

# Internationalising the Curriculum: Exploring Proxy Designer and Pseudo Client Relationships through Virtual, Physical and Textual Design

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**Discipline/ Course Subject Area:** Interior Architecture / Interior Design

**Institution/s:** Duncan of Jordanstone College of Art & Design: University of Dundee in collaboration with School of Visual Arts, University of North Texas

**Impact:** the practice was introduced within a course / unit/ module, and in collaboration with other institution/s

**Length of Time Project Has Been Running:** one year / 3 weeks, (re-running in 07-08)

**No of Students:** 40 total; 20 per institution

**Level / Year of Students:** year 3

**No of Staff Involved:** 3 academic / 1 workshop / 2 IT Technical

## ABSTRACT

This case study describes a student learning experience set up to simulate and navigate the difficult terrain of client and designer exchanges in a collaborative project that required students from two different institutions to work together remotely (Dundee, Scotland and Texas, U.S.A). In this it explores some of the inevitable conflicts, tensions and misinterpretations, which may emerge from the exchange of ideas and values on a virtual design project in which language, rather than visual process, is central to design thinking. Design integrity may be compromised by attempting to conform too rigidly to a client's expectation; equally, clients may be dominated by design agendas. Conflict may surface, but such creative tensions may be as energising as they are potentially paralysing. Where the intellectual and creative ownership of what is eventually 'designed' rests challenges misconceptions from inexperienced undergraduates, that designing is an exclusive, rather than inclusive act, and raises important questions on the

reality of designing within the real world or design school contexts. The experiment blends traditional design study discourse and digital textual exchange with a remote peer within a CAD suite. The project culminated in a simultaneous presentation of a 3D narrative object (i.e. a physical representation of each UK and US students' revealed personality, values, beliefs, or cultural references) during a virtual conference.

**Keywords:** Design, International Collaboration, Role Play

### **Key Points of Good Practice**

- The project set-up of *proxy designers* and *pseudo clients* was useful in challenging students' assumption on intellectual and creative ownership of design objects.
- Students learned that creativity is often the work of many, not the few, and that in an uncertain and changing world, design learners need to develop a concern and empathy of others.
- Students were encouraged to question, where, how, why, and in what contexts, they could integrate familiar social digital technologies, (such as msn, email, youtube, and texting), alongside narrative thinking, language, writing and interpretive skills in their design work.
- Students were encouraged to re-evaluate their assumptions on how CAD usage may be transformed through experimentation with low fidelity 'social' technologies, and to speculate on the impact technology may be having on life, study, home and work.
- The project induced a shift from a local, toward a global awareness expanding disciplinary and cultural perspectives, and repositioning cultural reference points between US and UK students.
- Peer to peer learning amongst students and staff is possible even when operating remotely through daily exchanges between teams.
- Visual learners were required to consider the impact and interdependence of language within the development of their visual thinking.

## Introduction

I am imagination. I can see what the eyes cannot see. I can hear what the ears cannot hear. I can feel what the heart cannot feel.

P. Zarlenga (1981)

Design praxis is challenging the traditional definitions and strategies of designing. Design is no longer a localised activity, nor is it the sole territory of designers (Rodgers *et al.*, 2005). Clients are increasingly influential in determining, and in some instances, capable of bypassing the design professions and acting independently of design practitioners. Co-designing now impacts directly upon design politics and strategy. Indeed, the role of the client continues to play a pivotal role in how design evolves, however, establishing client input within the learning environment of design students may be erratic or indeed absent. As our local markets broaden to become global economies, so must our local perspectives be transformed into new disciplinary horizons. Internationalising design education must expand to include cultural dimensions, experiences, and indeed, co-experiences that encourage awareness and empathy for the 'other'.

This paper explores a strategy in which the client designer relationship is simulated virtually between two remote student peer groups in the US and UK. Two universities on separate continents created an international project which encouraged student teams to re-examine attitudes toward digital technologies, and expectations of how designers might engage with clients. The differences in cultural awareness, phenomenology, values, and aspirations were explored by enacting and fabricating roles as *proxy designer* and *pseudo client*.

Both Texan and Scots cultural perspectives triggered debate on cultural identities; Texans' assumed distinctiveness within American culture which mirrored Scots' assumed separateness within a British identity. An intention of the project was to expose the personal disconnect within one's internal and external existence, acknowledging that, "We move within our everyday existence without reflecting on its meaning or the absence of same" (Clavell, 1994). This virtual and haptic project was to gradually identify each *pseudo client's* cultural profile through intelligent textual correspondence using deliberately low common denominator software, (e.g. email, msn, texting) to engage in a dialogue. It required students to use written exchanges but prohibited exchanges of facial material, to develop a client profile. Our dependency on texting and email touched upon themes of *tethering* and *presence* affecting one's addiction to one's social network (Grinter and Palen, 2002). In this instance, both institutions sought to provoke deeper insights into the possible role low key software and social networking may play alongside

design specific CAD software. The tensions, conflicts and opportunities between designers and clients throughout the three week long project are described.

## Description of Activities and their Implementation

### Project Structure

Staff from Texas and Dundee explored a number of potential vehicles for an international project, but identified that any creative collaboration should attempt to blend digital technologies, conventional design studio and 3D workshop experiences together, culminating in the departments' first virtual conferencing presentation. The brief, provided to students from both institutions sought to:

1. Encourage the development of analytical, interpretive and creative skills
2. Explore the nature of dialogue and communication, both verbal and visual
3. Acknowledge the role of the client in the creative process
4. Develop the use of three-dimensional presentation skills
5. Use email, web and virtual conferencing technologies creatively
6. Explore the cultural dimensions of design.

A three week timeframe was agreed and scheduled for the start of the year in September 2006. At the start of the project, staff members randomly placed the 40 participating students in their 3<sup>rd</sup> year of study into twenty *proxy designer / pseudo client* teams, (each with one Texas and Dundee counterpart). Teams fabricated factual (designer), and overtly fictional (client) personas, continually switching roles as client or designer to exchange views and, facts, determine tastes and test assumptions, which would become media and material for creative reinterpretation. These interpretations were eventually developed into full scale 3D narrative objects of each *pseudo client*.

The authors describe these factual and fictional personas as *proxy designer*, with an opposing role of the *pseudo client*. In this digitally duplicitous scenario, the term fabrication, (as in to simultaneously build and to lie), is particularly apposite and acknowledges that whilst we may, as a society, be indeed shifting from familiar places of home, work, leisure, toward ambiguous spaces of digital flows (Massey, 1999), one's experience, expectations and attitudes toward the digital within design education, seldom flows seamlessly (Thakara, 2006). Empirical evidence suggests that disciplinary specific CAD training may fail to encourage independence and initiative to emerge – often appearing to suggest that learners expect a spoon-fed relationship between

CAD lecturers and lessons. Indeed, one aim of using this construct was to provoke students into questioning expectations of how digital technologies impacted on their learning and become aware of their place within a visually saturated hyper real world (Van Koten, 2006). The deliberate use of ubiquitous low level digital technologies, often perceived as social portals, (e.g. email, texting, but excluding video exchanges) were used to highlight the role of dialogue and foster sensitivity in communication, interpreting and designing questions.

### Rules Of Engagement

The project presented particular challenges to the institutions, their staff and students, who were collectively operating outside the comfort zone of traditional, though potentially insular, studio teaching. This project also embraced risk and uncertainty, each fundamental to creativity. It incorporated intuitive and emotive experiences that engage interest and memory, and which lead to qualitative, real-time learning experiences that provoke reflection, are fun and touch upon sharing interpretations and values.

A number of design paradigms proved influential in the development of this project such as IDEO's 'deep-dive' thinking, in which short intensive design activity with clearly defined team roles and rules of engagement provide flexible and inventive frameworks which both provoke and focus designers into concentrated action (Burns, 2004). Managing uncertainty within creativity, touches upon design paradigms of Eddie Obeng, such as FOG, PAINT-BY-NUMBERS, MOVIE and QUEST (Anusas, 2006), or "scenarios for real world projects", which bring freedom and loose frameworks, (rather than prescriptive and descriptive design briefs). Consequently, at the outset of this project, staff agreed roles and 'rules of engagement', which echoed IDEO's deep dive for Texan and Dundee students. These were:

- Images of facial features must not be exchanged as part of the question/answer exchange between *proxy designers* and *pseudo clients*.
- Images of memorabilia and/or objects, belonging or relating to the client may be exchanged, as part of the question/answer process, although individuals had to consider carefully whether or not this would be too "leading" in terms of visual ideas, especially in the early stages of the exchange.
- Phone numbers, if exchanged, could only be used for texting purposes and not for verbal conversations.
- Consider any "cultural clichés" as being a layer, which must necessarily be passed through. Therefore, the posing of questions (and making of answers), which relate directly to

these was actively encouraged, as a means of "breaking the ice". Offence should not be taken (or intended) by this necessary elimination of layers of received opinion. Think of it as a way of "cutting through the crap".

- The answering of the questions posed must be treated as being of equal importance to the posing of the questions. Both *proxy designers* and *pseudo clients* need to take adequate time in answering.
- It is the responsibility of each student to keep this process moving and individuals must undertake to check and respond to e-mails, at least twice, at the beginning and end of each working day.
- Make agreements with your client/designer as to when your next correspondence will be and then keep to these arrangements.

### Collaborative Activities & Interactions

As explained under the "Rules of Engagement" above, an important prerequisite to this project limited digital exchanges between each student team to written language and textual formats with video, audio and facial exchanges strictly prohibited, although the exchange of photographs of abstract memorabilia personal to any team member was encouraged.

The process commenced with each student, (prior to any communication taking place), designing a series of questions, which, as *proxy designer*, would be directed to their *pseudo client*. These questions had to be carefully constructed in advance of any exchange in such a way as to illicit responses, which could trigger three-dimensional visual ideas. However, many students underestimated this early element of the project, and perhaps revealed more of the cursory and casual nature of social exchange (i.e. through email/texting) typical amongst younger students. Each *pseudo clients* response became each *proxy designers* media and information with which to reinterpret, analyse and translate into a full scale 3D narrative object laterally representative, rather than literally illustrating one's *pseudo client's* personality, culture, whims, likes or dislikes.

Establishing a healthy dialogue between each *pseudo client* and their *proxy designer* was an essential objective, as was an ability to interpret, and reinterpret responses of each client to each designer's questions. At all stages students were expected to keep a dated record of this process, dialogue and reflection, along with notes, thoughts and sources of inspiration. Students then had to filter and edit their re-readings of received questions from their *pseudo clients*, carefully discerning which aspects of any response would become the focus of design ideation and development.

At this visual development stage, students would select from ideas, themes and associations with the most potential, and out of this material, they then began to refine these in ways that each individual student felt was appropriate, as well as being of visual appeal. The creation of the final full scale 3D narrative object, or portrait, had to be representative of their *pseudo client* conveying aspects of their client's personality, distinct feelings and values. In other words, the object had to evolve into an experience of each *pseudo client* in 3D visual form, rather than a representation of their outward appearance.

Improvisational and emotive making (Buchenau & Suri, 2000) within the studio and better equipped 3D workshop occurred under guidance from technical and academic staff after a prolonged series of individual and group tutorials, and low fidelity artefactual making attempted to match higher fidelity thinking. The authors equate the deep dive with 'deep learning', where learners seek meaning, context and comparison between new ideas and existing knowledge, in an intense and emotionally charged creative experience with others. Here, learners relate abstract concepts to experience, as a counterpoint to the emotionally disengaged notion of 'surface learning', where facts are recalled and regurgitated without reference to deeper meaning (and the authors would add, without feeling).

Bringing emotions into learning also promotes experiential and holistic learning as an alternative to the reasoned intellectual competences associated with Aristotelian modes of learning common in university (Welford, 2004). Such emotive learning opens the floodgates to creativity, is experiential, endorses play as discovery to deeper learning, builds relationships and makes connections. In contrast to Aristotle, John Heron's 'holistic learning' may offer a helpful model in which to link learning to the creative process. It has four psychological modes, two of which fit Aristotelian concepts; thinking (intellectual statements), and the practical (resolution), whilst the remaining two link feeling (method acting) and imagination (ludic playfulness, dreams & visions) to learning. Or, as Welford (2004) puts it, relax>think>dream>act. Rather than the tenet form-follows-function, projects like this may enable emotions and subjectivity to affect one's experience of learning, leading to a more flexible form-follows-feeling approach to design learning. Play need not be misinterpreted as lacking context, relevance or intellectual rigour (Kane, 2004). The 'special relationship' between the UK and the US was playfully exploited throughout the project, and allowed staff to introduce important issues of American and British identity, foreign policy, political, cultural, social and historical significance between both nations.

Working within improvisational method design strategies, ad hoc, impromptu and mixed media approaches were considered, and students moved to three-dimensions at as early a stage as possible, making many sketch models in

order to test the impact of ideas. Some individuals relied almost exclusively on conventional sketching, others focused on language or emotive making. Close to final presentation and once a 3D narrative object was completed, each *proxy designer* was encouraged to discuss their intended approach with their remote client. In this they had to be careful to distance themselves and avoid being overly influenced by their *pseudo client's* opinions. As this was also a personal and potentially revealing process, teams were reminded that each team player had to be sensitive to their client's needs, without allowing adverse client criticisms to quash creative ideas. Striking this particular balance was a key to a creatively successful solution. It was envisaged by staff that this key stage of the correspondence between designer and client would help each party to gauge the success and probable direction of each other's outcomes, and help to clarify the suitability of the solution. However, many students were either unable or unwilling to seek a response from their *pseudo client*, leaving the presentation to the main virtual conferencing event.

Whilst some students avoided recording responses from their remote client, several sought views from their immediate peers in their native studio. Therefore, there were rather limited opportunities for students to adapt a previous solution in response to client feedback, and none of the students decided to make two versions of the portrait, one which fulfils the client's needs, and one which fulfils the contrasting perceptions of the designer. Moreover, while the issue of how the visceral and haptic narrative objects that students had created could be successfully 'felt' and transmitted through virtual conferencing represented a dilemma for student teams, it also prompted them to begin to distinguish between the rhetoric and the reality of digital technologies in art and design.

## Observations

Variance on how student teams engaged with the task exposed problematic issues and underlying differences in education and culture (see also Challenges/Issues). Both US and UK art & design students were encouraged to map their creative process through sketching, diaries, maquettes and prototypes, but conceptual design thinking emerged as especially strong within the Dundee work whilst the Texas submissions tended to offer more superficial responses to the task. By contrast, the US students conveyed their ideas verbally with considerable confidence. Both groups exhibited tremendous enthusiasm and curiosity during the day long virtual conference. The orientation and set up of the virtual conference suite did not lend itself to a seamless flow of engagement - and exposed problems with real time exchanges. Whilst there also appeared a strong disciplinary and linguistic similarity, (both English speaking, both Interiors), in reality, the task helped to challenge students' initial assumptions that disciplinary nomenclature meant

identical experience or approaches. Indeed significant gulfs appeared between use and interpretation with language, where communication often reverted to misunderstandings, casual inclusion of texting terms in the body of a typed conversation, (i.e., L.O.L., laugh – out-loud), yet few students, despite being efficient with texting formats sought to exploit these occurrences in their presentation, though all acknowledged their presence in their email exchanges.

The educational structure and the highly fragmented modular experience of our Texan counterparts proved very different from the Scottish art school structure. Whilst the traditional Scottish art school studio experience is often taken for granted, the reality at Texas was far more fluid and regular focused exposure to the task for the Texan students was limited when compared to Dundee. Because of the low key use of socialising media, which all students understood, very little formal training of students or staff was required. This reflected an approach toward digital technologies within Dundee, which sought to utilise rudimentary software programmes intelligently. Examples of how this is applied include image editing in MSWord; making Powerpoint simulate Flash; using shareware and freeware; all of which challenge assumptions that CAD learning can only take place if CAD lecturers are present.

## **CULTURE**

Through this project, the remoteness experienced by each *proxy designer* and *pseudo client* presented challenges and opportunities for individuals to exploit, and to reflect upon. Students across both institutions reflected a thriving multi-cultural and ethnic mix, far from the simplistic, often cited description of Scottish or Texan. The assumptions that: A. everyone was Scots or Texan, B. everyone spoke English as their first language, and C. each participant naturally shared the same cultural, geographical or technological reference points, all quickly evaporated. Indeed the mix of nationalities included Irish, Scottish, German, Finnish, Korean, Czech, Brazilian, Taiwanese, Japanese, American Hispanic and American.

In addition, what was assumed by many of the Dundee students to be a dependable Interior Design nomenclature, proved to be less reliable. The potential role the virtual might play in subsequent years of study, or indeed, how future practice may move beyond factual material structures to embrace dematerialised virtual experiences, were discussed. How subject specific software might be blending with social software to enhance design skill and thinking was also discussed as an important rationale for undertaking the project. Indeed, the acknowledgment that email correspondence clearly plays a crucial role in heavily administrative realities of Interior Design / Interior

Architecture practice did not go unnoticed, but the experimentation between Texas and Dundee suggests valid and exploratory alternatives.

In seeking to construct a narrative profile of each other through a digital dialogue, quality of questions inevitably varied through the three weeks, as did concise or insightful responses, reminding us that saturation, access and exposure in the globally connected world does not guarantee quality of exchange or reliability of response. In part, the variable quality of questioning stemmed from overly casual conversations, particularly from instant messenger exchanges between proxy designers and their *pseudo clients*. Although, some students approached their questioning strategy with considerable reflection, sensitivity and intelligence, often seeking to dupe the client into revealing information previously guarded closely, such as:

- ‘can you tell me what defines Texan / Scots?’
- ‘what is it about your sexuality which you feel is important?’

One strategy, which we suggested invited students to offer a deliberately provocative statement which describes a preconceived view of Texan identity, or more diplomatically, to offer their Texan counterpart an ironic take of what might define ‘Scotchness’. In either case, the aim was to break the ice quickly and encourage deeper discussion of both groups’ cultural reference points and to avoid superficial questioning such as:

- ‘what is your favorite color? / favourite colour?’.

In reality, very few Dundee students felt comfortable or confident in adopting this approach, and on reflection, this was a prescriptive rather than provocative idea.

## **NARRATIVES**

Narrative and metaphor tended to result from students’ re-reading of received or projected questions and responses. Often students sought to reframe text quickly into diagrams or sketches, shifting textual responses into a more familiar visual design language. Some student’s initial re-readings and reflections on received responses were transformed into form and materials. In terms of form generators, some student interpretations of the variability and hit-or-miss responses were visualised in 3D as a linear stepped profile, redolent of a timeline, e.g. ‘up’ for good question and response; ‘down’ for poor question poor response.

In some cases, the selection of wood was used to echo aspects of the nature nurture debate, where students interpreted their *pseudo client’s* responses as having distinct parallels between the nurturing of one’s personality and cultural identity, and perhaps mirroring the growth of a tree which is dependent on its

environmental contexts, geography, climate and nutrients. The following student statement offers some insight into this shared process:

Depending on its environment a tree will grow and develop accordingly. Similar to that of a person, the environment and culture of a place can almost shape their personality. I choose wood with a specific grain structure that I felt represented aspects of Jennifer's personality. The darker wood is Elm and the other is Yew..... The [staggered] line represents the highs and lows in a conversation as well as to show the idea of information being exchanged back and forth between two people. The finger joint also refers to body language. The way we clasp our hands when were listening.....

Dundee student

Other presentations of 3D narrative objects being transformed and transcribed through narratives and metaphor include the symbolism within the form of the pop-up book. Here, cultural references of a given personality whose spiritual allegiance seem to shift between a good Chinese girl respectful of her culture and family, and the tensions which arise from having, simultaneously, a Chinese American identity. The metaphor of the book cover alludes to protection, presenting a façade, which shields and obscures the narrative content. Likewise, the *pseudo client's* emotional / social connection to others is perceived by the *proxy designer*, as mirroring this metaphor:

Pop-up book I created represents my client's life. It [the presentation of the book] is closed first because she mentioned her need to cover herself from people she didn't know, or even from people close to her. She still can open her heart to someone if she wants to, and only then are you able to understand her.[her] parents came from China and Taiwan 30 years ago but she has lived her whole life in America. That is why she feels herself a half American and a half Chinese. Both cultures and countries play a big role in her life.....

Dundee student

Other students' responses included objects inspired by Aztec culture, temporal & spiritual time, mirror images, doppelgangers & recycled fashion, themes of family, faith & future, and metaphors of baggage.

## Assessment

Assessment methods were flexible enough to allow each institution partner to fit their respective module assessment structures to the project. Clear parameters were identified within the joint brief offering US and UK students a framework, carefully noting that each exchange and response had to be clearly documented within a personal sketch book or diary, with copies of all

emails, texts, instant messages made available to staff, and a formative daily monitoring of progress in the studio at Dundee, with a less regular staff student contact at Texas. The issue of assessment therefore became one of flexible appraisal rather than numerical, summative assessment, which quickly became unrealistic. In other words, student teams were evaluated primarily through formative feedback in group and individual tutorials within the respective studios. Staff from the UK and US concentrated on their own cohorts and did not interfere in each other's procedures, though this needs to be changed next year. The platform for appraisal was the virtual conference suite presentations on the very last day, in which teams 'met' face to face for the very first time.

Each team had a twenty minute window to make consecutive presentations to each other whilst being observed by the full cohorts from Texas and Dundee. Self assessment, (which is a central element of formative and summative assessment at Dundee), was used. Here, a range of criteria were available to students to evaluate the module, the quality of experience, quality of tutorials etc. Staff assessment looked for intelligent, insightful and well crafted questions, well documented research, evidence of actual emails, texts etc, evidence of visual, textual and 3D process, quality of execution in the 3D narrative object created in the workshop, and visual, verbal, textual presentation skills.

### **Perceived Benefits for Students**

Prior to this project, students had seldom worked in parallel with student peers in any international context, nor had they experimented with socialising software as an element of the design process. The Dundee third year group participated in an earlier project in year two, involving the University of Groningen's English and Word & Image studies programme. During this project students interacted not only with their Scottish tutor but also a set of Dutch academics; however, no Dutch students were involved. The project focused on the relationships between the poetic and the spatial; and the experience helped Dundee students adapt relatively quickly to the US project. Nevertheless, this project initially provoked curiosity and anxiety in equal measure amongst the majority of students. Most were sceptical of the relevance of unconventional tasks, which embraced risk, uncertainty and play, particularly given that this was the first project of the academic year. Only gradually, the potential freedom and dynamic, which the project offered was recognised by the more able and motivated students. The project brought students into collision with issues of creative and intellectual ownership, (often a dominant and distracting issue affecting student progress). In the end, students reacted to the learning experience with encouraging feedback, often surprised at the successful response their work received from their *pseudo*

*clients*. Collectively, Dundee student strengths focused on strong conceptual development, good depth of thinking and well considered making, whilst verbal confidence in the public setting of the virtual conference was less effective than their US counterparts. Other strengths of the project include diversity of interpretive responses, particularly with the 3D narrative object and enthusiasm for client engagement.

## Perceived Benefits for Staff

Staff had known each other informally through an earlier exchange programme between Dundee and Memphis, with the US colleague later moving to a new post at the University of North Texas. The project energised staff surprisingly quickly, though there were significant lapses of time due to vacation, which reduced impact and some back tracking occurred. Staff had been keen to forge an intelligent activity after discussing general concerns on Interior Design / Interior Architecture theory, pedagogy and practice from an international perspective, and recognised the benefits of jointly composing a project brief -which gave staff and students a flexible framework without compromising either party. The perceived strengths of the project revolve around language (and its place in the visual beyond the academic dissertation or verbal presentation) with its capacity to become a medium of, and for, creative thinking. Equally, narratives, and the blurring of traditional disciplinary boundaries reflected the changing role of designers, and the increasing confidence, which design aware clients can bring to the table. In addition, a range of dualisms were helpful, such as the physical / virtual; the designer / client; the unreal world of education / the real world of practice and the material / and the immaterial influenced our thinking. The impact of digital technology infecting, affecting and transforming notions of home, work and play, (whilst also blurring the boundaries of all three). Equally of interest was how digital technology could be perceived as metaphorical window (into), bridge (across), or indeed barrier (to) learning. Interest in the case study, particularly from conferences, has been excellent, and has led to invitations to collaborate with Chinese universities. However, the most vocal and positive response to this case study stems from the Texan and Dundee students themselves who have expressed a wish to continue this project, and it is our intention to repeat it in 07/08.

## Issues / Challenges for Students

Difficulties arose in seeking access to hardware, virtual conference spaces and technical assistance but were quickly resolved. Some problems arose due to differences in software used to convey each *proxy designer* and *pseudo client* conversation, whilst access to 3D workshops facilities proved excellent for the Dundee group, their US counterparts struggled to gain

access. Very different modular frameworks exposed key problems of fragmentation from the US perspective – with several additional demands placed on the Texan students, whilst Dundee students had a relatively flexible module approach. As such the approaches to studio culture were decidedly different, with Dundee students having a secure and permanent design space and their US counterparts moving around a large campus. Differences between UK and US time zones meant that there was a six hour difference which raises questions regarding a 9 to 5 university operating time within a 24/7 digital reality.

Some students had to accept that part time working commitments interrupted their engagement and exchanges with their *pseudo client*. This seems an unavoidable reality of studying today in the UK but does force education to rethink nine to five opening hours. Several Dundee students commented on the need for a more equitable programme for their Texan counterparts, whom they recognised as having limited time to undertake the project due to their different programme structure.

### Issues / Challenges for Staff

Ironically, in a project which seeks to explore the glitches which can occur in miscommunication between clients and designers, it was communication across and between students, technical support and academic staff, which presented problems. Basic typing errors in some email addresses for each *proxy designer* and their *pseudo client* proved frustrating. In future, improved preparation well in advance of the project will need to take place. All staff members need to be in attendance during the project launch. Lack of parity across socialising software led to frustrating delays and inevitable tensions arose between clients and designers, with the result that highly motivated students posing particularly insightful questions, became frustrated at the unexpected slowness and lack of depth of responses. Discussions on which software to use, and whether staff should seek to limit and control this, or allow students to determine which is best suited to their needs and access, has to be explored, as does how blogs may be incorporated. Some academic staff members were part time, US counterparts were over 'there', not here, and technical staff were only loosely aware of the project's aims and objectives. These issues need to be resolved.

The project offered students considerable flexibility in how and where they engaged in dialogue with their *pseudo client* and when and how often they engaged in progress tutorials with staff, (e.g. in the CAD suite, at their studio desk, using wireless in the library or at home). This immediately disrupted any control staff may have wished to exert. Timetables were agreed which allowed staff to meet up at regular intervals to discuss emerging ideas and resolve problems as they emerged, initially with small teams, and later individually.

The less focused individuals required considerable guidance and support during the project, especially when frustrated with lack of client response or merely needed direction due to poor motivation. One could suggest reactionary measures to avoid such diversity of approach, but this would seem counter to the experimental and exploratory nature of the project. Indeed, the problem was not the student's mobility and choice of diverse venues, it is our inflexibility and relative fixedness which is problematic, and the tradition of the design studio – which we often defend, needs to be modified if such projects are to become part of the student experience. Often students had to negotiate with each other how best to respond to the six hour time difference, and this impacted upon attendance in the studio.

The project's inherent focus depended on active, rather than passive participation. Students could not proceed without direct engagement with their peers across the 'pond', and unless they fully engaged in the conceptual richness of the fictitious conversation or person, results could be predictably pedestrian. More able students found the task inspiring and intellectually transformative; weaker students, who had attendance problems, inevitably blamed lack of progress on technology, on the 'other's' lack of engagement, poor questioning, and/or response, but seldom themselves.

In some cases, language was not always helpful in enabling participation, and as the creative and intellectual focus lay on the context of the text, patience was required by all teams in comprehending cultural colloquialisms of American English, English and Scottish slang. Strategies and tactics included a simple series of 'rules-of-engagement'; clear roles, shared project brief, agreed structure, approach and timeframes; whilst staff initially suggested that student could offer cultural clichés of themselves, or of their clients to trigger responses beyond predictable areas.

## **Enablers that Helped the Project Work**

The project was informed and inspired by previous research into interdisciplinary, collaborative, international experiments most notably Duncan of Jordanstone's Interior & Environmental Design's level two project with Groningen in the Netherlands (Milligan & Rogers, 2005, 2006; Collins, 2006). The virtual exchange between University of Strathclyde and Stanford, (Greirson *et al*, 2006), and collaborations between Delft TU and University of Northumbria's Globally Distributed Design Studio for Industrial Design students in the UK and Netherlands (Bohemia & Lauche, 2006) also offers important insights for educators wishing to develop work in this area. Insights into texting, emoticons and digital exchanges in contemporary life which describe linguistic abbreviations as emotional shorthand to humanise the sterile nature of texting are also helpful (Gothe, 2001). Our project was also informed by Badke and Walker's work on contextualising design thinking

(2005) and Yagou's studies (2001) on new spaces for networked collaboration and the design of cyber-studios. In respect to cultural issues staff and students gained insights from the work of Fernandez (2004) and Geert Hofstede's five *cultural dimensions* (see Van Boeijen & Badke-Schaub, 2007). Deep dive scenarios reflect gestalt psychological theories of 'optimal tension zone', (Baillie & Dewulf, 1999), in which deliberately pressured, but well managed team learning experiments inevitably provokes creative and critical thinking.

## Project Evaluation

Student feedback, derived from individual feedback interviews, was very positive from both institutions.

Student reflection and feedback of the project was very positive indeed, but whilst Dundee focused entirely on this task, Texas introduced other projects on top of this event, resulting in variable responses from the American side to their Scottish counterparts, causing frustration to surface from Dundee. Student feedback was mainly derived from individual feedback interviews conducted a few days after the virtual conference session, in which the students were required to reflect upon their reactions to each others *proxy designer* presentations. A typical "interview" is reproduced below to provide insights in how students reacted:

### **Did your designer understand you? What do you base this opinion on?**

By asking the questions that she did, I think that my proxy designer at least came to understand my core values, which were coincidentally enough very similar to her own.

### **What about their solution surprised you?**

I really didn't know what to expect from my designer, I didn't have any ideas as to how she would interpret my responses to her questions and so can't say I was surprised so much as impressed by her solution. I really liked her use of circular forms and thought it was interesting how the concept behind designing her model the way she did, was very similar to my own concept, concentrating on what really made up and shaped our individual personalities.

### **If your designer mis-read you, why do you think this happened?**

I don't think there were any elements to her model that would lead me to think that she had mis-read me at all, there was nothing about her solution that I disagreed with or was puzzled by.

### **What were the strengths of their portrait of you?**

My designer interpreted my responses really well and so captured what I would consider to be my, 'bottom line' very accurately.

### **What would you change about their portrait of you? Why?**

Although I loved my portrait and the thought behind it, I'd maybe change the rectangular shapes of the structure slightly – although I know she has probably designed her solution like this for a great reason, I wouldn't have chosen this shape for myself, but oftentimes a designer will know something about the client that the client is unaware of anyway so this is quite irrelevant.

### **List some positive and negative things about the project and make suggestions for possible change.**

The positive aspects to the project were that we'd never done anything like this before, it was extremely interesting to get to know people we'd never met in person before who live in a very different place from us and it was a very challenging project as regards designing the solution – once the end product was finished though, it was really satisfying to observe the process and end result.

One major negative aspect to the project was that the Texan students didn't have as much time as we did to carry out the project – as far as I understood they had two other projects on the go at the same time as this one and, as well as this not really being fair on them, it also meant that, at times, some of them weren't able to reply as quickly as they may have liked and this had a knock on affect for our students.

Dundee student

Overall, the project suggests that visionary design educators need to challenge learner's expectations, (and perhaps industry too), of mere software delivery, PDP's, (personal development planning), and VLE's, (virtual learning environments), toward a deeper intellectual engagement with the overtly spatial / digital terrain –with all its ambiguity and contradictions and explore the hybridised spaces and cybridised contexts of physical experience and digital experience (Roscoe, 2007).

Whilst recent research assumes that today's learners are, in an ideal sense, already efficient digital natives prior to entering university (Fisher, 2007), empirical evidence at Dundee and Texas suggests that learners – (perhaps due the increase in mature students entering education, and the variable exposure one has to social networking and digital design prior to college), may be far from the digital native we assume to teach. Given that our premise was to demonstrate that the textual and verbal provokes visual / spatial

learners to re-evaluate their connection with others, one also speculates whether *digital natives* and visions of a *digitised campus* will simply conform to a predominately visual, rather than multi modal future of design thinking (Millar & Mair, 2005). The authors would suggest that students may be applying quite distinct values, expectations and assumptions of how, when, where and why they engage with digital media. In this project, ubiquitous low key socialising technologies such as email, instant messenger or texting were used, rather than subject specific software of AutoCAD, Viz or Premiere. How might the cursory exchanges in email communication so prevalent amongst student peers be integrated into design learning in order to better prepare designers for the so called 'real' world? How might educators persuade students to reflect upon the distinctions between social chat and professional discourse? Digital technologies may increase access, but does this access lead to quality of thought or guarantee quality of response? How may visual / spatial disciplines, which operate within the physical, visceral, sensorial immediacy of the haptic learning experience in art schools in particular, such as Architecture, Interior Design, Exhibition Design, Product and Engineering - convey these experiences through virtual conferences, and within the rhetoric of digital marketing, are there inherent limitations?

Considerable enthusiasm was voiced during the virtual conference session to continue the process next year. It was clear that many students had developed a strong rapport through the task; others expressed frustration over the rate and quality of responses and of questions from their counterparts. Others were sympathetic for those who had additional projects to deliver, whilst striving to work on their Dundee project. Both groups expressed considerable curiosity of the techniques, timeframes and course content of each other's programmes of study, and this suggests that far from initiating complex or creatively engaging international workshops, several days of virtual conversation on an international level - involving a broad spectrum of programmes from around the world, (reinforced by a loose though reliable foundation by academic staff), - might offer learners' considerable insights and advantages over institutions which offer no opportunities for such exchanges.

Evidence of changed attitudes was good with several highlighting a level of cultural transformation, revised attitudes toward the role of digital technologies in their discipline and society generally. Others expressed interest in how demanding the role of language had been to visual students. Both institutions revealed their distinct creative process, notably, Dundee students had more studio time, better support for 3D workshop, and although recently modularised the programme was significantly less fragmented than the system in Texas, which in some cases, placed students under particular pressure to meet commitments to this international project.

In appraising the quality of final 3D narrative objects in the virtual conference suite, Texan students revealed a tendency for literal interpretations— again, restrictions on workshop access being problematic, whilst Dundee students worked effectively with concept development sketchbooks and sketch models and the quality of much of the 3D narrative objects were tackled with conviction and focus. Dundee students’ slightly laboured verbal presentations were hampered by an awkward arrangement of camera angles and hemmed in by an overly formal lecture room layout, but they were generally more able to articulate deeper insights and marginally deeper thinking despite this.

Teams never met in the flesh, but instead operated virtually from remote points in their native institutions, gradually establishing cultural and personal material through diplomatic questioning. In designing questions rather than interior space, skill, sensitivity and diplomacy helped bring ideas into existence. Learners were encouraged to either manipulate their questioning to their client and to *‘read between the lines’* of what was written, implied, or indeed omitted within this dialogue. The authors suggest that the experiment demonstrates one method of merging language directly within visual disciplines, whilst the pivotal role of writing, dialogue, listening and envisioning may also be transferable across a spectrum of visual and non- visual academic disciplines within radically differing contexts, (i.e. between English and Architecture, or between Business and Product), where communication, interpretation, interpersonal skills and translation are crucial.

In conclusion, this case study suggests:

1. international digital projects are challenging, difficult to coordinate, hard to slot into rigid modular systems, but exciting to teach and fun to learn
2. given the drive for Personal Development Planning (PDP), reflective learning and the role of virtual learning environments, this project offers a way to go beyond standard formats by blurring the boundaries between reflective PDP and personal subject specific practice
3. whilst the project revealed flaws, participating students self assessed the experience and offered very positive feedback on the project, identified shortcomings, querying disparities in the timeframe, differences in commitments on top of the international project, (problematic for Texas) and offered suggestions for changes for next year
4. staff, as well as students, undergo disciplinary change and are also outside of their normal comfort zone
5. the experimental approach we illustrate here is transferable across many disciplines and contexts but may be especially useful to overseas non English speaking nations

6. the project begins a process of transformation, enables better personal, intra-personal, and disciplinary reflection on where, when, why and how one should use socialising digital technologies in one's study, and how language and discourse can play critical roles in visual design thinking
7. holistic learning, play ethics, and tasks which embrace uncertainty, can be used to compliment more formal, assessed and rational approaches to learning

## **Possible Improvements / Enhancements**

Whilst there is a natural requirement to assess, quantify and measure learning experiences, some experiences, by their very nature are difficult to quantify, remain subjectively charged and reflect a spirit of experimentation and enquiry. How far are educators willing to go to support new enquiry, and are all design outcomes necessarily seeking to solve problems in the same way? Care needs to be taken on how best to police any rules of engagement. Each institution's approach toward the discipline and creativity generally could be discussed or made available prior to the student project occurring, to make both groups aware of the other's strengths and weaknesses. The virtual conference venue in Dundee was not conducive to the informal exchange we had hoped for, and more flexible and less institutional venues need to be explored. Opportunities for staff to virtually engage in progress tutorials should be considered to bring in new academic perspectives and insights into student experiences. A reasonable level of parity between participating institutions, particularly in class sizes, student effort expected, access to staff, facilities and each other is required to make the experience work. Software compatibility needs to be organised more effectively. However, a balance will need to be struck in how this may be achieved, as this can never be a true like for like experience. Using other industrial or pedagogic precedents could be important in convincing less able students of the relevance of such activities. This project also suggests that students might benefit if they were able to access an informal international 'space' in which to discuss the minutiae of their day-to-day experiences.

## **Points of Advice for Others Who May Wish to Replicate the Technique Used**

Most HEI's now have good technical facilities, promote some form of VLE and offer virtual conferencing facilities. With these technologies, and modest student numbers, this case study can easily be replicated.

## Transferability, Flexibility and Core Elements

Although the case study describes a digital textual experiment within a spatial discipline, this case study could be transferable to a very broad spectrum of visual and non visual disciplines, from Architecture to English Literature, and could offer UK institutions an effective platform in which to deliver virtual and distance learning workshops in collaboration with overseas institutions to enable shared learning experiences, and establish deeper insights into one's cultural and national self identity, and bring language directly into the heart of visual thinking. Language, dialogue and interpretive skills are core to this case study. The brief was designed to offer students intellectual and creative flexibility, however, the format of the output (a 3D object) is key to the goal of provoking deeper reflection on the limitations of digital technologies to convey haptic and visceral qualities of objects. The project may benefit from dramatically short sharp timeframes, or from more prolonged activity beyond three weeks. The setting of 'rules of engagement' mentioned in this paper, is also adaptable and is likely to vary across disciplines as to their relevance or value.

## Key Advice to Others

- Question how far staff should attempt to control and police the activity, or allow it to evolve. Relinquish control, but be clear about roles and responsibilities.
- Encourage deep and critical learning through intellectual discussion on the relationship between text and visual thinking.
- Highlight the issues of creative and intellectual ownership.
- Check that exchanges between student teams use language constructively and civilly, as this might inadvertently cause offence and intrude on confidentiality.
- Try to ensure your partner institution is willing to put in the same resources, effort, time and space, but celebrate the inevitable differences between each camp, which may emerge.
- Question whether formative appraised experiences are more appropriate than summative assessment.
- Offer immediate feedback to each student.
- Consider which year group might be best positioned to deal with the responsibilities required in the task, especially how adept the group may be to improvisation with digital technologies and with attitudes to making.
- Challenge students to bring their 'digital native' skills, cultural references and cultural clichés directly into project.

- Offer examples where similar experimentation exists in the creative industries, and reassure students by describing successful international projects at other higher education institutions.
- Tutors should seek to integrate, and encourage students to utilise their own digital tools and skills sets in their own time to enable fluid, seamless and efficient communication between *proxy designer* and *pseudo client* exchanges.
- Students may also need a refresher on language, grammar, web protocol, (which can be different from socialising activity and relevance to disciplinary thinking).
- Consider using aspects frameworks such as Geert Hofstede's theories on cultural dimensions to provide students with a route into making sense of cultural differences in international collaborative projects (see Van Boeijen & Badke-Schaub, 2007)

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