

CRAFTING ECONOMIC OPPORTUNITY

PILOTING DESIGN EDUCATION IN A DEVELOPING WORLD CONTEXT

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1. INTRODUCTION

Handicraft and small cottage industries in Nepal have taken an enormous beating over recent decades, predominantly due to stagnant product development. As just one example, at its height in the early 2000s, the pashmina industry in Nepal generated revenues topping \$110 million a year, but within a decade that number had shrunk to \$25.83 million in 2010.¹ Although the Nepalese product was superior to global competitors, the lack of innovation in product and patterning commoditized pashmina, devastating the industry. Nascent efforts to encourage product development within the handicraft market have only been met with limited success, primarily due to the inability of companies to recruit and hire trained designers. Many handicraft companies rely on traditional craftsman to develop new products, a task they are ill equipped for. Other companies attempt to develop talent from within, hoping that experience working with overseas buyers will translate into the design skills needed to innovate, but it can take years to build those resources from within.

Currently, design education in Nepal consists of graphic design for advertising and brand identity along with a number of private fashion design institutes. There are no educational institutions in Nepal offering a product design curriculum. Even with a limited manufacturing base, that absence is felt across various industries, from small cooperatives to large manufacturing entities. The ability of companies to innovate and provide distinct value to domestic and international consumers through the development of meaningful and appealing products and services is a major factor limiting economic development in Nepal. But with no prior educational or industry imperative to cultivate product design as a vital component of economic growth, the education sector has not responded. For the last 15 years, our research has been engaged in product development for the handicraft industry, primarily with fair trade artisans. These efforts have shown the immense value that skilled designers can bring to this market and the positive economic impact on the often most disadvantaged in society, the traditional craftsman entrusted with the artistic heritage of a culture. With a burgeoning artistic scene and an excellent arts curriculum particularly appealing to students from traditional craft castes, a product development curriculum would be well situated to attract art students seeking job opportunities and career pathways. Rather than bringing designers from abroad, or relying on external buyer input, there is an urgent need to cultivate talent from within.

With a grant from the U.S. State Department in collaboration with the U.S. diplomatic mission to Nepal, an effort was undertaken to develop and pilot a unique product design curriculum focused on developing design resources for the handicraft and small cottage industries. Working in collaboration with Kathmandu University, the premier

¹ International Finance Corporation World Bank Group web citation
'http://www.ifc.org/wps/wcm/connect/region__ext_content/regions/south+asia/news/ifc+helps+revive+nepal+pashmina+industry'

private education institution in Nepal, and their esteemed Centre for Art and Design, a two-week intensive workshop was piloted in the summer of 2013 to deploy a craft design curriculum with two constituencies, BFA studio art students and industry professionals working in handicraft design without formal design training. These two groups were brought together to explore the interaction that would emerge and to test the opportunity for a complementary educational initiative aimed at handicraft professionals. These individuals often lack the formal educational credentials to pursue higher education, but who would greatly benefit from more formalized design training. Twenty-six individuals evenly divided between students and industry professionals were recruited. The Federation of Handicraft Association of Nepal (FHAN) was crucial in recruiting industry professionals from both the commercial and fair trade sectors and hand selected individuals from a variety of trades and skill categories, from papermaking to natural fiber weaving to leatherworking. The students selected were selected from studio art and graphic design BFA candidates in the fourth or fifth year of a five-year program of study.

The overarching goals of introducing a product design curriculum in the developing country context of Nepal with its limited manufacturing base were more focused than traditional design pedagogy. These goals were to:

- Aid students in relating to the world in visual, tactile and spatial terms and understanding art, design and craft in a variety of contexts – historical, cultural, economic, social and personal.
- Develop aesthetic sensibilities, creativity, and ingenuity along with the ability to critically appraise and evaluate his/her own work and the work of others, to refine and improve one's own work product.
- Develop a core understanding of the diversity of Nepal's most accomplished handicraft and production processes, materials, technologies and constraints in order to design effectively within the Nepali context.
- Internalize product design methodology in order to sustain a project from conception to realization.
- Develop an awareness of the historical, social and economic role and value of design and craft, especially as it relates to the progress and development of Nepal within the international context.

The workshop was held over two weeks, with students attending from 10am to 5pm each day and concluding on the Monday of the third week. During the intervening weekends, students were tasked with fieldwork and progress on their own creations. The workshop culminated in an exhibition of prototype designs generated by participants. The primary goals of the pilot workshop were to introduce both participants, KU faculty and industry representatives to the principles of a product design curriculum and ultimately cultivate an imperative for such a curriculum within Nepal's educational paradigm from both industry and educational sectors.

2. PILOTING A CRAFT DESIGN WORKSHOP

The workshop began with a discussion on the intersections between traditional art, product design and contemporary craft. It was critical to situate their emergent understanding of design within the more traditional notions of craft as understood by participants. With many belonging to traditional craft castes, hereditary social classes often distinguished by occupation, individuals came into the course with strong conceptions of the role of craft in society and the economy. Because the exclusive need for functional handmade objects no longer exists and the learning of craft processes not limited to community tradition, contemporary craft is now marked by innovation in design and materials and new interpretations of traditional technique and style. This lively discussion made for an excellent introduction to the workshop and framed expectations for the instruction to come.

The remainder of the first and all of the second day were focused on conveying a strong foundation in basic design principles. While this was new for the industry professionals, BFA students were typically well versed in these core principles, though typically from a studio art perspective. To ensure engagement among both constituencies, instruction in various principles was quickly followed by practical applications directly related to craft products. These were rapid hands-on exercises designed to make explicit the principles discussed in a very visual and tactile manner while incorporating motifs and elements of Nepali culture in ways that relate strongly to craft traditions. For example, after a discussion on value and contrast, students were tasked with translating images of a lotus flower into a high contrast and low contrast visualization noting how the results conveyed different emotive and perceptual qualities (Figure 1).



Figure 1 Value studies with lotus flower



Figure 2: Students discussed butterfly composition studies

Another exercise of note was the development of a motif into a series of compositions using basic design layout principles. Assigning students the motif of a butterfly and a square frame repeated three times, students were tasked with developing a compositional series that directly utilized one or more foundational design layout principles including unity, harmony, balance, contrast, hierarchy, tension, proximity, symmetry, asymmetry, rhythm, transformation, progression and pattern. The end results of this exercise allowed students to imagine a series of pillows or cushions that would aesthetically relate but offer dynamic variation in their array, pushing students to think beyond simple repetition within an environment (Figure 2). Day two finished with a color interaction and relativity lecture and hands on collaborative exercise based on Joseph Albers color theory work. Following his studies breaking down the understanding of color into a series of exercises, participants were paired up, one student and one industry professional and using a pack of color-aid color sheets and neutral backgrounds, students recreated these fundamental color illusions. It was instructive to see the roles often reversed between student and professional, as students' more theoretical knowledge enhanced the professional's more grounded experience and wisdom (Figure 3).



Figure 3 Practitioners and students work together



Figure 4 Participants touring ceramics facility

The third day was held off-site with participants traveling to various locations around the Kathmandu valley to visit handicraft production facilities to learn about craft manufacturing processes. Over the course of one long day, they visited facilities devoted to ceramics, papermaking, metal sculpting and silver-smithing, textile and natural fiber weaving, dyeing and production sewing (Figure 4). At each site, participants were taken through the commercial manufacturing process in order to develop an understanding of current capabilities along with constraints inherent in each process. Industry participants themselves coordinated some visits, giving tours of their facilities. For example, we visited the factory of one participant who founded the natural fiber processing movement in Nepal and is at the forefront of technological advancements in this area. An elder statesman, she was a powerful inspiration to all participants alike, and her enthusiastic involvement in and advocacy of the workshop was another confirmation of the critical need for this educational pedagogy for industry development.

The workshop resumed with a day devoted to ideation and iteration, bringing participants up to speed on analog and digital visualization methods for developing and communicating ideas, starting with fundamentals of rapid sketching. The transition from drawing what one sees to what one knows or imagines can be challenging for students, especially those from studio art backgrounds. Participants moved into timed drills, drawing objects from their imagination in increasingly shorter increments, challenging them to communicate objects with more efficiency and deliberateness. This was followed by instruction in orthographic projection as the best means of communicating dimensional and production information. The afternoon was devoted to an introduction to Adobe Illustrator and Photoshop for developing line art and rendered visualizations.

Now more comfortable with visualization, participants then moved into brainstorming and motif development. Instruction began with various techniques for generating many ideas in a short amount of time. As an exercise, participants brainstormed traditional Nepali motifs from architecture and history to natural elements and cultural themes. The breadth and range of ideas generated provided a wonderful resource for participants to mine for current and future inspiration. Instruction in motif development followed, sharing with participants various ways to take a motif and develop various aesthetic treatments. By supplying them with a framework for aesthetic exploration, it introduces a more rigorous method of generating ideas and concepts, rather than relying on a haphazard approach. Participants divided into three teams, and selected a Nepali motif from the brainstorming. They explored various aesthetic treatments from abstraction to silhouettes, and patterning to exaggeration, allowing them to experience the very wide range of possibilities inherent in creative exploration (Figure 5).

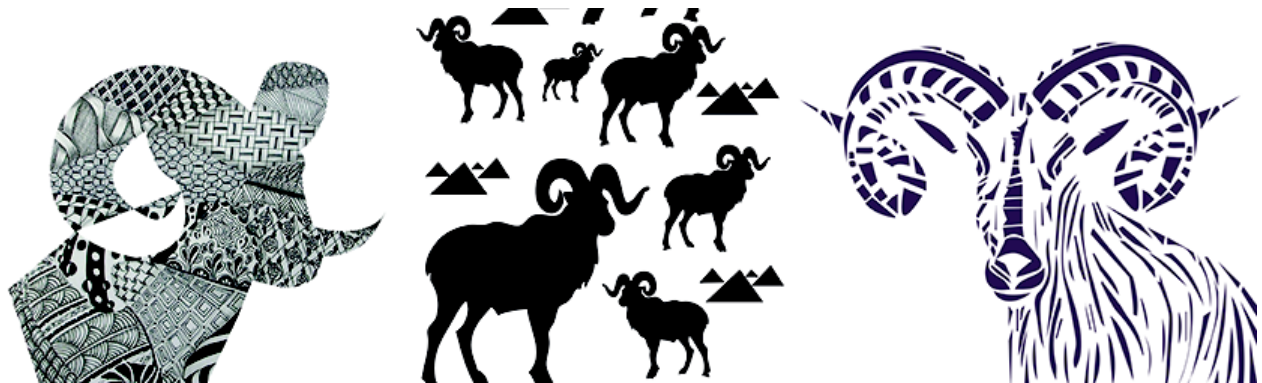


Figure 5 Team aesthetic development on the Nepali Mountain Goat

Lastly the day ended with a lecture on understanding your consumer from their basic demographics and psychographics to understanding their buying behavior and lifestyle needs, inspiring a discussion on the domestic craft market in Nepal and the consumers of craft in a local context. Participants identified three fundamentally different local craft marketplaces, each with their own distinct craft products, consumers and retail environment. The first is Thamel, the tourist hub of Kathmandu, where cheap and plentiful trinkets can be found. The second is Kupendole, the center for Nepal's traditional craft heritage, with its' strong emphasis on authenticity and time honored techniques. The last is Babar Mahal, a restored palace complex which houses high-end contemporary craft boutiques with well designed products appealing to the diplomatic and expatriate communities as well as upper class Nepalese. Using the same three teams, each group selected a marketplace and was assigned to visit that location over the weekend to document products, interview consumers and retailers, benchmark products, and develop buyer profiles, all ultimately compiled into an insightful presentation to the class.

The second week started with these presentations and a vigorous discussion followed as students debated the differences marking each context. This provided an excellent segue into a larger discussion on global consumer buying paradigms and purchase decision-making frameworks from impulse buying to recreational shopping. Participants were particularly animated around the concepts of tourist art, the idea of traditional crafts repackaged and purchased by tourists visiting exotic locales in search of objects that represent a particular ethnic or cultural tradition. Though these may be purchased with the real or perceived intent to aid traditional craft heritages, their true function exists in the space between an object's decorative quality and its ability to evoke memories of travel experience itself once home. The repackaging of religious and cultural tropes is particularly controversial with participants debating the positives and negatives of this emergent marketplace. Lectures followed on lifestyle and culture in major international craft marketplaces with presentations on home design and décor, lifestyle retailers, color convention, and holidays and cultural traditions. These presentations also invoked a lively conversation. Though some professionals had traveled abroad, most participants had never been outside of Nepal and these presentations were eye-opening and thought provoking. Stereotypes were debated, and participants were surprised and even shocked by some of the practices or traditions presented. With frank discussion, they came to a better understanding of the global consumer and the markets they hope to design for.

The final presentation of the day revolved around forecasting and trend analysis. It began with defining trends as patterns of behavior linking demographic, economic, political and technological change to individual choices. With roots in popular culture and global events, identifying trends allows designers and retailers to understand what's going on in people's minds in order to predict how they will react when shopping and decorating. Through trend analysis, common factors, issues, concerns and events are matched to colors, styles, products and materials to suit those emergent need and wants. While it is important to understand the process of forecasting trends, for designers in the developing world context, it can be more productive to research established trend forecasters and media coverage of lifestyle trends. With the internet readily available throughout Nepal, local designers can mine trend forecasting websites, preview publications by major industry groups such as Pantone or for-profit forecasting groups, media coverage of major home and lifestyle events such as Ambiente and New York Gift Fair and more recently pinterest boards that showcase edited design finds and trends for almost every topic imaginable. To provide participants with a concrete example of how macro movements impact decision making at the micro level, contemporary trends were analyzed from their cultural and temporal roots through to their tangible manifestation in home design and décor. The global recession was examined for its impact on a wide variety of trends, and how a sustained period of financial austerity and general economic downturn inspired an overall

consumer need for security and comfort often manifesting in the form of nostalgia. Retro patterns and vintage with a twist were highlighted in all major fashion and lifestyle shows with old becoming new again through a very deliberate reimaging of traditional motifs. Similarly, large scale and oversized knits and knotted details provide comfort by cushioning consumers from everyday instability. Participants were able to draw a very tangible line from macro events to their manifestations in lifestyle products. With useful tools in hand, participants geared up to develop and prototype their own line of contemporary craft products over the last days of the workshop.

3. CREATING A LINE OF CONTEMPORARY CRAFTS

Participants spent the first of four days exploring various craft processes available on site at the KU Centre for Art & Design. As part of the grant, KU was endowed craft production equipment to complement existing facilities. A full papermaking unit was built from pits for preparing raw materials and a pulp beater to pools for pulling sheets of paper. A small-scale felting unit and a sewing unit were installed along with woodworking and jewelry-smithing tools. Silk-screening and ceramics facilities already in existence were enhanced with better capabilities. Two outside experts were brought in to share technical knowledge into dyeing and contemporary weaving processes while a loom was brought in on loan with students instructed in its operation, for those interested in exploring textile weaving. Lastly two KU faculty members with craft background and expertise shared knowledge in the areas of ceramic materials and glazes as well as jewelry-smithing. Between lectures and presentation, students experimented with new processes, making handmade paper, felted objects, fiber weaving, thrown ceramics and silk-screening images. Industry participants led some of these explorations in their own areas of expertise, aiding in a vital transfer of knowledge. It is easy to imagine translating this portion of the workshop to a larger curriculum with students taking individual courses in craft areas of interest taught by readily available industry experts.

The final three days were devoted to guiding students in developing, prototyping and showcasing a line of modern handicraft products. They began by generating a mood and inspiration board to capture initial ideas, then moving into motif and aesthetic development, experimenting with ideas and concepts, sketching and prototyping back and forth. Participants freely critiqued each other, offering valuable feedback and suggestions. With final design directions selected in skills categories across the board including textiles, leather, natural fiber weaving, fashion, ceramics, woodworking, paper crafts and paper jewelry, they moved into implementation and execution mode through the final day and a half. A final lecture was given on visual merchandising and exhibit design instructing participants in the critical task of creating a compelling and attractive display of their work. Progress continued unabated through the weekend though, revealing the enthusiasm and motivation of everyone involved (Figure 6).



Figure 6 Participants conceptualizing and prototyping their own line of contemporary craft products

The final day of the workshop consisted of an exhibition, presentation and closing ceremony attended by industry delegates, educational representatives, US diplomatic mission and embassy personal, and media journalists. Participants worked hard to ready their work and display it in an attractive exhibit. While the timeline did not allow for all products to be fully realized, most participants showcased a well-resolved line of contemporary crafts that highlighted their own creativity along with the very tangible influence of the workshop instruction (Figure 7).



Figure 7 Final exhibit presentations showcasing a wide range of contemporary craft

During the closing program, participants shared views on the impact of the workshop with participating industry practitioners and outside delegates unanimously voicing the critical need for this kind of instruction to continue in order to support the innovation and growth of handicraft and small cottage industries. While the curriculum needs refinement to ensure smooth translation from workshop to educational program, the components were successful in instilling basic design theory and methodology and knowledge of lifestyle trends, consumer needs and craft production constraints as evidenced by the high quality and viability of the craft lines produced. More importantly, the project created awareness and catalyzed demand for such educational programming across constituencies.

4. MOVING FORWARD

As inspiring was the subsequent enthusiasm displayed by BFA students, KU faculty and professional participants in the workshop. Four students carried the work over into their BFA thesis projects, and have since moved into the industry first as interns and then as product designers while two others are applying to U.S. based MFA programs in Industrial Design. Changing the course of their career trajectories, these students found themselves much in demand. KU faculty members also later visited the US to lay the foundation for longer-term educational exchange to support this nascent program and provide the expertise needed to staff it. While it is difficult to assess the actual economic impact of this one workshop, the impact of this type of educational intervention on subsequent demand for and sales of craft products in the global market is documented in an article for Innovation magazine Winter 2011 (pg 48-53) of the same title, highlighting fifteen years of collaboration with the Association for Craft Producers, the largest fair trade group in Nepal.

Perhaps the most poignant impact of the workshop was felt in the aftermath of the tragic 7.9 magnitude earthquake that struck Nepal on April 25, 2015. Students and faculty at KU, faced with the loss of their own facilities and the devastation of the city around them, embraced design methodology and adopted the village of Bungamati to rebuild. From rapid sketching and quick prototyping to refining and building shelters (Figure 8) to house displaced families, the educational community responded to great need in wonderfully innovative ways. Results of this pilot program attest to the value product design pedagogy brings to a developing world context and the role it can play in economic revitalization not just within the handicraft sector but across the wider spectrum.



Figure 8 Shelters built by KU Center for Art & Design Faculty and students in the village of Bungamati after the devastating earthquake in April 2015