Using Active Learning to Teach Critical and Contextual Studies: One Teaching Plan, Two Experiments, Three Videos.

Artemis Alexiou
School of the Arts, York St John University, UK.

Abstract

Since the 1970s, art and design education at UK universities has existed as a divided practice; on the one hand applying experiential learning in the studio and on the other hand using passive learning methods in the lecture theatre. As a result, art and design students are in their vast majority reluctant about modules that may require them to think, read and write critically during their academic studies. This article describes, evaluates and analyses two individual active learning experiments designed to determine if it is possible to teach CCS modules in a manner that encourages student participation. The results reveal that opting for active learning methods improved academic achievement, encouraged cooperation, and enforced an inclusive classroom. Furthermore, and contrary to wider perception, the article demonstrates that active learning methods can be equally beneficial for small-size as well as large-size groups.

Keywords: Active learning; design pedagogy; reflective practice.

1. Introduction

In the 1970s, the Coldstream reports argued for changes in higher education that would 'improve the status of artists and designers' (Borg, 2012, p. 4); namely the implementation of contextual and critical studies (CCS) modules to art and design HE courses. Since then, art and design education at university level has been 'almost uniquely divided against itself' (Frayling, 2004, p. 40), often because CCS is taught in a traditional manner that tends to 'reinforce students' role as passive learners' (Ebert-May et al., 1997, p. 601). Subsequently, the requirements of academic study, which are quite different from those of experiential learning, create a certain anxiety to art and design students, many of whom may already struggle with dyslexia or other learning disorders and mental health conditions. In addition to the above, pedagogical studies show that art and design students often resist writing (Borg, 2012, p. 5).

Applying Graham Gibbs' (1988) reflective cycle framework, this article expands on two active learning experiments: one activity involving a small group of six graphic design students (Level 4), and another activity involving a large group of thirty-four graphic design students (Level 4). The findings reveal that teaching CCS is most effective when the instructor follows an active learning approach, which has been found to improve academic achievement and encourage an inclusive environment for all students (Weller, 2019; Baepler and Walker, 2014; Smith and Cardaciotto, 2011; Parker et al., 2005; Haggis and Puget, 2002; Thomas, 2002; Bamber and Tett, 2001). Furthermore, the following sections demonstrate that an active learning approach can be beneficial for small-size as well as large-size classes, when planned appropriately, whilst alternative forms of delivering content help students learn effectively, especially those who identify as visual learners (Falchikov, 2006 (1995); Stefani, 1994; Berk, 2009).

2. Description

CCS modules offer students the opportunity to engage with existing literature on design and other related disciplines, in order to better understand design practice within a wider socio-cultural context. Thus, students are typically expected to read academic texts during their scheduled sessions with their teacher, or independently. In this case, the topic of interest was the difference between art and design practice. However, instead of reading about and then discussing the topic in the classroom, the two experiments examined in this paper utilized two video-recorded presentations by distinguished design historian Alice Rawsthorn at Domus Academy in Milan, Italy (Domus Academy, 2015a; 2015b). In both cases, the purpose of this activity was to watch the videos, answer the questions that were listed in the A3 prints provided, and then use this infromation to develop a discussion around art and design.

Table 1. Teaching Plan

Duration	Activity Description	Assessment Method
5 mins	/ The teacher welcomes students and offers instructions of the day's session // The teacher asks students to form groups of 2-4 people	/ The teacher answers any questions to make sure they understand the activity
15 mins	/ Students watch video 1 on the screen // Students identify and write down their answers to the list of questions provided	/ The teacher moves around the classroom monitoring each group of students, quietly offering support if needed, without distracting other groups
5 mins	/ Students deliberate with peers // Students finalise their answers	/ The teacher moves around the classroom monitoring individual groups, quietly offering support if needed, without distracting other groups
15 mins	/ Students watch video 2 on the screen // Students identify and write down their answers to the list of questions provided	/ The teacher moves around the classroom monitoring individual groups, quietly offering support if needed, without distracting other groups
5 mins	/ Students deliberate with peers // Students finalise their answers	/ The teacher moves around the classroom monitoring individual groups, quietly offering support if needed, without distracting other groups
15 mins	/ She teacher goes through each question on the list prompting students to offer their answers // If students missed any answers during the videos, the teacher encourages them to figure them out through dialogue /// The teacher offers a summary of the key theoretical points learned	/ The teacher answers any student questions to make sure students understood the lessons learned / The teacher offers a list of additional resources for further study to students

3. Feelings

3.1. Session 1 (small-size group)

On the day of the session students were presented with the day's teaching aims and objectives. The reaction to the fact that they were asked to actively participate during the lesson was met with reluctance, however, they were excited to find out that they will be watching two videos, instead of reading academic journal articles, to answer the questions presented to them. This student group was typically quieter than others, yet, when it came to

asking questions about the activity itself and what they were required to do, they were very specific with their queries and appeared keen to do their best with the activity presented to them.

3.2. Session 2 (large-size group)

On the day of the session students were presented with the day's teaching aims and objectives. The reaction to the fact that they were asked to actively participate during the lesson was met with enthusiasm and curiosity. They were excited to find out that they will be watching two videos, instead of reading academic journal articles, to answer the questions presented to them. Given its large scale, this student group consisted of a wide variety of students, so typically the most confident students would be those asking questions about the activity in front of the whole group. Yet, all students paid the appropriate attention to the instructions provided, preparing with their own smaller groups for the activity. The majority of students seemed enthusiastic about the idea of having to work collaboratively.

4. Evaluation

Following both sessions, students were asked to complete a short online survey to capture their opinion on what had just taken place. In general, the responses revealed the activity was beneficial to both groups. It helped students understand the key differences between art and design, exposing them to a number of interesting contemporary design practice examples. One student commented that the set list of questions helped them focus on the information presented by the speaker in the video, trying to sustain their concentration on the task at hand. Another student noted that listening to the design historian talk about design history and practice in a manner that was easily understandable, in contrast to the formal language used in written academic articles, has allowed them to engage better. Another student, who discolved they were dyslexic, noted that they preferred the use of videos because reading academic articles was usually a struggle for them.

5. Analysis

5.1. Session I

Smith and Cardaciotto (2011, p. 58) reveal that active learning may 'be like broccoli', meaning that 'although it is good for students intellectually, their overall impression of it may not be completely positive'. However, Alliger et al. (2006 [1997]) found that when students express a dislike about an active learning session, this typically affects their performance of the required task, rather than their learning. Both opinions are certainly true in this case, given that students did not write down all the answers to the questions provided, although the task was admittedly fairly simple and easy. Yet, their learning was impactful enough to inspire

some of the students to write about the subject presented during the session for their summative assignment, and others to look into some of the information mentioned during the videos independently. Additionally, the use of videos for delivering content to students in combination with the specific set of questions provided has been found to increase students' memory of this knowledge (Berk, 2009; Smith and Cardaciotto, 2011), which in itself proved to be beneficial.

5.2. Session II

Berk (2009) argues that students can attain at least twenty potential learning outcomes when an appropriate use of videos takes place during a taught session. In this case, the active learning session described above has allowed students to focus their attention, created a sense of anticipation, improved attitudes towards content and learning, inspired and motivated students, and decreased anxiety on a typically perceived as intimidating type of activity (ibid., p. 2). Students were intensely concentrated on what the speaker was talking about during her presentation, enthusiastically anticipating for the answers to the questions they had in front of them to come up. Furthermore, students confessed that they gained a better understanding about design history, and how the critique of contemporary design could be beneficial to them as designers – because not only would offer them inspiration and motivation for their own practice, but also offer them a historical perspective to design practice in general. Additionally, as Michaelsen et al. (2009) have previously argued, working as a team of 2-4 people enabled students most susceptible to poor performance to complete the required task and remain on track during the session.

6. Future Considerations

Taking into account the teacher's own observations and the student feedback provided, a number of considerations could be implemented to further improve the learning outcomes of this type of activity. Specifically, asking students in the large-size group to 'think-pair-share' (instead of just pair and share) would potentially lead to better analytical, argumentention, prioritization, problem solving, and resolution skills, as well as foster short class discussions (Kaddoura, 2013; Green, 2000). Additionally, rearranging the tables to create an arrangement that is less linear, and more spherical could also potentially add to the overall student experience, given that physical space can also improve student learning (Brooks, 2011; Park and Choi, 2014). Furthermore, a similar active learning session could possibly be used with students in other levels (e.g. level 5), utilizing a different set of videos appropriate for that level of study. In this case, students could be invited to generate a written summary of the most important elements presented after each video, instead of having to answer a set of predefined questions. This would allow more autonomy, because they would have to decide how to write and what to include in their summary, and then present their own written text

to the group. Providing a learning experience that 'explicitly addressed the development of students as autonomous persons' would then make this active learning session more advanced (Yorke, 2001), and therefore, more challenging and appropriate.

7. Discussion

The results of the two experiments seemed more or less equal in quality, by the end students fully understood the difference between art and design practice, and gained a better awareness of contemporary design practice. From a practical perspective, the larger group required more assistance from the teacher throughout this planned activity, which made it more challenging to remain faithful to the time slots allocated for each task. Yet, the larger group of students seemed to profit much more throughout the session because they were invited to work in small teams of four people, whereas the students in the smaller group worked in pairs.

Research reveals that students learn better by participating in collaborative groups, their desire to participate is higher, and they consider the classroom environment to be fun and dynamic (Ebert-May et al., 1997; Chickering and Gamson, 1987). In fact, the positive effects of active learning methods have been found to benefit the students that may be characterized as 'low-performing' (Walker et al., 2008), as well as the highly-performing students that may already be well equipped to actively participate in these sessions. Active learning also allows students to measure their own knowledge, positioning themselves within their peer group, and at the same time offers tutors the opportunity to assess the level of knowledge of the group, and of individual students, identifying areas that may need more work (Knight and Wood, 2005; National Research Council, 2000). Creating an environment for small-size or large-size groups of students to actively participate in knowledge formation has been shown to increase the length of time students remember the material discussed, because what they say or do stays with them longer than what they hear (Slamecka and Graf, 1978; Edgar, 1969).

A common concern about active learning is that as learning and teaching method it can only be successful with smaller classes (Auster and Wylie, 2006). Yet, this article revealed that size is not necessarily obstructive to the success of an active learning session, as long as all other factors are firmly in place, such as effective planning, interesting and appropriate content. As long as educators, regardless of discipline, are eager to work hard, capable of providing students with suitable active learning opportunities to practice their critical and analytical skills, and willing to offer constructive feedback to students for their performance (Michael, 2006), then in their vast majority active learning sessions are a success.

8. Conclusion

CCS teaching for art and design courses in higher education can and ought to be dynamic, complex, and well-positioned within contemporary practice. Teachers ought to be making use of learning methods that enhance employability, inclusivity, internationalization, the use of digital technologies, and student engagement (Weller, 2019), whilst instilling an enthusiasm for the study of design. Still, moving from being a passive learner to an active learner depends not only on the teacher, but also the student's willingness to accept shared responsibility for their own educational experience (Billson and Tiberius, 1991). Nonetheless, with the use of active learning techniques that allow us to break down 'the hierarchies that divide teachers and learners in traditional learning spaces', and encourage empathy among students (Baepler and Walker, 2014), we can effect change in the modern classroom. But first, we ought to allow room for compassion, in addition to 'responsive academic and positive behavioral support' (Bilias-Lolis et al., 2017).

References

Alliger, G. M., Tannenbaum, S. I., Bennett, W., Traver, H. and Shortland, A. (2006 [1997]). A meta-analysis of the relations among training criteria. *Personnel Psychology*, 50 (2). 341-358. https://onlinelibrary.wiley.com/doi/10.1111/j.1744-6570.1997.tb00911.x

Auster, E. R., and Wylie, K. K. (2006). Creating active learning in the classroom: a systematic approach. *Journal of Management Education,* 30 (2), 333-353. https://journals.sagepub.com/doi/10.1177/1052562905283346

Baepler, P. & Walker, J. D. (2014). Active learning classrooms and educational alliances: Changing relationships to improve learning. *New Directions for Teaching and Learning*, Spring (137), 27-40. https://onlinelibrary.wiley.com/doi/abs/10.1002/tl.20083

Bamber, J. & Tett, I. (2001). Ensuring integrative learning experiences for non-traditional students in higher education. *Journal of Widening Participation and Lifelong Learning,* 3 (1), 8-16. https://www.ingentaconnect.com/content/openu/jwpll/2001/00000003/00000001/art00003

Berk, R. A. (2009). Multimedia teaching with video clips: TV, movies, YouTube, and mtvU in the college classroom. *International Journal of Technology in Teaching and Learning,* 5 (1), 1-21. https://sicet.org/main/wp-content/uploads/2016/11/ijttl-09-01-1_Berk.pdf

Bilias-Lolis, E., Gelber, N. W., Rispoli, K. M., Bray, M. A., & Maykel, C. (2017). On promoting understanding and equity through compassionate educational practice: toward a new inclusion. *Psychology in the Schools*, 54 (10), 1129-1237. https://onlinelibrary.wiley.com/doi/10.1002/pits.22077

Billson, J. M., and Tiberius, R. G. (1991). Effective social arrangements for teaching and learning. *New Directions for Teaching and Learning*, 45 (Spring), 87-109.

Borg, E. (2012). Writing differently in art and design: Innovative approaches to writing tasks. In C. Hardy, & L. Clughen (Eds.), *Writing in the disciplines building supportive cultures for student writing in UK Higher Education.* Emerald Group Publishing Limited. https://pureportal.coventry.ac.uk/en/publications/writing-differently-in-art-and-design-innovative-approaches-to-wr-2

Brooks, D. C. (2011). Space matters: the impact of formal learning environments on student learning'. *British Journal Of Educational Technology,* 42 (5), 719-726. https://bera-journals.onlinelibrary.wiley.com/doi/10.1111/j.1467-8535.2010.01098.x

Chickering, A. W. & Gamson, Z. F. (1987). Seven principles for good practice in undergraduate education. *American Association for Higher Education Bulletin, March*, 3-10.

Domus Academy (2015a). *Alice Rawsthorn #1 - What is design?* [Video]. YouTube. https://www.youtube.com/watch?v=vIBQEeH14ks&ab_channel=DomusAcademy

Domus Academy (2015b). *Alice Rawsthorn #2 – Is it design or art?* [Video]. YouTube. https://www.youtube.com/watch?v=_DaxhxBx_r0&ab_channel=DomusAcademy

Ebert-May, D., Brewer, C., & Allred, S. (1997). Innovation in large lectures: Teaching for active learning. *BioScience*, 47(9), 601–607. https://doi.org/10.2307/1313166

Edgar, D. (1969) *Audiovisual Methods in Teaching*. New York, NY: Dryden Press.

Falchikov, N. (2006 [1995]). Peer feedback marking: developing peer-assessment. *Innovations In Education and Training International*, 32(2), 175-187. https://www.tandfonline.com/doi/abs/10.1080/1355800950320212

Frayling, C. (2004). To art and through art. In P. Bonaventura, & S. Farthing (Eds.), *A Curriculum for Artists* (pp. 38-41). The University of Oxford.

Gibbs, G. (1988). *Learning by doing*. Oxford, UK: Further Education Unit, Oxford Polytechnic.

Green, T. D. (2000). Responding and sharing: techniques for energizing classroom discussions. *The Clearing House,* 73(6), 331-334. https://www.jstor.org/stable/30189612

Haggis, T., & Pouget, M. (2002). Trying to be motivated: perspectives on learning from younger students accessing higher education. *Teaching in Higher Education,* 7(3), 323–336. https://doi.org/10.1080/13562510220144798a

Kaddoura, M. (2013). Think pair share: a teaching learning strategy to enhance students' critical thinking. *Educational Research Quarterly,* 36 (4), 3-24.

Knight, J. K., and Wood, W. B. (2005), Teaching more by lecturing less. *Cell Biology Education,* 4 (4), 298-310. https://www.lifescied.org/doi/10.1187/05-06-0082

Michael, J. (2006). Where's the evidence that active learning works?. *Advances in Physiology Education,* 30 (4), 159-167. https://journals.physiology.org/doi/full/10.1152/advan.00053.2006

Michaelsen, L. K., and Sweet, M. (2008). The essential elements of team-based learning. *Team-Based Learning: Small Group Learning's Next Big Step: New Directions for Teaching & Learning,* Winter (116), 7-27. https://onlinelibrary.wiley.com/doi/abs/10.1002/tl.330

National Research Council (2000). *How People Learn: Brain, Mind, Experience, And School: Expanded Edition*. Washington, DC: National Academies.

Park, E. L., and Choi, B. K. (2014). Transformation of classroom spaces: traditional versus active learning classroom in colleges. *Higher Education,* 68 (5), 749-771. https://link.springer.com/article/10.1007/s10734-014-9742-0

Parker, S., Naylor, P. & Wannington, P. (2005). Widening participation in higher education: what can we learn from the ideologies and practices of committed practitioners?. *Journal Of Access Policy and Practice*, 2 (2), 140-160.

Slamecha, N. J. & Graf, P. (1978). The generation effect: delineation of a phenomenon. *Journal of Experimental Psychology: Human Learning & Memory,* 4 (6), 592-604. https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.931.1284&rep=rep1&type=pdf

Smith, C. V. & Cardaciotto, L. (2011). Is active learning like broccoli? Student perceptions of active learning in large lecture classes. *Journal Of Scholarship of Teaching and Learning*, 11(1), 53-61. https://scholarworks.iu.edu/journals/index.php/josotl/article/view/1808/1805

Stefani, L. A. J. (1994) Peer, self and tutor assessment: Relative reliabilities. *Studies in Higher Education*, 19 (1), 69-75. https://www.tandfonline.com/doi/abs/10.1080/03075079412331382153

Thomas, L. (2002). Student retention in higher education: The role of institutional habitus. *Journal Of Education Policy*, 17(4), 423-442. https://www.tandfonline.com/doi/abs/10.1080/02680930210140257

Walker, J. D., Cotner, S. H., Baepler, P. M., and Decker, M. D. (2008). A delicate balance: integrating active learning into a large lecture course. *CBE Life Sciences Education,* 7 (Winter), 347-430. https://www.lifescied.org/doi/10.1187/cbe.08-02-0004

Weller, S. (2019). *Academic practice: developing as a professional in higher education*. London, UK: SAGE Publications Ltd.

Yorke, M. (2010 [2001]). Formative assessment and its relevance to retention. *Higher Education Research & Development,* 20 (2), 115-126. https://www.tandfonline.com/doi/abs/10.1080/758483462