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DESIGN EDUCATION | AFRIKA | 4TH INDUSTRIAL REVOLUTION

The role of student-staff partnership and collaborative learning in interior design education

Alexandra Balkanska, Greenside Design Centre

Abstract

This paper aims to propose and motivate further research in the sphere of Interior Design education in a private college environment in South Africa. The study focuses on finding strategies that motivate for student-staff partnership and collaborative learning in the theory subject of Critical Studies (CS) within a hybrid/online learning environment. The discussion takes the reader on a journey of analysis and discussion starting with traditional method of education and alternative pedagogies; the value of critical thinking skills in the twenty-first century and research based-education. The emphasis is on Critical Theory in Higher Education (HE) as a valuable drive in stimulating self-reflection that produces graduates that are contributing members to our society.

Furthermore as we approach the fourth industrial revolution (4IR) as well as the present challenges we face in the midst of a pandemic, educators need to re-evaluate current methods of lecture delivery especially when hybrid/online learning is fast becoming the 'new normal'. The focus remains on learning rather than just teaching. Student-staff partnership, collaborative learning, and reciprocal peer tutoring (RPT) are identified as potential strategies that may be used to engage and stimulate students. The author of this paper is also the researcher and a practising academic in the field of Critical Studies in a private college environment.

The inquiry relies on developing pilot lectures informed by interviews with colleagues and conducting focus groups with students in an effort to identify recurring themes and strategies that maybe used in order to develop ways of integrating student-staff partnership and collaborative learning within a hybrid/online learning environment. Those will be implemented during academic year 2022 (Second Phase). Throughout this process, it is important to note that students are continuously involved and consulted.

Keywords: collaborative learning, critical thinking, radical pedagogy, reciprocal peer tutoring (RPT), research equals teaching (R=T), student-staff partnership

Abbreviations

AUB Arts University Bournemouth

CS Critical Studies

4IR fourth industrial revolution

GDC Greenside Design Center

HE Higher education

HoD Head of department

ID Interior Design

OEB Online Educa Berlin

PP PowerPoint

R=T Research equals teaching

RPT Reciprocal peer tutoring

TUTS Tutorials

Introduction

Since the 1784 industrial revolution, often described as a development and in some instances a 'revolution', has radically changed society and the way people live on a daily basis. Currently we live and move towards the fourth industrial revolution of cyber-physical systems. According to Online Educa Berlin (OEB), the annual global, cross-sector conference and exhibition on digital learning and training, a digital revolution has remodelled the way people and especially youngsters "access information, communicate, learn and even play" (OEB Insights, 2019, p. 1).

According to Klaus Schwab (2016), the founder and executive chairperson of the World Economic Forum, humanity is about to enter unprecedented times of radical change. In his article titled *The fourth industrial revolution: What it means, how to respond,* he argues the effect on all industries will be unparalleled. One such industry is education.

Education and the fourth industrial revolution (4IR)

Advancements in technology and the potential of billions of users having access to smart devises with unlimited access to information and the internet are some of the concerns in the sphere of academia. How is that affecting teaching and learning in a world of fast development and infinite possibilities? How do we adapt our current methods of lecture delivery in order to empower and support a future generation of leaders and proactive citizens?

This progress also comes with exciting new opportunities for the education system to change and adapt with a possibility of attracting a wider and more varied audience. With online and hybrid learning students are becoming more proactive and in charge of their own education. At the same time, it is important for educators to provide the right tools and strategies in order to facilitate this transition (OEB Insights, 2019).

In my professional capacity as a lecturer, I have witnessed this transformation already been enforced by the COVID-19 pandemic as most institutions are currently implementing online and/or hybrid learning. As the world is moving forward, education has an important role to play and although that may be true, many would argue that radical change calls for radical methods. Is it time to finally forget about traditional pedagogies and radically transform the educational system, from syllabus, lecture delivery, and grading? This paper focuses on exploring new ways of lecture delivery that may be more fitting to the current challenges faced with hybrid/online learning such as student interaction and participation. The focus remains on the importance of teaching theory to Interior Design students as a way of developing critical thinking skills.

Traditional method of education

The traditional teaching approach at university level relies heavily on lecture delivery. In this case there is a lecturer (one person) instructing a passive audience (students). Also known as the instructional method of education, a type of pedagogy, which assumes that there is a "fixed body of knowledge" that learners accept, memorise and reproduce (Khalid & Azeem 2012, p. 172). Activities such as student interaction, questioning, critical and independent thinking are discouraged and very often completely ignored due to time constraints (Khalid & Azeem, 2012).

As claimed by Braa & Callero (2006) this approach to education can only lead to passive, easily manipulated, and apathetic society. Furthermore according to research published by MIT's Media Lab, student's cognitive function is practically absent during lectures, equating it to sleep time (OEB Insights, 2019). Consequently, professionals in the field of education have been looking for the right strategies and answers in order to counteract and address the above.

Student-centred classrooms and collaborative learning is one such approach. It encourages peer and tutor interactions and as a result stimulates independence of thought, metacognition and critical thinking. However, have those been critical or radical enough to mirror societal changes and needs? More importantly, how do we adapt and implement those strategies to *online* and *hybrid learning*?

Alternative pedagogies: from teaching to learning

Education and learning in a postmodern world are not about transmitting knowledge to a passive audience who is expected to memorise and transmit the information acquired. Educators need to acknowledge the postmodern world of today and the ramifications this may have on creating a learning society (Jarvis, 2006). Creating a *learning society* is paramount to the wellbeing of a country, and higher education (HE) is at the centre of a learning society (Wildman 1995). We need intelligent, confident, independent, and *critically thinking graduates* who will defend democracy and the commonwealth (Marginson, 2016).

Postmodern theory questions traditional knowledge and authority upon which a traditional classroom is based (Jarvis, 2006). Currently we are experiencing a radical transformation from teaching to learning and a shift of control from the educator to the student (Marcum, 2006).

Critical or radical pedagogies is one such approach which aims to empower learners by interrogating "traditional forms of social and political oppression" (Jarvis 2006: 53). The aim of a classroom is to stimulate a conversation and to encourage student interaction and deep self-reflection. For this to happen, the traditional role of educator and learner is challenged,

and the educator in this case is in no position of power, but is rather seen as a facilitator (Jarvis, 2006).

Critical theory in higher education

According to Dell'Angelo, Seaton and Smith (2012, p. 1) Critical Theory is concerned with matters of "inequality and oppression" and strives towards achieving social change in an effort to build a more equitable world. Power imbalances are understood through debates and communication in order to involve people from all walks in life to participate actively in an effort to achieve empowerment and drive social change (Dell'Angelo, Seaton & Smith, 2012).

Unfortunately in education we have continued to re-establish the same kind of circumstances that Critical Theorists question and insufficient progress has been made. According to the authors, we need to reconsider both the curriculum and ways of teaching or pedagogues (Dell'Angelo, Seaton & Smith, 2012).

We should rather strive for democracy in education where teachers and students work together and students are equally valued. Educators in this case encourage students to self-reflect, and understand their position in society in order to become active drivers for social change (Dell'Angelo, Seaton & Smith, 2012).

Critical thinking

Educators should aim to encourage critical thinking in their classrooms, as it can be applied to any subject or activity, "Critical thinking is clear, rational, logical, and independent thinking" (Global Digital Citizen Foundation, n.d.). Critical thinking is also analytical, has a purpose, and encourages self-reflection. It involves problem-solving and making clear non-partial judgements. The aim of critical thinking in education is to leave students empowered, being able to argue objectively various theories, and feeling like experts in a field (Ritola, 2012).

Ways of stimulating critical thinking, life-long and independent learning:

A. Collaborative learning can be recognised in both peer and tutor interactions. "By regulating peers' learning and cognition, students question, reconstruct, and control their own cognitive processes and strategies" (De Backer, Van Keer & Valcke 2012, p. 560).

B. Reciprocal peer tutoring (RPT) is a kind of collaborative learning which aims at gaining "knowledge and skills" while working in small peer groups. The authors distinguish two important roles, that of the tutor and the tutee (De Backer, Van Keer & Valcke, 2012, p. 562).

James (2017) speaks about the importance of research in higher education in helping to develop competent professionals of the future. By learning about research, students become proficient in problem solving and making sound judgements based on evidence. In other words, research cannot be made exclusive to students who only want to pursue a career in academics. Also, people learn best by doing and giving students real life problems closely related to various communities can also prove beneficial (James, 2017).

Research-based education

According to Tong (2018, p. 5), "research-based education" is an ongoing topic in higher education that brings together various discussions about the practice of teaching and learning. The aim of research-based education is to empower learners to become independent thinkers and creators by encouraging student and staff collaboration. Students are seen as "partners" (Tong 2018, p. 5) and equal contributors to knowledge.

The author advocates research equals teaching (R=T) approach to higher education (HE) where learning is seen as the link between teaching and research, student and staff. In the process, students are seen vital to giving feedback and shape HE to move beyond the traditional classroom. Lecturers are motivated by their students and see the sharing of experience and knowledge vital in developing more efficient teaching methods (Tong, 2018).

In their publication, Tong, Lauren, Clark, Standen and Sotiriou (2018) discuss ways student-staff partnership and research-based education can inspire change. In fact the authors view student-staff partnership as being "instrumental in inspiring change" especially when dealing with research-based education and (R=T) leadership (Tong, Lauren, Clark, Standen & Sotiriou, 2018, p. 314).

According to the authors, students and staff should work together as equal partners, while researching, creating, and exploring. There are many obstacles in achieving this change, one being resistance to change both from staff and students. Educators who have not previously worked with students and are not aware of their potential may feel that students are inadequate and unable to make meaningful contribution. While students may feel intimidated by having to work with staff and see themselves as less capable and intelligent (Tong, et al., 2018).

The authors conclude of the importance of involving students in research, as it will teach them the process and the value of research. At the same time, it will give students an opportunity to make valuable contribution towards generating new knowledge. Furthermore, the emphasis remains on problem solving, "teamwork and collaboration" as a way to better prepare students for entering the workforce (Telfer & Oliver 2018, p. 247). The authors also speak of the term "double-looped learning" which is learning from making mistakes (Telfer & Oliver, 2018, p. 247). R=T can be seen as a strategy and drive at instigating change in HE pedagogy.

Student-staff partnership

Clark (2018) reflects on her enriching experience with research-based education as a student, an approach to education she considers life altering. She speaks about 'praxis', a practice that involves "theory, action, and reflection" (Clark, 2018, p. 87). Some of the benefits of this kind of education include "increased retention of knowledge, development of research skills and preparation for the workforce" (Clark, 2018, p. 88).

Most importantly research-based education inspires students and educators "to question the traditional power dynamic in education" (Clark, 2018, p. 88). The focus is on the student, and creating a "more equal dynamic between staff and students" (Clark, 2018, p. 89). The aim is to involve students in the production of knowledge and research, and discourage passive accumulation of knowledge. This will lead to empowerment and taking control of their education, instead of simply accepting it as a given (Clark, 2018).

Mistakes remain part of this process and even prove essential to learning. Student-staff partnerships are seen as beneficial to both parties. Furthermore, students involved in research-based education were more "empowered to take on leadership positions and challenge the status quo" (Sharp, et al., as cited in Clark, 2018, p. 94).

Staying critical at all times remains important especially in a world overwhelmed by information. As a result, critical pedagogy has a big role to play in HE. This will inevitably involve a radical change of thinking in the way things are done in HE by both staff and students. In her article Marie (2018) talks about the value of research-based education and student-staff partnerships in strengthening student learning. A process that is known as R=T. Research-based learning centres around students as "active participants" during the research process and work together with educators in a partnership (Marie, 2018, p. 30).

Both research-based education and partnership question traditional education methods and the relationship between staff and students. At the same time, both processes are consistent with the "concept of participatory democracy" were citizens are encouraged to take part in making serious decisions. Which in turn challenges the power of the elite (Marie, 2018, p. 34).

Research-based education also involves critical thinking and helps students cope with challenges and make decisions in the real world. Both research-based education and student-staff partnership increase student ambition, inspiration, and self-assurance. It also encourages students to do some self-reflecting and mature as adults. It involves working with local communities and developing a social conscious (Marie, 2018).

Problem statement

The importance of developing critical thinking skills and independence of thought empowers students and may results in graduates who have the potential to become contributing members of our society. Although most view learning in the Arts and Design as "experiential" (Gray & Malins, 2004, p. 1), as people learn most effectively by doing, both practice and research are powerful tools that can be used in tandem to stimulate deeper learning and reflection.

As the world is moving towards the 4IR, and perhaps even enforced by the current pandemic, education has been compelled to make changes and adapt to a hybrid-learning environment. How do we ensure that educators adapt their lecture delivery methods in order to reflect those changes and provide an environment for their students that is critical, engaging, and stimulating?

The paper focuses on the subject of Critical Studies (CS) as a potential forerunner in investigating and potentially implementing changes. A theory subject required for the completion of a Bachelor degree and part of the syllabus for all three years of studies.

The question that is being asked is how to encourage student interaction and participation when facilitating the theory subject of CS within a hybrid/online-learning environment in the ID department of a private design college (GDC) by applying collaborative learning, reciprocal peer tutoring (RPT) and student-staff partnership?

Aims

 To explore and critique collaborative learning and RPT within a hybrid/online learning environment of a private design college;

- To identify ways in which student-staff partnership, collaborative learning and RPT can be implemented successfully within a hybrid/online learning environment of a private design college; and
- To further investigate the potential connection between *student engagement and class interaction* within a hybrid/online-learning environment that encourages collaborative learning, RPT, and student-staff partnership.

Objectives

- A. Primary data collection (2021):
 - 1. Private interviews with colleagues (October 2021)
 - 2. Preliminary focus groups with students (October 2021)
- B. Second Phase: Pilot lectures and observations (academic year 2022)
 - 3. Surveys with students (academic year 2022)
 - 4. Focus groups with students (academic year 2022)
- C. Data analysis
- D. Method of triangulation

Research methodology

According to Gray & Malins (2004, p. 3), "practice-led or practice-based research" is still grounded in sound research practices and yet affords some flexibility especially needed in the fields of art, design, and teaching. This research proposal follows a constructivist paradigm of enquiry identified by a:

'[R]elativist' ontology (multiple realities exist as personal and social constructions) and the epistemology is subjectivist (the researcher is involved); and as a consequence, methodologies are hermeneutic (interpretative) and dialectic (discursive) (Gray & Malins, 2004, p. 19).

Here the practitioner becomes the researcher having identified issues fostered by practice that become the starting point of this kind of research. Therefore, subjectivity using this kind of paradigm is acknowledged, and transferability is not the main goal or the end result (Gray & Malins, 2004). The advantages of the practitioner-researcher as defined by Gray & Malins (2004, p. 23) are extensive, from "insider-knowledge" to "enquiring as a reflective practitioner" and the possibility of "self-evaluation and self-improvement"

Furthermore, according to Hofstee (2006, p. 127) action research or "participatory research" as a "form of research whereby the researcher actively involves the participants in order to solve a problem or achieve a learning objective". The point of this kind of research is to turn "participants into co-researchers" (Hofstee, 2006, p. 127). The author further encourages the use of this kind of research in a small group classroom setting similar to the context and case study that was chosen.

The focus of this research is on the practical and a case study approach of teaching theory to Interior Design (ID) students in a private college environment, where the author of this research teaches Critical Studies (CS) to first and second-year Interior Design students. Classes are small between 30 and 40 students per class that make it appropriate for this kind of practice-based and participatory research.

The research relies on developing pilot lectures with a focus on student-staff partnership, collaborative learning, and RPT that are applied to first and second-year Interior Design students taking the theory subject, Critical Studies (CS). Pilot lectures are carefully planned, informed, and developed from private interviews with colleagues, a preliminary focus group with students and secondary data analysis prior to commencement of the study in 2022. Over the course of one academic year in 2022 pilot lectures are implemented, primary data collected, stored and analysed (Second Phase).

At the end of each term (eight weeks), a student survey and focus groups with students are conducted. Parallel to the above the researcher aims to conduct class observations, in order to identify certain patterns of behaviour such as participation in class discussions and display of critical thinking. Data is collected, stored, and analysed accordingly.

A colleague who teaches third-year CS in the ID department has agreed to participate in the study by applying the pilot lectures, student surveys, and focus groups at the end of each term. Provided those are discussed, evaluated and applied to a third-year level prior to commencement of academic year 2022. That may provide a sense of objectivity to the study and maybe another angle that may not be observed by the researcher.

The proposed methods of this research are inherently qualitative using the method of triangulation, i.e. collecting and analysing primary data from pilot lectures, observations, student surveys, and student focus groups.

Target population

The target population comprises most students between the ages of 18 and 21, as well as five fellow lecturers identified for their interest and experience in student-centred classrooms and research-based education. The researcher has access to both parties and an agreement to conduct the research.

Ethics in research

Fundamental principles of research ethics that are considered include consent, anonymity and confidentiality, right to withdraw, vulnerability, and debriefing. All participants (students and staff) are required to sign ethics form informing them of the aim and objectives of the research as well as the ways the research will be conducted. The researcher, who is also the lecturer, has applied for approval from the institution to go ahead with the study that provides access to primary data collection. Focus groups and surveys involve all ID students from the first, second and third year, ensuring justice and fairness.

Sources

Interviews with colleagues, 2021

In order to develop pilot lectures with a focus on student-staff partnership, collaborative learning and reciprocal peer tutoring (RPT) that can be used towards generating reliable and dependable research that answers the main research question, personal interviews with fellow lecturers were conducted in October 2021, digitally recorded, transcribed and stored safely (Appendix A).

Here is a complete list of interviewees (five in total):

Marina Hendricks, architect, lecturer and HoD of the ID Department at GDC; A supervisor to honours students, research report fourth year). BA Honours in Psychology.

Suzanne Erasmus, artist, senior lecturer for CS first and second-year Graphics and Multimedia students at GDC; a supervisor to honours students, research report (fourth year) and in charge of the CS department at GDC.

Rhett Martin, artist, lecturer in the Design Thinking & ID Department at GDC; a supervisor to honours students, research report (fourth year).

Steffen Fischer, architect and lecturer in the ID Department at GDC, third-year CS lecturer; A supervisor to honours students, research report and studio (fourth year).

Franziska Conrad, senior lecturer in design, course leader for the BA and MA Design and Innovation, School of Arts, Design & Architecture, Arts University Bournemouth (AUB)

Preliminary focus group with students, 2021

Separate online focus groups with ID1, 2 & 3 were conducted on 30 September (ID2) and 15 October (ID1 & 2) with about 70% participation. All sessions were recorded, transcribed and stored safely. The discussion was about students' experiences during online/hybrid learning throughout the last academic year. Appendix B was used as a rough guide in guiding the discussion. Students were engaged, and appeared interested in giving their feedback. What needs to be acknowledged, however, is that although there was good attendance, not all students participated actively in the discussion. Similar to the classroom experience throughout the last year.

Pilot lectures – second phase

Based on the interviews with colleagues, preliminary focus groups with students and secondary data analysis, pilot lectures were developed and used as one of the main sources of data collection with an aim of answering the aims of the research.

Over the course of one academic year (2022), pilot lectures are implemented with an aim to create a classroom environment that encourages critical thinking, class participation, teamwork and collaboration. Students are empowered to learn and become in charge of their own education by being actively involved in the process of teaching and learning.

As previously mentioned the pilot lectures are shared with another colleague responsible for third-year CS who has agreed to participate in the study. In this way, the researcher can ensure transferability of this kind of lecture method, as well as objectivity in data analysis.

Focus groups with students – Second phase

The same process as seen above is repeated at the end of each term in 2022. The aim of the focus groups at the end of each term in 2022 is to gather student feedback and/ or any other student input regarding this method of education.

Student surveys – second phase

Digital student surveys are conducted at the end of each term in year 2022 using Google Forms. The purpose of those surveys is to ensure that each student can express an individual opinion regarding this method of education. In order to ensure confidentiality and encourage honesty in replies, the surveys are anonymous. Those consist of both specific and open-ended

questions in order to ensure students are given a voice and are seen as a vital part to the research (Appendix B).

Observations – second phase

During the pilot lectures in terms 1, 2, 3, and 4 (academic year 2022), the lecturer who is also the researcher will observe, note and analyse student behaviour in terms of attendance, critical thinking, problem solving skills, class interaction, teamwork, and collaboration.

Analysis and discussion

Educators need to assume a more practical approach to theory education based on project based learning and student-centred classrooms where students are empowered to take charge of their own education. Furthermore, integrating collaborative learning & student-staff partnership may be even more successful in preparing confident learners who are resilient in the future work environment.

The following discussion was generated after conducting interviews with colleagues and separate focus groups with students (ID1, 2 & 3). A framework for facilitating the subject of CS was developed (Appendix C) which provides the foundation for developing pilot lectures commencing in 2022. Those will be moderated by the HoD of the ID Department, Marina Hendricks, a third-year lecturer for CS, Steffen Fischer, and studio lecturers in the ID department at the beginning of academic year 2022.

The main concern with online/hybrid learning is the struggle with student engagement. It is agreed that theory can indeed be taught mostly online and lectures recorded. "Theoretical subjects are advantaged by online learning. However, I don't know if some of the students are viewing all of this. They are very often on their phones, so are they even looking?" (Colleague D). Switching on cameras can help, but most lecturers do not enforce that for now. Students acknowledge the above along with some of the advantages with online learning like being able to "interact with people around the world, as well as you can always go back and re-listen to the lecturer if you have missed anything" (student).

It is important to consider students' mental health, especially when they "are constantly glued to their screens, and there is no disconnect" (Colleague C). Many struggle with "lack of motivation, depression, anxiety" (Colleague B). We can force students to switch on their cameras, however, that brings about other issues such as social anxiety (Colleague B). Both students and lecturers were in agreement that regular site visits, group work, and guest lecturers may help address some of those concerns.

On the subject of collaborative learning, most colleagues agree that the strategy extends beyond the classroom, i.e. it includes various lecturers and departments, as well as encouraging lifelong learning. At GDC, we have the 10% initiative community project, where students get to collaborate with their peers from various departments and years for a period of four weeks and work on a real life community project. Perhaps for the subject of CS, we can offer more of that hands-on community engagement, that is more aligned to research?

There needs to be a **gradual transition** from year one to three, perhaps this kind of student-staff collaboration is reserved for mature students, year three to honours. And if that is aligned to a specific local context, students and staff may collaborate in order to generate research on relevant and engaging topics. Year one and two primary focus lies in mastering academic writing including essay writing, referencing, understanding the theory, deductive reasoning

and visuals analysis. In year three, students are given the freedom to explore their interests and apply their knowledge in a more practical manner.

On the subject of **collaborative learning** all colleagues acknowledged the value of group work and peer review. They also implement those strategies to their teaching and the assignments given in class. For example, the final essay submission was sometimes peer reviewed, where students assess each other's work (Colleague A). The essay exchange prior to submission was also appreciated by students.

Although student-staff partnership was generally not applied, it was agreed that it is a valuable tool to use during hybrid/online-learning. "I definitely think it would be something interesting to do in the future, it could promote thinking about theory and practice...the practical component ... is where learning happens" (Colleague C). Also, students and lecturers can help each other in potentially publishing papers that deal with local issues, and that in turn "creates an interesting relationship between staff and students, students will feel more involved in the class than what it is right now...showing students something real, that relates to their lives" (Colleague C).

Conclusion

The approach of the 4IR offers unprecedented opportunities in many professional and non-professional spheres. One such affected industry is tertiary education. With the continuous pressure from industry for more proactive, critically thinking, and employable graduates we as educators need to ask the question, are we still providing the best learning environment and hybrid platform for our learners?

The primary aim of the above research was to come up with strategies that support both students and staff within a hybrid/online learning environment. With a focus on student-staff partnership, collaborative learning and reciprocal peer tutoring (RPT) within the theory subject of Critical Studies (CS). The study concludes with a framework for facilitating the subject of CS in the ID department of a private design college (GDC), for 2022 (Appendices C and D):

- Shorter lectures;
- Cameras on for the first 15 minutes and during presentations;
- Class discussions (actively engage with the lecture content);
- Use more visual examples from various sources (images, videos, movies, interviews and examples from social media);
- Mini weekly deadlines;
- Teamwork group projects and presentations;
- Flipped classrooms;
- Miro;
- Site visits;
- · Guest lecturers; and
- Learning from mistakes.

The study proposes pilot lectures developed by conducting interviews with fellow colleagues and focus groups with students in order to identify recurring themes and strategies that maybe used to develop ways of conducting lectures within a hybrid/online-learning environment. The **Second Phase** to be conducted during academic year 2022 (terms 1, 2, 3, and 4) having collaborated with the HoD of the ID department, Marina Hendricks, Steffen Fischer, the CS lecturer for third year, and studio lecturers. It is important to note that students are

continuously involved in the research process with the help of digital student surveys and more focus groups as discussed in the Methodology section above.

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Appendix A: Interviews with colleagues

- 1. Name, position, and department
- 2. Years of experience in higher education
- 3. What strategies do you use in order to encourage student participation and engagement in a hybrid learning environment?
- 4. What strategies do you use in order to challenge students in a hybrid learning environment?
- 5. What is your understanding of student-staff partnerships and collaborative learning?
- 6. Do you use the above strategies in your lectures and if yes, provide more explanation?
- 7. In your opinion, would you say we need to implement more of those strategies when teaching theory in a hybrid learning environment?
- 8. What are some of the challenges that you have experienced with hybrid learning?
- 9. What are some of the advantages?
- 10. Do you encourage students to learn from their mistakes? Do you feel you have sufficient time to allow for that?
- 11. Any other comments?

For each statement given below, circle the number that bests describes your opinion.

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

1	The objective of the course was made clear at the start of the term.	1	2	3	4	5
2	The content and structure of the course did accommodate that objective.	1	2	3	4	5
3	I feel encouraged to participate in class discussions and respond to others.	1	2	3	4	5
5	Lectures kept me adequately engaged in the subject of the course.	1	2	3	4	5

6	Lectures made me feel adequately challenged by the subject of the course.	1	2	3	4	5
7	I see the value in peer review and collaborating with my fellow students.	1	2	3	4	5
8	Making mistakes is part of the learning process.	1	2	3	4	5
9	I have a better understanding of the role of research in design education.	1	2	3	4	5

Appendix B: Student surveys

What do you like best about this course?

What would you like to change about this course?

Appendix C: A framework for facilitating the subject of CS in the ID department, year 1 & 2, 2022

- 1. Shorter Lectures 20 minutes with a change of activity followed by a short break
- **2.** Cameras on can help with engagement.

I received mixed messages from students, some saying they are dealing with "anxiety or nerves", however, the overall agreement was pro-camera use, because that may help with engagement as well as concentration when there are distractions at home (Students). One student mentioned a project they worked on during 10% during which they agreed as a team to have their cameras on throughout the project and final presentation. According to them, "this early, really helped...bring back that human connection, we need to have it on!!" (Student). Although staff are not enforcing camera use for now, perhaps having them on for the first 15 minutes of every online/hybrid session may help with student engagement?

3. Class Discussions (TUTS) during which students actively engage with the lecture content.

Students were enthusiastic about sharing their experiences of the class discussions during TUTS sessions. "I think the tut session helps with participation, mainly for me because it feels like having a conversation with friends as suppose to sitting in a big hall" (Student). "We especially liked the group discussions, that we could voice our understanding of the theory"; "you as a lecturer have taken an approach to listen more that dictate" we feel comfortable talking to you and participating in class, you listen to us" (Student). "Definitely yes, helped us to think about the theory and understand it and not only write it on a piece of paper" (Student). "I got to learn about stuff from how everyone else engaged with the topics" (Student).

Colleagues are also in agreement and use similar methods especially when teaching theory: "for me, you are in the class when you engage with the reading" (Colleague A). There are no right or wrong answers, it is more about participating and some colleagues give up to a week for students to reflect and respond to posed questions during those discussions. "I do encourage for them to engage in the session, but theory is difficult and it takes some time to digest it)" (Colleague A). Also both verbal and written engagement is accepted. Another interesting point raised by a student was perhaps if we do not record those sessions more people will participate and speak up? The argument was made that students feel intimidated they will say something wrong that is recorded (Student).

4. Use more visual examples from various sources

Include more images, videos, movies, interviews and examples from social media. The emphasis is on visual analysis and a "multilayered approach to projects that are not necessarily all about words, but also images, infographics, diagrams...they get to indulge in a kind of visual experience" (Colleague D). One colleague's strategy is for shorter lectures followed by a workshop during which we look at images and "analyse them in terms of the theory" and "sometimes I give them a little task at the end of a lecture – find a visual that relates to the theory discussed in class" (Colleague A).

Author's note: Visual essays, Infographics, Research Presentation -T4 (Group Presentations)

5. Mini weekly deadlines

Both staff and students agree that encouraging weekly engagement on a regular basis (weekly?) helps with participation as well as time management. One student suggested we use an assignment tab in Teams to show a calendar of all due submissions for the term. A concern raised by a student was as long as those deadlines did not increase the current workload.

6. Teamwork (Group Presentations)

According to students "helps you to get used to working with other people and you learn from others" and can also be fun (Student). It also "..helps us interact more as classmates because we don't really have something that brings us together like being on campus". "Working with others allows you to combine your thoughts and look at problems from several angles" (Students).

"However I don't necessarily believe that the above mentioned is achieved through online leaning when group members communicate on screen and not interactively" (Student). Group work is also seen as"... tough and tricky" by some students because "everyone has a different life and schedule" At the same time it helps reduce the workload (Student).

Colleagues share a similar view: "working in teams is important to prepare them for real-life scenarios academic writing is important but they also need to explore different methods of expressing" (Colleague E). Smaller peer groups work better, two to three maximum four students per group. One colleague suggested for students in each group to sign off a code of conduct which includes a group leader, a project plan and delegated tasks (Colleague E).

"I'm no longer doing PowerPoint (PP) presentation with tons of slides talking for one, two or three hours, just doesn't work; it exhausts me, they are bored, just doesn't work. What works is small breakaway groups, getting them to do a small project" (Colleague E).

Author's note: Visual essays, Infographics, Research Presentation -T4 (Group Presentations)

7. Flipped classroom

The reverse of a traditional classroom, and a type of blended learning, where students are given time prior to the lesson to go over the content and prepare for class independently. This strategy may encourage student engagement and participation because students come prepared for the session and there is more time for class discussions. Also, by encouraging more independence may result in more proactive students who do not sit in class and wait to be told what to do. "when you give them work to do prior to the lesson; the honour is on them to make the next session as interesting as possible; if no one has done anything you send them home early" (Colleague E).

8. Miro

A Miro board is an online whiteboard that you can use to visualise your ideas, work on projects either individually or with a team.

"I use Miro excessively now...don't use PP to prepare lectures...Spending time to put PP slides is a complete waste of time...all my course information is in Miro...instead of me having to share actual lecture notes the students have active element of engagements with their lecture notes" (Colleague E).

"Students can work together using Miro...Students can also review text, comment, as a lecturer you can also join in the process. Although it may seem wacky and off centre, they engage in a completely different way" (Colleague E).

Educators support students and provide them with a basic structure, which encourages them to explore further, and do the work. That is one way to encourage student engagements and participation.

9. Site visits

Site visits can help with engagements and add a more practical dimension to teaching theory. "I really enjoy learning about something and then being able to see it" (Students). According to colleagues site visits encourage student participation especially when those become the case study for the essay. It is also beneficial to students because they get to meet and engage with their peers.

10. Guest speakers

Both students and lecturers agree that one of the advantages of hybrid learning is the ease and flexibility in inviting various people from all over the world to engage in a class discussion. According to colleagues it is important to have guests speakers who can add another dynamic, and "change the monotony" (Colleague C) by presenting another viewpoint and engaging with students. Anything between 20-40 minutes.

11. Learning from mistakes

Students learn from making mistakes and although lecturers agree with the statement, it is not much of an option for the subject of CS at GDC. Students are only able to re-submit if they have failed, but not in order to improve their marks. Also lecturers teaching theory do not have the capacity to welcome more re-submission opportunities. On a few occasions when I have allowed for more re-submissions for better marks, few take the opportunity. Students get a detailed mark sheet with each submission, but generally few would go over the comments resulting in similar mistakes for the next submission.

Setting mini deadlines throughout each term may help with monitoring progress as students get continuous feedback as opposed to only at the end of the final essay submission (where they get a detailed mark sheet). In term four, I give students (ID1 & 2) a project to do consisting of two (2) parts. They present each part to me and the rest of the class throughout the term. When it comes to the final submissions, students are confident and prepared.

A college records the feedback and students are only able to access the marl unless they have listed to the recording (Colleague E). Also, students associate making mistakes with failure, which is a mind set that needs to change.