COLLABORATIVE INTERNATIONAL PROJECT - 'KITCHEN OF THE WORLD', A CASE STUDY IN MULTI-NATIONAL GROUPS UNDERTAKING DESIGN STUDIO ACTIVITY

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ABSTRACT

This case study describes an undergraduate Industrial Design project involving three Universities from three different countries that have been brought together to experience the creative and working relationships concerning the design of a conceptual kitchen, its environment and the products within it.

The project took place in three distinctive phases. Firstly an initial research investigation within the bounds of the students' home institutions and countries. A second synthesis phase hosted by Luleå Technical University in Sweden and finally a third phase concerning the configuration of physical design outcomes hosted by Monash University at its centre in Prato, Italy.

The project is indicative of the 'studio' mode of teaching and learning where students engage in knowledge and skills acquisition through creating and evaluating under the guidance of a lecturer. This studio project had a heightened level of experience in placing the student within an alien, but stimulating environment rich in cultural heritage, and with other students from a country other than their own. It was speculated that this period overseas might have the most influence upon the learning experience during activities requiring a great deal of creativity. The project also explored team based cooperative learning at an international level that hopefully would prove central to a young designer's education. The project exposed both flawed and effective pedagogic strategies in the refinement of the Industrial Design studio experience, especially across international design cultures. These findings have implications upon the development of studio practice, modes of creativity, and teaching.

Keywords: Learning environments, Culture, Industrial Design, Kitchens.

1 BACKGROUND

Industrial design concerns itself with the planning, evaluating and creation of objects where the needs of the human being are central. The experiential activity of designing to solve problems is a distinguishing feature of studio education. The studio learning experience, where students work, think, draw and make to realize solutions either collectively or as individuals has been core to design education for many years. It has been a successful cornerstone of the Industrial Design program both at Monash and at overseas institutions. Typically, Industrial Design projects are multifaceted with variable and open-ended outcomes that encourage students to have a heightened

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responsibility for their learning. Cultivating new ideas and synthesizing what we call 'design thinking' is an effective tool for attaining high levels of innovation. Student evaluation surveys conducted over recent years at Monash University provide evidence of the relative merits of this approach from a student experiential perspective.

There is a large body of research that suggests that student learning is affected by physical place [1]. It has been found that an effective learning environment that addresses the physical, social and psychological needs of the student and supports the task at hand and encourages learning and teaching. The working context in which creative people live and work also has consequences for the production of innovation as well as its acceptance. It is suggested [2] that this might account for the creation of clusters of creative individuals that gravitate towards centres of design activity at certain places and institutions

The professional practice of Industrial Design is not distributed evenly around the world but appears to gravitate in particular geographical regions. Within the broader design community this is considered true of regions such as Scandinavia and Italy. These are the locations that created a contextual background to the 'Kitchens of the World' project and imbued a historical design culture that may, in fact, aid students to see situations from novel viewpoints. In order to enrich the learning experience of our Australian Design students Monash University Department of Art and Design attempts a number of strategies that in some way access these practice-rich areas. These strategies include designer residency programs to work placements. One such strategy is the development and undertaking of collaborative projects, enabling the student to experience how different locations and people might influence the creative process. The novelty of a new environment, its people and culture stimulates processes that help the student to make vital connections that might be unlikely when the problem is pursued within an environment of a students' everyday experience. The greater density of unfamiliar objects and architecture in Sweden and Italy, stimulated students to experiment with ideas more readily than if they had stayed within a more familiar environment.

2 THE PROJECT

The consuming and preparation of food is an activity that unifies all of humanity, but at the same time is often heavily embedded with cultural diversity, therefore 'Kitchens of the World' was an apt title and topic for the creative collaboration. From their home institutions, the student groups set out to question current paradigms of food preparation and consumption as well as their associated rituals. Students of Luleå Technical University visited commercial kitchens and interviewed luminaries of the culinary world. Northumbria University carried out an audit of contemporary attitudes to food and cooking through the popular media's portrayal and representation of culinary activity, whilst Monash University undertook a studio-based design workshop resulting in conceptual designs.

The results of this scoping exercise were brought to Luleå Technical University in the north of Sweden in late April 2005 and formed the basis of a forecast of relevant social and cultural issues, emerging technologies, design trends and ergonomics in relation to each of the students' home countries. Presentations from each of the universities' cohort of students formed the basis for creating specific design briefs. At this stage the groups were re-formed as multinational groups that contained, where possible, an equal number of students from each university. The design briefs that emerged from this process were as follows:

- 1. a kitchen that promoted and stimulated children to learn to cook.
- 2. a kitchen for young couples in a small apartment.
- 3. a communal kitchen.
- 4. a kitchen for someone living alone; and
- 5. a kitchen to assist in combating obesity.

The design briefs were redistributed between the groups so that the original authors were not the designers. This precluded any possibility of preconceptions of the design outcome.

In terms of group dynamics the new multinational groups followed all the hallmarks of group development, namely 'storming', 'norming' and 'performing' [3]. The Australian and English students appeared to become more cohesive earlier in the project. Speaking a common language (although typically the Swedish contingent spoke English fluently) could have been a factor contributing for this early cohesion, as well as the fact that their design education followed similar visually driven modes of expression. The Swedish students approached problem solving using a linear process path that reflected a more deductive engineering methodology. This prescriptive educational strategy that was based upon the use of a large amount of quantitative data was diametrically opposed the other liberal and qualitative approach.

After this period in Sweden the groups decamped and moved to the Monash Centre at Prato. The Italian intervention was the longest period in the project and the one in which all the students shared the novelty of the new environment. The transition from the cool climes of an ordered, structured and tidy design culture to the effervescent, and at times apparently anarchic flavour of Italy created an energizing effect upon the groups. There were the distractions of curiosity, but there also remained a sense of working within a greater whole in terms of artisanship and creativity beyond the walls of the centre.

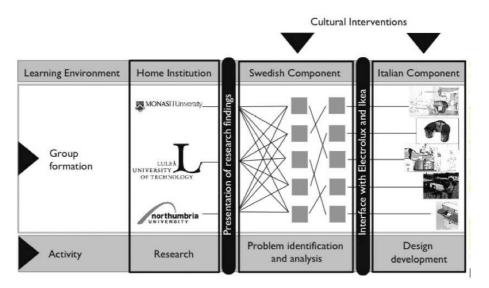


Figure 1 From left to right the path of the collaborative process...

3 DESIGN OUTCOMES

In three weeks the student groups interpreted the briefs and worked together to produce drawings and models (in virtual and soft forms) as an expression of their collaboration.



Figure 2. The design outcomes.

Figure 2 above; the top left image shows a kitchen bench system that sought an inclusive and safe cooking environment for use by children. The bench took the form of a series of shelves or cabinets that articulated up and down to suit the height requirements of a child. This flexible arrangement also included a step-by-step interactive cookbook that suggested recipes and ways for the child to carry them out. Top right is a representation of a communal kitchen. A lozenge shaped bench that can be accessed from all sides suitable for outdoor environments, and catering for groups of ten people cooking different dishes. The design appealed to an egalitarian community keen to rebuild a social cohesion that might elude single occupiers of apartments. Bottom left shows an island kitchen design for young couples containing all major cooking requirements; sink, hotplate dishwasher and a dining area complete with fireside hearth, expressing a combination of utility and intimacy. Bottom centre shows the design for a pedestal steamer. This steamer formed a central component of this kitchen concept that sought to assist the overcoming of obesity. The concept encourages a healthier lifestyle through immersion into dietary practice, such as steaming vegetables in this instance, and retaining a protracted display of healthy foods and products. Bottom right is a kitchen for someone living alone. A compact console style kitchen that envelops the user creating a sense of security, wellbeing and accessibility.

4 REFLECTIONS

There were two main interventions in the normal studio paradigm of study; one was working in multicultural groups and the other working in a changed environment. To analyse these and reflect upon the outcomes a semi-structured interview was carried out with each of the Australian students to validate the observation of the projects' progress. Analysis of the responses does suggest, at least anecdotally, that students that find themselves in different but stimulating settings appear to be more likely to find new connections among their new colleagues. This was a qualitative test rather than a

quantitative comparison, and no correlation was made with the relative creativity of groups remaining in their own countries. All of the students responded that they had enjoyed the experience, but that the groups were not cohesive. This is because they displayed group behaviour rather than team identity despite carefully defined roles emerging towards the end of each project. Difficulties arose in the process of gaining 'buy-in' to the chosen design and the feeling of some sense of ownership in the outcomes. Methods of persuasion could become heated especially if individuals within a group were unable to access the currency of negotiation, which was drawing. This would appear to reinforce 'the triumph of the individual creative mind', as displayed by current design orthodoxy.

A project concerning the practical and cultural aspects of eating and preparing food was sufficiently broad to cater for the needs of a wide variety of approaches. Indeed it was telling that each group brought with them a very different perspective to defining the project at their first meeting in Sweden. The reach of the design outcomes where perhaps a little more limited than one might have hoped. However the success in the project lay with the process of developing the student designers themselves rather than the design of the products. Their personal growth lay in how they dealt with conflicting requirements and opinion, developing their capacity to design and manage a project of this nature working with people from other countries and technical backgrounds. Students reported no problems in pursing divergent thinking. They had more difficulty in managing consensus and convergent thinking when decisions had to be made.

In response to the change of environment, both Prato and Luleå presented novel and complex sensory experiences. Attention was diverted from the norm and encouraged to follow the novel. Interestingly, despite the attention on culinary activity none of the design concepts displayed overtly Swedish or Italian cooking techniques or themes, instead the students tried to respond to the brief in a focused and neutral way. Typical working days would be eight hours with two group meetings a day, with at least one of these having a teaching staff member involved. Respondents to the interview enquiry commented that this presented too much interference to the momentum of the group. However, it would appear that in future developments more attention could be given to assisting students in group dynamics. Occupational health and safety policies differed widely between the institutions. Monash University, who hosted the larger part of the activity at Prato have very strict or forward thinking depending on ones point of view, policies in place compared to the UK and Sweden and this created its own issues. Strict risk assessment was most notably polarised with the laissez faire attitude of Italian culture.

Pastoral care issues also differ markedly from the Australian and European perspective. The former tend to live at their parents home, and for them living and working overseas represented an even greater shift in their lifestyle. The authors' hope is to use the experience of 'Kitchens of the World' to create a framework for analysing collaborative problem solving across socio-cultural perspectives, and thus refining the experience for the future. It is an aspiration to develop the initiative with the participants in the coming years.

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