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Social design pedagogy and the UN SDGs: Bridging theory and practice to foster critical agency for sustainable futures

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Social design pedagogy and the UN SDGs: Bridging theory and practice to foster critical agency for sustainable futures

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Abstract

This paper reflects on designing, coordinating and teaching a third-year unit of study, Design for Social Impact, at The University of Sydney, Australia in 2020 and 2021 during the COVID-19 pandemic. It specifically comments on how the United Nations 17 Sustainable Development Goals (SDGs) are used to scaffold student projects in social design spaces. What we are interested in extracting from the entire unit of study is how design pedagogy for social change combines design theory and practice to deepen enquiry into what, how and why student social designers design. To do so, we pay specific attention to what constitutes social design and the role of a social designer. We discuss how design theory and practice might underpin a student's understanding and application of critical agency to their practice of design. Further, we draw specific attention to the unique challenges and complexities of the practice of social design for students in the context of COVID-19. This paper intends to contribute to the critical discussion of social design pedagogy and offer insights into how the SDGs might frame this pedagogy.

Keywords: Social design, Sustainability, UN SDGs, Pedagogy, Criticality

Introduction

To shape sustainable futures, it is imperative to educate the next generation of social designers on the agency of design, given how design acts upon the world and the world acts upon it. The key to these futures is an interrogation of the systems that shape them. The social and the theory and practice of social design is one system that can be examined to help secure sustainable futures. This paper focuses on our approach to bridge such theory with a social design practice in the delivery of a new undergraduate unit of study at The University of Sydney, titled Design for Social Impact. We turn to theory from prominent designer scholars such as Elizabeth Resnick, Jennifer Ritter, Cameron Tonkinwise, Tony Fry and Anne-Marie Willis in our approach. Further, we specifically unpack how the United Nations (UN) Sustainable Development Goals (SDGs) are used to underpin student projects in social design spaces. We touch on how the course and student outcomes were influenced by the challenges of the "next normal" of hybrid and online education. A focus is then brought to the most successful student projects, including a discussion of the role of interdisciplinarity for approaching the complex challenges that the SDGs and social design seek to address. We conclude with an exploration of interrogating systems through practice, how this relates to the SDGs and a reflection on what the next iteration of Design for Social Impact might look like.

Our intention here is not to dwell on the specificities of curricula or student outcomes but rather to explore how pedagogy can contribute to shaping the future of the social designer and subsequently their shaping of the world. We provide students with a glimpse into what designing beyond the market might look like and what ontologies and epistemologies of social design might underpin this. We argue that the approach taken offers a model of how social design pedagogy can move beyond the interrogation of systems through discussion and towards an interrogation through design action, underpinned by fostering critical agency in students.

Positioning design for social impact

Design for Social Impact is an undergraduate third-year, six-point unit of study offered as part of the Design Major at the Design Lab, School of Architecture, Design and Planning at The University of Sydney. A broad objective of the three-year design major is to equip students from a wide variety of disciplines with critical and theoretical understandings of design and design thinking skills to address and respond to complex problems. For example, the three-year design major combines units of study that focus on design theory (Principles of Design and Design Theory and Culture) with those that specifically focus on design practice, such as Design Thinking, Innovation Design Studio and Experience and Service Design.

Design for Social Impact seeks to merge the study of design theory and practice. It is a relatively new unit for the design major that was first offered in 2020 and again in 2021 during the COVID-19 pandemic. Students undertake the unit equipped with practical knowledge of design thinking methodologies and methods of user and human-centred design from previous units of study (Tomitsch et al., 2021). Design for Social Impact students are asked to consider the application of these methods to a social design space based on their choice of an SDG and draw on learnings from the unit to strengthen and critically deepen their design practice. Students are also explicitly encouraged to develop critical agency over their design thinking process rather than applying by rote design thinking methods learnt previously. Key to this directive is an aim to foster critical, future-focused designers who possess the ability and flexibility to respond to the unique needs of contextual social design projects and community-focused problem spaces.

Design for Social Impact encompasses 12 weeks of lecture and tutorial content that introduces students to the theory and practice of design for social change (Fig. 1). The unit is divided into four interrelated stages: (i) theoretical underpinnings, (ii) positioning practice, (iii) engaging practice and (iv) thinking forward.

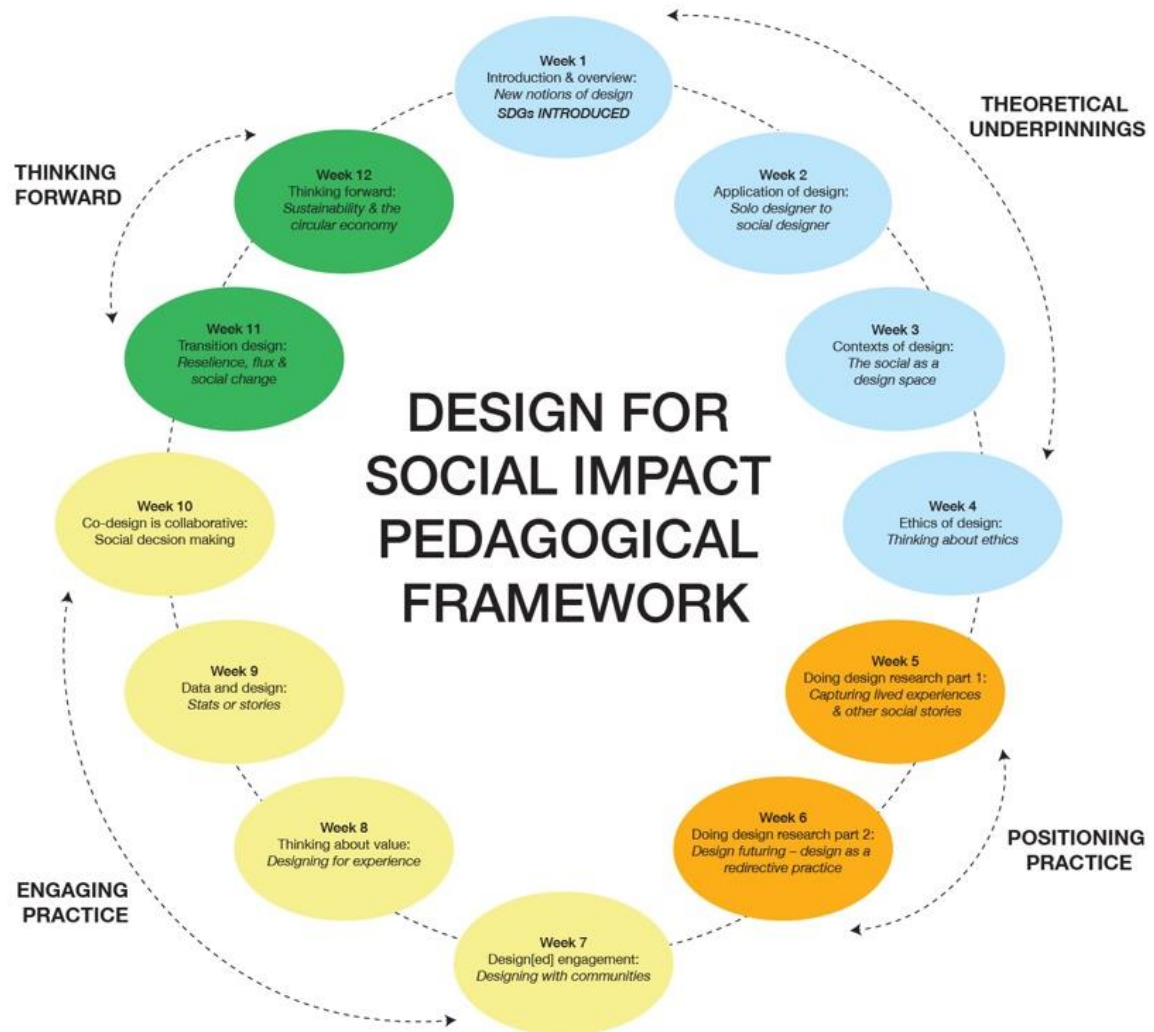


Figure 1: Pedagogical framework of Design for Social Impact highlighting the key stages – theoretical underpinnings, positioning practice, engaging practice and thinking forward – of the curricula.

Student success is measured by their performance across four assessments, as outlined in Figure 2. A full breakdown of these assessments can be found in the Appendix.

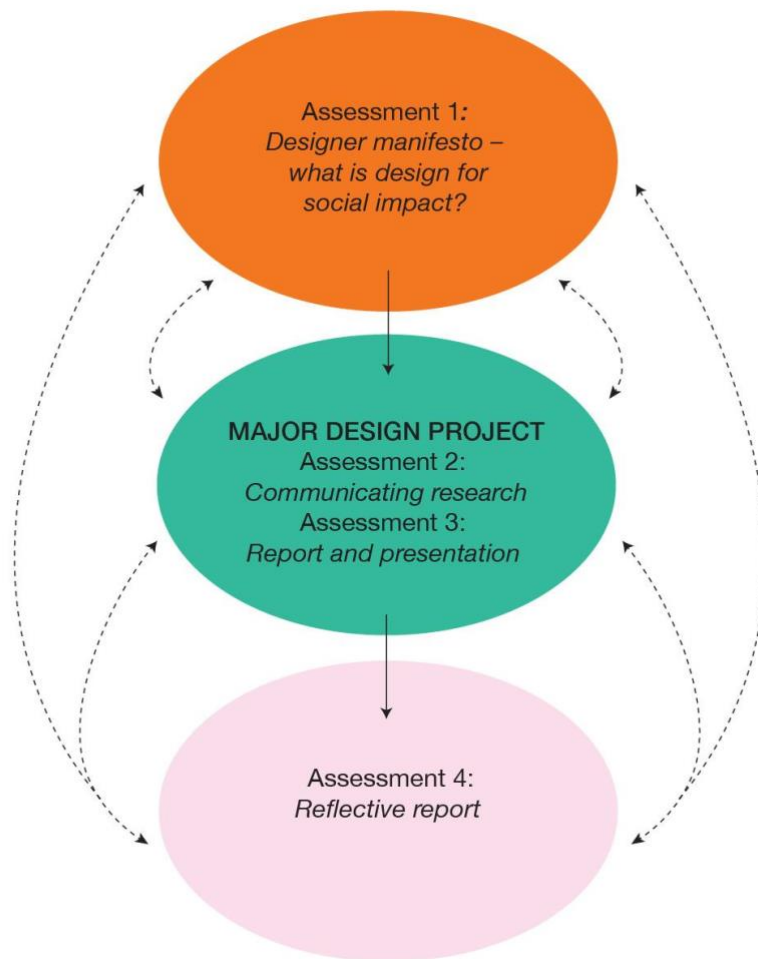


Figure 2: Assessment breakdown for Design for Social Impact. The centre arrows indicate the direction of the assessments; each assessment builds on the next. The dotted lines represent how each assessment likewise speaks to those preceding and following it so that there is movement across the learnings.

The UN SDGs are introduced in Week 1 and scaffold the unit’s lecture and tutorial content and assessments; they offer students a list of actionable, real-world and future-focused targets to base their major design project on. The goals act as a framework for student designers to work towards social outcomes that sustain our world, rather than designing within a delimited market, consumerist frame of reference. For context, the SDGs are a series of objectives ratified in 2015 by the UN General Assembly to assist in the creation of global sustainable futures by 2030 and beyond. In July 2017, a list of targets and indicators was added to the original goals to provide direction on how each can be achieved. The UN explicitly indicates that the goals are interrelated and bound; in other words, action about one goal will facilitate change in another (United Nations Development Programme, n.d). Further, the UN acknowledges the plurality of sustainable action and that “development must balance social, economic and environmental sustainability” (UNDP, n.d). The types of problems that the SDGs are designed to address are those that parallel the “wicked” or complex problems that are so often spoken about in design thinking (Buchanan, 1992).

The theoretical underpinnings of Design for Social Impact

Design for Social Impact begins with an explication on what constitutes social design. Students are

introduced to the idea that social impact design is a term used interchangeably with public-interest design, social design, socially responsive design, transformative design and humanitarian design (Resnick, 2019). What underpins the interchangeability of these terms is that, as Elizabeth Resnick articulates, “social design is the practice of design where the primary motivation is to promote positive social change within society” (Resnick, 2019, p. 3). To facilitate this change, social design is concerned with the interrogation of systems – economic, institutional, behavioural, moral/ethical, political, social – that constitute ways of being in and being shaped by the world (Rittner, n.d). Further, Cameron Tonkinwise argues that a schema of social design comprises “designing as a social activity [...] designing for/with non-commercial contexts [...]” and “design in the context of unmet needs” (Tonkinwise, 2019, p. 9–16). Tonkinwise also indicates that social design is contextual, “directed at the creation of systems and places that support particular kinds of social activities” (p. 11). In other words, Resnick, Rittner and Tonkinwise indicate that social design is systems-focused, participatory and engages beyond design for market-oriented needs to create change. Indeed, Fuad-Luke argues that

“The ability of design (and designers) in bringing different people together to codefine possibilities, cofind problems, coframe challenges and co-create new modes of action lies in participatory processes and tangible aesthetic experiences that create difference.”
(Fuad-Luke, 2021, p. 34)

As such, social design encompasses a broad set of motivations, approaches, audiences and stakeholders, and impacts (Armstrong et. al., 2014).

It is well accepted that design is crucial to how people shape, experience and navigate their worlds (Buchanan, 1992; Papanek, 1972). As Victor Margolin posits, design is not a fixed practice but a constantly evolving one (Margolin, 1995). Design and design practices that exist today are vastly different from those that populate human history. As people engage with the world in different social, technological, environmental and political ways, the designs they choose to make, implement and use reflect this change. To deepen enquiry into a critical discussion of social design, students are introduced to the idea that “design designs us” (Stewart, 2015 p. 290). In other words, humans design, and these designs configure people, places, and things into particular ways of being. Design scholars Tony Fry and Anne-Marie Willis refer to this as “ontological design” (Fry, 2009, p. 34; Willis, 2006). As Anne-Marie Willis suggests:

“Designing is fundamental to being human – we design, that is to say, we deliberate, plan and scheme in ways which prefigure our actions and makings – in turn, we are designed by our designing and by that which we have designed [...] We design our world, while our world acts back on us and designs us.”
(Willis, 2006, p. 80)

Further, students are exposed to Fry’s idea that design is a “redirective practice” capable of addressing how people, places and things are currently shaped, and redirecting them “towards the future with sustaining ability” (Fry, 2011, p. 77). We argue that the benefit of introducing the idea of ontological design and design as a redirective practice to social design students is twofold. Students can (i) consider and critique how design exerts a shaping force where it is employed and (ii) examine how what design shapes can be shifted towards sustainable, future-focused outcomes.

The social designer

In *Design for Social Impact*, we unpack with students the meaning of the “social designer” as it might exist in opposition to the market-focused designer. As Tonkinwise suggests, the practice of social design differs from the practice of design that produces commercial, market-driven outcomes (Tonkinwise, 2019). It is well accepted that designers design things for people to consume. Following the philosopher Pierre Bourdieu, “designers” are often referred to as mediators, the “new cultural intermediaries” or “cultural engineers” (Bourdieu, 1984; Nixon & du Gay, 2002; Forty, 1986). Building on Bourdieu’s work, Guy Julier argues that a designer’s role is that of a “taste creator” involved in “needs production”. Designers introduce new things to people and encourage them to think that they need them (Julier, 2014, p. 54). The designer’s job is predicated precisely on this manipulation of need. As Julier, amongst others, suggests, the designer’s role is also to generate value, both fiduciary value for a company’s shareholders and social value for a consumer (Crocker, 2016; Heskett, 2005; Julier, 2014). Recalling Tonkinwise’s (2019, p. 15) idea that social design is “design in the context of unmet needs”, students are asked to consider what these needs might be and how a social designer might differ from a designer who designs for the market in finding and addressing these needs.

Designer, urbanist and spatial justice activist Liz Ogbu provides an accessible pathway for students to understand what might constitute a social designer. A lecture given early in the semester introduces Ogbu’s TED Talk (2014), “Why I’m an architect that designs for social impact, not buildings”. Ogbu proposes that designers are (i) citizen designers working with (ii) citizen experts as (iii) translators and (iii) storytellers. What is made explicit here is that the practice of social design and the social designer is participatory; it is driven by designing with and for people. In other words, Ogbu stresses the importance of a designer’s engagement with “expert citizens”, who she explains have “the experience of living and working in a specific community” (Ogbu, 2014). As such, we encourage students to conduct research via interviews and focus groups to search for “expert citizens” to work with who can provide critical insights into the complex SDG problem spaces they were addressing. In turn, students are encouraged to position themselves as “citizen designers” (Ogbu, 2014).

Ogbu’s explication on what might constitute a social designer extends students’ pre-existing knowledge of the user and human-centred design methods. Here, design practice that focuses on uncovering and responding to the needs of a particular group of people underpins the lifespan of the design thinking process (Tomitsch et al., 2021). However, we challenge students to consider the terms ‘user’ or ‘consumer’ in the landscape of social design, suggesting that such nomenclature conflates the complexities and intricacies of being human to that of a person who uses/consumes a particular design. Although we suggest that the ‘human’ in human-centred design comes some way to address the view of a person as a ‘user’ or ‘consumer’, the unit encourages students to adopt Ogbu’s use of the word ‘citizen’ to describe the people social design projects seek to work with. Adopting the word ‘citizen’ rather than ‘user’ or ‘consumer’ also socially and contextually situates the people who student designers design with and for.

Integrating the UN SDGs into curricula: Positioning and engaging practice

Returning to the lens provided by ontological design and design as a redirective practice, students are encouraged to approach the SDGs as a series of objectives that seek to overcome how the world has been designed in unsustainable ways; they offer a series of directions to think about how things could be designed differently. Indeed, the SDGs acknowledge a world made unsustainable and provide a series of pathways to facilitate change. However, what this change is and how it will manifest is open to contestation. Students are asked to critically interrogate precisely what is meant by change. If designers, as Herbert Simon indicates (1996, p. 111), “devise courses of action that aim to move existing situations

to preferred ones”, we argue that designers must critically consider what underpins these courses of actions and what a preferred situation looks like. It is via this criticality that change might indeed come about, rather than a return of the same conditions the SDGs are seeking to overcome. Indeed, Fry (2011, p. 76) explicitly argues that design and designers “bonded to the economic status quo [...] must break radically with existing and dominant patterns.”

When defining the subject matter for their major design projects (Assessments 2 and 3, see Fig. 2 and Appendix), student groups were directed to pick one SDG and explore the various sub-problem spaces associated with this. For example, a group focused on SDG 4: Equity & Education chose to explore the sub-problem space of gender inequities in Australia’s education system. The SDGs chosen by the groups in the 2021 class of 45 students included the following:

- Goal 3: Good Health & Wellbeing – 1 group
- Goal 4: Equity & Education – 2 groups
- Goal 5: Gender Equality – 2 group
- Goal 10: Reduced Inequalities – 1 group
- Goal 11: Sustainable Cities & Communities – 1 group
- Goal 12: Responsible Consumption & Production – 2 groups

To reiterate, the SDGs worked to frame students’ understanding of social design as a redirective practice (Fry, 2009) in the sense that we encouraged them to use design interventions as a vessel to redirect the status quo towards these goals of sustainability. Our pedagogical project of redirection in this unit was to get students to see beyond the frame of reference of purely economic goals in design practice and towards social and environmental goals like the SDGs. We found that the SDGs worked well as common goals for redirective practice given they were ones that all students, no matter which culture or nationality they were from, could understand and were motivated to work towards. Indeed, all students had at least one goal that was interesting or personally relevant to them.

Social design education in the ‘next normal’

The challenges posed by the COVID-19 pandemic disrupted the planned delivery of this unit of study yet created an opportunity for pedagogical innovation within higher education’s ‘next normal’. That is, the post-COVID era of reshaped ways of doing and being and the aftermath of “the great onlineing” (Bozkurt & Sharma, 2020). The unit was first delivered in three months from March 2020, which saw the entirety of teaching transitioned to online due to the state-sanctioned conditions imposed by the first wave of the COVID-19 pandemic in Australia. The following year, 2021, we faced a new set of circumstances that entailed we delivered the course simultaneously in three modes: in person, online and hybrid. Whilst transitioning a course based heavily on community engagement to online and hybrid formats posed novel challenges, an interesting set of opportunities subsequently arose.

In response to the conditions imposed by the COVID-19 pandemic, virtual communication tools were employed. We used Zoom to conduct online lectures and tutorials and Miro, an online whiteboard application, to foster teacher-to-student and peer-to-peer collaboration. The latter was particularly useful in the case of hybrid delivery in 2021, as those students participating in person could collaborate in a shared visual space with those online. We used this to foster in-class conversations. Likewise, students were able to complete tutorial activities such as system mapping (Tomitsch et al., 2021) to foster understanding of cause-and-effect relationships in complex problems (Lich et. al., 2017), such as that of the SDGs, in this virtual collaboration and co-learning environment. Following these activities, we encouraged

students to reflect and review the approach of others on Miro. Whilst these tools enabled the effective delivery of this unit in parallel formats, there is still a significant opportunity for improvement as these technologies develop.

As DiSalvo et al. (2012) argue, a central pillar of participatory design practice is community engagement. As such, the design of this unit focused heavily on this activity. This presented challenges for students, predominantly because they were often geographically distanced from the communities they were designing for. However, it also enabled students to widen the scope of communities that they could design for, given their new familiarity with virtual communication tools. We were impressed to see, for example, one group of students based in Sydney using Zoom to conduct semi-structured interviews with stakeholders in the Australian Northern Territory's indigenous tourism community, who discussed the unique challenges they faced in light of the travel restrictions caused by the COVID-19 pandemic in 2020 and 2021. Another group of students from South Korea, China and Australia chose to focus on the challenge of gender inequality, which they believed to be a shared issue; they were able to learn about this issue in their teammates' countries. Our intentions behind integrating the SDGs into the Design for Social Impact curricula were to broaden students' outlook and, as Kopnina (2020) recommends, emphasise a planetary ethic. It was thus reassuring to see students taking the initiative to engage with communities beyond their everyday sphere of interaction.

An advantage of teaching in hybrid and online formats was that we were able to create an international classroom of many nationalities and geographies, whilst still aiding students to ground their design practice in community engagement. This 'next normal' of social design education reflects Irwin et. al.'s idea of "place-based, globally networked" solutions being central in design for sustainable transitions (2015). What is important to note here is that transition design encompasses a mindset that is at once both communities-focused and globally minded. This dual perspective is something we aimed to integrate into the curricula, specifically through drawing upon the SDGs as a project framework. Students were encouraged to (i) select and research one of the 17 SDGs, (ii) consider and choose a specific target of their chosen SDG and (iii) narrow this target to a micro problem space that is place-based and specific to a community that they could connect with. As such, we aimed to connect their locally focused design solutions to globally minded long-term visions. We were thus able to aid students in learning through experience how a designer can play the role of mediator, as highlighted by Howard and Melles (2011), connecting the local to global transitions.

A limitation of this approach is that problems can arise when students, as designers, are abstracted from the communities they are designing for. In particular, groups of students found it difficult to connect with relevant communities due to several constraints, primarily geographical. They were limited in the research methods they could draw upon, including co-design methods and ethnographic methods such as participatory observation, which in many cases involves observing people in physical contexts (Clark et al., 2007). For this type of research, such contextual behaviour is important to understand given it can provide students with a deeper understanding of the lived experiences of those they are designing for (Prosek & Gibson, 2021). Whilst some qualitative research may be conducted online, in many cases this gave students a limited window into participants' lives, leading to designs that were not informed by the complex contexts of communities. The risk here, Janzer and Weinstein (2014) argue, is that a design practice not informed by these complex contexts may be seen as a form of neocolonialism, where the designer exercises control or a shaping force over a community they are abstracted from. To mitigate this, we ensured that students were aware of this risk and were critically reflective of how they were going

about designing and their subsequent outcomes. Where possible, we encouraged them to continually engage with and in community-oriented contexts.

In summation, this 'next normal' – consisting of a learning mode trifecta (in-person, online and hybrid) – is no doubt shaping the future of social design education. Opportunity remains for continued iteration.

Interdisciplinarity for sustainability

As Menken et. al. (2016) argue, the complex questions and problems of the type that social design practice addresses require an interdisciplinary approach. This unit of study is open not only to students from the Design faculty but also any undergraduate student at The University of Sydney with assumed prior knowledge in design methodologies and methods. A benefit of this is that the cohort of students is truly interdisciplinary, spanning academic backgrounds such as economics, biology, anthropology, visual arts, psychology and marketing. Most student project groups were composed of at least three different disciplines. It was thus interesting to see the variety of perspectives drawn upon when approaching the SDGs. For example, one group designing an experience for train stations drew upon their knowledge of both behavioural psychology and biology to create a biophilic installation that elicited feelings of increased safety when travelling.

Tonkinwise (2013, p. 219) provides a list of traits for the contemporary designer which include an understanding of histories, anthropologies, psychology and living systems. These, as inspired by Buchanan (2001), realign design with the humanities, in addition to techno-scientific disciplines. We too agree that bringing a humanities perspective into design pedagogy is essential given this practice is inherently social. Hence, much of our teaching touched on and incorporated ways of knowing through the methodologies of the humanities, so that students could develop a richer understanding of the mechanics of systems, cultures, institutions, and individuals that they were designing for and from. This grounding in the humanities was successful in challenging student designers to mediate between mindsets of making/doing and reflecting/enquiring.

Such an approach is critical to aiding students in navigating the post-normal times we live in, which Sardar (2010) argues is characterised by three Cs: complexity, chaos, and contradictions. These times are post-normal in the sense that we find ourselves in a transitional age, in which we are unable to return to a known past and are yet to carve out a known future of the kind that is desirable, valued, attainable or sustainable (Sardar, 2010). Hence, Tonkinwise (2017) argues that design practice in universities must speak outside of its discipline, articulating experiments broadly to stakeholders, and go against the insular tendencies of institutions in light of these post-normal transitions. As such, it is crucial to foster interdisciplinary classrooms and interdisciplinary practices for design pedagogy.

Interrogating systems through practice

A central idea we sought to communicate to students in the delivery of this unit is the relationship between social design practice and the interrogation of systems, as highlighted by Rittner (2020). This is not to say that we sought to dismantle in its entirety that which is pre-existing. Rather, we actively encouraged students to locate and address through design those systemic forces most problematic in light of their chosen SDGs.

It is one thing to talk about interrogating systems by design and another to do it. A challenge we faced in the delivery of this unit of study was creating an effective bridge between theory and practice, one from which students could digest and take actionable steps. In their end-of-semester Assessment 4: Reflective

Report, many students reported that “fear of not doing it right” was a significant challenge, as was resilience in the face of navigating complexities. Many of these students tried to tackle too much of their SDG at once, rather than focusing on a very specific aspect and stakeholder group to design for. As discussed, those students who were most successful were the ones who were able to be specific and focused in their design efforts, whilst simultaneously connecting to the bigger picture of how their designs would contribute to interrogating broader systemic forces.

A way in which we endeavoured to help students address the latter was through educating them about the practice of “design futuring”. The term “design futuring” is attributed to Fry (2009) and is a design epistemology he also refers to as “design in the medium of time”. Fry suggests that

“...To design in time is not to claim an ability to see into the future, rather it involves examining in detail what is likely to, or could shape future positive or negative possibilities and thereafter deciding what should, or should not be factored into design activity on a cautionary basis ...”.
(Fry, 2009, p. 58)

We encouraged students from the ideation phase right through to concept refinement to imagine the future and possible worlds in which their design contributes to social change, envisioning the role that it might play in this narrative. Students were introduced to methods of futuring practice from The University of Sydney, Design Lab’s textbook *Design Think Make Break Repeat*, 2nd edition (2021). Methods included: Backcasting (p. 26); Design timescapes (p. 62); Scenario-based thinking (p. 134); and Speculating preferred futures (p. 146) to facilitate their design practice in this space. Connecting this practice to their SDG was critical to student success. The most compelling design outcomes were those grounded in the narrative concerning the critical role design would play in re-shaping the future, catalysing transitions and redirecting systems.

The students who were most successful in their projects were those who were able to navigate the complexities of their chosen problem with critical depth. Most groups conducted semi-structured interviews as a primary method in their qualitative research, which supported the uncovering of “unmet needs” (Tonkinwise, 2019, p. 15). Successful students were also those who effectively negotiated between an understanding of system-wide forces associated with their SDGs and a narrow definition of the specific aspect of it they sought to design for. For example, many engaged in processes of system mapping introduced at the start of their projects to better understand their SDG problem space and followed this with a narrowing-down through research of the lived experiences of a particular stakeholder group within that system. Once a specific research question was defined, they did not let go of an understanding of how that question operates systemically in the space of their SDG. This entailed a negotiation between the systemic/narrow parallels and the global/local focus central to transition design (Irwin et. al., 2015), as discussed previously, in addition to the movement between divergent/convergent, constructive/deconstructive styles of thinking in the design process. We argue that students who are most strongly disposed to the practice of social design are those who can effectively negotiate between broad-based and narrowed-down perspectives on the complex problems they address and switch between the two where necessary in their process. In future iterations of this unit of study, we will seek to continue to develop further methods of teaching that help to foster such negotiation of perspective.

We cannot mention the interrogation of systems by design without interrogating the systems through which we design. Most students entered this unit with a strong grounding in design thinking methods, taught as one of their core units of study for the design major. As such, we noticed in the 2020 offering

of the unit that many students gravitated towards a familiar process of designing without critical thought on why they were employing its methods. Concerned that students were not taking agency over their design processes, we sought to inform them of critical perspectives on design thinking, for instance, Janzer and Weinstein's (2014) argument that designers must be sensitive to the complex social and cultural cues of systemic problems or they risk contributing to a form of design neocolonialism, as previously discussed. Likewise, as Rittner (2020) argues, well-branded design frameworks such as that of IDEO are taken as gospel and "too often taught with credulity rather than criticality." This is not to say that these processes are wrong but rather that design education should seek to interrogate those systems through which designers produce and acquire knowledge. As such, the aim here was not dissuasion but rather encouraging critical agency over the students' design practice. It is a shift from branded methodology to critical pedagogy, as Rittner (2020) argues:

"... We cannot take this work lightly. The design curriculum frames the designer's ability not only to apply a set of tools for building things but also a set of principles for applying social values to the things they make. The 'thingness' of design does not exist absent of a social construct that is laden with values. Design is object and intention. It is our beliefs made manifest ...".

(Rittner, 2020, p. 14)

The next iteration

There are elements of this unit of study which will be iterated upon in its continued delivery in 2022. A significant degree of these stem from the fact that we are still adapting to this 'next normal' of hybrid and online social design education, as discussed previously. Aside from this, some opportunities for iteration are as follows.

First, many students were challenged by the short time frame of their major design projects. Despite the unit running for a total of 12 weeks, the bulk of their project work was done in the latter half. This was overwhelming for some, as students have to juggle the commitments of other units of study alongside things like part-time work and study-work-life balance. This meant that some student projects were not as resolved or showing a level of depth that we would have hoped for. Some projects suffered from mismanagement of time with the bulk of student effort spent in one phase of their design process rather than another. In the future, we hope to explore ways of extending the time frame of their projects, perhaps by linking this first semester unit of study with a second semester sequel – Design for Transitions or Design for Futures, for example. Students could continue resolving their design concepts in response to the SDGs whilst simultaneously deepening their engagement with theory. It would also be interesting to explore with students what a future beyond the SDGs (targeted for 2030) might look like.

Second, we reflect that the title of this unit of study, Design for Social Impact, is no longer fitting. This is because the word 'impact' necessitates a force or exertion of power over another, reminiscent of Janzer and Weinstein's critique of design thinking as a neocolonial practice (2014), which is not the frame through which we wish to educate future designers. Rather, we propose Design for Social Change or Design for Social Value, the latter as proposed by Rittner (2020) as a preferred title for future iterations of this unit.

Third, the focus on participatory design in this unit resonated with students in theory, but they were often challenged to engage with this in practice. This was both due to the previously discussed issue of time constraints, in addition to students not having access or the courage to connect with relevant 'citizen experts' for whom they wished to design with and for. Moving forward, we do not seek to dissuade students from designing with and for communities but rather to continuously encourage them to be aware

of and navigate the complexities of their positionality as designers. It is necessary to remind students that this unit is simply a taster of what social design in their post-university journeys could look like.

Fourth, the notion of interrogating systems through practice leads the call for an increasingly interdisciplinary approach. In the next iteration, we seek to further explore and test what the pedagogy of interrogating systems through design practice might look like. We are especially interested in widening the community of Design for Social Impact, for example by engaging with students and academics from other disciplines such as sociology, philosophy and biological science either at The University of Sydney or other universities.

Overall, the unit of study aims to provide students with a glimpse into what designing beyond the market could look like and what ontologies and epistemologies of social design might underpin this. We provide students with the tools to design for the narratives of an ontological, redirective and sustainable future, grounded in the vision of the SDGs and beyond. Social design is a vessel through which we can move beyond the interrogation of systems through discussion and towards an interrogation through design action, underpinned by critical agency. We hope that as students venture beyond university and carve their design practice or contribute to the design practice of others, in whatever domain this may be, these lessons will stay with them well into the preferred futures they create.

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Appendix

Design for Social Impact assessment breakdown

Assessment 1:
Designer manifesto –
what is design for
social impact?
*20% of final grade

As designers, we are often called on to articulate what we do. This assessment asks you to write a 1000-word manifesto on the question "What is design for social impact?" The manifesto should reference academic sources and be cited using the APA system of referencing. You are permitted to present your manifesto in any written and visual format you think best communicates your thoughts.

Major Design Project

PART 1: DESIGN RESEARCH

Pick a theme from the UN Sustainable Development Goals. Decide how you are going to define your theme. The choice you make underpins your entire research project so make sure it is something you can sustain—it needs to be broad enough but also pointed enough for you to create a designed response, outcome and/or intervention. Consider why this issue is important to you and how you are affected. Read widely and draw on relevant academic literature to determine the current state of play regarding your theme. Investigate the current social, economic, cultural and/or environmental impact/s of your theme. You can draw on popular literature, journalism and social media if you think they will help your understanding. However, their inclusions need to be Justified and supported by academic literature.

Investigate what kind of work has already been done by designers to challenge, address, or raise awareness and interest in this problem? Were there any outcomes; i.e. was there a response within society as a result of the design? Based on your research, devise a problem statement you will address in Part 2 of the Major Design Project.

Design a 10-minute presentation that clearly communicates your groups understanding of your chosen theme, its effects on people, places and things, and your problem statement.

Assessment 2:
Communicating research
*20% of final grade

PART 2: DESIGN IDEAS WITH A FUTURE FOCUS

Begin idea generation based on your Part 1 research and problem statement. Consider how you can draw on the idea generation skills learned over your previous years of study. What methods will help you develop your ideas? Narrow your ideas down to the best three. Choose a time frame –e.g., 1, year 5 years, 10 years, 20 years—you envisage your concepts will need to create social change. This will be basis of the futuring part of your project. Provide a detailed rationale for each concept based on your Part 1 research and problem statement and time frame. Consider what you would need to make your concepts work e.g., would you need to work with specific organisations or funding bodies? Succinctly present and communicate your best three ideas to class for feedback. After feedback, collectively decide on the best idea to take forward into Part 3: Major Design Project.

PART 3: DESIGN MAKE

Develop, prototype, test and refine the selected idea to produce a design response, outcome and/or intervention. Again, consider how your design responds to your problem statement, research and the time frame you have chosen.

Produce a visual report of no more than 5000 words that shares your design response(outcome, response, intervention)and your design process. Your report should clearly articulate the ways in which your design responds to your UN Sustainable Development Goal and your social issue over a period of time of your choosing and answers your problem statement. Deliver a succinct and creative 10-minute verbal or video presentation together with your group to present your design response. Indicate how you envisage your design will create social change over the time period you chose in part 2.

Assessment 3:
Report & presentation
*40% of final grade

Reflective report
*20% of final grade

Design and write a 1500–2000 word reflective report that examines your personal response to your Major Design Project. You are required to move beyond describing your experiences, to critically reflect upon your understanding of those experiences.

Key questions to respond to are:

- What was your contribution to the project?
- What were the most successful and unsuccessful parts of project? Why?
- What were the unexpected parts of the project and how did you respond to them?
- How could the design concept be improved in the future?
- What are your suggestions for how a similar project could be improved on in the future?
- What have you learned about social design by doing the project?

Keep in mind a well-crafted reflective report is a great way for a potential employee or stakeholder to see how you work individually and as part of a team. Consider how you are clearly and quickly communicating this information. Does all of it need to be text based?

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