking design programmes with craft communities and market opportunities. This would support a more sustainable and culturally grounded integration of crafts in Saudi design education while contributing to broader discussions on diversity and inclusion in design education.

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