Visualising transformative spaces for education: a focus on lecture halls, computer rooms and studios

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Abstract

One room, three learning spaces for creative education. This image-led investigation shows how a standard blank room can be effectively transformed into three different kinds of learning environments: a lecture hall, a computer room and a studio. Research has shown that effective design of teaching spaces is beneficial to the learning experience and contributes to creating a more engaging relationship between teachers and learners. On the other hand, few visual resources have been produced to support this in the UK. This article seeks to fill this gap. The design of these classrooms applies Basye's idea of campfire to stimulate and support interaction between teachers and learners. In particular, these visuals show how technology can improve the students' experience of the lecture hall, provide adequate lighting, personal space and drawing devices in the computer room, and finally how gathering in a circle may replicate the benefits of campfires in the studio.

Introduction

Research has shown that "classrooms intentionally designed to support active learning increased student engagement on multiple measures as compared to traditional classrooms" (Basye et al., 2012: 41) resulting in a better learning experience. For this reason, the aim of this article is to design active learning spaces from an apparently blank room in order to explore how this design can help challenge the traditional roles forced on tutor and students by the placement of furniture. The authors align with the definition that, in such environments, "ideally there is no 'front of the room' where the teacher stands or students present. Mobile tables and chairs are well suited for facilitating the whole group discussions, presentations, or lectures. This is the 'campfire' where stories are told and large-group discussion occurs. With the right design, this public/together model can be easily and quickly modified' (Basye et al., 2012: 54)

The reasons why we decided to explore how the same space can be transformed into three different kinds of active learning environments starts from our personal experience. We are a team of early graduate/post-graduate/PhD graduates currently completing our PGCHE at UCA. Our teaching is strongly connected to our creative practice, and especially to screenwriting, 2D animation, life drawing, photography and printmaking. This article leads you into a visual journey across three different modes of creating an active learning space, following the campfire model discussed above. The core research question of this article is:

how can we illustrate active learning spaces for creative education following the campfire model?

Studies have shown that visuals and video content are essential to translate research into practice (Zagami, 2012; Winter and Szczepanek, 2009). Smiths and Dean (2009) have also claimed for a wider recognition of research-led practice as a valuable methodological tool able to move theories "towards the production of practical outcomes" (Smiths and Dean, 2009: 7). This is "also very important in the creative arts" because its full impact "is still to be felt" – it is "generating new pedagogical tools and shifting educational paradigms" (ibid.:9). In the last few months completing our PGCHE, we had the chance to study and discuss the evolution of signature pedagogies in creative education. However, very little visual resources are available in support of these theories for early scholars. This image-led investigation seeks to fill this gap.

To start with, we chose a room within the London College of Communication that was photographed in November 2018. This room is our 'blank slate' – the bare bones of where active learning can take place. This particular room at the London College of Communication is generally used for different purposes such as lectures, workshops and one-to-one tutorials. Originally the room was filled with movable chairs and desks, and the space itself can fit up to thirty people. All objects in this classroom were taken out in order to capture the basis of our metaphorical space that can be transformed into a lecture room/hall, a studio and a computer room. Once pictures of the room were taken, we proceeded to design our active classrooms using a combination of analogue and digital tools. Among the analogue techniques available, we first used hand drawing from photo reference and live observational drawings of props used in the scenarios. Illustrations and sketches were realised with ball-point pen on paper. We kept it black and white to keep a neutral aesthetic to match with the colors of the room. In addition to this, we used Photoshop and Illustrator to create and edit part of the visuals. Finally, we used AfterEffects to build and design a 3D space for each of the classrooms. The following sections investigate in more depth how each of these classrooms were designed from the blank room.

The blank room

Our journey starts with this blank room. This is actually a very common setting to start with if we want to create active learning spaces as, ideally, "all classrooms start empty. Think about an empty classroom space, either an imaginary place or one you know well. Imagine it without furniture, with blank white walls, no lighting, and a swept floor. Perhaps the room has windows, perhaps not. If windows are there, they are uncovered." [Basye et al., 2012:54].

In our case, this is how our selected room looks like.

When students and tutors walk their classroom for the first time, they bring a variety of backgrounds and expectations with them, that is why it is important "not to mythologise the 'ideal student'; one who is instantly comfortable with the equivocal and contingent nature of a pedagogy of creativity… we must also be careful not to mythologise and demonise the tutors who believe so strongly in an approach to learning that goes beyond 'right' and 'wrong' (Vaughan et al., 2008: 9). This is why a diversified approach and a reconsideration of the interactions between students and teachers seems to be fundamental to optimise the learning experience. In the light of this, our version of lecture halls, computer rooms and studios embrace the view of 'universal design'. This term has been created by the architect Ronald L. Mace in 1991 to reflect ideas that are "meant to produce buildings and environments that are inherently accessible to both people without disabilities and people with disability." (Smaldino and Flexer, 2012: IX). Inclusivity is in fact one of the core values we commit to guaranteeing our students, and especially in their learning spaces.

The lecture hall

Lectures are a common signature pedagogy in creative education [Shulman, 2005]. Lectures require tutors to speak in front of both small and large cohorts of students for at least an hour. In addition, "we do not usually expect interaction from our students during lectures – even the physical space in the traditional lecture hall militates against this, with tiered rows of forward-facing seats" (hooks, 2013: 3). In many ways, this dynamic between lecturer and student in the traditional setting can be quite limiting in terms of active learning. Barriers between teachers and students can be exaggerated and potentially create pitfalls in the learning environment. Students may potentially feel anxiety in this setting, or even project unrealistic expectations on the teacher, and in turn, on themselves, and what they hope the course will provide them in their future profession. As most of lecture halls are designed with fixed tables and chairs/benches, it is difficult to move this furniture in circle. However, the campfire model can here be adopted as a metaphorical space, where ideas are exchanged freely.

Several scholars have explored how tutors can increase participation in the lecture hall. Studies have shown the efficacy of the Socratic method where tutors use "exchanges of questions and answers, and only occasional writing anything on the board" (Shulman, 2005: 53) to break up the lecture. Even walking around the room can in fact be a way of deflating the mythology of the teacher/student dynamic. Other strategies to increase in-class engagement focus on encouraging preparation prior to the class. Klionsky (2001) has designed a set of methods to optimise such strategy, including minimising the amount of readings, providing concise outline questions for the entire course, and designing problem-solving sessions in class. Finally, other research has shown the importance of diversifying teaching and learning activities through the use of technology such as slide-show based presentations and video material (National Research Council, 2000). The use of clickers (Goldstein and Wallis, 2015) in lecture halls was also proved to increase participation and remove the barriers between tutors and learners.

The Computer Room

Digital technologies are a constant leitmotiv in the life of our students, especially as many of them classify as part of the millennial generation. For most of them, the digital has "surrounded and pervaded their lives since birth, constantly evolving into a higher state of connectedness, vividness and interactivity" (Salkowitz 2008: 92) When it comes to contemporary creative education, software, cloud storages, interactive apps and programmes are only a few of the digital tools that students are required to master by the end of their course. This is why computer rooms are essentials to learning experience.

Our campfire-style computer room is designed to host computer tables in circle. Each computer is equipped with drawing pads that are connected to the computers to help them transfer sketches and drafts faster on illustrator or photoshop, so their process will not be distracted by time consuming technical issues of each program. This model also allows enough personal space to work with both analogue and digital tools and an adequate amount of backlighting. Research has proved the benefits of this design in a well-lit environment, as on the one hand teachers can monitor all computer screens together, whilst, at the same time "the full circle or perimeter design bridges the space between students and, in effect, joins all the computer users […] because the tables are shared space, not teacher space" (Palmquist et. al, 1998: 84). The downside of this design is that some students might be facing the wall for long hours. This is why our room is designed with windows overlooking natural landscape whilst the walls are decorated with posters and colorful images, which have been proven to have a positive impact on the learning experience (Harris and Hartman, 2002).

The Studio

Beyond the digital sphere, the studio still remains a pivotal space where we develop our practice and expand the learning experience. This is why the studio is the next and final stop of our journey. According to Renfro, studios that are "free standing and remote from one another perpetuate old school concepts about artists' work habits that have long driven our attempts to accommodate them" (Renfro, 2009: 163). This is why our ideal studio tries to tackle this old stereotype, in favour of a greater transformational space following the campfire design. This allows us to translate into practice the idea that studio classrooms aims to put "making at the centre of learning", where the teacher plays "a key diagnostic role, observing the students working and consulting one-on-one to guide them in their work" (Hetland et. al., 2013: 27). As a consequence the space has three benefits: first, the symmetrical distance from the centre of the room democratises the interaction; second, it allows teachers to observe the process of making; finally, it helps individualise the learning as each student is working on their personal project.

In our video, we provide examples of two different practical activities inspired by the modules we teach. The first is a life-drawing session in which the donkey chairs are aligned in a half circle with the model in the middle. The donkeys are evenly spaced and have space in the back for the tutor to have easy access to students. The second one is a printmaking workshop. In this case, the campfire is predominantly a piece of printing equipment – a screen printing bed or a risograph printing machine. Students gather around the printer to explore the functionality of the machinery: how it works, what it does and the outcomes we can achieve. Thereafter, the tutor can begin to engage the students with the process by taking their imagery and running it through the process, usually ending up with a print or a small publication/fanzine.

Conclusion

This image-led investigation has shown how to turn an apparently ordinary room into three active learning spaces for creative education: a lecture hall, a computer room and a studio. We followed the campfire model to illustrate the democratisation of the interactions between students and tutors. The first example shows how, despite the furniture making it generally difficult to move around, a lecture can still be transformed into an active space with a clever use of the preparation material, a diversification of the learning activities and a pervasive use of technology and video-based content. Second, the computer room has been redesigned by moving the desks and devices in circle in order to create a democratic space where students can easily interact with each other, and where analogue and digital spaces are equally shared to improve the learning experience. Finally, the studio allow the students to gather around the centre of the room, which can be used to used for different practicals such as – but not limited to – a drawing and a printing session. Given the pivotal role that images and visual stimuli play in supporting the practical application of pedagogical theories, we hope that our contribution may help "investigate further the possibilities of developing new learning spaces capable of celebrating diversity rather than normalising it" (Hemingway and Armstrong, 2014: 50).

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