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Ghassan, A. and Bohemia, E.

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From Tutor-led to Student-led design education: the Global Studio

Aysar GHASSAN[a] and Erik BOHEMIA[b]

[a] Northumbria University; [b] Loughborough University

Abstract: *"Tutor-led" design education has been argued to be a system where lecturers are at the centre of teaching & learning activities and where educators' tastes strongly influence students' outcomes. Design education has also been argued not to prepare graduates for working in highly complex professional capacities synonymous with the contemporary era. We argue the role of tutors in tutor-led design education to be a factor in this.*
The Global Studio runs Web 2.0 enabled industry sponsored international collaborations between students. One aim is to introduce learners to "complex project situations" and consequently to prepare them for contemporary working life. It is operationally different from "tutor-led" design education as lecturers are more "distant" in teaching &learning activities and students construct conversations and outcomes primarily via interaction with peers. Feedback from home-institution students suggests many individuals struggle with making decisions without "tutor-led design education" involvement from tutors.
Given the on-going change in funding provision and the continuing dissolution of "normal" structures, universities are predicted to continue to undergo extensive transformation in their remit and the way education is delivered. We ask whether tutor-led design education is maintainable and whether educators and students are prepared for the consequences of change.

Keywords: *peer learning, learning to deal with complexity, tutor led learning.*

Introduction

It is perhaps only natural for educators to take an interest in the direction universities are heading. Not all are content with the track higher education is pursuing. For example, John Danvers (2003, p.53), argues that education is becoming 'increasingly determinist' and is promoting 'linear systematic processes [which] lead to predictable [student] outcomes'. However, for Danvers (2003, p.54), practice-led training of artists and designers appears to differ in its approach to the other sections of the higher education fraternity. He claims a dialogical approach is the norm in art & design education as '...there is an expectation that received opinions, dogmas and assumptions will be challenged by students and staff...' (p.54). In art and design higher education Danvers (2003: 54) suggests that,

> ...students are encouraged to take as little as possible as 'given', and to develop a critical stance in relation to the orthodoxies of practice, matters of taste, style and aesthetic codification, and to recognise and question ideological positions wherever possible.

Danvers' experiences of design education appear different to those of some other academics. Alain Findeli (2001) argues that problem solving through linear, casual means remains the most widely utilised method of processing seen in design teaching. Rather than facilitating the continued development of "voice" in learners, researchers have argued design educators speak more than their students during studio teaching sessions and are at the centre of learning activities (see Davies and Reid 2000). Perhaps more ominously, Cameron Tonskinwise (2011: 452) argues 'design education is exemplarily Bourdieusian' in that tutors' values dictate outcomes delivered by students. Rather than being involved in a perspectivist dialogue with students, Jorge Frascara (2007: 64) states,

> I have seen [design] instructors judge the quality of their students' work by saying: "This one is too busy" or "This is better, it is simpler." They suggest that "busy" is bad and "simpler" is better in every situation.

The behaviourist system described above is surely of some concern as it does not provide optimal conditions for creating mature relationships between students and tutors in the classroom (Baxter Magolda 2009). For Jorge Frascara (2007) this approach leads to curtailing of students' development evidenced through their delivery of unimaginative forms. Controlling students' outputs can add little to preparing them for life as a professional which demands graduates to be flexible, adaptable and to rely on their own initiative (see Barnett 2000). Brigitte Borja de Mozota (2010, p.98) disputes whether design education enables designers to operate optimally in tough professional climates. For her the problem is that even though designers 'have this potential to work at higher strategic levels... they are not trained to do so'. This, she claims, 'is a challenge for design education.' (Borja de Mozota 2010, p.98)

The educational theorist Ronald Barnett (2000) proposes that graduates are entering 'a world that exhibits global features of challenge, uncertainty, turbulence, unquantifiable able risk, contestability and unpredictability' (p.262). For Barnett, contemporary existence seems to have become messy – for he argues we currently reside in,

> a *supercomplex* world [...] in which the very frameworks by which we orient ourselves to the world are themselves contested. It is a world where nothing can be taken for granted, where no frame of understanding or of action can be entertained

with any security. It is a world in which we are conceptually challenged, and continually so. (Barnett 2000, p.257)

Seemingly in agreement, the sociologist and cultural theorist Scott Lash (2003, p.53) argues that in late modernity 'totally normal chaos is regulated by non-linear systems'. Michael Beverland (2012) suggests that design graduates will need to have 'soft' skills in order to deal with high levels of uncertainty. We argue the constrictive influence of "tutor-led" design education upon students' processing of problems is not optimally suited to preparing them to negotiate "normal chaos" as graduates. For Derek Miller (2010), Senior Fellow at the United Nations Institute for Disarmament Research, professionals should be involved in a process of 'figur[ing] out what is wrong with their own ideas, and not what is right about them.' However, Miller (ibid, p.5) argues,

> Designers are worryingly not involved in that process. Design is trying to prove itself, rather than disprove itself. It is the latter, though, that will serve the social good.

Perhaps the lack of exposing design students to complex challenges contributes to the situation described by Miller (2010, p.5). We attempt to introduce students to demands of "normal chaos" that are a function of the contemporary era via running projects through 'The Global Studio'. The Global Studio primarily centres on students taking responsibility for their own decisions through peer engagement. We construct this approach to give learners the opportunity of "dealing with uncertainty". We term the approach used in the Global Studio "student-led" Design Education.

The Global Studio

In the contemporary world of professional industrial design practice, it is not unusual for teams located in different geographic locations and from different cultural backgrounds to collaborate in order to deliver interventions (Wang et al. 2002, Gupta et al. 2009). The list of professionals in such operations is formidable: – clients, designers, researchers, engineers, suppliers and manufacturers. It is important to remember that each team contains a workforce made up of *human beings*. Richard Thaler and Cass Sunstein (2009, p.7) argue individuals from this species are not as infallible as they are sometimes made out to be:

> If you look as economics textbooks, you will learn that homo economicus can think like Albert Einstein, store as much memory as IBM's Big Blue, and exercise the willpower of Mahatma Gandhi. Really. But the folks we know are not like that. Real people have trouble with long division if they don't have a calculator, sometimes forget their spouse's birthday, and have a hangover on New Year's Day…

Add to this other requirements (for example negotiating differences in time zones, issues with spoken or written language as well as differences in cultural norms and practices) and one can imagine the likelihood of "normal chaos" ensuing in professional design practice.
Through enabling cross-institutional collaboration conducted between a university based in England, industry partners and international universities, the Global Studio responds to shifting trends taking place in design practice with regards the emergence of globally networked organisations and the inherent shift in ways of working (e.g.

Hoppe 2005, Horváth, Duhovnik, and Xirouchakis 2003, Asokan and Payne 2008). Harrison and Peacock (2010, p.878) claim this presents 'home students with [an opportunity to develop] a portfolio of globally relevant skills and knowledge without them leaving their home country'. The organisation of the learning activities aims to equip students with an appreciation of cross-cultural and distance communication and consequently strives to allow them an opportunity to experience "normal chaos". Our approach thus mirrors Ben Johnson's (Johnson 2011, unpaged) claim that education should prepare learners 'for uncertainty by helping them feel comfortable in postulating, guessing, hypothesizing, conjecturing, and testing their theories.' Our approach in turn aims to address the already cited criticisms of design made by Miller (ibid).

The Global Studio follows in the tradition of the Design Studio, with its emphasis on project-based learning and learning in and through "doing" (Schön 1985). Concentration on project-based learning in the Global Studio is claimed to help embed established design practices into the students' repertoires (Bohemia and Harman 2008). The Global Studio makes use of a blended learning approach – a combination of online learning and face-to-face teaching. In order to facilitate cross-cultural collaborative learning, Web 2.0 technologies are utilises to enable communication between distributed student design teams. According to Harrison and Peacock (2010, p. 878) these technologies help individuals 'transcend national boundaries and the constraints of distance educational opportunities'.

In the Global Studio all participating students are allocated an online project site which provides a common interface and "space" for staff, learners and industry partners to collaborate on a given assignment. The use of such technology has led to the production of learner-authored content and has facilitating the development of a student-centred learning & teaching approach (Bohemia, Harman, and McDowell 2009). The shared sites also provide students with an opportunity to learn from and with peers from their own and participating universities and manage their own time frames in order to simulate a "real world design studio" scenario. Falchikov & Goldfinch (2000 cited in Cassidy 2006) claim peer learning also enables students to take a leading role in learning and to develop autonomy and independence. A central premise of the Global Studio is that throughout the projects, collaborating students are co-dependent on one another's inputs. This introduces a sense of 'risk' to the Global Studio. Earwaker (1992) suggests that for growth to occur amongst students, risk should be inherent to the experience of higher education.

We claim the Global Studio is structured in such a way as to deliver students the opportunity to experience the educationally valid phenomenon of "normal chaos" through introducing uncertainty. As an example of "student-led" – as opposed to "tutor-led" – design education, the Global Studio also promotes "risk" which is argued to be necessary for growth to occur.

Two Projects: Gifts and Festivals

These two Global Studio projects involved more than one hundred students from universities around the world. At a micro level, the projects were run via teams of three to five students from one university (Team A) collaborating with an equivalent group from another participating institution (Team B). Although these collaborations are provided with their own WordPress project sites through which they communicate,

students are also free to choose to communicate via other Web 2.0 technologies such as Skype or Facebook. Staff, other participating learners and industrial collaborators also are encouraged to provide feedback to students via the project sites.

The Global Studio projects advance through pairs of teams adopting client–designer relationships. As in professional design practice, the client delivers a brief and set of parameters for the designer. Ultimately, the designer's task is to responds with a design intervention. In the Global Studio, client briefs and eventual design outcomes must exist within an overarching "project theme" provided by the project coordinators. This theme contains a set of deliverables as well as deadlines. It is important to note that when a team acts as "client", their brief contains instructions to design products or services that are to be relevant to an aspect of the culture in which they are "home students" – this will be expanded on below. Each team within the pairing performs both the client role and the designer role. Thus, Team A is the client for Team B. At the same time, Team B must write a brief and expects appropriate design interventions from Team A.

There are many reasons for our choice to enable each team to play a "dual role" in the collaboration. Firstly, we wanted to help develop the opportunity for an egalitarian relationship between partnerships to flourish. We also wished to enable each individual a varied learning experience and subsequently the opportunity to develop a diverse range of material for their portfolio. Finally, our aim was that each student was given the space to experience and negotiate the simulated "normal chaos" of contemporary working life as a design professional. Our belief is that through experiencing this "normal chaos" and negotiating uncertainties during the project, students can become more versed in negotiating complex problems in professional life.

The authors have worked together over two consecutive academic years to initiate and help deliver two projects through the Global Studio. The first project, in which nearly 250 students participated, was termed 'The Gift' and was inspired by the anthropologist Marcel Mauss' seminal book of the same name (Mauss 1950, 1990). The sociologist Pierre Bourdieu (1998, p.94) claims 'Mauss described the exchange of gifts as a discontinuous succession of generous acts'. Mauss claims that 'giving', 'receiving' and 'reciprocation' the central tenets of human interaction. For the cultural theorist Stuart Hall (1997, p.3), these interactions, which are part of cultural practices 'carry meaning[s] and value[s] for us, which need to be meaningfully interpreted by others, or which depend on meaning for their effective operation.'

The Gift project aimed to encourage students to explore various aspects of communication and design. Such issues included:

- How do relationships form between people?
- How do bonds form between people of different cultures?
- Should cultural differences be bridged or should they be celebrated?
- What strategies might be employed in order to encourage relationships?
- What are the material effects of Design?

Ghassan and Bohemia (2011, p.5)

Over 200 students participated in the second project entitled 'Festivals Fairytales and Myths', it reflected the notion that in currently in developed markets, where consumers can get hold of seemingly limitless quantities of fungible commodities, there is a yearning for "authenticity" (Arnould and Price 1993). This helps explain the

expansion of the 'Slow Movement', resurgent culture and the growth in festivals and community events (Pietrykowski 2004). The project also attempted to underscore the importance of "context" and "meaning" to design students. For example, Peter Lloyd and Dirk Snelders (2003, p.250) claim that beyond what may be termed its actual intended function, an object can be something that 'expresses or embodies ideas' in society. The notion that designers should be able to understand contemporary or historical movements is highlighted by Paul du Gay et al. (1997) who state that they 'play a pivotal role in articulating production with consumption by attempting to associate goods and services with particular cultural meanings' (p.5) and are pivotal in presenting 'these values to prospective buyers'. Consequently designers are termed 'cultural intermediaries' (du Gay et al. 1997, p.62).

As noted, in both projects, when assuming the role of client, students were asked to write a brief which was relevant to an aspect of the culture in which they were "home individuals". Via opening channels for Web 2.0 communication we hoped to provide a platform through which designers would have access to a level of cultural knowledge they may not otherwise have. We will term this "local knowledge". In our experience, "normal design education" often promotes the practice of asking students to design *for* abstracted individuals (requesting students to create imaginary "personas" for whom their design interventions are aimed at is a good example of this). Through utilising feedback from collaborators, we wanted to enact a shift away from these practices. The aim here was to provide teams a means of designing *with* partners with local knowledge.

To summarise, our aims were:

1) To address the criticism of tutor-centred learning in design education. Through creating an environment which centred on collaborative peer learning, we wished to decrease the overarching influence of tutors in the design teaching & learning environment.
2) Through limiting our "control" of the project, we aimed to introduce – and thus ultimately help prepare – future design professionals to the "normal chaos" that is a function of late modern practices. We believe through this that designers can become more versed in negotiating complex problems.

Students' Reflections and Discussion

Individual feedback from participating students was collected at the mid-point and the end of the two projects. This paper will focus on end-of-project qualitative feedback provided by home students at the UK institution. We have only included end-of-project feedback as this data is provided following reflection on the whole learning experience provided by the Global Studio. We have concentrated on data from the UK HE establishment as the authors have observed practices there which are concurrent with criticism of tutor-centred philosophies already cited.

Through undertaking these projects, many students appreciated that understanding cultures different from their own is important in contemporary design practice:

> This festival is closely linked to Valentines Day, so it was important not just to skim over it and assume it as a western celebration but look for the unique differences this day holds in China… To have a successful project I learned that it is highly important to spend time trying to empathize, understand and respect other people's cultures, and breaking through this barrier will ease communications and enhance productivity.

> …we had missed the point that in China cupcakes are not popular and don't hold the same meaning as in our Western culture.

> …doing this project it has made me learn about other countries festivals and how they celebrate it.

> It is important to understand cross culture differences. And the differences should not be underestimated either.

The majority of students reported that working with peers from cultures different to their own helped develop their understanding of other cultures:

> Learning to work with a design team from a different cultural background was challenging and interesting; it was all about learning about a new culture, having to both understand and respond to new, and different cultural cues.

Importantly, the exercise of evaluating conversations with (as well as design proposals presented by) their collaborators located in other countries enabled students to critically evaluate cultural stereotypes:

> Seeing/observing what the overseas team had found on our own culture (or my own) demonstrating what the cultural stereotypes were. What the overseas team found was not necessarily appropriate to our culture or reflected our culture, but based on these cultural stereotypes and clichés.

> [I gained an appreciation of] the opinion of people so far away from the U.K. and Europe considering those places and how wrong are some stereotypes from both parties.

Through the Global Studio projects, students – for the first time in their experience in HE – were asked to tackle a range of complex issues highly relevant to contemporary design practice. These issues include, problems intrinsic to the client designer-relationship:

> ...I was able to experience both sides and the difficulties in communications and getting the correct information to gets stuff done, also giving the correct information so that the designer can get everything you ask for in the designs.

Issues relevant to communicating from within different time zones were also highlighted:

> I have learnt the difficulties of different time zones, for example Japan is 9 hours ahead of here. This often made it difficult to get quick feedback on ideas or as we found to clear up confusion. This had big affects on the speed of work as designers

Learners also experienced problems communicating when "mother tongues" are different:

> Because the languages are different, the meaning's translation is difficult and often make people hard to understand, can't transmit clearly.

Students also realised that some nations' political policies were very different to their own - and that this impacts on what information can be accessed by their collaborators:

> One of the first to be brought to my attention is the fact that Facebook is blocked in China, as are several other websites such as Youtube. I first noticed this when we posted several links with our brief to websites related to the Evolution festival.

The ability to negotiate complexity was an important part of the success or failure of this project. An important example is creating methods to bridge the language divide between home students and overseas collaborators:

> ...re-phras[ing] questions and [...]talk[ing] a little slower and a little louder using more simple English so that we were able to get our point across.

> [we] learnt to communicate using more pictures and less words.

> To try to help them in the understanding of the brief we put together a powerpoint of our local area, general instructions as to how the cakes are made: including a video, and an information sheet with images, at the same time trying not to be patronising if they already had knowledge of this.

Collaborators were generally unfamiliar with the "local context" relevant to students from the home institution. This caused frequent misunderstandings:

> Our collaborators didn't understand the meaning behind our festival and this caused them ask questions such as 'Is there any special aspects of your local area.

The difficulties experienced by students while working with their counterparts highlighted for them the importance the research stage has on the overall design project's direction and the impact of communication on the design process:

> This project has also highlighted how important the research stage is especially when designing for an area that you have no previous knowledge or experience of.

> ...a thoroughly enjoyable project that i believe has taught both collaborating groups a lot about the true value of communication, the ability to understand and respond to different cultures and produce more relevant products as a consequence of this.

> …by collaborating with students where the distance was to the extreme, I hope that in the future I will feel more prepared for design collaborations across distance, whether it be again somewhere as far as Japan or on the other hand a company (person) based in the UK but a few hours away from where I am based

Some of the students also recognised that in order to make a meaningful difference to other people's lives they need to take into consideration the others people's cultures:

> Within design I see society and culture as the main driver for products, the ability to fully encompass a knowledge for someone else's culture will make you a well rounded, better designer who creates more effective designs that have an impact on peoples lives.

Central to the philosophy of the Global Studio is the notion that collaborating students are co-dependent on one another's inputs. Thus, for a successful outcome, teams must rely on a teaching approach that is not tutor-centred. As such, students who felt they had benefitted from the experience noted they had learnt to rely on developing their own problem solving strategies. For example, going beyond normal confines, self-

evaluating design work, and feeling a greater level of control about their work's direction is as suggested by students' quotes below:

I had to go outside and experience [the] world. Get out of the shell that is the [class] room 103.

We then had to go ahead and use our own judgment, as designers to decide as to what concept would work the best.

[The project] created several challenges that needed to be addressed without input from lecturers. This definitely formed an environment that felt greatly independent of University even though the project was undergone there.

Reflecting back, the majority of students stated the Global Studio projects were a positive learning experience and that they could foresee this learning being relevant to their future professional design practice. For example, this student informed us how difficult designing for others can be:

Another positive was designing an idea for a culture that is very different from our own. It can sometimes become very easy to start incorporating your own views and preferences on an idea when you are designing for someone else, however when a culture is so very different from your own it becomes almost impossible to do this while trying to keep an idea relevant and keep your clients happy.

However, paralleling this reflection upon the positive effect on learning, many students informed us that they struggled with making decisions without tutor-led involvement from design educators. For example, in their feedback learners suggested that 'tutors pushing students to work harder' or that lecturers should provide 'more strict deadlines […] to make sure everything is done on time':

...improvements could be made by having interim presentations with lecturers present. It would have been good had we had two or three presentations to the other university.

It would have been beneficial to the process if we could have had some input from the lecturers with regards to the actual designs too, perhaps resulting in some less dubious outcomes or smoother transitions between iterations.

We really were stuck, as we couldn't progress an inch without the feedback [from our counterparts] on our designs. By now we had to take it to the tutors to set things in motion, eventually things started moving again.

Our partners didn't act upon the initial concept feedback we gave them and therefore didn't upload any developed concepts. This caused us to panic

The student quoted below articulated how projects that learners are normally asked to work on are governed by the tutors – and how this impacts on the course project takes.

I have learnt an incredible amount from this project and they are things that I would never have experienced from the in-house projects at university, the projects we get from the university are regulated often by your tutors but it is so different when it is done by fellow students. Evidently our tutors are our clients and it's so easy to gain feedback and direction as they are there with you in your classroom however when working with international 'clients' it is clear to me how important

communication is, how important leadership is and how communication your ideas in the right way can stop allot of confusion and misunderstanding.

Through enacting a behaviourist approach, we argue design education is working to diminish students' exposure to "normal chaos". An important aim of the Global Studio is to help introduce students to the "supercomplexity" that is a function of late modernity. The authors have attempted to achieve this through reducing the reliance on a tutor-centric approach to design pedagogy..

A student who wrote his feedback whilst being on placement with an international manufacturer of high-end sports cars reflected the need for an approach to design education which is less "dictated" by tutors:

'I feel I can understand this [Global Studio project] more so, as I've just spent my first week at the [...] Design Studio, where its extremely fast paced and not everything goes to plan when there are many things going at once.'

A Sustainable Future for "Tutor-Led" Design Education?
In a recent report, the leading UK management think tank the PA Consulting Group (2011) highlighted the unprecedented challenges ahead for home-based universities. Issues listed include the 'next wave of globalisation' (2011, p.5) which will continue to increase access to learning through Web-enabled technologies for individuals wishing to study. Also mentioned is the 'blurring of public-private divisions' (2011, p.5) in terms of funding structures. According to the PA Consulting Group (2011, p.5), this momentum is,

...systematically sweeping away the organisational and regulatory walls that have delineated higher education and universities, opening up a dynamic and expanding economy of purposeful learning.

These issues translate into the possibility of offering greater distance learning opportunities for an increasingly diverse population of students and the possibility of universities working with a greater variety of agencies in order to supplement decreasing funding from the State. They are symptoms of Barnett's aforementioned "supercomplex" era in which structures are dismantled. As part of a wider field of higher education, it seems sensible to suggest that design education is not immune from such upheavals. If it is going to become increasingly normal for the day-to-day logistics of higher education to become more complex, then it is highly possible the experience of higher education will follow suit design students. It may mean greater complexity in terms of the increasing the amount of time spent collaborating with peers and tutors across distance as well as routinely being involved in more diverse, externally funded projects.
We argue augmented demands placed upon design students necessitate changes in teaching methods employed by design educators. For example, implementing distance learning within design curriculum might result in reducing students' face-to-face studio contact with tutors. One outcome from this process could be a reduction in tutors' "voice". An increased diversity in the nature of projects may necessitate branching into areas design educators may not deem themselves to be experts in as well as increased collaboration with colleagues whose specialism lies outside of design. Reduced "voice", increased collaboration and a diminished claim to expertise may combine to reduce the influence design educators have over the solutions created by their students.

Consequently, tutor-led design education may become less of a logistically workable principle as de-structured higher education systems continue to emerge.

Conclusion

In this paper we have argued that "tutor-led design education" may not be ideally suited in helping to prepare students for complexity and the "normal chaos" which helps to define contemporary times. The Global Studio attempts to enable design students to experience normal chaos. Our aim is to help prepare students for this "supercomplex" era. Our qualitative data provided by home-institution students suggests many have found it to be a valuable learning experience.

However, student feedback suggests that many students have struggled with making design decisions during both Global Studio projects. We suggest one factor for this may be the difference in pedagogical approach between Global Studio teaching &learning philosophy and that of tutor-led design education. The latter is the dominant approach in the curriculum. Given the contemporary cultural and professional climate, we suggest there is a need to "introduce a much-needed sense of chaos" at an early stage in design education and to scaffold its presence into the curriculum.

Finally, given the operational changes continuing to influence higher education, we hope that our discussion raises the issue of the on-going logistical feasibility of tutor-led design education. If it may not be feasible going forward, we must ask ourselves whether tutors and students are ready for a changing dynamic? We argue more research should take place into this subject.

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