

Virtual and blended design studios

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A conversation held at DRS2016
June 29th 2016, 4:00 – 5:30 PM.

This document is conversation proposal and documentation in one.

Please also see <http://cloudworks.ac.uk/cloud/view/10060> for the concurrent online dissemination that was generated during the session.

Catalysts

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Introduction

The design studio has been the preferred environment to support creative, social and artefact-centred design education and practice (Crowther, 2013, Howarth, 2013). While corporate design studios become increasingly connected across locations, design education becomes progressively augmented with virtual learning environments (Broadfoot and Bennet, 2003, Robbie and Zeeng, 2012, Jones, 2013, Lotz et al, 2015).

Virtual and blended studios differ from traditional physical environments in significant ways. With designers working at a distance, the people, resources, and objects of design are not

physically co-located, which poses particular challenges but also offers some unique benefits. Designing at a distance leads to an increased need for communication. Managing expectations and motivations through social interactions as well as the conception, sharing and implementation of designs can be a challenge. New opportunities arise through distributed expertise and product development. New forms of user engagement and skills development may change the way designers work. This conversation is going to tackle the question:

How can we best support learners in virtual design studios?

The session at DRS2016

The workshop "Virtual and blended design studio" at [#drs2016](#) asked participants to engage in a little design challenge with a remote partner. The aim was to experience the difficulties students and professionals might face when working in virtual design studios.

After a very short introduction to the topic, participants pooled into two groups. We asked participants to engage in a little design challenge with a remote partner. Aim was to experience the difficulties students and professionals might face when working in virtual design studios.

The groups consisted of each one remote partner and 2 local designers (Figure 1). The remote partner had started with a sketch addressing the task to design a fun toy for a baby (6m+). One remote partner uploaded the sketch to virtual studio – OpenDesignStudio (Lotz et al, 2015) (Figure 1). The other remote partner shared her idea with the group by holding up a sketch to her camera.

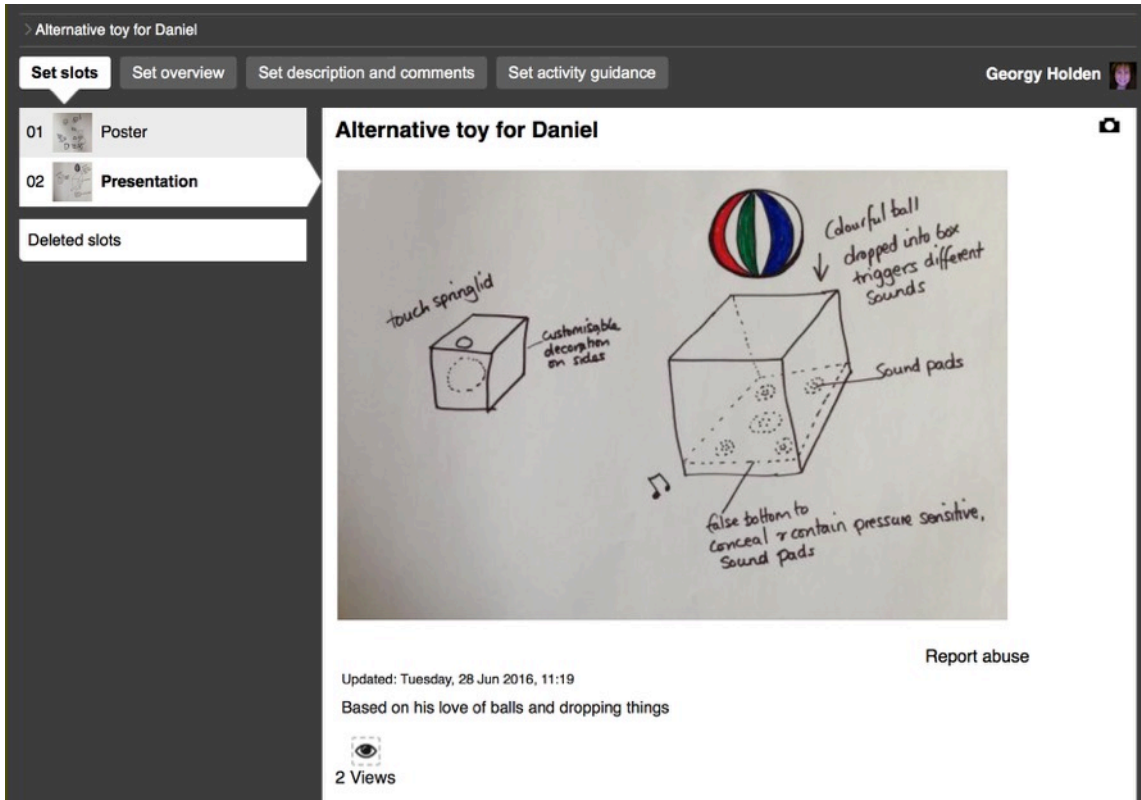


Figure 1: Uploaded sketch for a toy for Daniel

The local workshop participants had to develop the idea further in discussion with the remote partner (30 min). The groups developed physical prototypes. (Figure 2a and b). Participants had a variety of tools for thinking at their disposal. Sheets of paper and pens, Inspiration cards, Play dough and Lego pieces and whatever they could find in the room.

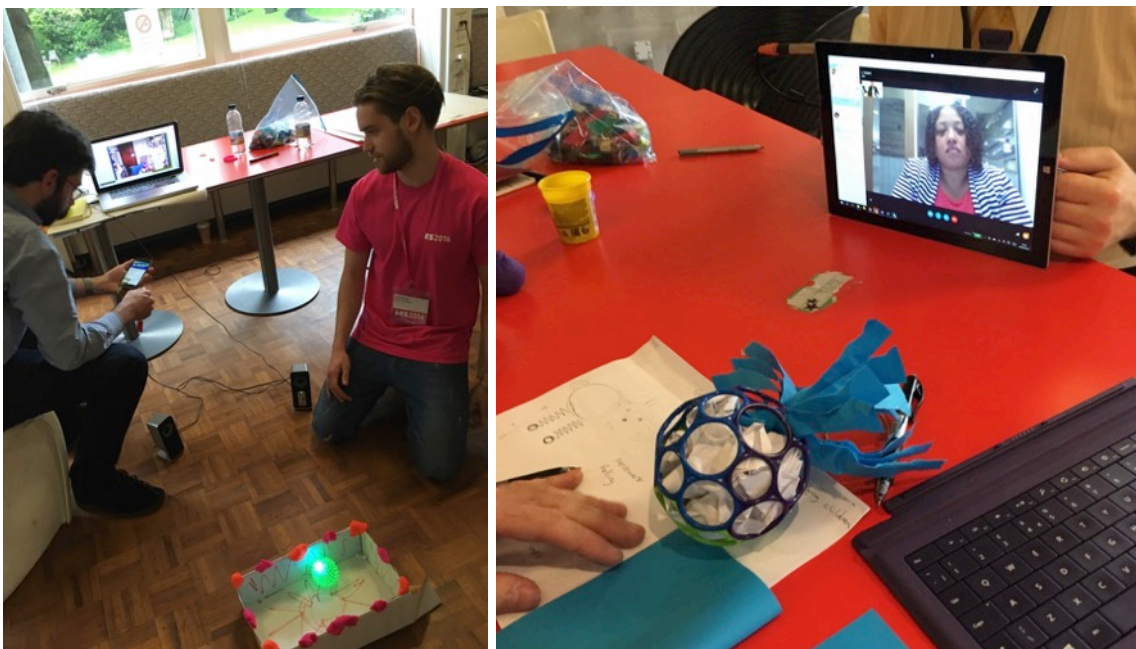


Figure 2a (left): Drop a ball game from group 1, 2b (right): ball with paper shavings by group 2.

Then we switched remote partners. Baby Daniel was invited to test the toy in front of the new remote partner (Figure 3a and b). The local team then presented the design to the new remote partner and received a critique of the design (20 min) (Figure 4 and 5). After this short experiment all participants were invited to reflect on the experience especially considering the challenges of remote and blended designing in a plenary session (20 min).



Figure 3a (left): Daniel tests prototype by group 2, 3b (right): Daniel tests prototype by group 1.



Figure 4: Remote critique of group 2's design

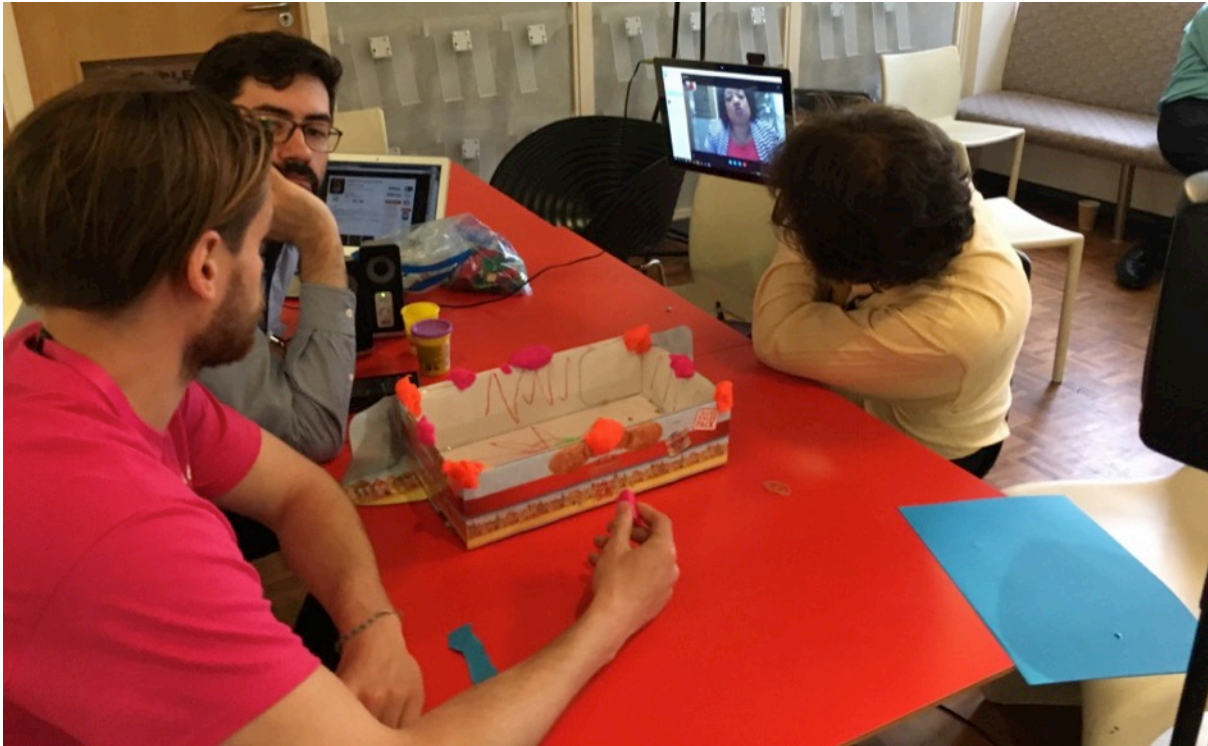


Figure 5: Remote critique of group 1's design

In-session reflection of experience, challenges and best practice

During the closing plenary discussion, the session organiser noted down challenges and best practice identified by the groups in a 'cloud' on the social networking site Cloudworks (<http://cloudworks.ac.uk/cloud/view/10060>).

These were the participants' reflections:

- One immediate challenge identified was sharing and communicating sensory experiences when designing with the remote partner. Verbal description of the experience of the design prototype are limiting. There is a need to facilitate developing empathy.
- It would be desirable if both parties had a local version of the prototype. There is a need to provide the same materials for prototyping or send over files for printing.
- The camera seemed in a wrong angle to make a true connection with local partners, (that was what the remote partner felt, not the local partner). The local partners felt more being in the same space with the remote partner by holding up the screen. The remote partner could see more with a fish eye lenses.
- A challenge of the workshop format was not knowing what was the goal. In 'real' design situation one would discuss more before making quick prototypes.

- The task was not well defined, so roles of the participants could not be defined easily. It was argued that this might reflect real design situations. There are also roles and hierarchies in virtual studios.
- Framing the design problem remotely is a real challenge. Different cultures (national, discipline, company) do it differently, they might have different expectations on how well the problem is framed beforehand.
- One has to work out spontaneously what can be done in the specific virtual setting, for example how to arrange turn taking, or how to improve the clarity of communication. When drawings are ambiguous, simplify them, but show the simplification process, not just the end result.
- The remote partner found that seeing the thought process when presenting not the result improved the understanding of the idea immensely.

Conclusion

The online documentation helped to generate immediate and long-term engagement beyond the session itself. As of december 2016, it received 140 views, extending an already on-going conversation on best practice in design studios and design pedagogy.

While the session had a fairly small number of participants, it was still experienced as fast-paced. It might be worth either reserving more time or in fact limiting such sessions to a small number of participants. The fast pace also means that the real-time reflection remains fragmented and a more in-depth reflection after the session would be desirable. A recording of the design process would be useful to support this. To facilitate access to reviewing the process, a segmented and annotated timeline would help. Design critique could then be held via a video blog.

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About the Catalysts:

Nicole Lotz Lecturer at the Open University. She designs, develops and teaches award-winning design courses in online design environments. Her research interests cover design pedagogy, design patterns, cross-cultural collaboration and social interaction in online design environments.

Erik Bohemia is the Programme Director in the Institute for Design Innovation at Loughborough University. Dr. Bohemia's research explores changes associated with Globalisation and the impact on Design. This research has been used to develop an innovative international collaboration named the Global Studio.

Sam Dunne is a design strategy professional. Sam has worked with University of the Arts London to develop a series of intensive two-week interdisciplinary digital collaboration workshops that aim to equip students with the skills needed to flourish after graduation.

Georgy Holden Senior Lecturer, Open University, qualification lead for Design and Innovation, has designed, developed and supported many distance taught and online design courses. Research interests include design education, use of web interfaces for learning, participative and collaborative design and patterns.

Joi Roberts A User Experience professional with creative and technical expertise. She is an initiative-taker who believes in the power of community building, social networking and multicultural, interdisciplinary collaboration, and an active contributor to the broader Design community through conference planning, industry events, keynote presentations and publications.