

Collaborative drawing as a tool for creating a sense of community within NTU's Architecture students.

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Abstract

During the COVID-19 pandemic, students studied from home in isolation, communicating digitally through the computer. Some students lost confidence academically, as well as socially. Students' wellbeing also suffered due to the challenging circumstances of the pandemic. A community of practice (CoP) is one way of tackling this issue and building a sense of community post pandemic. A CoP brings people together who share a passion for something they do and have a desire to further their skills alongside others with the same interest (Wenger-Trayner and Wenger-Trayner, 2015). Students get to know, trust and support each other (Laal and Ghodsi, 2012, p.817), improving the sense of belonging as students work together, consequently benefitting students' wellbeing.

The Architecture department at Nottingham Trent University (NTU) is exploring collaborative drawing, as a community of practice to improve a sense of belonging, whilst tackling issues related to confidence, perfectionism, and wellbeing. Alongside this, they seek to encourage students to draw more by hand, a skill that is often forgotten or put to one side in favour of digital drawing.

Jessica Payne, Final year Bachelor of Architecture (BArch) student and Holly Mills, Senior Lecturer at NTU have been researching aspects of collaborative drawing together. The collaboration between staff and student was critical as it enabled the scholarly enquiry to be centred on student engagement.

This case study focuses on one session which explored the practice and impact on learning: a 'Cake & Draw' workshop hosted by the Architecture Student Society in April 2023. Using a focus group and post workshop surveys, Mills and Payne evaluated the benefits of collaborative drawing. They found that collaborative drawing enabled students to take risks, draw more fluently and accept 'imperfect' work. Collaborative drawing was found to expand feelings of community and increase communication between different cohorts, which in turn benefited the student's wellbeing.

Following Mills and Payne's scholarly enquiry, the architecture department will implement a drawing area in the studio and adapt the themes of the collaborative drawing workshops to be more closely related to the architecture course.

Context and rationale for the study

Drawing is an essential skill required for an Architecture Student so that they can develop and communicate their ideas. There are many different types of drawing – observation sketches of real buildings, accurate measured survey drawings of existing buildings, conceptual drawings, design development drawings, presentation drawings to show the final design of the building, construction drawings etc to name a few. Each type of drawing has a different purpose.

Due to the advent of technology, this has changed the practice of architectural drawing over the last 40 years. In many ways it has enhanced drawing as we can draw more accurately, duplicate drawings quickly, add realistic materials to drawings etc. However, Mills believes that students can become over reliant on technology which can stifle creativity and that they do not always understand the relevance and importance of hand drawing. Hand drawing is still commonplace in Architectural Practice for the early design stage of the project and when communicating with clients and builders during meetings. She believes that drawing by hand is still an essential skill which architecture students require.

An important part of learning as an architecture student is through the studio culture – designing, drawing and working together in a collective space. Students learn through peer-to-peer learning and create their own support networks and community.

The Covid-19 pandemic in 2020 meant that students were learning from home on their own rather than together in the architecture studio. They therefore missed out on the studio culture. Due to the reliance of technology to communicate with one another digitally, students focused on drawing and modelling digitally, placing hand drawing to one side. Payne has seen her fellow student's reliance on technology in their architectural design process and how students like their work to look aesthetically pleasing, often implementing digital technology to do so. Students focus on producing digital final polished drawings rather than the design process. Mills believes that the design process is the most important part of a student project and is often best suited to hand drawing or hand drawing combined with digital technology. Hand drawing allows freedom of expression and creative exploration which isn't limited by the user's software skills.

Mills began running collaborative drawing workshops before the pandemic but felt that they could become a method of encouraging architecture students to draw by hand again and rebuild the architecture community following the pandemic. Mills has run workshops during timetabled sessions, at University Open Days, with visiting primary schools as well as with the architecture society, which is the focus of this reflective essay.

Mills wanted to begin formalising her scholarly enquiry into collaborative drawing and felt that it was important to engage a student, to gain their perspective. Payne had participated in some of Mills' collaborative drawing workshops and was keen to be involved. Mills and Payne were awarded the Trent Institute for Learning and Teaching (TILT) Staff Student Co-creation fund at NTU in April 2023. The Co-Creation fund is

awarded to students who collaborate with staff to carry out research to benefit an aspect of teaching and learning (ntu, (n.d)a).

Mills and Payne hope that through researching collaborative drawing, they can improve the community created through the student Architecture Society, especially the interaction between the different year groups. Both staff and students want to create healthier attitudes towards 'perfect' work, benefitting students' wellbeing and increasing creativity and risk taking.

Using these collaborative drawing workshops, Mills and Payne aim to use the building of community to increase students' confidence in their own drawing abilities; furthermore, making students feel more comfortable making mistakes. Through drawing with others and experimenting creatively together, they hope collaborative drawing can reduce levels of perfectionism in the participating students, as they realise it's okay to make mistakes and for their drawings not to be perfect.

The workshop activity

The architecture course at Nottingham Trent University consists of 350 students, from a diverse range of backgrounds with an even gender split. All the students can join the Architecture Student Society as members. In the academic year 2022/23, there were 120 members, the majority are from the undergraduate architecture course although 26% were from the Interior Architecture Course and 2% from the Architectural Technology Course. Students from other courses are welcome to join also. The five society committee members were from years 2 and 3 of the Architecture undergraduate course.

The collaborative drawing workshops ran in conjunction with the student society and teaching team were branded as 'Cake & Draw' and took place on Wednesday lunchtimes every 2/3 weeks during term 1 of 2022/23 with a special one-off session in April 2023 to create a banner for the Degree Show. Generally, around 20 students attended each session. One hour was spent drawing, followed by informal discussion and the consumption of cake!

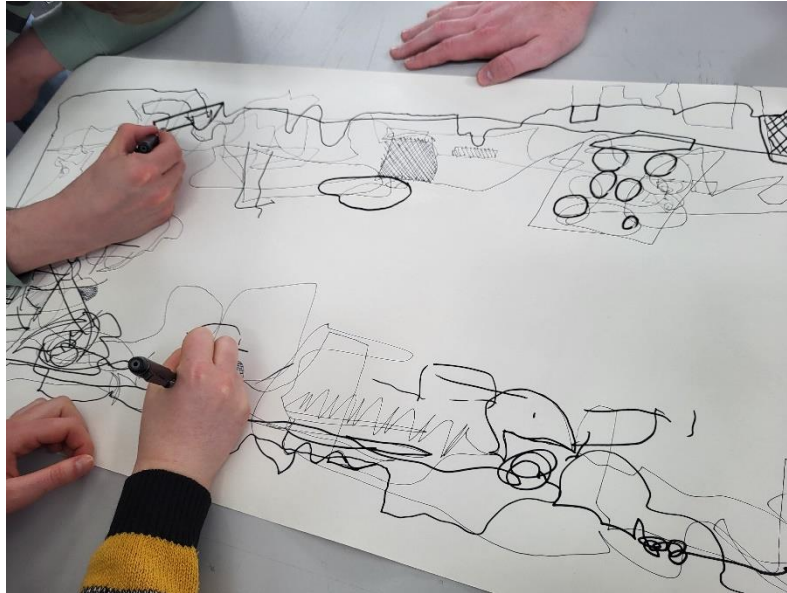
The 'Cake & Draw' sessions involved staff and students drawing together, freely on one long piece of paper. Students were encouraged to move around the table standing up and drawing in response to their peers' work. The learning outcome of the session was for students to be able to draw in response to others and learn from one another, whilst creating a network with other students.

This reflective essay focuses on one 'Cake & Draw' session in April 2023. Seventeen students from the architecture society participated, consisting of three architecture students from year 1, five students from year 2, eight students from year 3 and one student from year 1 on Product Design (a friend of one of the architecture students). There was an even gender split (8 male students and 9 female students).

The workshop started with an introduction and some initial guidance including inspirational images delivered by Mills & Payne. A warm-up exercise followed, where students were asked to move around the table, drawing what they saw in front of them

in outline, such as the windows, people, and furniture in the studio. This was done without looking at the paper and without taking their pens off the paper so that they drew one continuous line.

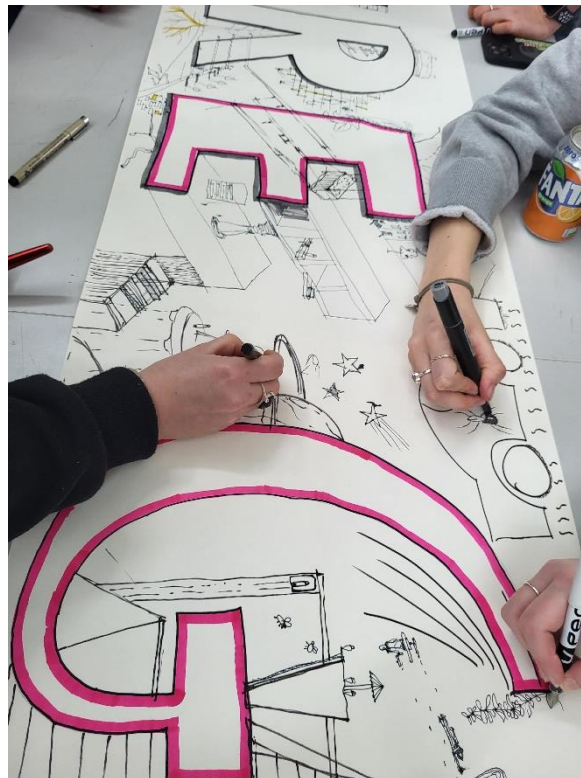
Figure 1 Warm up exercise



Note. View of the drawing workshop's warm up exercise in progress. Own work.

Following the warm-up, in the main exercise, students were asked to create a banner which would be exhibited at the end of year degree show. The outline of letters spelling 'Architecture Grad Show' were written along the paper by Payne, the gaps in between filled in by the students with imaginary transitional spaces of the future. These spaces consisted of landscaping, activities, or anything the students imagined would exist in their futuristic world. The letters on the drawing acted as the buildings in between these spaces. Once again, students rotated around the paper, adding to the drawings of their peers. Thicker pen was used to add depth and colour added afterwards, whilst continuing the rotation around the table.

Figure 2 Main drawing exercise



Note. Collaborative drawing workshop main exercise (degree show banner), in progress. Own work.

Figure 3 Architecture degree show banner section



Note. A section of the collaborative drawing workshop degree show banner after completion. Own work.

Following the workshop, surveys were completed by the participants, consisting of 12 quantitative and one qualitative question (*How do you think the collaborative drawing activity could be improved?*), alongside a space for additional comments. Questions such as 'Could collaborative drawing help create a stronger sense of belonging' and 'could collaborative drawing help build confidence for submissions' were asked to members of the society. The focus group took place straight after the workshop, involving the same 17 participants as the workshop. All data and percentages are taken from the 17 participants. Although a focus group of 17 participants is a significant amount of people for a group discussion, there were opportunities for all students to share their views. The session was facilitated by Mills who ensured that everyone had the opportunity to talk whilst, Payne scribed the discussion and prompted Mills where

necessary. As expected, the third-year students with the most experience and confidence shared their views more, but the first years did make some contributions after encouragement from Mills.

Mills and Payne have identified several themes through their own experiences and through the collaborative drawing exercise and reflection, they also explored the literature to identify common themes that recur. This forms the basis of the following section.

Literature Review

Confidence

In design-based subjects, students' confidence in hand drawing is generally low as many of them rely on digital technology. This means that students often perceive hand drawing to be of less importance and therefore use digital software for the design process, which sometimes stifles creativity (Thurlow and Ford, 2017, p.10). This is a particular issue on courses such as Architecture, which challenges students to push the boundaries of design and actively encourages students to hand draw.

Perfectionism and risk taking

Perfectionism can inhibit a student's ability to experiment and enter the 'creative zone'. They also struggle to take risks, as familiarity maintains their comfort zone and reduces the chances of perceived failure. Perfectionism also prevents students being happy or proud of the work they produce, often believing that sketching is a skill you are born with, rather than learnt (Thurlow and Ford, 2017, pp.3-6). This has resulted in 30% of undergraduates having "high depressive symptoms" (Latif et al., 2021, p.1). Perfectionism can be influenced by others and develops over time (Henegauer, 2022, p.20). The Student Well Survey (SAW) carried out in 2020 suggested that many students found interacting with teaching staff could increase perfectionism, anxiety, and stress, as they "overwork" and try to find perfection or "creative originality" (Russel, Thompson and Jones, 2021, p.41). Students also focus on the end product, instead of the development process (Thurlow and Ford, 2017, p.10), something that Mills is keen to address.

Community and Wellbeing

The society 'cake & draw' sessions create a community of practice as the students share a passion for drawing and learn how to do it better by interacting and drawing together. They "are able to copy one another's lines, to learn from different approaches and styles, and to correct each other's mistakes".

As well as learning the skill of drawing, drawing can also be used as a method of conveying thoughts that may be hard to be put into words, (Kantrowitz, Fava and Brew,

2017, pp.54-55) developing communication skills which can be used later in professional practice.

Collaborative drawing translates the thoughts, feelings, and views of the group into a drawing, like the “group mind” on a page. Research has been carried out into the benefits of different drawing types on mental health. Drawing to express can enable the drawer to free emotions, meanwhile drawing something emotionally unrelated can distract the person, providing a mental escape (Kantrowitz, Fava and Brew, 2017, pp.54-55).

Storytelling is important in architecture, as we can tell stories through the expression of the built form – it may reference the local culture or surrounding landscape for example. Drawing is also a method of storytelling (Chow, 2017, p.240), allowing the students to learn about each other through what they draw. When working collaboratively, communication skills and trust can be formed. Taken forward this can help facilitate the forming of a community. Drawing collaboratively also allows the ‘success’ of one person’s drawing to encourage others to follow their lead (Laal and Ghodsi, 2012, pp.816-817).

Through drawing in a group, anxiety and procrastination around drawing could reduce (Kutlesa and Arthur, 2008, p.135), benefitting participants. One element of collaborative drawing that creates feelings of community are the “common ground” created over the shared activity. This turns the usual “You” and “me”, into “us”, creating a talking point that breaks the ice and begins the forming of relationships. These relationships then develop into a community (Harty and Sawdon, 2017, pp.99-100).

Mills and Payne identified a gap in the literature as they found little evidence of the benefits of collaborative drawing by hand within architectural education specifically. This pointed to the need to explore this method of learning and building community further.

Findings

Confidence

Confidence through hand drawing is often built through practice. The workshop aimed to create a space where students could practice drawing in a collaborative environment and learn from each other to help build their hand drawing skills further. During the focus group and survey, students shared their thoughts on the effectiveness of the workshop in building confidence.

The Survey results indicated that 58% of the 17 students found the workshop helpful in building their drawing confidence. Meanwhile, 35% of students felt they were supported by each other, with only one person feeling shy. More regular workshops may increase the students confidence in their own drawing ability, as well as their social confidence, improving the sense of community. Students participating in the focus group felt that the workshop would be more effective in building their drawing confidence, if the drawing tasks were more closely linked to their coursework. Third Year students made the comparison between the collaborative drawing workshop and

a 'draw like an architect workshop' ran by an architectural illustrator. Students expressed that the 'draw like an architect' workshop was more beneficial to them, due to the close links between this and their coursework.

Students also said that due to the collaborative nature of the workshop, the benefits such as drawing skills and confidence often go unrecognised by participants. However, they valued how drawing with others allowed them to see each other's style. Whether perceived as good or bad, they could give each other feedback on their drawings and learn from one another.

Figure 4 Collaborative drawing workshop



Note. View of the collaborative drawing workshop in progress. Own work.

Perfectionism and risk taking

82% of survey participants considered themselves a 'perfectionist'. Students often self-assess their work, using how 'finished' they think their work looks, rather than the quality of their design. In teaching, perfectionism often prevents students from hand drawing. Worried about how it looks or if it is 'correct', students don't feel comfortable or confident in their hand drawing, resulting in less work being produced, and less developed designs.

Through producing a non-assessed collaborative drawing, the workshops aim to encourage students to relax when drawing, not worrying about the outcome, and care more about the process than the end product (Thurlow and Ford, 2017, p.10). The survey showed 82% of students found the collaborative drawing workshop forced them to draw quickly, without overthinking and not to worry about the outcome. Drawing with others also helped them get started, with many students being daunted by a blank page. Students said during the focus group that the pre-drawn letters, inspirational images and initial guidance helped them invest in the activity. Overall, students agreed that the workshop helped them be less of a 'perfectionist', and that this type of drawing would be good to do at the start of projects to help with concepts and initial ideas. However, they said the further into the project they are, the more of a 'perfectionist' they become.

The drawing is done whilst the students are standing. One participant commented that "the mind works better when you're standing as you're freer and more imaginative". Students in the focus group liked the break standing provided, as most of their university work is completed whilst sitting. Standing up also made it harder to be precise with the drawing, encouraging a more relaxed and free approach, meanwhile differentiating the workshop, a non-assessed activity, with assessed work, often completed individually and sat down.

In design, risk taking allows projects to reach their full potential, be creative and unique. Often, a fear of failure prevents experimentation, hindering the creativity of students. Following the collaborative drawing workshop, the survey showed 52% of students felt drawing with others encouraged them to take more risks, helped by the opportunity to respond to each other's work. The focus group revealed it also encouraged them to be more creative and think "outside the box", as they build upon the work of others, whilst moving around the table, adding to different parts of the drawing. Drawing as a group therefore increased their confidence in taking risks. However, students in the focus group did say that they were less likely to take risks nearer to an assessment submission and less likely to engage in non-assessed group activities when they "are stressing about doing their work" commented a participant. Therefore, it is essential that the timing of the collaborative drawing workshops is carefully considered to have the biggest impact in terms of risk taking. The more the students take risks, the more their confidence will also grow, enabling them to take bigger risks closer to deadlines in the future.

Community and Wellbeing

Students in the focus group expressed feelings of freedom and greater imagination when standing up as they were "more free and can move the whole body instead of just an arm" said one participant. This also helped them to feel more comfortable and relaxed. Staff at the TILT (Trent Institute of Learning and Teaching) conference did a similar workshop on a round table. They found this good for collaboration and community building as well as being easier to move around than rectangular tables.

Drawing itself in a casual, non-assessed environment allows students to experiment in a non-pressured situation, allowing them to enjoy the process more than if it were assessed. During the focus group students thought it was beneficial to their mental health, however “not in deadline periods”, as students want to work on their assessments during this time. If workshops took place in stressful periods, it would instead have a negative effect on mental health, especially if the activity was compulsory and teaching time was lost. The students also expressed feelings of dislike towards non-assessed work, often seeing it as unbeneficial. Something suggested during the staff TILT conference was that displaying the drawings would give them more value, similarly to how the banner produced in the Architecture Student Society workshop was displayed at the Degree Show.

Figure 5 Degree show banner



Note. Collaborative drawing workshop degree show banner on display at NTU. Own work.

Students suggested incorporating collaborative drawing into studio life daily, in a less formal way, perhaps alongside workshop sessions. They proposed having a long sheet of paper being left at the front of the studio, where students could take breaks throughout their studio day to go and draw freely, alone or with friends. The students commented that it would “get people thinking creatively”. This would build a community through drawing, whether in person drawing together or responding to other students’ drawings.

Evaluation

Confidence

The focus group revealed that the students’ confidence related to drawing would be improved if the collaborative drawing was closely related to the course. This could also potentially increase creativity and reduce reliance on digital design. In addition, drawing together could improve the students’ ‘social confidence’, building relationships with students in other cohorts.

Perfectionism and risk taking

Drawing together, the feeling of community and the opportunity for open discussion, gives students the chance to discuss their ideas, debate and inspire each other, increasing the risks they take. In this workshop, we asked students to draw futuristic landscaping in between the letters. The theme being ‘futuristic’ may have acted as permission to be bold and encouraged the students to use ‘blue sky thinking’.

Upon reflection, as expressed by the students, collaborative drawing activities are beneficial for students who struggle with perfectionism. This aligns with Henegauer’s thoughts, as actively drawing together means that the students inspire one another, reducing anxiety related to perfectionism (2022, p.20).

The speed of the activity also forces students to deal with any imperfections, encouraging them to adapt their ideas or move on to the next drawing. The workshop could potentially change perceptions of what failure is, encourage students to immerse themselves in the drawing process and provide an opportunity for positive interactions with staff. If this approach is practiced, it may be translated into assessed work, making students more comfortable to take risks, resulting in more experimental design development. Design development is one of the assessment criteria for the Design Studio module on architecture, and therefore risk taking will be rewarded if students can show the experimental process and analyse how it shaped their design.

Community and wellbeing

The sense of community created through collaborative drawing workshops generates a social/ support network for the students to go to if they need help, outside of workshop sessions. Standing up and moving around the table also gives students the

ability to move between one another, giving greater opportunities for them to meet new people. This is especially important as the student Architecture Society at NTU is made up of students across all years.

Students suggested a drawing area in the studio could create an 'art therapeutic' environment, where students can decide whether they would like to contribute, giving students freedom over the drawing. They could also decide when they want to contribute, providing a stress relieving activity during deadline periods. A drawing area could also create a talking point between the students both verbally and on paper, engaging social connections and increasing the sense of community. This could benefit students suffering from anxiety, as they could choose a quieter time to contribute to the drawing should they feel anxious around others. It would also enable them to express themselves and communicate non-verbally adding to the "group mind", also creating an "us" (Harty and Sawdon, 2017, pp.99-100).

Community of Practice

Throughout the process of carrying out this research, Mills and Payne worked together. This provided opportunities for open conversations. Mills felt that the collaboration with Payne was an essential part of the process, enabling the research to be centred on student engagement. Payne also saw benefits of sharing views between the students and staff, raising points of discussion that may not have been thought about, should this project not have taken place. One challenge of student-staff collaboration is scheduling time for conversations in between deadlines and busy teaching/assessment periods.

The focus group allowed for students views to be expressed, sharing ideas that may not be apparent from a staff perspective. The NTU TILT Teaching & Learning Conference enabled Mills and Payne to gather views from staff from a wide range of disciplines.

This project has opened new conversations on collaborative drawing. The continuation of student-staff collaboration through NTU's Architecture department will allow for future improvements to teaching, and learning.

Limitations of the study

This study focuses on one session involving 17 students from the student architecture society. To create a more in-depth study in the future, Mills plans to compare feedback and reflections across several different workshops for example between timetabled sessions for particular year groups on the architecture course, university open day workshops with prospective architecture students and primary school children.

Summary

The NTU Architecture Department and Student Society hope to create a stronger learning community using collaborative drawing workshops. The findings of this initial study shows that they can be used to increase confidence, reduce perfectionism, and improve drawing skills. Collaborative drawing with students from other cohorts can expand social circles and help with the creating of community within the society and the course.

The continued use of collaborative drawing should also help create communities of practice (Wenger et al., 2002, p.xi), where the students involved share a common passion for designing and learning together. This could be through doing these workshops more regularly, so that they become more 'normal' and more widely accepted as a skill building process and therefore enable students to value non-assessed activities. Linking the workshops to drawing skills required for assessed coursework could improve the students' perception of collaborative drawing.

Mills plans to create a designated collaborative drawing area in the Architecture Studio next year, so that students can freely draw during their day when they wish and collaborate with others either directly or indirectly. This will hopefully enhance the learning community within the Architecture department at NTU.

Following the successful collaboration with Payne, Mills would like to work jointly with students to undertake a more in-depth study. She also aims to co-curate an exhibition of the collaborative drawings produced over the last eight years, to raise awareness of the benefits of collaborative drawing at NTU and beyond.

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