

Meighan Ellis, Fiona Grieve *

The Recalibration of a Design Studio Curriculum During COVID-19 in Aotearoa



Meighan Ellis is a creative hybrid, with a background and professional training in photography, graphic design, moving image, fine-art and design theory and more recently a re-acquaintance with clay. Her multi-disciplinary practice spans various media and is distinctively positioned at the intersection between art and commerce. Meighan's work has been exhibited in New Zealand, America, Europe, Australia and Japan, and her photographic and ceramic works are held in private collections in New Zealand and overseas. For a number of years she lived in London, Sydney and Tokyo, where, alongside her fine-art practice and a long list of creative and commercial side-hustles, she worked as a writer, photographer, designer, art director, content creator and producer for various international clients, brands, print and online channels. <meighan.ellis@aut.ac.nz>
ORCID: 0000-0002-8130-2806

Abstract *This article presents the impact COVID-19 had on a first-year communication design curricula revitalisation to progress students from a secondary level standards-based criterion to a tertiary culture predicated on active and experiential practice-led studio inquiry. Methodologically, it describes a design-based research intervention that asks what occurred in the translation of a brief written as an in-person, studio-based model into a purely online undertaking, learning from anywhere, teaching in a constant state of flux? Through a commentary on practice, the revitalisation of a design programme, and the pedagogical shift from within the traditional studio paradigm—a dynamic*

on-campus, in-person model into an abrupt and atypical online undertaking due to the global pandemic, this paper contributes to a discourse on a design studio approach and presents the transference of the Learning Management System that supports distance learning.

Keywords COVID-19, Curriculum Design, Design Education, Online Learning, Studio Practice.

Fiona Grieve is Head of Communications Design Department at Auckland University of Technology. She is an Academic Leader and Creative Director with 20+ years' experience in design education, research and consultancy. She is engaged in projects that utilise collaborative processes to comprehend and distill information into visual systems. Her practice positions publication design as a reflective and reflexive research platform to facilitate educational discourse and examine practice-based research and industry contexts. She has been involved in a number of collaborations which intersect educational and professional domains of practice: THREADED is an international award winning design magazine; and FREE PLAN is the Alla Prima Project which expands on approaches to design and visual arts, assessment, curricula and studio-centred education. <fiona.grieve@aut.ac.nz>
ORCID: 0000-0002-5996-9436

A recalibração do currículo de um estúdio de design durante o COVID – 19 em Aotearoa

Resumo Este artigo apresenta o impacto que Covid-19 teve na revitalização de um currículo de design de comunicação no primeiro ano com o objetivo de progredir os alunos de um critério baseado em padrões de nível secundário para uma cultura terciária baseada em estudos de estúdio baseados na prática ativa e experiencial. Metodologicamente, ele descreve uma intervenção de pesquisa baseada em design que pergunta o que aconteceu na tradução de um briefing escrito como um modelo baseado em estúdio em uma empresa puramente online, aprendendo de qualquer lugar, ensinando em um estado de fluxo constante? Por meio de um comentário sobre a prática, a revitalização de um programa de design e a mudança pedagógica de dentro do paradigma do estúdio tradicional - um modelo dinâmico no campus, presencial em um empreendimento online abrupto e atípico devido à pandemia global, este artigo contribui a um discurso sobre a abordagem de um estúdio de design e apresenta a transferência do Sistema de Gestão de Aprendizagem que apóia a educação a distância.

Palavras chave COVID-19, Design de currículo, Educação em design, Aprendizado online, Prática de estúdio.

La recalibración del plan de estudios de un estudio de diseño durante COVID-19 en Aotearoa

Resumen Este artículo presenta el impacto que tuvo Covid-19 en la revitalización de un plan de estudios de diseño de comunicación en el primer año con el objetivo de que los estudiantes progresen desde un criterio basado en estándares de nivel secundario a una cultura terciaria basada en estudios de estudio basados en la práctica. experimental. Metodológicamente, describe una intervención de investigación basada en el diseño que pregunta qué sucedió al traducir un informe escrito como un modelo basado en un estudio en una empresa puramente en línea, aprendiendo desde cualquier lugar, enseñando en un estado de cambio constante. A través de un comentario sobre la práctica, la revitalización de un programa de diseño y el cambio pedagógico desde dentro del paradigma tradicional del estudio - un modelo dinámico en el campus, presente en una aventura online abrupta y atípica debido a la pandemia global, este artículo contribuye a un discurso sobre el planteamiento de un estudio de diseño y presenta la transferencia del Sistema de Gestión del Aprendizaje que soporta la educación a distancia.

Palabras clave COVID - 19, Diseño curricular, Educación en diseño, Aprendizaje en línea, Práctica de estudio.

Introduction

This article discusses the development of a collaborative and pedagogic approach in a design studio programme, advanced through a framework of design-based research (DBR). DBR opened up for a team of six tertiary educators and designers, a space to create, transfer and measure the impact of new pedagogical strategies in their learning and teaching, where the educator is simultaneously the teacher and the researcher (Kuhn and Quigley, 1997).

The basis of DBR methodology focuses on the development of solutions that are called “interventions” (Brown, 1992; Collins, 1992), that are designed and tested to check how they work, and then adapted and re-tested in a cyclical process of iterations. The main goal of this approach is to emerge new knowledge and methodologies to conceptualize learning, instruction, design processes, and educational reform. In this context the interventions are the strategies formulated to redesign an undergraduate communication design year-one curricula, delivered on campus in a face-to-face traditional model. The fortuitous impact of COVID-19 however, demanded a complete recalibration to a multi modal-distance learning platform, in a timeframe of four weeks.

The emphasis of the brief for the communication design studio in year-one is concerned with the transition of students starting their academic journey and to bridge the gap between the distinct levels of learning in secondary and tertiary levels. To connect these different worlds, the brief has to offer students the opportunity in the development of skills, competencies and expertise to progress throughout their degree and sustain a lifelong engagement in creative and professional practice.

The implementation of the new curricula was impacted by two major factors; COVID-19 and the immediate move to online delivery, and the university’s trajectory to restructure the undergraduate programmes to align with a new student profile that responded to recent research developed by Ministry of Education (2012) regarding a future-oriented education system in Aotearoa, New Zealand.

The new curriculum structure was aimed to encourage student autonomy and the conditions to navigate their learning progression through a decentralised model, in an environment which “promotes the personalisation of learning, interdisciplinarity and real-world authentic problems to structure the curriculum, collaborative project-based enquiry learning, integration of ICT, greater connections with communities” (McPhail, 2020, p.388).

In this context, the graduate strives to be empowered with hybrid skills and be able to address complex economic, social, political, and technological issues. Paradigmatically, Lourie (2020) identifies that this shift may be problematic, since “an over-emphasis on skills and competencies and an under-emphasis on disciplinary knowledge means that students may struggle to achieve deeper levels of learning” (p.125). This phenomenon is currently in debate in Aotearoa, New Zealand and McPhail repositions the

idea of the twenty-first century student, which influenced our intention to redesign a curriculum that embraces future orientated learning, without dismissing traditional forms of design studio teaching practice.

In parallel to discussing the characteristics underpinning the re-design of an educational framework for a year-one curriculum, two points will be examined: firstly, the pedagogical components of design studio practice, its cognizance of the need for an iterative process, experiential learning and design conventions such as materiality, and craft. Secondly, the disruption of the academic team having to recalibrate, develop and prototype a new course to translate the essential social and environmental dimensions of the design studio to a distance learning model, whilst simultaneously navigating an obsolescent learning management system.

Scaffolding Experiential Learning

The re-development of the curriculum began in 2019, aiming to re-energize a year-one studio programme in the Bachelor of Design, Communication Design Major. The new brief was designed to address the problems associated by student's increasingly passive behaviour, cultivated by the culture of credit validation and assessment-driven learning—a by-product of the secondary sectors NCEA¹ model. Following a different approach, the ideal learner at tertiary level needs to be a “self-managing, self-motivated, collaborative, creative, persistent, adaptable, and flexible critical thinker” (McDowell & Hipkins, 2020, p. 388). The course was designed to advance aspirations for a reciprocal learning culture and to encourage the need in establishing connections and community (Ellis and Grieve, 2020). The relevance of identity and belonging was identified to become the central conceptual focus, forging the agency for self-actualization (Maslow, 1964), alongside the fundamental conventions in communication design.

Identity and belonging were introduced to promote aspirations for autonomous and participatory learning through a range of activities and interactions in the design studio. The goal was to encourage first year students to feel confident, engaged and invested with meaningful lived and shared life experiences. From another perspective, these themes exposed students to diverse worldviews, promoting social, cultural, and community connections.

The community connections created are defined by Wenger (1998) as “routines, words, tools, ways of doing things, stories, gestures, symbols, genres, actions or concepts” (p. 83). In parallel, the course was planned to take advantage of the experiential learning that takes place in the design studio and its focus on the “process (input) including roughs, research, risk, failure, adaption and the shifting of beliefs and world views” (Kolb and Kolb, 2005, p. 37).

Baumeister and Leary (1995) argue that belongingness has multiple and strong effects on emotional patterns and on cognitive processes. The majority of year-one design students are primarily concerned with the aesthetics of the final output and the grade attached to it, instead of an ingenious holistic learning experience and journey. The underpinning thematic of self-discovery aimed to stimulate congenital responses, enabling students to start their course from a place of personal reference, using their mindset and attitudes to foster distinct and authentic perspectives.

The course design advanced key phases of learning: the iterative making processes including observation, material exploration, reflection and revision. The purpose was to install a conscious realm to the biases created by students' individual frames of reference (Kampen 2019) and to avoid students defaulting to superficial ways of problem solving.

The Disruption In Cognitive Learning

The course structure prioritised design iteration, developing competencies with form, materiality, and craft. To activate this development, the deliverables consisted of three printed artefacts aimed to act as a repository to curate, collate and synthesise connections between formal design conventions, ideation, and contextual thinking.

Letraset, a low-fi and analogue typographic medium (Figure 1.) was employed as the first artefact to formulate initial insights for the first project, *Pre-Face*, that asked students to explore their identity and a personal hereditary lineage. The assessment deliverable was a multi-page A3 bound publication with a focus on creating analogue typefaces, initiated by a sequence of self-portraits constructed from glyph forms. This task was inspired by the internationally acclaimed graphic designer and educator Erik Brandt's Letraset workshop (which he presented to our year-one student cohort in 2019), and his well renowned, experimental typographic project *Ficciones Typografika* (2019). Design fundamentals and relevant media were introduced to encourage formal and cognitive play and to accelerate an iterative design process.



Fig 1. Inside the Communication Design Studio using Letraset

This approach promoted experiential learning experiences, that according to Kolb and Kolb (2019), are best conceived as processes, and not as outcomes. In this sense, the interactive design process included sequence, multiples, analysis, quick-fire prototyping, synthesis and reflection (Kampen 2020), scaffolded across a four-week period. Fortunately, this vital first iterative output was developed in studio on campus pre-pandemic, before a state of emergency was declared on the 25th of March and our entire nation went into self-isolation.

The second artefact, a poster diptych titled *Two-Face*, introduced the conceptual frameworks of dualities and binaries to deepen the ideas and contexts emerging from the theme of self-identity. The focus was on analysing and reapplying design iteration and the understanding that “learning is facilitated by a process that draws out the students’ beliefs and ideas about a topic so that they can be examined, tested, and integrated with new and more refined ideas” (Kolb & Kolb, 2005, p. 37).

The third artefact, *Face-to-Face*, a scrollable digital map, was planned to be viewed on-screen via a hand-held device, introducing personal narrative using story-telling conventions. These three artefacts aimed to produce “conceptual knowledge, understanding ideas and how they can be applied in a range of situations” (McPhail, 2020, p.399). To synthesise ideas related to self-identity students evaluated their repertoire of practice (Wenger 1998) and integrated design elements from personal collections, ephemera and visual and typographic assets to tell their story.

The final format, a digital workbook was a primary online notebook, that functioned as a repository to document research, reflect on design activations, and to synthesise the accumulative learning of brainstorming, process journaling and reflective annotations. Designed to increase strate-

gies for analysis for year-one students and the idea to encourage the conversational concept of the reflexive practitioner advanced by Donald Schön (1983). The workbook was planned as a vehicle to reveal and identify new connections and empirical research to “develop strategies, activities, and exercises to help students understand what reflection is, why it is important, and how it is tied to iterative design process” (Kampden, 2019, p.39). The transition from an A3 analogue workbook to a digital format enabled lecturers to respond to student's engagement and identify their progression to give essential feedback that replaced the face-to-face format of the studio interim critique.

March 2020 would present another variable that would alter again the trajectory for the curriculum dramatically: the advent of a global pandemic and the multiple challenges when students and lecturers conjointly faced the sudden onset to prepare for and adopt remote distance learning, which required an unprecedented recalibration of the course.

For students, their education was paused, faced with the sudden reality that learning would become virtual, the bedroom would replace their on-campus studio, and personal computers, data and a reliable internet connection would be vital.

The academic team were quickly faced with the realisation that their experience of online teaching was exceedingly limited and naïve, and we found ourselves deep inside a praxis of practice-led research; intuitively and reflexively embodying, responding, testing, and re-designing curricula as design practitioners, educators, ‘users’ and researchers simultaneously.

As the familiarity and interdependence with on-campus delivery collapsed, a core group in our department, led by Dr Marcos Mortensen Steagall, collated and identified a framework and a repository of ideas borrowed from distance learning strategies. These strategies were partly based on Bloom’s taxonomy (1956) and Knowles (1970) andragogical approaches and were added to a benchmark of best practices and identification of the fundamental issues. The new scenario required a different approach in the way the teaching team operated and resulted in a detailed plan comprised of three parts.

1. A Framework and Research Repository (education and distance learning perspectives, a benchmark of best practices).
2. A Blueprint Document (a practical framework based on best practices).
3. A Course Structure and Lesson Planning Template (a micro-level blueprint).

Based on these findings a communication design task force was formed to organise and advance the development of the departmental response and define the four principles to better support the student's engagement:

1. A sense of progression; to provide feedback on the evolution and achievement of goals.
2. Project driven studio objectives; with successive and iterative tasks to build towards outcomes.
3. A sense of belonging; to link and reinforce relationships between lecturers, students, and the department and to create a consistent navigational interface for online courses.
4. Student centred; whereby lecturers create a positive learning environment and implement activities to create the conditions conducive to learning.

A gameboard inspired lesson planner (Figure 2.) was devised to simulate activities, tasks and interactions for the virtual classrooms and grouped configurations of learners and to align the teaching team and student's involvement for each online session. A taxonomy informed by gamification and UX/UI principles guided lecturers and students understanding of virtual studio learning and the application of asynchronous and synchronous modes of activity and delivery.

SIMULATION		Lesson Plan			Synchronous (Contact hours) - 3 hours			Asynchronous (Self-studies / extra class activities) - 9h 30 minutes		
Lesson Plan		1pm:			ACTIVITY			ACTIVITY		
30 credits paper (CDS)		Lecture (1 hour) – PPT presentation Taxonomy, terms and usage. The terminology of type.			Lecture (30 min) using Collaborate. Transform PPT to Acrobat PDF for easy access on BB.			Lecturer to record the session with voice over – upload to BB		
Week 5		Typographic guidelines.			Type crime (20 min) individual Online test – provide break down of class.			Results of type crime and scores/winners (20 minutes) Break: Students to hang out using Groups or Livestream (Zoom) (30 minutes)		
6 x 1-hour synchronous blocks is equivalent to 6 hours of contact per week		Groups (30 minutes) Type crime discussion – handout provided with some samples of layout. Students to circulate and discuss the 'type crimes' on the page. Presentation			Groups			Forum		
This table simulates a way to bring a planned class content and convert it to an online delivery model.		Break (15 minutes)			Online Friends Request			Hand-on Exercise		
It considers contact hours (6 hours/pw) as equivalent to synchronous activities while the self-study and extra hours as asynchronous (19 hr/pw).		Class / Homework: Have one-on-ones during this exercise Using the Helvetica / Futura, and Times New Roman / Minion Pro 16 sheets as reference.			Visual Diary			Visual Diary		
The model presents how each hour could be used into smaller blocks to create engagement using a variety of the LMS tools.		<ul style="list-style-type: none"> Do two sets of 50mm (apart) parallel lines on an A3 sheet. Consider ascender / descender's x-height Hand draw the letter forms, both Roman (serif) and sans serif fonts, using: a, e, g, o, n, h, v a, e, g, o, n, h, v Below the letter pairs, make notes about their differences. 			Lecturer to be available for individual livestream for one-on-one during this time.			Forum		
Course Hours 30 credits paper		Lecture: Juggling and lettering (30 minutes) How to work with grids to create typographic arrangements. Show samples and processes. Look at Jessica Hache website (http://jessicahache.is).			Lecture (15 min) + task for the session: Using Collaborate.			Blog		
Learning hours: 300hs		Class exercise/homework 1 (Show WIP by end of class) A) 30-40 minutes: Give them designer's quotes – one each. Ask them to start with lettering by sketching some grids in how they can align the words of their quote.			Time the session - Students to draw grids/thumbnails (30 min).			Reflective session		
Contact hours: 72hs		B) 40 minutes: Draw a final grid and develop lettering for your quote (start in class / complete as homework). Pencil, Photocopy (so you can use for <i>output</i> option if needed). <i>Output</i> by drawing with sharpie.			Student to post WIP on chat / forum.			Visual research session		
Self-directed: 228hs		Homework 2 (Handout) Select an inspirational quote. Do a juggling with a selection of images collected from the internet about the methods of your quote. Write one sentence about its meaning. Ask yourself: Why have you selected and your personal relationship with the message and ethos of the quote? Design (by hand) a lettering composition with the selected quote. You must follow the steps provided (in class) by starting with sketching of 5 grid options, development and refinement using a selection of 3-4 typefaces provided + one of your choice.			Lecturer to provide a PDF Handout of Homework and Readings/YouTube			Readings		
Weekly Hours		Lecturer to remind all homework due next week (given in class + extra)			End of session: Acknowledge students who completed and participated on chat/livestream / forum			Online test		
<ul style="list-style-type: none"> Social: 6h:14min Observational: 2:30 hours Analytical: 3:46 hours Experiential: 12:50 hours 		Readings: Design Principles (typography) + lettering (PDF) Provide some YouTube and <i>output</i> videos of designers working with lettering.			Pre-recorded Tutorials			Students to take online test about taxonomy / terms and usage of typography and readings.		

Fig 2. Communication Design Department Gameboard Lesson Planner

HACKS AND INTERVENTIONS

To minimise further disruption, courses maintained their on-campus timetable while the brief, titled *Self-Matters*, a remote learning timeline and the final assessment deliverables underwent significant changes. All four analogue assessment outputs were reconceived as digital formats to facilitate appropriate learning and teaching outcomes for both learners and educators.

The Pre-Face process publication was replaced with a 31-frame iterative animatic.

- The Two-Face poster diptych was replaced with a digital poster output responding to the notion of binaries and dualities.
- The Face-to-Face 12 panel double-sided concertina publication was replaced with a scrollable identity map for handheld digital devices.
- The A3 analogue process workbook was replaced with an online digital workbook.

The university abruptly embraced Blackboard, their Learning Management System (LMS) at the time of New Zealand's first lockdown, as the principal teaching tool for remote studio delivery, where it had predominately been operating as a content repository for courses pre-pandemic. The Panopto function was adopted for video content and integrated with Blackboard Collaborate Ultra, which was employed for virtual classrooms, discussion forums and whiteboard features. Alongside these platforms, Microsoft Teams was implemented for meetings and activity-oriented virtual tutorials.

The commodification of Blackboard became a necessary sub-project, as it was required to signpost an updated timeline (Figure 3.) and ensure that the course content was assessable, consistent, logical, and most critically engaging and activity oriented. To reinforce this, customisations were deployed to increase student's motivation, and to arouse their engagement with content and resources on a somewhat outdated LMS. Announcements and animated gifs were embedded daily to personalise the static and anachronistic interface, using social media communication troupes in an attempt to align with our zoomers² innate online social behaviours.

A suite of illustrated Activity Prompt Cards modelled on aspirational, or mindfulness card decks were designed to implement daily help strategies to encourage students use and comprehension of design tactics, which were based on six process verbs for core phases of design: collect, review, make, test, refine, and share.

self-matters

An introduction to graphic design principles + processes responding to the thematics of identity.

TIMELINE GRAD501 COMMUNICATION DESIGN STUDIO I

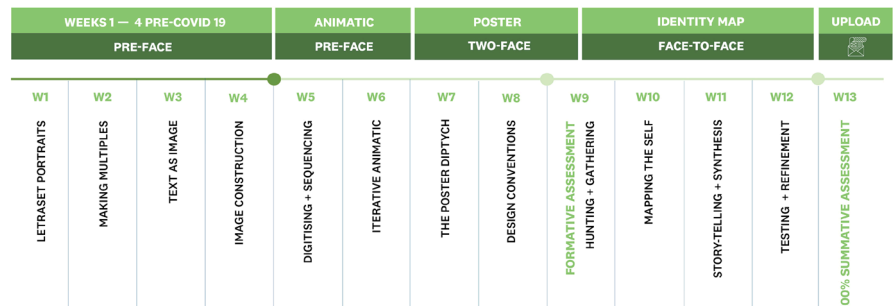


Fig 3. Online Remote Learning Timeline on Blackboard

Drick Boyd (2016) critiques the banking nature of the LMS and concerns with the online platform as a repository of resources for teaching and learning in the scenario where the system is “set up to be the primary source of information in a course, and the teacher is assigned as the expert designer of the learning experience, thus limiting the constructivist nature and mutuality of the learning process” (p.175).

Educator and philosopher Paulo Freire vehemently rejects this approach to education as it does not recognize or encourage the student’s creative, exploratory, and critical abilities (Boyd, 2016). Moreover, it leaves the student in the role of passive recipient rather than active creator of knowledge (Freire, 2007). The pivot to online learning impacted our ambition for a critical classroom, where the student at times takes on the role of teacher and the teacher becomes a learner (Boyd, 2016). In the new context, the primary goal was to sustain engagement with the online content to facilitate their learning in a way to mitigate against any assumptions of the student as an empty vessel, and the course not valuing or recognizing the student’s prior experiential and cultural knowledge (Freire, 2007).

Lost In Translation

The face-to-face studio experience pre-COVID-19, provided the environmental conditions for students to develop and foster the acquisition of knowledge through actions, seeing, hearing, and ‘making’ experiences in real-time. Comprehension could be witnessed, monitored, and calibrated from this sharing and exchange. Dewey (1937) argued that learning is based on social and interactive processes, and the notion that students accumulatively learn more from their peers. Based on Dewey’s premise, specific interventions are required to construct the conditions for peer-to-peer learning experiences and relationships from their participation and interaction.

The online context, in contrast, enabled anonymity, non-participatory action such as the predilection to be incognito, which students frequently defaulted to. Drick Boyd (2016) describes this as the disembodied nature of the online learning process, the freedom to not having to be in class and be active in the learning exchange, and he argues that:

Embodied learning means students must not only engage the cognitive dimension (thinking and reflection), but also partake in concrete action. This action in reflection, and reflection in action, referred to as praxis, involves acting on and in the world as one is seeking to learn about and transform the world. (p. 176)

Whilst students' participation and online attendance became increasingly challenging for some, other students found Blackboard's whiteboard and chat functions more comfortable forums to raise questions and contribute to online studio discussions, with emojis accepted and normalised to hastily express an idea or emotion.

The transparency of recording online classes and data within the digital environment revealed the extent by which students engaged in the plethora of resources lecturers designed and disseminated online. Blackboard collated specific data; tracked attendance, participation by way of student's interactions, and revealed the peer-to-peer and to-lecturer exchanges offering a new standard of visibility and accountability. In the rapid move to online delivery, and in our naivety, a kaupapa³ wasn't formalised to establish fundamental netiquette^{iv} and online protocols to ensure respectful discussion, exchange and to promote cultural safety and mindful communication.

For lecturers, teaching became increasingly performative, requiring additional energy, fluidity, and buoyancy, due to the vast majority of students not turning on their cameras and microphones. The disruptive consequences of digital inequity and limited accessibility with reliable internet connections became exceedingly visible in this new learning mode, for an otherwise invisible issue when teaching 147 students offline and on campus. As the online transition required digital assessment outputs, increased reliance of digital literacy, technical acumen and media fluency were required, highlighting societal inequalities that resulted in technological barriers.

The speed and rationale of the online delivery and course content production had to be slowed down and recalibrated on a daily basis due to the digital inequalities. For the academic team, the frequency of online meetings was increased to be able monitor and reflect on the nuances of cohesion and the progression within the online studio, demanding additional acuity and ability to collaborate and co-design.

Impacts And Future Aspirations

Despite the face-to-face design studio being forced to become virtual due to COVID-19 regulations, and the innumerable daily obstacles, the year-one student retention and success overall, was incredibly positive—with only two students withdrawing from the course and a 97% pass rate obtained in a cohort of 147 students. Many students excelled within the online delivery, exhibiting the characteristics aimed for the 21st century learner: committed, adaptive, goal orientated, and inherently self-motivated.

As anticipated, students were eager to return to the physical, face-to-face setting of their on-campus design studio community and to gain access to the technical facilities to print, make design artefacts and engage with other live sensory experiences. Exhausted staff emerged cognisant of the need to integrate experiential learning theory with core curriculum activities to identify and apply a wider range of strategies for engagement, collaborative learning, peer to peer interactions and participation (Figure 4).



Fig 4. Year One students working on campus in the Communication Design Studio

These practices reinforce humanistic values and attitudes to include diverse views, individual experience, and learners' cognitive complexities and potential ineptitudes. Since returning to the physical design studio and now face-to-face with the students and our academic team, five key pedagogical aspirations have been identified to further reflect upon and to align with future orientated 21st century learning and teaching:

1. Understanding and learning from blended delivery modes and learning.
2. Defending the value of discipline specific knowledge about design (knowledge about knowledge).
3. Developing and implementing course briefs to further equip students to engage and succeed.
4. Unite as a year-one teaching team in 'reflective practicum'⁴ from a co-design predicated on an experiential practice-led studio culture.
5. Embody a kaupapa founded on empathy, community, and which supports value-centred learning experiences that upholds and honours Te Tiriti o Waitangi.⁵

As the academic team prepare for a post-pandemic future, will the pedagogical approach in the communication design studio be a blended learning environment?

This article attests to the experiential learning experience in which a year-one design studio tacitly activates play, process and imagination via analogue methodologies. But we question how will students locate and experience these unequivocal physical tactics and values in an online paradigm?

From this current state of flux and uncertainty, due to the continual interruptions stemmed from teaching in the time of coronavirus, it raises an emergent pedagogical problem, as we question our ability to collectively navigate an uncharted future applying innovative, sustainable approaches and insights assimilated from the recent lived experience, as tertiary design educators, researchers and practitioners.

1 National Certificates of Educational Achievement (NCEA) are national qualifications for senior secondary school students in New Zealand.

2 Also referred to as Generation Z and is the demographic that follows Millennials.

3 A kaupapa is the Māori term for a set of values and principles in which people have agreed on as a foundation for their actions.

4 Ehn and Ullmark propose that design education is a question of creating a 'reflective practicum' (p. 83) also referred to as reflective practice-based design research.

5 The Treaty of Waitangi (Te Tiriti o Waitangi) is New Zealand's founding document that was signed by representatives of the British Crown and Māori on the 6th of February 1840 in Aotearoa, New Zealand.

References

- Anderson, L. W., & Bloom, B. S. (2001). *A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives*. UK: Longman.
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: desire for interpersonal attachments as a fundamental human motivation. *Psychological bulletin*, 117(3), 497.
- Biggs, John. (2012). What the student does: teaching for enhanced learning. *Higher Education Research & Development*, 31(1), 39-55. DOI: 10.1080/07294360.2012.642839
- Bolstad, R., & Gilbert., J with McDowall, S Bull., A Boyd., S & Hipkins, R (2012). Supporting future-oriented learning and teaching: A New Zealand perspective. Ministry of Education.
- Boyd, D. (2016). What Would Paulo Freire Think of Blackboard™: Critical Pedagogy in an age of Online Learning. *International Journal of Critical Pedagogy*. Vol. 7 No. 1. p. 174-5.
- Brown, A. L. (1992). Design experiments: Theoretical and methodological challenges in creating complex interventions in classroom settings. *The Journal of the Learning Sciences*, 2(2), 141-178.
- Collins, A. (1992). Toward a Design Science of Education. In E. Scanlon & T. O'Shea (Eds.), *New Directions in Educational Technology* (pp. 15-22). New York: Springer-Verlag.
- Delors, J., Chung, F., Geremek, B., Gorham, W., Kornhauser, A., Manley, M., & Nanzhao, Z. (1996). *Relatório para a UNESCO da Comissão Internacional sobre Educação para o século XXI. Educação um tesouro a descobrir*, 6.
- Dewey, J. (1937). Education and Social Change. *Bulletin of the American Association of University Professors*, (1915-1955), 23(6), 472-474.
- Drick Boyd (2016) What Would Paulo Freire Think of Blackboard™: Critical Pedagogy in an age of Online Learning, *International Journal of Critical Pedagogy* | Vol. 7 No. 1, 2016 (p. 174-5).
- Ehn, P., & Ullmark, P. (2017). Educating the Reflective Design Researcher. In L. Vaughan (Eds.). *Practice-based Design Research* (pp. 77-86). London: Bloomsbury Academic. DOI: Retrieved April 12, 2021, from DOI <http://dx.doi.org/10.5040/9781474267830.ch-008>
- Ellis, M., & Grieve, F. (2020, December). Teaching in a State of Flux and Uncertainty: Transitioning the Design Studio during COVID-19. In *Link Symposium Abstracts 2020* (pp. 20-21). DOI: <https://doi.org/10.24135/linksymposium.vi.5>
- Freire, P. (2007). *Pedagogy of the Oppressed*. 30th Anniversary Edition. New York: Continuum Press.
- Gowing, M., & Brandt, E. (2019). *Ficciones Typografika*. Sydney: Formist.
- Kampen, S. (2019). An Investigation into Uncovering and Understanding Tacit Knowledge in a First-Year Design Studio Environment. DOI: <https://doi.org/10.1111/jade.12171>
- Kirschner, P. A. (2002). Cognitive load theory: Implications of cognitive load theory on the design of learning [Editorial]. *Learning and Instruction*, 12(1), 1-10. [https://doi.org/10.1016/S0959-4752\(01\)00014-7](https://doi.org/10.1016/S0959-4752(01)00014-7)
- Kolb, A., & Kolb, D. (2005). Learning Styles and Learning Spaces: Enhancing Experiential Learning in Higher Education. *Academy of Management Learning & Education* Vol. 4, No. 2. <https://doi.org/10.5465/amle.2005.17268566>
- Kuhn, G., & Quigley, A. (1997). Understanding and Using Action Research in Practice Settings. Kuhn, G., & Quigley, A. (Eds.), *Creating Practical Knowledge through Action Research*, (pp. 23-40). San Francisco: Jossey-Bass.

- Lourie, M. (2020). Recontextualising 21st century learning in New Zealand education policy: The reframing of knowledge, skills and competencies. *New Zealand Journal of Education Studies*, 55, 125.
- Maslow, A. H. (1962). Lessons from the Peak-Experiences. *Journal of Humanistic Psychology*, 2 (1), 9-18. DOI: <https://doi.org/10.1177/002216786200200102>
- McPhail, G. (2020). Twenty-First Century Learning and the case for More Knowledge About Knowledge. *New Zealand Journal of Educational Studies*. DOI: <https://doi.org/10.1007/s40841-020-00172-2>.
- Mortensen Steagall, M., Tavares, T. and Barbosa, N. (2020). Communication Design Department Response to COVID-19: A study for online delivery in Blackboard. Unpublished report.
- Wang, F & Hannafin, M.J. (2005). Design-Based Research and Technology-Enhanced Learning Environments. *Educational Technology Research and Development*, 53(4), 5-23. p. 6).
- Wenger, E. (1998). *Communities of Practice. Learning, meaning, and identity*. USA: Cambridge University Press.

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