Editorial

Design Education: Teaching in Crisis

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It is probably an obvious understatement to say that the past years have been turbulent and uncertain. The Covid-19 pandemic forced changes in many areas across all parts of society and its effects continue today and will undoubtedly do so for many years to come.

In education the impacts were significant. Design education is usually taught in a design studio setting and relies heavily on physically proximate and social mechanisms of learning and teaching. Changes to physical modes of teaching had to be made at speed, meaning the planning and preparation needed to successfully create learning materials was not always possible. Contingency teaching methods and material quickly appeared and, for many, responding and reacting, in what was effectively an emergency setting, became the reality of teaching (Winters, 2021).

There were exceptions, of course. Some institutions refused to abandon face to face methods: some on the basis of student expectation; others around beliefs about the purpose and politics of design education. Yet other institutions responded as they normally did, in the sense that emergency response teaching was already their way of working and the pandemic was another disruption requiring an emergent teaching response.

Like privilege, the effects of the pandemic have not been evenly distributed.

For many design educators the shock of losing physically proximate and synchronous access to students removed what turned out to be a huge and taken-for-granted structural component of design pedagogy. This was more than a loss of space to teach or place to design; for some institutions it affected all aspects of the praxis and socio-complex that is studio-based learning. Many educators quickly realised that the immediacy of constructivist, experiential and emergent learning in a co-located setting like studio cannot be replaced immediately or simply in an online setting. Attempts to make up for the loss of spatial proximity with temporal (online) proximity didn't seem to work as expected; orientation methods effective in studio, such as furniture layouts, activities and demonstrations, or informal breakout spaces etc., were unable to be replaced easily or failed completely.

The single overarching lesson from emergency remote teaching has been that moving studio-based curricula online is a non-trivial exercise.

Distance Design Education

Of course, there are a few institutions already teaching at a distance and using online and blended methods. The Open University in the UK (OU) is one of these and has taught design remotely since its inception in the early 1970s. During this time, the OU has developed many ways of approaching this mode of learning and teaching across a number of diverse subject domains, including design.

It might be assumed that it would be a relatively straightforward task to share this knowledge. But, the full richness of praxis that exists in studio and the myriad of tacit and implicit knowledge it requires (regardless of mode), makes this a very difficult task. What is particularly hard to do is to simply transfer aspects of complexity and richness from traditional to online settings: what works in one may only do so depending on particular conditions in another, and these are not always obvious.

The lesson for those of us already teaching at a distance was to realise just how much we, too, embody our own practice as tacit and implicit knowledge. Design is an inherently embodied practice where the unseen and hidden processes are just as important as the final proposal, and this is just as true in design education. The unseen and hidden, the tacit and implicit, the informal and unplanned, all turned out to matter far more than anyone thought.

Making Visible

Making the unseen and hidden properties of design education visible was a key motivation behind this Special Issue. The changes caused by emergency remote teaching meant that assumptions made in traditional studio settings had to be abandoned; invisible things had to be made real and tangible at a distance or left behind. This need to 'make visible' has arguably been the greatest challenge for educators.

Having said that, design educators had several advantages in this challenge, all of which are evidenced in this special issue. Firstly, designers are used to working with uncertainty, complexity and the vagaries of real-world settings where no perfect plan or design exists. Looking at the articles it is clear just how adaptive some of the teaching responses have been but also how aware of these complexities design educators were. There are probably greater connections between design and teaching practice than some realise.

Secondly, using creativity as a way of thinking and approaching challenges - not simply as a way of coming up with ideas. Inherent in designerly creativity is a *depth* of creative thinking that does not stop at one or two sketch notes but engages in thinking through design responses, often by iteratively implementing and testing the underlying value being created.

Finally, all design education is inherently and deeply emergent and constructivist: it is dependent on circumstances and contexts that change what we do as designers as well as *how* we do things. No design process or outcome is ever fixed beforehand and, as noted above, teachers are most aware of this contingency in studio:

"...something that works well one time may be ineffective another, and each new class is a very different experience." (Rowland, 2016, p. 229)

It is these 'different experiences' we hope to capture in this Special Issue.

The experiences during the pandemic have forced us all to talk about our teaching and learning in ways that we would not normally do. The learning and experience that has emerged from this is critical to capture to inform current and future practice. As we transition from the pandemic setting there are a number of key lessons worth taking on board, some of which reflect deep problems in current studio praxis. As Colin Gray asks in this Special Issue, "...what are we willing to replace, and with what justification?"

To replace any encultured practice is difficult in any setting and, even though design is a creative practice, the habits and praxis we form around uncertainty can often be very rigid and fixed. Hence, being able to make informed and effective change is important, as well as being able to articulate and support such change in education settings that might not fully understand the modes of learning and teaching required for design education.

Lessons Learned

Here, then, are a few lessons drawn from the case studies and articles in this special issue. This is by no means a definitive list, but it certainly gives us, as a community, a few things to think about as we move forward.

You Can't Just Translate the 'Surfaces' of One Mode to Another

The first instinct of many educators was to replace spatial proximity (studio) with synchronous online proximity. This was only partially successful in that real proximities are the connections made between students, tutors, artefacts, and ideas. What must be transferred is the value of the experience underlying the surfaces of space and time. There are numerous examples of failed attempts to simply move a traditional curriculum online or to force a hybrid version and assume that these will work.

David O'Brien's case study, On country – off country, provides a good example of how an existing paradigm (on country discussion) is used to overcome technical challenges, where it is the underlying value (the act of specific and intentional forms of dialogue) that matters far more than simply the surface communication. In addition, it highlights the successful adaptation of emergent conversations in client-led projects on country to the more structured modes of online technologies by anticipating these conversations through simulations and allowing conversations to emerge in agile online presentations.

Similarly Miikka Lehtonnen, Noorin Khamisani, and Gionata Gatto argue in their article *Playful absence / absence of play* that studio can be created, regardless of mode, as an act of play. Specific actionable examples like this offer important lessons for anyone transitioning back to prior modes of teaching - it's the underlying value that has always mattered far more than surfaces in studio.

Who Gets to Speak - Who Takes Part

Different students (and even tutors) speak in different modes of interaction and many educators have reported being surprised by which students have been active in distance and online settings. As Colin Gray observes in the article "Scaling Up" and Adapting to Crisis: Shifting a Residential UX Studio Program Online:

"...more voices could be "heard" through Post-Its than would have been possible in the physical studio with verbal questions."

This matches findings in general distance education research and raises the uncomfortable fact that some voices have not been prominent, or even present, in traditional studio settings in the past. Moving forward, it is not only important to make space for these 'hidden' voices once we return to 'normal', but to also ask what can we do to improve participation and representation for all voices in the studio? One example of a response to this is given in the case study "Here's what we really want your class to be about!" from Lesley-Ann Noel, who explores and builds on

the values that underpinned the work (relationality, community-centredness, and situatedness), to suggest transitions to alternative modes. Perhaps the continuing shift of attitudes toward blending modes of studio will allow further responses to this question, helping it become a focused area of study and research over the coming years.

Connections, Not Proximities, Matter Regardless of Mode of Teaching

This was one of the first lessons learned for many educators: without the orientation that studio and other norms afford, students had no immediate means of finding out where they were or where they needed to go. As Leigh-Anne Hepburn and Madeleine Borthwick observe in their case study, Synchronicity in the Online Studio: A Study of Two Cases, replicating even some of the synchronous and proximate signals and routines available in traditional studios, such as interactions and feedback between peers, can be a huge task in an online setting, and this is no less true in virtual studios designed to do this (Lotz et al., 2015, 2018). Similarly, the importance of interactions and praxis in a designer's education identified by Virginie Tessier and Marie-Pier Aubrey-Boyer, in their article Turbulence in Crit Assessment: From the Design Workshop to Online Learning, has to be understood and provided in any and all modes of learning and teaching. This also highlights just how much 'work' studio has been doing - when it is lost, we lose far more than realised simply because the proximities we have relied on in traditional studios are far more than only spatial or temporal. These can be replicated in other modes of studio if they are treated accordingly, such as visualising processes, establishing routines for communal working and fostering experimentation by giving learners ownership over shared online spaces, as outlined in the recommendations in the case study, From Sharing Screens to Sharing Spaces by Jon Spruce, Pete Thomas, and Sarah Moriarty.

Studio Depends on Habits of Practice - But Is Also Adaptable and Changeable

The results outlined in Katja Fleishmann's article, *Is the Design Studio Dead? - An International Perspective on the Changing Shape of the Physical Studio across Design Domains*, demonstrates just how important studio remains to design educators as a core part of practice and teaching. But this study also demonstrated the subject domain's ability to adapt and learn as shown in the significant shift in attitudes to blended modes of studio. This finding is extended in the case study, *The ones who have never been physically in a studio*, by Berrak Karaca-Salgamcioglu and irem Genç, who demonstrate that the 'myth' of studio is also constituted (maintained and constructed) by students themselves, in this case hacking the studio to suit their needs. Both examples highlight the need to have better methods and approaches to research and scholarship across modes of studio learning, and, in particular, that moving beyond simplistic dualities of online vs offline, or face to face vs distance, can allow us to work with underlying patterns and values. In questioning the role of studio in *Making the Studio Smaller*, James Brown forces us to examine what it is that truly matters about studio and this is perhaps a more useful reflection point when considering adaption: not what we *think* matters, or what we'd *like* to matter, or even what we *have relied on* mattering historically.

New Words to Describe and Conceptualise In-between Experiences

We might need some new words (or better ones anyway) for concepts like hybrid; blended; synchronous; asynchronous; zoom fatigue; semi-synchronous learning and teaching. Even the phrase 'face-to-face' has been challenged - by students themselves - in terms of its underlying assumption. Being online does not mean a face is not present and this challenges what we assume 'being present' means in any setting. The value we give to different modes of learning

and therefore the value we place on certain activities and actions, has to be questioned as we transition away from emergency teaching. 'Being' in studio means far more than simply a body located in space and time, as is clearly demonstrated in the examples of studio being in the article *Everyday Routines and Material Practices in the Design Studio*, by James Corazzo and Layla Gharib. The sub-title to this article, *Why Informal Pedagogy Matters*, highlights a critical lesson for all educators to take from the last year.

New Opportunities Beyond 'Normal' Boundaries

Several of the case studies present creative and innovative responses to the crisis. As some boundaries closed, yet others were made possible, such as collaborations between colleagues around the world. When you read examples such as the case study, *Global Design Studio*: *Advancing Cross-Disciplinary Experiential Education During the COVID-19 Pandemic*, by Shital Desai, Ingrid Stahl, and Marianella Chamorro-Koc, what becomes clear is that we still have much to learn about international collaborations especially in terms of managing asynchronicity and local activity coordination. This is explored by Ibrahim Delen, Fatma Özüdoğru, and Burak Yavaş, in the article *Designing During the Pandemic: Understanding Teachers' Challenges in eTwinning Projects*, and how global working might be supported, sustained, and developed beyond individual projects by building interdisciplinary communities of practice. What we have as a community of design educators is a rare opportunity to reform the boundaries of participation, agency, emancipation and belonging to better respond to existing problems and challenges, such as representation and inclusion. Such opportunities not only explore who can design and where design might take place but, as with the examples in Noel and O'Brien, actively question the methods and structures of designing itself.

We All Need Support

It can be difficult to be a design educator in emergency educational settings, particularly if you are also a practitioner. The reflective study, An Administrative and Faculty Autoethnographic Analysis of Shifting Modalities of Pre-service Technology Education Programming During the Onset of COVID-19, by David Gill and Thomas Kennedy examines the challenges in maintaining hands-on and constructivist education in contemporary education. Importantly, it recognises the extent to which many educators went in supporting students during the emergency teaching response, observing there is a limit to what can be done without tailored institutional, technical and collegiate support. A positive example of such support is provided by James Thompson, Kate Tregloan, Phillipa Soccio, and Huiseung Song in their case study, Dual Delivery Design Studios, which outlines the strategic and operational approaches they took to ensure a blend of different modes of course delivery to suit individual needs. This also highlighted the personal, professional and pastoral support we all needed as design educators. Another exemplar of collegiate practice through team teaching is given in the case study *Teaching* Design Thinking in a Research-Intensive University at a Time of Rapid Change, by Robert O'Toole and Bo Kelestyn, who also allude to how they maintained connections to the wider community beyond their institution. As we look forward, this community will become critical as we all make decisions about future curricula and, perhaps, come under another wave of pressure to change modes of design education for reasons that are not necessarily pedagogically motivated, for example in response to the Climate Change Crisis.

Making Things Visible

Finally, and returning to one of the motivations for the special issue, it is clear that the transition has made a lot of things visible that previously have not been noticed (Jones, 2021). The issues faced by many of us may have felt like large problems: loss of studio, technology not working, lack of support, and so on. In online learning research the theory of learning hygiene argues that students rarely notice when things go well online but immediately notice when they go wrong. Each little 'wrong' thing contributes to an overall loss of confidence in material and an erosion in motivation and engagement. In distance design education this is a daily battle of hygiene as technology, demographics, and contexts shift.

But perhaps we also need to recognise the inverse of this - the 'little good things' that contribute to quality design education hygiene and experiences. Whether these little things are obvious little things, such as dialogic methods that help "focus the architecture student's attention towards the community's voices and aspirations" (O'Brien), or hidden little things that "reminds you that you're an art and design student" (Corazzo and Gahrib), they all matter; they all need to be recognised.

It may even be that the size of studio (Brown) is really a problem of scale, not volume - that the importance of studio lies, not the size of the space itself, but in the quality of all the little things in that space.

Acknowledgements

We thank all the reviewers who supported this Special Issue. We deliberately took a peer review approach to reflect the shared (and divergent) nature of the context design educators faced in 2020. In doing so, the nature of the peer review comments genuinely helped to further shape a real snapshot of practice, scholarship and thinking during this period.

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