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The Global Studio

Incorporating Peer-Learning into the Design Curriculum

Abstract

In 'tutor-led' design education, lecturers reside at the centre of teaching & learning activities. We argue that tutor-led design education does not prepare graduates sufficiently for working in highly complex professional capacities. We outline an alternative learning environment named the Global Studio in which lecturers are more 'distant' in pedagogical activities. This 'distance' opens up learning spaces which expose students to complex project situations in preparation for professional working life. Global Studio projects are 'student-led' and contain explicit opportunities for peer tutoring to ensue. Feedback indicates that learners benefitted from engaging in peer tutoring. However, many students struggled with making important decisions when operating outside of the tutor-led learning environment. To maximise their benefit, we argue that student-led projects featuring peer-tutoring should be scaffolded throughout design programmes to provide students with a sufficient level of exposure to this mode of learning.

Keywords: peer tutoring, peer learning, learning to deal with complexity, tutor-led learning, student-led learning

Introduction

The 'tutor-led' model has a long history in design education. It can be traced back at least as far as the Staatliches Bauhaus. In characterising the tutor-led system, Walter Gropius (1919, p. 1), the founder of this highly influential institution, stated that the educator "instruct[s]" the novice. Gropius (1919, p. 3) reaffirmed the top-down nature of the schema by pointing out that "the instruction of the individual is left to the discretion of each master".

As the design profession is perceived as being practice-led, an important attribute for tutors remains their ability to 'pass on' practical skills to students. Talented, experienced and passionate educators continue to aid students to understand and hone a plethora of skills intrinsic to life as a design professional. Indeed, the attainment of many practical skills seems difficult to envisage without educators' continued dedication to the tutor-led system.

The authors have both benefitted from being educated via the tutor-led model. We fully understand and appreciate its positive attributes. However, criticism has been levied at this system. Below we reflect on criticisms associated with the tutor-led model.

The Tutor-Led Model

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), practice-led training of artists and designers appears to differ in its approach to the other sections of the higher education fraternity. Danvers (2003, p. 54) 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". In art and design higher education Danvers 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 codifi-

cation, and to recognise and question ideological positions wherever possible (Danvers, 2003, p. 54; original emphasis).

Danvers' experiences of design education appear different to those of some other academics. Alain Findeli (2001) argues that problem solving through linear, causal 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, p. 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 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 (Frascara, 2007, p. 64; original emphasis).

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) questions whether design education enables designers to operate optimally in current 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, p. 262) proposes that graduates are entering "a world that exhibits global features of challenge, uncertainty, turbulence, unquantifiable able risk, contestability and unpredictability". 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; original emphasis)

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". We argue *tutor-led* design education does not optimally prepare students for processing complex problems. As such, it may not aid learners prepare to negotiate *normal chaos* as graduates.

For Derek Miller (2010, p. 5), 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 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. (Miller, 2010, p. 5)

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 the demands of ‘normal chaos’ that are a feature 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-tutoring and 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 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 (Thaler and Sunstein, 2009, p. 7).

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 claim this presents:

...home students with [an opportunity to develop] a portfolio of globally relevant skills and knowledge without them leaving their home country (Harrison and Peacock, 2010, p. 878).

The organisation of Global Studio 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 concurs with Ben Johnson’s claim that education should prepare learners:

...for uncertainty by helping them feel comfortable in postulating, guessing, hypothesizing, conjecturing, and testing their theories (Johnson, 2011, unpagged).

Our approach in turn aims to address the already cited criticisms of design made by Miller (2011).

The Global Studio follows in the tradition of the Design Studio, with its emphasis on project-based learning and learning in & through “doing” (Schön, 1985). Concentration on project-based learning in the Global Studio is claimed to help embed established design practices into 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

used 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 learners, academic staff, 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 facilitated the development of a student-centred teaching & learning 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.

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 enabling learners to negotiate and construct conversations and design outcomes with peers. Consequently, in focusing on student-led learning, the Global Studio makes use of peer-tutoring. We move on to discuss peer-tutoring with respect to the two Global Studio projects the authors have conceived and collaborated on.

Peer Tutoring in the Global Studio

Peer tutoring is defined as teaching which is facilitated by individuals who are not professional tutors (Topping, 1996). Falchikov and Goldfinch (2000) claim peer learning enables students to take a leading role in learning and to develop autonomy and independence. Moreover, Wong et al. (2003, p. 417) propose that students “interacting with a more knowledgeable peer can learn to become as knowledgeable as the peer”. The concept of peer tutoring has its origins in face-to-face environments (De Wever et al. 2010). Pertinent to the Global Studio, De Wever et al. (2010, p. 355) argue peer tutoring can also be seen to occur in an online environment where it improves students’ “knowledge construction”. Specifically pertinent to both Global Studio projects to be outlined here, cross-institutional educational endeavours conducted through ICT have been argued to precipitate increased levels of peer learning among students (OECD-CERI, 2005). Elsewhere, we have suggested that peer tutoring is a feature of the Global Studio (Bohemia and Ghassan, 2012; Ghassan and Bohemia, 2011).

The subject of *knowledge construction* is of great interest to this paper. The tutor-led model propagates a top-down knowledge system in which professional educators orchestrate the learning experience for students. Rather than this, through developing a model where “collaborating students are co-dependent on one another’s inputs” (Bohemia and Ghassan, 2012, p. 113), the authors have attempted to propagate a method which recognises that knowledge is socially constructed. This is not to say that an air of neutrality and egalitarianism exists between peers—indeed elsewhere we have suggested that this is not the case (Bohemia and Ghassan, 2012). However, we argue that learners share more in terms of status with peers than they do with professional academics. As such, there exists more opportunity for design outcomes to be precipitated via a process of conversation and negotiation. Below, we move on to discuss the *explicit* opportunities for peer tutoring which have been purposefully designed into the two projects the authors have worked together on.

Explicit Opportunities for Peer Tutoring: Gifts & Festivals

The two Global Studio projects outlined in this section each involved more than two hundred students from universities around the world. That said, 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). Collaborating teams 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. Academic staff, other participating learners and industrial collaborators were also encouraged to provide feedback to students via the project sites.

Global Studio projects advance through pairs of teams adopting *Client–Designer relationships*. As in professional design practice, the Client delivers a brief and a set of parameters for the Designer. Ultimately, the Designer’s task is to respond 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 notion 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.

The premise that teams of students are reliant upon input from one another introduces a sense of *risk* to the Global Studio. John Earwaker (1992) suggests that for growth to occur amongst students, risk should be inherent to the experience of higher education. Of importance to the focus of this paper, the notion that collaborating teams are co-dependent facilitates an explicit opportunity for peer tutoring to take place.

The first Global Studio project outlined here was named *The Gift*. The project 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* are the central tenets of human interaction.

Whilst undertaking the role of Designer, students were asked to create gift artefact(s) and/or service(s) which were specific to cultural practices experienced by their collaborators. A central premise of the project revolved around the notion that relevant information on these cultural practices—as well as iterative feedback on the appropriateness of design solutions—was to be supplied by the collaborating teams in their role as Clients. This presented an explicit opportunity for peer tutoring to take place.

Over 200 students participated in the second project entitled *Festivals, Fairytales and Myths*. This collaboration reflected the notion that 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* (Pietrykowski, 2004) and the growth of music festivals (Stone, 2009). The project also attempted to underscore the importance of *context* and *meaning* to design students. Kopytoff (1986, p. 68) argues that artefacts exist as “culturally constructed entit[ies]” which are “endowed with culturally specific meanings”. The notion that designers should be able to understand contemporary or historical movements is highlighted by Paul du Gay et al. (1997, p. 5) who state that designers “play a pivotal role in articulating production with consumption by attempting to associate goods and services with particular cultural meanings” and are pivotal in presenting “these values to prospective buyers”. Consequently designers are termed “cultural intermediaries” (du Gay et al., 1997, p. 62).

Whilst undertaking the role of Designer, students were asked to create solutions pertinent to festivals, fairytales or myths which were intrinsic to the cultural experiences of their collaborators. As with the previous project, the collaborators were required to communicate relevant information to the design team. Elsewhere we have termed this process the communication of “local knowledge” (Ghassan and Bohemia, 2013). In their role as Clients,

the collaborators were also asked to provide regular feedback on design interventions. Consequently, this project offered an opportunity for peer tutoring to ensue.

Students' Reflection and Discussion on Peer Learning in the Global Studio

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 kindly provided by home students at the UK institution. We have only included end-of-project feedback as this data was collected following reflection on the whole learning experience provided by the Global Studio.

Through their feedback, many learners indicated that working in a student-led manner through the Global Studio has been a beneficial learning experience. For example one student stated that collaborating with a “complete group of strangers from another country” helped him improve his confidence. This student felt this experience was:

...beneficial [...] for future situations where I'll need to present to companies or group of people I've never met before.

Another learner stated working with people with cultural backgrounds which differed from her own was a “challenging and interesting” experience. This student felt the project:

...was all about learning about a new culture, having to both understand and respond to new, and different cultural cues.

Another student reiterated the value of the learning experience stating working via the Global Studio:

...gave each individual an experience and a learning curve at the same time.

Students also seemed to suggest that working in this manner may have been good preparation for professional practice. One student informed us that “collaborating with students where the distance was to the extreme” would prepare him for professional:

...design collaborations across distance, whether it be again somewhere as far as Japan or on the other hand a company (person) based in [elsewhere in] the UK.

Another learner believed “society and culture” to be the “main driver for products”. Consequently, she felt that:

...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.

Pertinent to the focus of this paper, feedback presented by many students indicated that they had benefitted from tutoring delivered by their collaborators in international settings. Students stated they had gained an appreciation of *local knowledge* (Bohemia and Ghassan, 2012) specific to their collaborators. For example, one student stated he had “learnt about the Nebuta festival” and felt it was “good to learn a bit about their own culture too.” In relaying relayed local knowledge that his peers had taught him, another student stated:

Apparently it is the craziest thing you will ever see in Japan; it is a huge fight amongst the villagers to ignite a wooden shrine by swatting their pine branch torches, which acts as a offering to the gods.

Peer tutoring also enabled students to critically evaluate cultural stereotypes. Feedback from the following student illustrates the importance of this:

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.

Another student relayed the idea that, as with members of his own team, his collaborators had also begun the project armed with culture stereotypes. This learner stated he had gained an appreciation of “how wrong are some stereotypes could be from both parties”.

As well as this, information gained through peer tutoring prompted students to reflect upon their own cultural practices:

England never hosts any festivals similar to this, partly due to fire hazards and the British Standards Institute.

As noted, the Global Studio peer learning environment means that in order to deliver a successful outcome, teams must rely on a student-led learning. 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 one student this meant leaving the confines of the studio and “go[ing] outside and experience[ing] [the] world.” Another student suggested she had to learn how to self-evaluate her design work:

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

Another student felt that working via the Global Studio meant negotiating “several challenges that needed to be addressed without input from lecturers”. In tackling these issues, this participant had to work in a student-led manner:

This definitely formed an environment that felt greatly independent of University even though the project was undergone there.

As educators, we are heartened to learn that students feel they have gained value from our innovations in teaching & learning. However, some participants informed us of the difficulties they had experienced negotiating the deliverables associated with *The Gift* and the *Festivals, Fairytales & Myths* projects. Such difficulties appeared to centre round a perceived lack of input from tutors. For example one learner stated:

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.

Moreover, some students felt they were in need of more “interim presentations with lecturers present” or practice runs prior to the final crit: “it would have been good had we had two or three presentations to the other university”.

As design education employs a tutor-led model, students develop their understanding of design through processes set by professional educators. In other words, as the tutor-led model is the prevailing norm, it is usual for students to understand that learning is to take place via interventions from tutors. One student described feeling “really [...] stuck” for his team “couldn’t progress an inch without the feedback” from his counterparts. This meant his team:

...had to take it to the tutors to set things in motion, eventually things started moving again.

Similarly, the following student expressed feelings of discomfort precipitated by a perceived lack of involvement from tutors:

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.

Another student stated the project was “very difficult” as he had trouble “managing time and keeping up with the deadlines proved difficult to handle”.

As noted earlier, the authors purposefully attempted to remain relatively distant in the Global Studio system. This is not to say that tutors were in any way neglectful. Projects which are run through the Global Studio are operationally different from those facilitated via the tutor-led model. The student quoted below articulated how projects that learners are normally asked to work on are administered by tutors—and how this impacts on the course projects 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 alot of confusion and misunderstanding.

As noted, there are tangible benefits to peer tutoring. We argue the top-down behaviourist approach common in design education can serve to reduce the opportunities for student-led peer tutoring to occur. Because of the scarcity of student-led education in design, we argue that it may take several iterations for individual students to become more accustomed to such operations and consequently to grow comfortable with the notion that learning from one’s peers is both a legitimate and worthy process.

Conclusion

In this paper we have argued that tutor-led design education may not be ideally suited in preparing students for complexity and associated the *normal chaos* which defines contemporary times. The Global Studio attempts to enable design students to experience normal chaos and deal with uncertainty. In so doing we aim to help prepare students for this *supercomplex* era.

This paper has also illustrated our two-fold strategy for providing learning activities which prepare students for complex working environments. Firstly, tutors purposefully refrained from providing feedback to students on evaluations which were meant to be provided by their peers (i.e. Clients). In instigating this practice, we aimed to address Baxter Magola’s (2009) call for tutors to create classroom relationships with students which differ from the ones primarily practiced by design educators. In this way we attempted to overcome some of the limitations of the dominant design education model outlined by Frascara (2007), namely

tutor-led design education's propensity to curtail students' development and dictate learners' outputs. Thus, in comparison to tutor-led design studio teaching & learning activities, the tutors remained relatively 'distant' and less directing in the two Global Studio projects described in this paper. Secondly, submissions were strategically timed throughout the project so that students were required to communicate and negotiate with their peers and acquire what we term *local knowledge* from them. In recognising that knowledge is socially constructed, we have aimed to facilitate peer-tutoring amongst participants.

Qualitative feedback informed us that many students gained valuable learning experiences from working in a student-led manner. This feedback also suggested that peer tutoring had helped improve participants' learning experiences. However, student feedback also suggested that learners 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 design curriculum. Given the contemporary cultural and professional climate, we argue that peer learning needs to be introduced and scaffolding throughout the learning journey of design students in order for students to become versed with making decisions for themselves and their peers. That way, students can have the opportunity to maximise the benefit of working via a student-led, peer-tutored environment.

We began this paper by noting the long history of the tutor-led model in design education. We then acknowledged its continued importance in ensuring that vital practical skills continue to be 'passed on' to design students. We do not call for the removal of the tutor-led model from higher education classrooms. The tutor-led approach certainly has its place. But so too does a student-led system which presents explicit opportunities for students to benefit from learning from their peers. We call for further research into a balanced and holistic approach to design education which will best enable students to prepare for professional life in the 21st Century.

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