

Workshops for Better Worlds: Exploring the Value-Action Gap in Sustainable Graphic Design Practice

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the degree of

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under the supervision of
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CERTIFICATE OF ORIGINAL AUTHORSHIP

I, **Theadora Blythe Clark Kable**, declare that this thesis is submitted in fulfilment of the requirements for the award of Doctor of Philosophy, in the School of Design, Faculty of Design and Society at the University of Technology Sydney.

This thesis is wholly my own work unless otherwise referenced or acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

This document has not been submitted for qualifications at any other academic institution.

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**WORKSHOPS FOR
BETTER WORLDS:
EXPLORING THE
VALUE-ACTION GAP
IN SUSTAINABLE GRAPHIC
DESIGN PRACTICE**

THEADORA BLYTHE CLARK KABLE

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TABLE OF CONTENTS

ix **ABSTRACT**

xi **LIST OF FIGURES**

xiv **GLOSSARY**

2 **INTRODUCTION: THE PROMISED “BETTER WORLD(S)”**

5 Summary of the Research Process

14 **1. SURVEY OF PRACTICE: SEEING, KNOWING, AND
DOING SUSTAINABLE GRAPHIC DESIGN PRACTICE**

14 1.1. A transition from “doing things better” and “doing better
things” to “seeing things differently”

21 1.2. The Value-Action Gap and Seeing, Knowing, and Doing

25 1.3. Australian Industry as a Constellation of Communities
of Practice

29 1.4. Sustainable Design in Australian Communities of Practice

42 1.5. Review of International Resources for Sustainable
Design Practice

47 1.6. The Problem with Garbage Information: Misinformation for
Our Consumption and Comfort

55 1.7. Conclusion

57	2.	LITERATURE REVIEW: HOW TO TALK ABOUT SUSTAINABLE GRAPHIC DESIGN PRACTICE IN A WAY THAT MAKES A DIFFERENCE
58	2.1.	Criticality
59	2.2.	Situated Knowledge, Situated Change
61	2.3.	Design Justice
63	2.4.	Constructive Emotional Responses
66	2.5.	Envisaging Changed Practices through Worldbuilding
69	2.6.	Workshops for Sustainability and Changed Practices
73	2.7.	Conclusion
77	3.	METHODOLOGY
78	3.1.	Participatory Design
80	3.2.	Workshops
82	3.2.1.	Before Workshops: Preparation and Context
84	3.2.2.	During Workshop Interactions
85	3.2.2.1.	Workshop Scripts
88	3.2.2.2.	Design, Play, and Playful Design
91	3.2.3.	Synthesis and Evaluation
92	3.3.	Conclusion
96	4.	SCOPING WORKSHOPS
96	4.1.	Description of the Participant Experience
98	4.2.	Aims
100	4.3.	Structure
103	4.4.	Findings
104	4.4.1.	Sustainable Practices
107	4.4.2.	The Scoping Workshop as Method
111	4.5.	Shift to Designing for Emerging Practitioners

115	5.	BUILDING THE BETTER WORLDS WORKSHOPS
115	5.1.	Description of the Participant Experience
121	5.1.1.	Introduction
122	5.2.	Format
123	5.2.1.	Documentation and Analysis Plan
123	5.2.2.	Design and Materiality
128	5.3.	Participants
128	5.3.1.	Group Sizes
129	5.3.2.	Inclusion and Exclusion
130	5.4.	Findings from the Better Worlds Workshops Prototype’s Design and Experience
131	5.4.1.	Complexity and Clarity in Ecological Literacy Education
142	5.4.2.	Awareness of the Workshops as Research
144	5.4.3.	Scripting for Incomplete or Unexpected Action
149	5.4.4.	The Importance of Conversation
152	5.4.5.	Common Practices, Common Language
156	5.4.6.	Visual Communicators Communicate Visually
162	5.5.	Conclusion
164	6.	FINDINGS: THE FIVE FACTORS FOR BETTER WORLDS
165	6.1.	Sustainability Education
173	6.2.	Communities of Practice
175	6.3.	Situated Knowledge
178	6.4.	Speculate Alternative Practices
186	6.5.	Ethics of Care
192	6.6.	Conclusion
195	7.	DISCUSSION AND IMPLICATIONS
196	7.1.	Reaching Better Worlds through the Five Factors
197	7.1.1.	Provocations

198	7.2.	The Refined Better Worlds Workshops
198	7.2.1.	Publication
201	7.2.2.	Implications
206	7.3.	Conclusion

208 REFERENCES

229 APPENDICES

229	A.	AGDA “Ecological Responsibility” Winners and Finalists (2016–2021)
235	B.	Pattern-Finding in the 2021 Graphic Design Course Content Description of Ten Universities
251	C.	‘The Problem with Garbage Information’ Investigation
255	D.	Progressive Overview Maps
259	E.	Better Worlds Workshops Experiment Log Extracts
265	F.	Scoping Workshop Guidebook
271	G.	Participant Information Sheet
273	H.	Informed Ethics Consent Form
276	I.	Pre-Workshop Survey
277	J.	Workshop 1 - <i>Engaging Criticality</i>
285	K.	<i>The Small Handbook</i>
289	L.	Workshop 2 - <i>Engaging Hope</i>
297	M.	Workshop 3 - <i>Paying it Forward</i>
308	N.	First Post-Workshop Survey
308	O.	Second Post-Workshop Survey
309	P.	Participants’ Proposed Better Worlds Workshops Redesigns
312	Q.	Workshop 3 Group C comments on Communities of Practice
313	R.	Participants’ Workshop 3 Proposed Modules
325	S.	Workshop Survey Responses related to Communities of Practice

ABSTRACT

As the impacts of climate change on the planet worsen, there are increasing calls for graphic designers to engage more responsibly with the ecological costs of their professional practice. However, international research reveals a *value-action gap* in graphic design practice: while sustainability is recognised as worthwhile, it is not yet seen as standard practice. This practice-based research investigates whether this value-action gap exists in an Australian graphic design context, why this gap may be occurring, and what might be done about it.

A review of literature, industry practice, and design education explored how Australian graphic designers are currently engaging with and defining sustainable design practices. The review established that a value-action gap exists and that there is a need to engage designers with ecological literacy, practice critiques, and hopeful futures. Therefore, participatory workshops were introduced as a method for developing strategies and tools to build pathways to action and a sense of agency among Australian designers.

A scoping workshop with three Sydney-based design studios, identified by exploring Australian industry awards and community discussion regarding sustainable design work, found that knowledge and access to sustainable practices are unequally distributed among practitioners, with particular disadvantages identified for emerging designers. Following this, a suite of three participatory workshops were iteratively designed for and tested with emerging designers.

Insights from this participatory design process resulted in two contributions to knowledge in the field of graphic design:

1. The Five Factors for Better Worlds: insights to guide sustainability education for graphic designers and educators.
2. The Better Worlds Workshops: a resource through which working designers develop pathways to action and a sense of agency within their communities of practice.

The Five Factors for Better Worlds and the Better Worlds Workshops enable designers to bridge the sustainable design value-action gap. These contributions are actionable, immediately applicable, and specifically help practitioners and researchers see, know, and do the work needed to bring us to better worlds.

LIST OF FIGURES

- 6 **Figure 1.** Research Diagram
- 10 **Figure 2.** Structure of the Better Worlds Workshops Prototype
- 23 **Figure 3.** Three Parts of a Paradigm (adapted from Boehnert, 2018, following Sterling, 2003)
- 27 **Figure 4.** Design Profession as Areas of Practice (Visualisation)
- 27 **Figure 5.** Design Profession as a Constellation of Communities of Practice (Visualisation)
- 32 **Figure 6.** Recent Member Articles on the AGDA Website as at 12 August 2022
- 32 **Figure 7.** Recent Member Articles on the AGDA Website as at 11 June 2025
- 33 **Figure 8.** All “Sustainability” Articles on the AGDA Website as at 12 August 2022
- 33 **Figure 9.** All “Sustainability” Articles on the AGDA Website as at 11 June 2025
- 34 **Figure 10.** Previous “Sustainability” AGDA Events on the AGDA Website as at 12 August 2022
- 34 **Figure 11.** Upcoming “Sustainability” AGDA Events on the AGDA Website as at 11 June 2025
- 35 **Figure 12.** All Previous AGDA Events from the Previous Six Months on the AGDA Website as at 11 June 2025
- 36 **Figure 13.** AGDA Code of Ethics as at 12 August 2022
- 37 **Figure 14.** AGDA Code of Ethics as at 11 June 2025

40	Figure 15. Patterns in 10 Graphic Design Course Content Descriptions, 2021
41	Figure 16. Excerpts from Appendix B. Pattern-Finding in the 2021 Graphic Design Course Content Description of Ten Universities
44	Figure 17. International “Sustainable” “Design” Resources
46	Figure 18. Sustainable Design Resources Categorised
82	Figure 19. What Happens in a Workshop
83	Figure 20. Scoping Workshop Aims
83	Figure 21. Better Worlds Workshops Prototype Aims
91	Figure 22. Workshop Data Collection
95	Figure 23. Illustration of a Scoping Workshop Session
99	Figure 24. 2022 Research Diagram
101	Figure 25. Image of the Scoping Workshop Guidebook
108	Figure 26. Synthesised Project Timeline from Scoping Maps of Practice
114	Figure 27. Illustration of a Better Worlds Workshops Prototype Session
124	Figure 28. Tactile Workshop Materials
125	Figure 29. Binding for the Better Worlds Workshops Prototype
127	Figure 30. <i>Logbook</i> Module Pages
134	Figure 31. Completed <i>Storyworld Rules</i> Module Pages
138	Figure 32. Iterated Versions of the <i>Small Handbook</i>
145	Figure 33. Diagram of Intended Action for the <i>Map of Practices</i> Module
147	Figure 34. Similarities and Differences in the Three Surveys
154	Figure 35. <i>Map of Practices</i> Module Completed by Group C
155	Figure 36. <i>Design Fiction</i> Module Completed by Group A-I
157	Figure 37. Completed <i>Object of Care</i> Modules
159	Figure 38. Illustrations extracted from Group A’s <i>Map of Practices</i> Module (Stephanie, Crystal, Melissa)

- 167 **Figure 39.** Better Worlds Workshops Prototype *Small Handbook*
- 170 **Figure 40.** Responses to “How sustainable is your practice on a scale of 0–10?”
- 174 **Figure 41.** Engagement with Communities of Practice
- 181 **Figure 42.** *Storyworld Rules* from Workshop 2 Group B
- 183 **Figure 43.** Corey’s *Letters from Better Worlds*
- 199 **Figure 44.** Website Site plan
- 202 **Figure 45.** Refined Better Worlds Workshop 2: Hope
- 203 **Figure 46.** Refined Better Worlds Workshops About Page
- 204 **Figure 47.** Refined Better Worlds Workshops *Small Handbook*
- 205 **Figure 48.** Refined Better Worlds Workshops Scripts

GLOSSARY

This glossary is intended to assist the reader in understanding the context of the research. First instances of each term in the thesis will be styled like *this**

GRAPHIC DESIGN

Initial discussion in the Introduction (p. 2).

Graphic design, hereafter *design*, in this thesis refers to the production of visual communication across print-, motion-, interaction- and web-design. A professional graphic designer purposefully learns about design in order to better their practices, whether through a degree, self-directed learning such as online tutorials, or by engaging with a community of practice.

Design is a field influenced significantly by technological change. Over the course of this doctoral research, between September 2021 and August 2025, Non-Fungible Tokens rose and fell from prominence and now Generative AI is on the rise. I have chosen to focus on the above core aspects of design, the informed implementation of visual communication by a human, in order to restrain my research within a manageable scope.

ECOLOGICAL SUSTAINABILITY

Initial discussion in Section 1.1 (p. 14).

This research is focusing on the realm of ecological sustainability and design, meaning the material and quantifiable impacts of design practices and products on the environment. When the phrase *more sustainable practices* is used, this refers to the increased inclusion of ecological sustainability in a designer's practices.

VALUE-ACTION GAP

Initial discussion in Section 1.2 (p. 21).

The value-action gap refers to the difference between the espoused desires of an individual or group and their actual practices. The value-action gap is reinforced by factors including an over-emphasis on education alone, present messaging approaches, and the restrictions that practitioners face.

COMMUNITIES OF PRACTICE

Initial discussion in Section 1.3 (p. 25).

Communities of practice, originating from practice theory, are groups of people who share common work activities and contexts and whose actions are shaped through regular interaction. The shared knowledge, practices, and procedures of these communities bind them, sometimes in spite of their personal convictions or values.

SITUATED KNOWLEDGE

Initial discussion in Section 2.2 (p. 59).

Situated knowledge establishes that each person draws their expertise from their singular lived experiences and that knowledge must be understood within the unique context and practices of each individual. The articulation of situated knowledge focuses on the development of particular and specific insights grounded in lived experience, while being explicit about the creator's standpoint and the context they exist within.

PRACTICE ARCHITECTURE

Initial discussion in Section 2.2 (p. 59).

Practice architecture, originating from practice theory, refers to the complex factors that affect how people work. These factors affect how practitioners understand their work, how practices are done, and how practitioners relate to one another. Practice architectures include cultural knowledge, social interactions, political messages, economic factors, and geographic locations. This provides

a frame to discuss the ways in which practices are not individual, objective, or isolated operations.

WORLDBUILDING

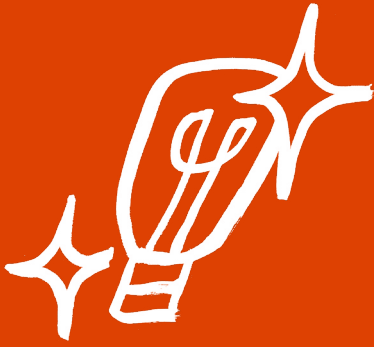
Initial discussion in Section 2.5 (p. 66).

Worldbuilding, as the creation of a fictional setting for a story, can be used to examine the distance and difference between the real world and a preferred or different speculative storyworld. Within this research, it is used in workshop exercises which invite participants to collaboratively create storyworlds that allow them to speculate alternate futures. This provides an avenue both for forming critiques of practice and for developing future-thinking pathways to action.

CRITICAL DOCUMENTATION

Initial discussion in Section 3.2.3 (p. 91).

Critical documentation is an approach to design research which is performed iteratively, reflectively, and is well-recorded, in order to build a credible evidence base for scholarly research from design experiments.



**INTRODUCTION:
THE PROMISED
“BETTER WORLD(S)”**

INTRODUCTION: THE PROMISED “BETTER WORLD(S)”

When I was just a few weeks into my Bachelor of Design in Visual Communication, I was set a homework task that changed how I looked at the world around me. It was a casual task, likely intended to challenge new students to move beyond traditional, glossy magazine-style *graphic design** and to recognise design in the everyday world around us. The instructions for the task were something akin to:

As soon as you wake up tomorrow, take note of everything around you that contains a designed graphic; the logo on your alarm clock, the hierarchy of the bus stop sign, the newspaper overall and each of the individual advertisements inside it, the washing instruction symbols on the tag of your shirt.

The exercise broadened my awareness of the world around me as constructed and informed daily by thousands of design choices. It helped me view design as something embedded in culture in often unseen or unnoticed ways. As Jessica Helfand wrote regarding the impact of seminal designer Paul Rand: “Graphic design is everywhere, touching everything we do, everything we see, everything we buy ... it is the art of visualizing ideas” (2001, p. 137).

Graphic designers methodically and purposefully use the elements of visual language—“scale, rhythm, color, hierarchy, grids, and diagrammatic relationships” (Lupton & Phillips, 2015, p. 6)—to affect an audience’s understanding of the world around them. Yet graphic designers do more than simply making visuals; they engage with the “problem-solving practice that meets human needs and

desires” (Boehnert, 2018, p. 13) through the production of identity and messaging across websites, applications, printed objects, motion designs, signage, and more. These are “visual devices as meaningful mediated communication” (Harland, 2015, p. 370), constructed with an “expertise in manipulating text and image to communicate” (Grocott, 2011, p. 35). This is a process concerned with the production of value through the development of products and their value augmentation through effective messaging and communication (Julier, 2006).

As I continued my studies, I frequently came across the idea that design could help build a *better world*, often meaning a more just and sustainable one:

Designers can create a *better world*” (Benson & Perullo, 2017, p. 109); “a *better world* may be on the horizon if we work towards it” (Zaidi, 2019, p. 22); “[designing utopias works] towards a never-finished project of building a *better world*” (Baumann, 2018, p. 303); “This *better world* was often described as transparent, ethical, and socially and environmentally conscious” (Kadas, 2018, p. 115); “work together to create a *better world*” (Walker et al., 2013, p. 376); “we will use whatever means possible to create these *better worlds*” (Bleecker, 2009, p. 86); “build a *better world*, a world where many worlds fit; ... of collective liberation and ecological sustainability” (Costanza-Chock, 2020, p. xvii).

At the time, it felt true; I was immersed in an educational culture that prioritised understanding my personal values as a designer and emphasised the role of graphic design in mediating messaging and communicating knowledge. This idea was so appealing to me that I made it the focal point of my research when undertaking my Honours degree in 2019. Using a participatory design workshop approach, I explored how emerging designers could imagine their preferred futures and begin to work towards them. This kernel of interest formed the initial foundation of the research described in this thesis.

When I began working as a designer, however, I found the pursuit of a better world through design more difficult. In particular, I struggled with

the enactment of sustainable graphic design, a pursuit that as a student I had seen lauded but as an emerging designer found hard to access. As the impacts of climate change on the planet worsen, there are increasing calls for graphic designers to engage more responsibly with the ecological costs of their professional practice. However, like other designers and researchers before me, I identified that “the practice of design, understood as a socially beneficial activity engaged with building a *better world*, is integrally in conflict with the design industry” (Boehnert, 2014, p. 120). Designers work within capitalist and profit-driven systems which can and often do constrain design practices (Boehnert, 2018; Matos, 2022; Pater, 2021). From my experience in an Australian context, designers work predominantly in studios or agencies that answer client briefs, in-house for companies, or as freelancers working for clients directly or on a contract basis with agencies and studios. Design projects, at least as I understood them, were predominantly determined by the client. While designers might want to work towards a better, more sustainable world, how is this done within the realities of the profession?

The issue of sustainable practice in design dates back at least half a century (Rams, 1976/2019). Much of the existing literature supports the belief that sustainable practices and epistemological frameworks have not been adopted by a significant portion of working graphic designers despite the fact that sustainability is acknowledged as valuable in the industry. The Sustainability Special Interest Group of the Design Research Society, a prominent international design research community, wrote that “despite over 50 years of calls for action on ecological concerns, the design industry has not yet enacted a substantial response to the accelerating climate and ecological emergencies” (2022, p. 19). As there is little existing information from an Australian context, this research investigates the possible *value-action gap** for sustainable design practice, focusing on Australian¹ graphic design and more specifically on commercial graphic design in Sydney.

1 Within the context of this research, Australian graphic design(ers / industry) refers to design practice in Australia. Unless otherwise specified, *Australian* means working/living in Australia, rather than nationality.

This investigation was guided by two research questions through the structure shown overpage in the Research Diagram (Figure 1):

1. How are graphic designers in Australia currently engaging with and defining sustainable design practices?
2. What factors enable emerging Australian graphic designers to develop pathways towards more sustainable design practices, and a sense of agency for action?

Summary of the Research Process

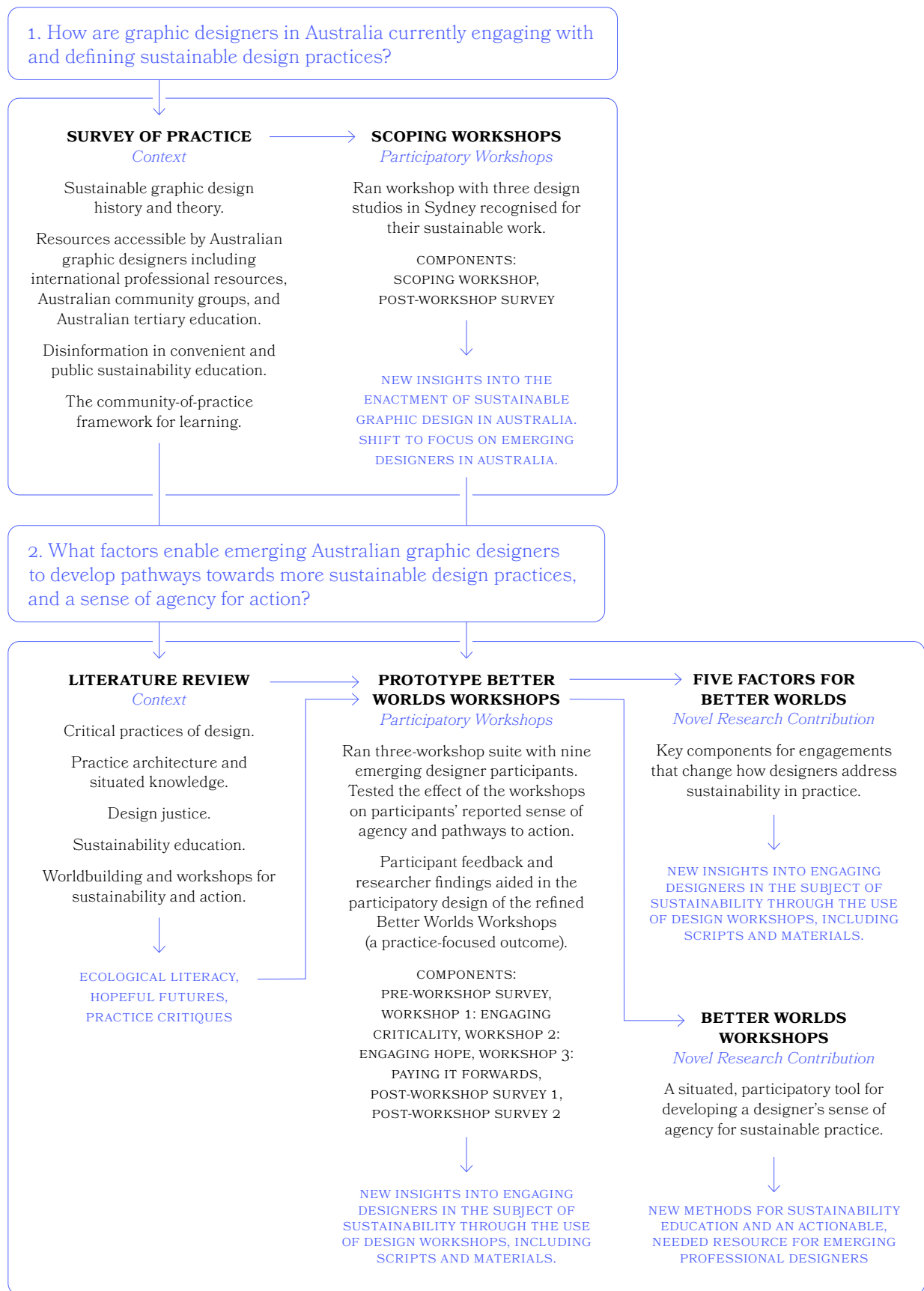
An investigation into the state of sustainable graphic design practice and education in Australia was conducted through literature and practice reviews, discussed in Chapters 1 and 2, and participatory workshops, discussed in Chapters 3, 4, and 5. This research process substantiates that a value-action gap on the issue of sustainability does exist in Australian graphic design and that a lack of clear information and targeted resources, compounded by the constraints of practice, inform this sustainable design value-action gap. Insights from this participatory design process resulted in two contributions to knowledge in the field of graphic design:

1. Five Factors for Better Worlds: insights to guide sustainability education for graphic designers, educators and researchers.
2. Better Worlds Workshops: a resource that offers much-needed targeted sustainability education and scripts to help working designers develop a sense of agency and pathways to action within their communities of practice.

The first chapter, the survey of practice, examines sustainable design practices through the lens of practice resources and sustainable design theory, with attention paid to how existing practice addresses environmental educator Stephen Sterling's (2014) three dimensions of a paradigm; seeing, knowing, and doing. Through the work of sustainable design researchers such as Joanna

Figure 1.

Research Diagram



Boehnert, frictions become apparent between the sustainable practice aspirations of designers and what is seen as possible in a profession often framed as led principally by client desires.

To close that value-action gap, Boehnert proposes that designers must become ecologically literate, meaning that they acquire an extensive comprehension of the impact of their work on the environment. Such ecological literacy, however, is often at odds with the desires of clients and the profit-driven incentives of industry.

How this friction appears in an Australian context and the factors that contribute to it are explored further in Chapter 1 through the analysis of available professional and educational resources and the introduction of practice theory. Practice theory is the study of how and why practices are enacted, a crucial consideration when discussing a possible gap between value and action in a working context. This research viewed the design industry in Australia through a *communities of practice** lens, a practice theory that learning can be fostered through social and professional engagements with other practitioners (Wenger, 1998). This uncovers points of leverage for ongoing education in professional graphic design in Australia as it helps identify under-utilised pathways for learning and action.

The survey of practices found a number of key insights that informed further research. These include the fact that professional designers often lack a sense of agency for change, are rarely afforded the kinds of resources needed to develop pathways to action, and those who value sustainability may find themselves at odds with the profit-driven nature of the industry in which they work. Nationally, few resources exist to help graphic designers with situated and context-specific support for undertaking professional design that includes *ecological sustainability** in its practice. This lack of support is in sharp contrast to the prominence of sustainability as a recognised value. Designers who might try to support their own educational journey are met with significant misinformation and minimal relevant guidance. There is an apparent need for greater conversation in Australia, along with more time and support for practitioner development.

Chapter 2, the literature review, includes research into sustainability education, the field of pedagogy research devoted to environmental concerns and their communication, and the continued application of practice theory, the examination of how and why practice is enacted. This literature review also explores how Australian designers might be better supported in developing more sustainable design practices. Drawing on research by Professor of Design Ramia Mazé and prominent Australian social theorist Rebecca Huntley, this research proposes that designers need to develop critical approaches to their practices, motivated by constructive emotional responses.

Methods for creating such work, such as workshops and *worldbuilding** are examined. Workshops are an established means of engaging multiple members of a community of practice (Groten, 2022a; Burns & Halprin, 1974) and encouraging collaborative engagement with sustainability education (Dolejšová et al., 2021; Wong, 2021). Worldbuilding, as the creation of a fictional setting for a story, can be used to examine the distance and difference between the real world and a preferred or different speculative storyworld (Akama et al., 2020; Korsmeyer et al., 2024; Von Stackelberg & McDowell, 2015; Zaidi, 2017). This research focused on participatory worldbuilding, where multiple people collaborated on one storyworld. This provided an avenue both for forming critiques of practice and for developing aspirations to change.

Chapter 2 also introduces concepts such as *practice architectures**, the understanding that there are significant factors that affect how people work (Kemmis et al., 2014), and *situated knowledge**, the feminist understanding that knowledge is inherently partial and embedded in context (Haraway, 1988). The application of these important frameworks led to insights into educational engagement by practitioners with the topic of sustainability, namely that education for sustainability in practice must be personal, situated, and contextual. The chapter concludes that, in order to change the way they work, designers need (1) ecological literacy—to understand the ecological ramifications of their practices and be able to navigate those choices, (2) hopeful futures—to have something that they can work towards and (3) practice critiques—to be able to

articulate what they like and dislike about their practice, why it is that way, and who or what can help them change it.

Chapter 3 discusses the methodology for this research. Participatory design is framed as a collaboration of users in a research structure defined and designed by a researcher (Simonsen & Robertson, 2013; Smith et al., 2025) and which develops novel insights into the local and specific knowledge of practitioners (Costanza-Chock, 2020; Vaajakallio, 2012). The work that is developed with a participatory design methodology is collaborative and is intended to be reciprocal; in addition to the researcher collecting data, the work also serves participants through the supply of design solutions or the exchange of knowledge.

In this research, participatory workshops were used as a method to explore practitioner engagement with ecological literacy, practice critiques, and hopeful futures. Drawing on research that shows that sustainability education must be situated, personal, and focused on the real complexities of practice, this research used participatory workshops as a means of establishing the much-needed time, space, and support for discussions by local communities of practice.

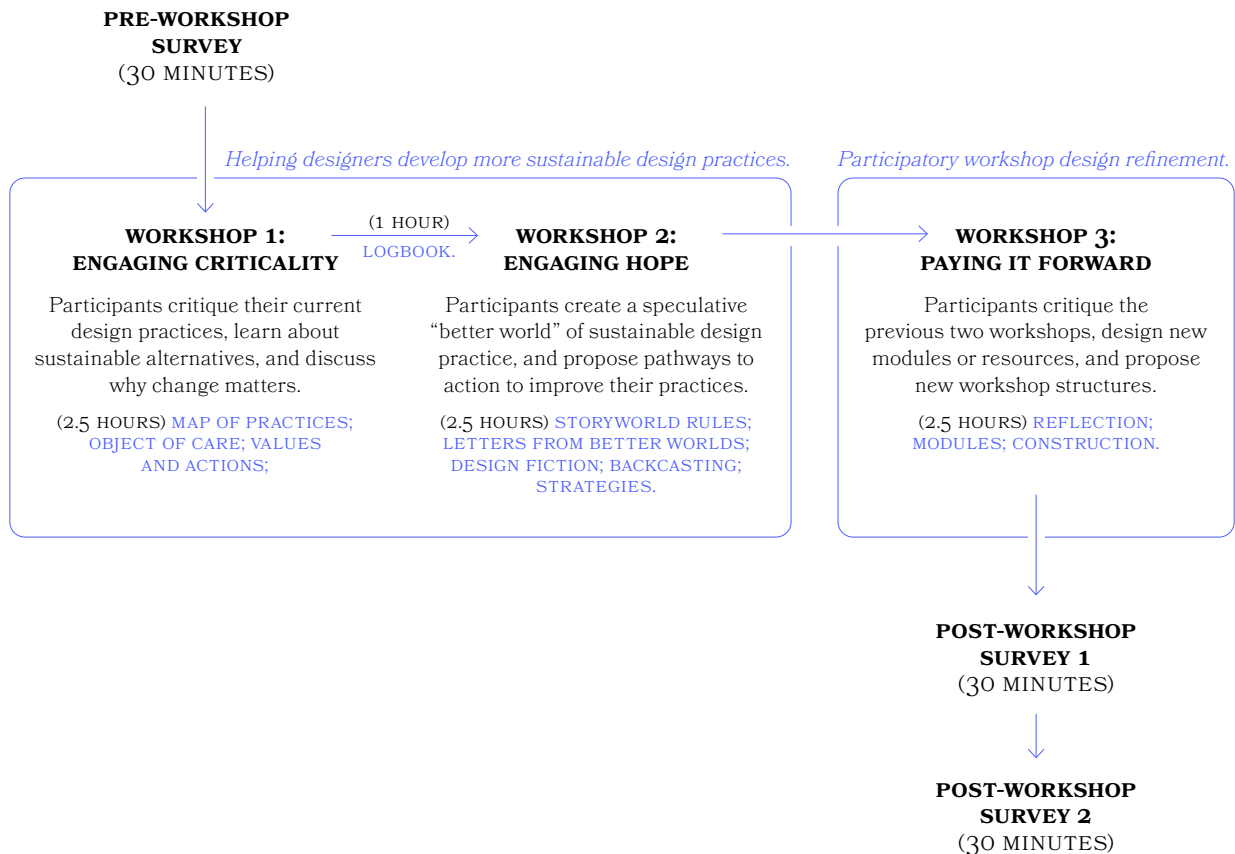
Workshops support designers with guidance and scaffolding, helping them to reflect critically on their practice with their communities and to form bonds and capacities through that reflection. The workshops in this research, which include scripts for action and designed materials, were iteratively developed using a *critical documentation** framework (Sadokierski, 2019). The development of the workshops drew on precedents set in Anja Groten's doctoral research on participatory workshops for collective action and education (Groten, 2022a).

Chapter 4 reports on insights from the first participatory workshop experiment. This was a scoping workshop repeated with three Sydney-based design studios that had been recognised in Australian industry awards for their sustainable design work. These Scoping Workshops collected data regarding how Australian graphic designers are currently engaging with and defining sustainable design practices. This research identified that while some design organisations have the stability and clientele to produce sustainable work, access to the knowledge and means for sustainable practices are not equally

distributed across industry. The Scoping Workshops led to a significant narrowing in the focus of this research to target emerging designers and smaller studios because these practitioners were less likely to have the financial stability, knowledge, or time for research necessary to have sustainability as a central consideration of how they work and who they choose to work with.

Guided by the findings from Chapter 4, Chapter 5 discusses the structure, design, development and testing of the Better Worlds Workshops Prototype; three workshops (see Figure 2), each two and a half hours long. These workshops guided participants through the development of ecological literacy, practice critiques, and hopeful futures to enable participating designers to develop more ecologically sustainable practices.

Figure 2.
Structure of the Better Worlds Workshops Prototype



The Chapter 5 findings include a number of key aspects affecting how creative interventions such as participatory workshops might be better utilised to engage designers in conversations around the complex topic of sustainable practice. The prototype testing additionally led to the identification of five factors, called Five Factors for Better Worlds, that helped participants develop more ecologically sustainable design practices, as discussed in Chapter 6.

Chapter 6 details the Five Factors for Better Worlds, a contribution of knowledge to sustainable graphic design theory and sustainability education research. This chapter examines participant feedback on the Better Worlds Workshops Prototype content, participants' changed perceptions of their sense of agency, and their pursuit of identified pathways to action. Through the analysis of participant responses, this research identified factors present within the workshops that led to changed practices and attitudes. This research proposes that by separating aspects of the larger issues of sustainable practice into smaller constituent parts, it becomes easier to construct educational workshops and resources that might create lasting change. As components of successful sustainability education, evidenced through the testing of the Better Worlds Workshops Prototype, the Five Factors for Better Worlds are:

1. access to sustainability education
2. awareness of their situated knowledge
3. belonging to communities of practice
4. capacity to speculate about alternative practice and
5. having an ethics of care.

The implications of the research findings and provocations for future practice are discussed in Chapter 7. On completion of this thesis, the refined Better Worlds Workshops will be published online as an open educational resource for working designers and educators, shared under a Creative Commons Attribution-Non-Commercial 4.0 International licence to allow for further use and development by these communities of practice. With their focus on strengthening local communities of practices and situated pathways to action,

these workshops provide a crucial and significant scaffold for emerging designers to perform self-reflexive conversations around shared care, hope, and critique.

The Five Factors for Better Worlds build on existing research into sustainable graphic design through the identification of strategic, actionable areas for focus in practice-changing education for designers. The factors extend knowledge into how education for sustainable practice might make a difference, particularly within sustainable graphic design theory. Through two novel research contributions, the Five Factors for Better Worlds and the Better Worlds Workshops, this research explores a big-picture, real-world problem and materialises what change is desired and what can be done about it.



(CHAPTER ONE)



**SURVEY OF PRACTICE:
SEEING, KNOWING,
AND DOING SUSTAINABLE
GRAPHIC DESIGN PRACTICE**

1. SURVEY OF PRACTICE: SEEING, KNOWING, AND DOING SUSTAINABLE GRAPHIC DESIGN PRACTICE

1.1. A transition from “doing things better” and “doing better things” to “seeing things differently”

Within the broad field of design practice, sustainability has taken many forms and approaches. This research defines sustainability as representative of work that contributes to:

- the reduction of material and energy waste in the development, eventual products, and supply of design
- the proliferation of environmentally responsible knowledge in society and culture
- the diverting of economic support from ecological harm towards ecological improvement.

Ideally, sustainable design practices would contribute to all three of these causes but that is a complex goal. This thesis focuses on ecological sustainability, meaning the planetary impacts of energy and material use, rather than the social or political impacts, of graphic design practice. Design practice here is representative of the “understandings, procedures and engagements” (Schatzki in Warde, 2005, p. 139) undertaken by designers in their work and as the co-ordinated decisions and performed actions of the designer. As discussed in this chapter, resources regarding ecological sustainability are minimal in the Australian graphic design context which provides an opportunity for change.

Although this research is concerned with graphic design, meaning the production of visual communication across print-, motion-, interaction- and web-design and more by creatives with expertise on the creation of meaning through graphics, much of the historical literature for sustainable design was popularised within industrial design or architecture and generalised across the field. Concerns for how design practice might be betraying its ecological responsibilities date back to early manifestos such as Austrian-American architect Richard Neutra's 1954 *Survival Through Design*. Neutra, concerned that the architectural industry was straying "farther and farther from the natural scene" (1954/1969, p. 5) and thus failing to design physical environments that benefitted humans, argued that we are on "an earth which we shall have to keep green with life if we mean to survive" (1954/1969, p. 14). He espoused careful, scientifically-informed design. Later, the *First Things First* manifesto made early movements in calling for greater care, creativity, and social responsibility in graphic design, though it did not make any explicit mention of ecological costs (Garland, 1964).

Architect and inventor Buckminster Fuller popularised the term "spaceship earth" (1969/1978, p. 1) as a means of representing the world as a closed system with finite resources. He called for "planners, architects, and engineers [to] take the initiative" (1969/1978, p. 133) and to "above all co-operate" (1969/1978, p. 133). In a similar social realm to Fuller, the controversial 1972 *Limits to Growth* report was published; a Club of Rome commissioned MIT computer simulation study of the possible impacts of exponential growth on finite resources (Houston et al., 2022). The *Limits to Growth* report contributed to the emerging popular comprehension of environmental damage as a matter of resource use and rising pollution levels (Edwards, 2019). In 1976, prominent industrial designer Dieter Rams spoke about the need for environmentally-conscious design as "there is an increasing and irreversible shortage of natural resources²" (Rams, 1976/2019). At this time, while design was predominantly concerned with the resource requirements of the eventual artefacts of practice, climate science discussions

2 This idea was later synthesized by Rams into one of his iconic ten principles for good design; "Good design is environmentally friendly" (Rams, 1995/2025, p. 7).

were beginning to grapple with the comprehension of action in whole systems. As Donella Meadows, co-author of the *Limits to Growth* report, wrote:

The world is a complex, interconnected, finite, ecological-social-psychological-economic system. We treat it as if it were not, as if it were divisible, separable, simple, and infinite. Our persistent, intractable, global problems arise directly from this mismatch.
(Meadows, 1982, p. 101)

Growing calls for design to be used for “worthwhile purposes” (Garland, 1964, para. 5) likely reflect the changing awareness of the climate crisis in cultural consciousness. Notable international developments include the United Nation-supported *Our Common Future / Brundtland Report* (WCED, 1987) and the Sustainable Development Goals (United Nations, 2015), known commonly as the SDGs, both of which have contributed significantly to the lexicon of sustainability (Bhamra & Hernandez, 2021; Kallipoliti, 2018; Light et al., 2020). The former established an international definition of sustainable development while the latter document outlined goals and targets for sustainable development in “its three dimensions—economic, social and environmental” (United Nations, 2015, para. 10), evoking the triple bottom line business model of sustainable practice.

The triple bottom line model of sustainability, a standard model in use in design today (Benson & Perullo, 2017, Chapter 1), is a business model of sustainability proposed by John Elkington in 1999 when he stated that in order to have longevity, businesses should “not only measure their economic but also their environmental and social bottom lines” (Szekely & Dossa, 2017, p. 1). Over time, the triple bottom line model has shifted perceptions to be seen as a model of environmental sustainability for businesses where there is a “balanced intersection of the three spheres of society, environment, and economy” (Kadas, 2018, p. 37). Variations on the model exist and their relationship to graphic design can be explored in more depth in Szilvia Kadas’ 2018 doctoral dissertation *Exploring the Meaning of Sustainability within Three Selected Institutions of the Graphic Design Field: A Phenomenological Study*. Many sustainability and design

texts frame sustainable design practices as happening at the intersection of these three spheres, sometimes with the addition of a fourth representing design's influence on culture.

The broad area of design for sustainability has evolved significantly over the past three decades, as suggested by a 2021 examination of paper titles from the International Conference of Engineering Design from 1989 to 2019 (Bhamra & Hernandez, 2021). The changing terminology use in paper titles indicates a multi-decade move from general concerns around environmental impact in the early 1990s towards more specific discussions of the production and life cycles of design outcomes in the late 1990s and early 2000s. Here, authors Bhamra and Hernandez link the latter evaluative movement to “ecodesign” (Bhamra & Hernandez, 2021, p. 2), an industrial approach characterised by assessing each stage of the product life cycle and reducing its environmental impact (Bhamra & Lofthouse, 2007).

Architects Sim van der Ryn and Stewart Cowan are credited by authors, such as Lydia Kallipoliti (2018), with coining the term ecological design in 1996 as “any form of design that minimizes environmentally destructive impacts by integrating itself with living processes” (Van der Ryn & Cowan, 1996, p. 18). Environmental integration is key to this ongoing definition, though latter expansions by authors such as architect William McDonough and chemist Michael Braungart emphasise the circular nature of a political economy that could reduce or reuse all waste (McDonough & Braungart, 2002, 2013). “Green design” (Stephens & Stephens, 2009, p. 8), which emerged at a similar time, incorporates the desire to work for sustainable organisations, to contribute to educational campaigns, and to produce work that limits waste and consumption.

Ecodesign, green design, eco-social design (Dolejšová et al., 2021; Houston et al., 2022), design for sustainment (Fry, 2009), and design for sustainability (Walker et al., 2013), have all contributed to a messy quagmire of epistemological models regarding sustainability, design, and the intersection of two. Despite differences in terminology and ontology, this research found that the above combinations of sustainability and graphic design practice are aligned with the

growth of “truly transformative education” (Sterling et al., 2013, p. 162) where guidance moves from “asking others to use less” (Houston et al., 2022, p. 1) or “doing things better” (Sterling et al., 2013, p. 162), towards practitioners “doing better things” (Sterling et al., 2013, p. 162), and finally to “seeing things differently” (Sterling et al., 2013, p. 162). This transition through the decades aligns with the recognised desire within industry for graphic designers to develop robust and often collaborative practices (Wallace & Crocker, 2020) which “intervene in the existing momentum of ... unsustainably resourced practice” (Lopes & Gill, 2015, p. 250). The growing comprehension of graphic design and sustainability is one that uses design practice to affect audiences, endorse sustainable products, and produce works that minimise any detrimental environmental impact.

While sustainability has been a topic in design discourse for many decades, as seen above the discussion frequently focuses on product or architectural design. Recent graphic design discourse has begun to investigate, with more depth, the ways in which the values of practitioners intersect and conflict with the real and perceived constraints of their practice. Graphic design as a profession is inextricable from ideas of value; author Guy Julier, originator of Design Cultures as a research field, argues, “The designer’s role is in the creation of value ... most obviously [in] commercial value” (Julier, 2006, p. 74) and that this production of value is found not just in the development of products but in the value augmentation of existing ideas and items. How do the interests or concerns of designers cause friction within a profit-driven industry? This thesis aligns with the recent sustainable graphic design epistemology of ecological literacy as written by Joanna Boehnert, an approach that acknowledges how deeply complex sustainable practice is but argues that designers can be educated and engaged in a way that will change their practices for the better.

The issue outlined by Boehnert in *Design, Ecology, Politics: Towards the Ecocene* (2018) is clear: despite abundant evidence that ecological sustainability is declining as a direct result of anthropocentric epistemologies, there is little interdisciplinary effort to rectify these alarming trends. Despite the prevalent value ascribed to sustainability, there is little consistent action taking place.

Her research focuses on communication design as a profession, particularly graphics and their use in advertising and data visualisation. In an earlier publication, Boehnert explained that the decisions made by designers to be more sustainable are often working against the economic needs of the practitioners: “Despite the aspirational goals of many designers, most design projects start with the identification of a potential for profit-making by servicing the desires of those with expendable capital” (Boehnert, 2014, p. 47). This positioning of design work as predominantly oriented by the potential for profit is a key critique of current sustainable design ventures; as design is a working profession, profit will be factored into the choices of almost all designers and the discussion of sustainable design without the acknowledgment of the economic incentives of industry is inherently shallow.

Boehnert establishes that the gap between value and action for sustainable design practice is primarily a consequence of fragmentary thinking, whereby the capitalist need for consumption separates humans from the requirements of their inherently non-human surroundings. This concept echoes the earlier quote by Meadows regarding intractable global issues which result from the mismatch between real-system complexity and perceived-system simplicity. Similarly, Boehnert ascribes many of the presently unsustainable practices found in design to a kindred disjoint, which she frames through Gregory Bateson’s 1972 concept of “epistemological error” (Boehnert, 2018, p. 62); the fallacious gap between how designers think about ecological systems and how they actually work.

Boehnert frames her investigation in terms of the systemic priorities of the graphic design industry through “ecological literacy” (Boehnert, 2018, p. 74); the ability to read and communicate the complex systems underlying environmental sustainability (Boehnert, 2018; Orr, 2011). She proposes that ecologically-literate visual communicators should, in the course of their work, take into consideration not only design, but also ecology and politics. These three realms, inspired by the work of Gregory Bateson (1972) and Felix Guattari (2000/1989), reflect the possibility for design to affect audience’s subjective experiences, their social interactions, and how they relate to and understand the environment.

In a development of the arguments presented in her 2012 doctoral dissertation, Boehnert positioned visual communication designers as poised to mend the rift between established climate crisis knowledge and active engagement with the underlying complex systems.

Rather than a direct expansion of Boehnert's dissertation regarding the visual communication of sustainability science, this text presents a thorough examination of the factors affecting the dissemination of ecological literacy through the graphic design industry. Ecological literacy, as coined by David Orr, is presented as the ability to read and communicate the complex systems underlying environmental sustainability. One solution proposed in Boehnert's dissertation is that communication designers, particularly those in advertising, will convey more accurately the complexity of sustainability solutions and ecological systems once they have properly engaged with ecological literacy pedagogy. As proposed by David Orr and reiterated in this text, "ecological literacy must become a pedagogic priority in design education" (Boehnert, 2018, p. 86). Throughout the text, the role and definition of *design* vary in scope from advertising materials to "the remaking of the human presence on earth" (Orr, 2007, as cited in Boehnert, 2018, p. 15).

Boehnert places pressure on graphic designers to convey a vast variety of interlocking ecological agents correctly, though the text also establishes that access to the much-needed guides and education on how to do so is limited. She calls for shifts in the business-as-usual progress of design, stating that ecological theory must be integrated not only into design pedagogy but into the fundamental framing of design as an industry. Design, she argues, is an ecological profession because all designers are animals, embedded within and inextricable from the ecological environments that sustain them. The current positioning of design as profit-oriented and "focused on the next season's fonts" (Boehnert, 2018, p. 185) stymies greater action as designers shy away from creating "something consequential" (Boehnert, 2018, p. 185). She urges design pedagogy to address sustainability in coursework more significantly through the integration of ecological theory. Boehnert also calls for further expansion of design research

to address the realities of the professional restrictions of practice, such as the reliance on client interest and budget to determine the ecological impacts or political messaging of design work.

1.2. The Value-Action Gap and Seeing, Knowing, and Doing

Though the shift from general calls for design to consider the environment towards more specific epistemologies for sustainable practice is important, much existing literature supports the belief that a significant portion of working designers are not adopting the necessary practices and epistemological frameworks (Boehnert, 2018; Dritz, 2014; Kadas, 2018). This lack of alignment between what designers value and what is happening in industry is known as a *value-action gap*, a well-recognised and multi-disciplinary lag between individual environmental values and changed actions (Portus et al., 2024).

A semi-systematic review performed by an international multi-disciplinary team of environmental educators and environmental education researchers found that research on the use of value-action gap theory, also known as intention-behaviour gap theory, is present in education across a range of disciplines (Portus et al., 2024). The review found that hands-on, experiential educational engagements are frequently used in attempts to address the value-action gap as students may otherwise lack the needed knowledge and experience to apply the information they are gaining (Kagawa, 2007; Redondo & Puelles, 2017; Rhee & Johnson, 2019; Swaim et al., 2014). Such education, however, must contend with making sustainability personally relevant and actionable, with a need for environmental education to be “mission-based and contextualized” (Carmi et al., 2015, Section 5). The authors of the review additionally argue that educational “practitioners would benefit from practical toolkits and guidance to help achieve these identified needs” (Portus et al., 2024, Section 6). Research into sustainability education also stresses the need for ongoing learning rather than single instances of education, as individuals may change their actions without a

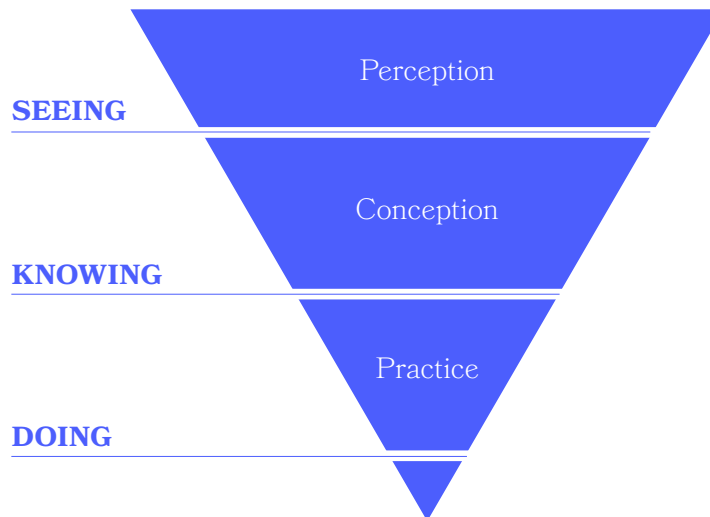
full picture of the issues, possibly leading to future barriers to action due to the many factors that affect behaviour (Fink et al., 2018). The authors of the review found that while work addressing the role of education is significant, “work addressing *how* educational practices might support people to bridge the value-action gap needs to be expanded” (Portus et al., 2024, para. 6) Existing research, limited as it is by the funding and timeline constraints of academia, contains significant gaps for further education.

However, knowledge is not sufficient on its own. Environmental policy and planning scholars Anja Kollmuss and Julian Agyeman found that educational campaigns reliant on “increases in knowledge and awareness did not lead to pro-environmental behaviour” (Kollmuss & Agyeman, 2002, p. 241). Rather, pro-environmental behaviour results from addressing internal factors, including knowledge and emotions, alongside external factors such as political, social and economic influences (Croteau, 2019; Kollmuss & Agyeman, 2002). Education that fails to address systems of practice is not sufficient, as “sociological theories and studies of consumption challenge the idea that more information and/or incentives lead to the ‘right’ choices” (Mazé, 2013, p. 97). As such, we can understand that there is more to decision-making than knowledge alone. While sustainable graphic design authors such as Boehnert call for increased ecological literacy and paradigmatic shifts in how designers value and enact sustainability, it is necessary to explore why this sustainable design value-action gap may be present in the first place.

In reaction to both the value-action gap in the design industry and her identification of epistemological error throughout practice, Boehnert raises environmental educator Stephen Sterling’s (2014) proposition that there are three domains to a paradigm: seeing, knowing, and doing. Sterling’s model (Figure 3, overpage) shows how one might consider the move from abstract idea to the basis of new practice. Broadly, it indicates the need for ecological concerns to be recognised within context; to be grappled with as practice contributing to complex systems; and for deliberate choices to be made by practitioners that “anticipate systemic consequences of action” (Sterling, 2003, as cited in Boehnert, 2018, p.

Figure 3.

Three Parts of a Paradigm (adapted from Boehnert, 2018, following Sterling, 2003)



78). For designers to develop meaningfully ecologically sustainable practices, I propose that practitioners need a sense of agency, to see the value of sustainable practices and know how to implement them, and to have pathways to action, that is, to transition from knowing to doing. What, then, is available to designers?

An analytical auto-ethnographic study, combined with semi-structured interviews, undertaken by two design researchers from the University of South Australia supports this belief. Researchers Niki Wallace and Robert Crocker interviewed 13 Australian communication designers on the topic of sustainability in their practices. They found that a common thread in the respondents' various understandings of sustainability was the "belief that sustainability amounted to the creation of 'greener things'" (2020, p. 133). Their findings also supported a pre-existing understanding in design literature that the rigidity of practice norms and fear of failure or loss of income greatly affected the perceived ability of designers to incorporate sustainability into their work.

Szilvia Kadas' 2018 doctoral dissertation presents similar findings, through the examination of published content from various American graphic design institutions including trade magazines and tertiary institutions. In her dissertation,

a phenomenological study of American graphic design trade magazines revealed that the texts were encouraging “choosing clients as a means for sustainability” (Kadas, 2018, p. 90), placing full responsibility for the sustainability of design work in the hands of a purpose-led client. Her research also found that resources for designers were lacking, as, although sustainability was frequently portrayed as valued and prioritised, “there were no examples or criteria to follow” (Kadas, 2018, p. 115). Kadas’ study of these institutions’ communications found a substantial gap between design’s positioning as a tool for shaping positive cultural change and a lack of industry “tools and resources to measure their impact on society and the environment” (Kadas, 2018, p. 116). Her dissertation extends earlier literature in the field, such as Amy Dritz’s 2014 master’s thesis, *Closing the Sustainability Gap: The Emerging Role of Sustainable Graphic Designer*. Both works articulate a simultaneous desire held by professional graphic designers for sustainability and a lack of industry or pedagogical institution support.

Dritz and Kadas both call, in part, for “open discussion on the topic of sustainable graphic design and a place to find in-depth resources” (Dritz, 2014, p. 47). This desire for industry-relevant resources is echoed in other research, including an examination of barriers to the proliferation of responsible design³ throughout industrial design in the UK and Ireland. This research, which engaged designers and academics in workshops and interviews on the subject of responsible design in industry, found that designers consistently identified a need for “clear, consistent, and useful information which is appropriate to how they work; and more importantly, which they can have confidence in” (Lofthouse & Stevenson, 2021, Section 5). A stated desire for more specific, actionable, and practice-oriented guidance is consistent throughout multiple areas of sustainable design research.

As seen in Boehnert’s writing, there is an established perception that many of the value-oriented choices of designers are at odds with the systemic priorities of the organisations they work within and for. Though the lack of productive

³ The article defines responsible design as the combination of sustainable design, eco/green design, design for social responsibility, and inclusive design.

educational material for active designers poses an issue, so too do the real or perceived existing conditions of practice that affect how designers view their own ability to change. There are limitations on what designers can do, no matter their values; they are bound to the interests of paying clients and operate within capitalist systems of profit.

1.3. Australian Industry as a Constellation of Communities of Practice

Imagine that you're a graphic designer in NSW, Australia; you're a recent graduate, rent in a share-house and are leaving your casual job to enter the workforce in a permanent design role. You're looking for guidance on your rights and responsibilities as a new designer in professional practice: *How much is a fair wage? How can I find a workplace that aligns with my values? What questions are interviewers allowed to ask me when I apply for jobs? How long are my guaranteed breaks? How much overtime can I be asked to do? Who should I contact if I'm not getting paid? How do I write a freelance project contract that will hold up if something goes wrong? Who evaluates whether a producer, manufacturer, or printer is being truthful about their sustainability promises? Can I refuse work that goes against my morals or ethics?*

You may have previously used union organisations for advice on rights and responsibilities; these may have included the National Tertiary Education Union as a student, the United Workers Union or the Shop, Distributive and Allied Employees' Association for your casual job in retail or hospitality, or the Tenants Union NSW as a renter. These groups have paid membership but also offer fact-sheets or hotlines for non-members to gain help.

There is no such union specifically for graphic designers in New South Wales or even in Australia. There are other organisations and alliances that service graphic designers: the Australian Graphic Design Association (AGDA) is one such group, which is discussed in more depth in the next section. Other groups that serve a graphic design audience include the Australian Book

Design Association, which hosts annual awards and lists online profiles for paid members, the National Association of Visual Arts, which provides guidances for visual and performing artists, and the Visual Media Association, which offers support for professionals in the print and digital media industries. The Media, Entertainment and Arts Alliance (MEAA) and the Australian Design Council both include graphic design in their cohort but address broader memberships, including musicians and stunt actors for the former, and industrial designers, policymakers and business strategists for the latter. These organisations predominantly focus on strengthening their disciplines as a whole, rather than the support of individual members. AGDA, as is discussed in the next section, best caters to the interests of working graphic designers in Australia although it suffers from limitations in its available support for sustainable design.

You might also turn to your peers for advice, either through your contacts with other recent graduates or perhaps through community organisation events like AGDA or The Design Kids. You benefit by sharing your knowledge with your peers and you improve your work by collaborating with them, and from gaining critique from established designers through community events or a personal network of creative colleagues. While the practices, fundamental principles, and cultural aesthetics of design are common, there is a vast amount of variation in the context of different design roles. For example, *will you work in-house, in an agency, in a studio, or try out freelancing or sole trading? Are you working on print-, motion-, interaction- or web-design, or perhaps a combination of those areas? Within those areas, what role are you taking on within the organisation and what will your tasks and responsibilities be? What size organisation will you be a part of?*

While industry can be understood as a concentric system (Figure 4, overpage), this research argues that the consideration of design as a constellation of communities of practice (Figure 5, overpage) provides a better frame in which to discuss this complex, sometimes incohesive industry. In *Communities of Practice: Learning, Meaning, and Identity* (Wenger, 1998), educational theorist Etienne Wenger and social anthropologist Jean Lave set forth communities of

Figure 4.
Design Profession as Areas of Practice (Visualisation)

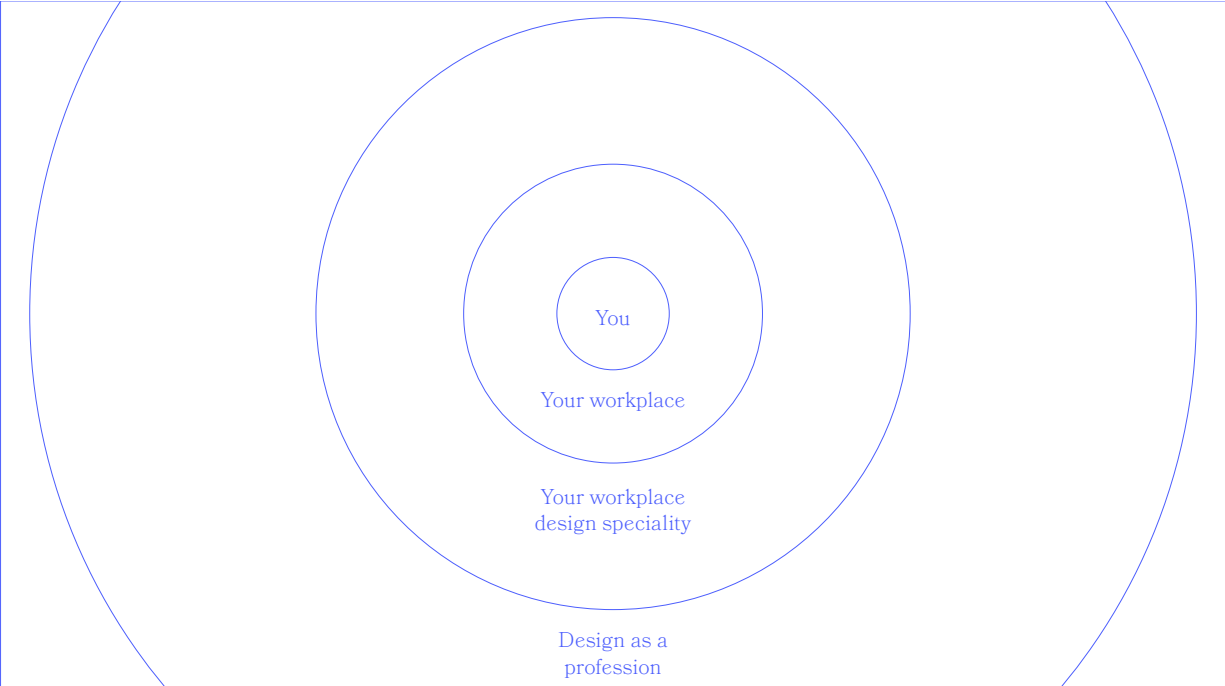
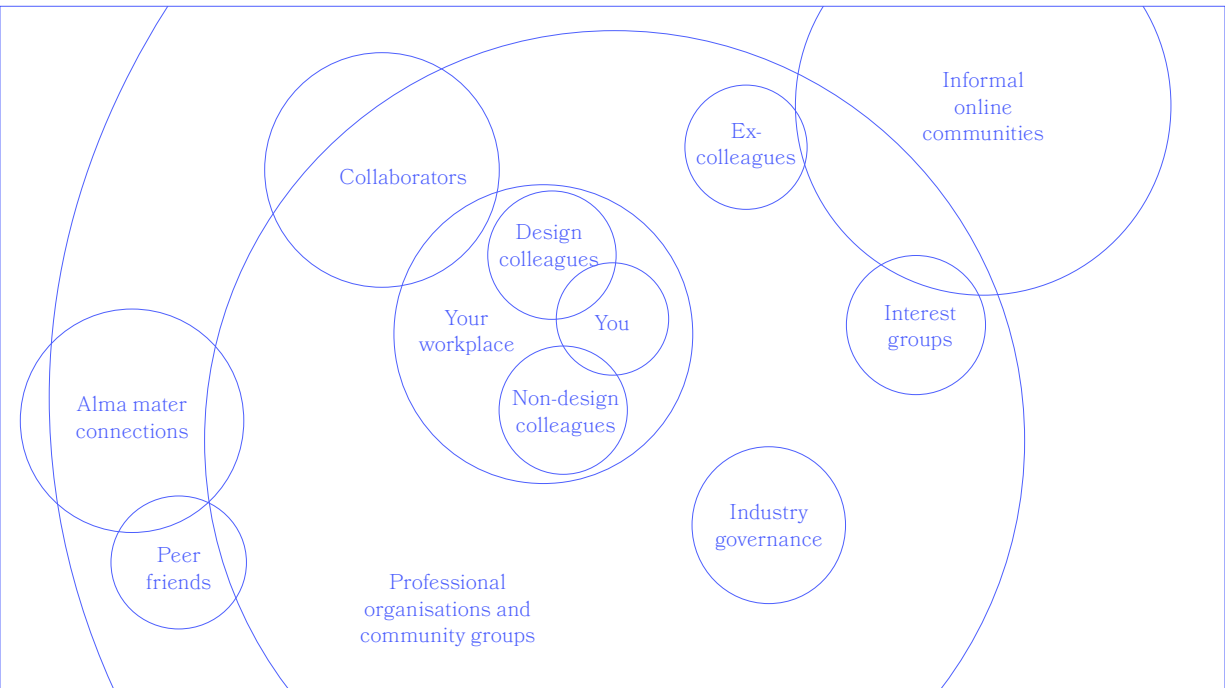


Figure 5.
Design Profession as a Constellation of Communities of Practice (Visualisation)



practice as a conceptual framework for understanding learning as a process of social participation⁴. The framing of communities of practice, being people with common work activities and contexts, allows for a consideration of how learning and work take place in a way that may overlap or expand beyond the bounds of a set workplace. Members are not inherently tied by an agreed set of values, only by shared practices and by learning through collaboration. The shared “understandings, procedures, and engagements” (Schatzi, as cited in Warde, 2005, p. 135) of these communities bind them, sometimes in spite of their personal convictions or values.

This is a framework that helps to address the ways in which the role of *graphic designer* is present in many different contexts but may share common activities, goals, restrictions, and concerns. As designers in industry may lack spaces and resources for ongoing education, particularly around sustainability, the proposition that practitioners “learn how to do it better through regular interaction” (Cundill et al., 2015, p. 3) is an avenue for greater education and engagement for designers within an often dispersed industry.

Designers, additionally, are restricted by what could be considered a “close-present” (Anusas & Harkness, 2016, p. 4) view of time. The idea of the close-present experience, that some practices encourage a limited perception of time, was coined by cultural anthropologist Mike Anusas and design ecologist Rachel Harkness at the University of Edinburgh. In their respective long-term observations—Harkness as an anthropologist and volunteer builder with a community of Earthship eco-homes for over a year and Anusas for eight months observing a commercial product design studio—the authors found that workers perceived time differently depending on the kind of making they were doing. The commercial designers experienced time as a pressure and a limitation, causing

4 It is important to note that while Wenger discusses *communities of practice* as occurring within shared workplaces, this research expands the term to accommodate communities that emerge outside of shared workplaces around shared practices. As will be discussed further in this chapter, this is an extension of *communities of practice* which embraces the complexities of social collaboration in the design profession.

stress and restricting opportunities for experimentation or change. This is a perception of the work that lasts for the length of the timeline from brief to deliverable. The eco-home builders, however, held a more long-lasting and far-reaching view of time and felt they had the opportunity to carefully consider materials and to deliberate on choices. This perception is more in line with the long-term thinking called for by environmentalists, such as Stewart Brand's *The Clock of the Long Now: Time and Responsibility* (1999). These different *presents*, these disparate perceptions of time and how long work lasts for, are reflective of “different socio-material ecological relationships with/in the world” (Anusas & Harkness, 2016, p. 11). As is discussed later in Chapter 4, the temporally restricted view of design practice as existing only until the project handover to clients and the perception that time is a scarce resource that cannot be wasted within that project timeline is apparent within the Sydney graphic design studios that took part in the Scoping Workshops of this research. This close-present view of time within design practice is discussed further in Chapter 6 following findings from the Better Worlds Workshops Prototype.

Systemic sustainable change will require significant and ongoing interventions from individuals, organisations, disciplines, and governance. In this research, the presence of community and collective action is shown to be key. Communities of practice provide a framework for exploring how change might be imagined, shared, and enacted by designers.

1.4. Sustainable Design in Australian Communities of Practice

What is the state of seeing, knowing, and doing sustainable design practice in Australia? The following investigation is not exhaustive but is indicative of the need for further research in an Australian context. As the national industry body, the Australian Graphic Design Association (AGDA) is a locus for community knowledge sharing, events, and national awards. Due to AGDA's focus on graphic designers and their practices, it was identified as the best suited body for further

examination within this research.

On the 12th of August 2022, to test how accessible information about sustainable practices was, I performed the kind of skimming search on the AGDA website that a designer curious about sustainable graphic design practice might perform. This exploration informed my continued research focus on improving the provision of knowledge and support for action in Australian industry as, while sustainability was visible as a value, relevant industry support for practice was not apparent as a priority. I repeated this search on the 11th of June 2025 after most of this thesis was completed to assess how the intra-industry seeing, knowing, and doing of design may have changed over the years. As of 2025, the ratio of sustainability-oriented knowledge and practice available through community resources on AGDA had not shifted significantly.

Comments from the 2025 exploration can be found below the initial 2022 notes. The figures listed in this analysis can be seen at the conclusion of the written commentary.

- 2022: Of the eight recommended recent member articles, one mentioned the environment (Figure 6). However, it is only available in full on the contributing member's own blog and it provides no actionable steps for further information (Agius, 2022).
 - 2025: One new article (Figure 7), published 17th May 2023, calls for designer responses to the question of "How may we help create a genuinely 'Responsible Living Economy'?" (Campbell, 2023). This call is for contributions to an ongoing research project and includes a table of responsible design considerations including the SDGs.
- Previous articles on sustainability within the available archive include a call for designers to answer a survey, a profile of a designer whose studio works with sustainable clients and an article by a circular-economy brand and packaging design studio (Figure 8). None provide next steps for action.
 - 2025: There are no new articles on sustainability (Figure 9).

- 2022: There are no apparent upcoming sustainability-related events, though previous event results for “sustainability” include both a presentation about working for sustainable brands and a panel talk including sustainability-oriented designers (Figure 10).
 - 2025: There are no upcoming sustainability-oriented events (Figure 11). When looking at all events within the previous six months, there are none that speak specifically to sustainability or related phrases⁵ (Figure 12).

AGDA’s code of ethics (Figure 13 in 2022 and Figure 14 in 2025), to which each member nominally agrees, makes mention of sustainability only in the line, “A Member shall work in a manner so that as little harm (direct or indirect) as possible is caused to the natural environment” (AGDA, n.d.-a, para. 6). While the presence of sustainability with the code of ethics is noteworthy, as it provides visible valuation, this line offers little structure as to the “knowing” or “doing” of sustainability. The lack of specificity in the AGDA’s code of ethics instructions regarding sustainability is particularly apparent when in contrast to many of the other concerns mentioned in the document. These include references regarding respecting other designers’ existing commissions⁶, presentations for securing commissions⁷, or free-pitching⁸.

5 Some session descriptions, like the Design:Impact series event by the agency Carbon Creative (Figure 12, second box from the left in row two), centre on the larger impacts of design outside being a *craft* but do not explicitly mention sustainability.

6 “A Member shall not knowingly accept a commission to work on a project for which there is an existing designer without first informing the other designer. This clause applies specifically to projects, and not to clients whose design needs require using a number of designers for different projects or accounts. As a matter of professional courtesy, AGDA encourages its Members to inform a client’s existing designer/s if a Member receives a commission from that client” (n.d.-a, Section 4.2).

7 “Preliminary to securing a commission, a Member should present a proposal in writing which covers: an understanding of the brief; an outline of how the project will be undertaken; an estimate of fees. In addition to the above, a Member may also present: examples of previous work; qualifications and details of experience of project team members” (n.d.-a, Section 5.2).

8 “AGDA is unequivocally opposed to the unfair manipulation of designers with the aim of garnering unpaid work (commonly known as ‘free pitching’). Client practices which do

Figure 6.
Recent Member Articles on the AGDA Website as at 12 August 2022

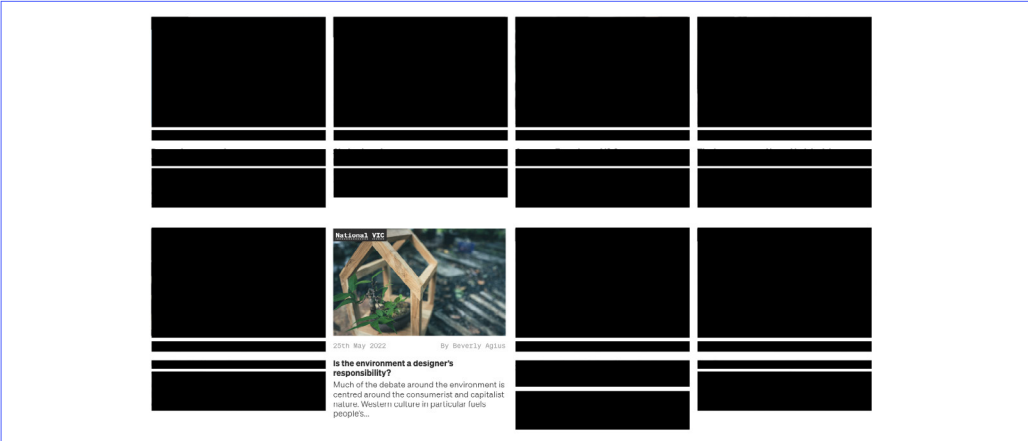


Figure 7.
Recent Member Articles on the AGDA Website as at 11 June 2025

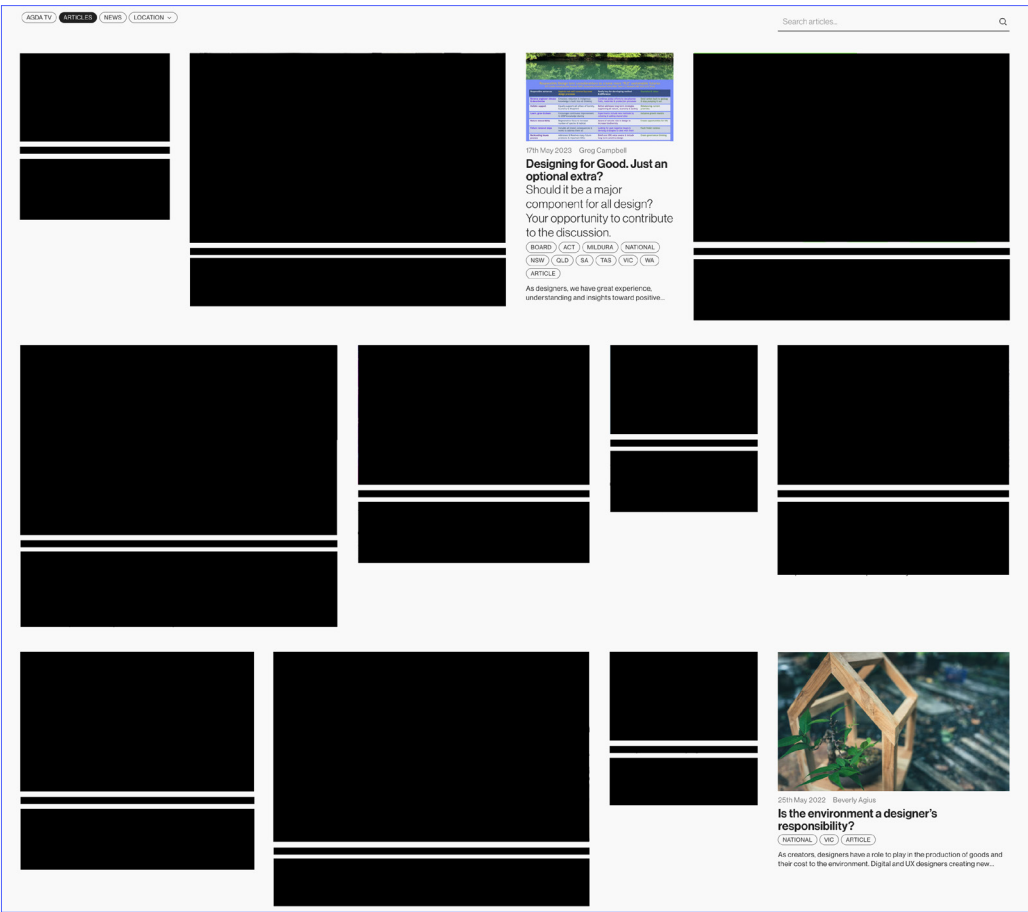


Figure 8.

All "Sustainability" Articles on the AGDA Website as at 12 August 2022



Figure 9.

All "Sustainability" Articles on the AGDA Website as at 11 June 2025

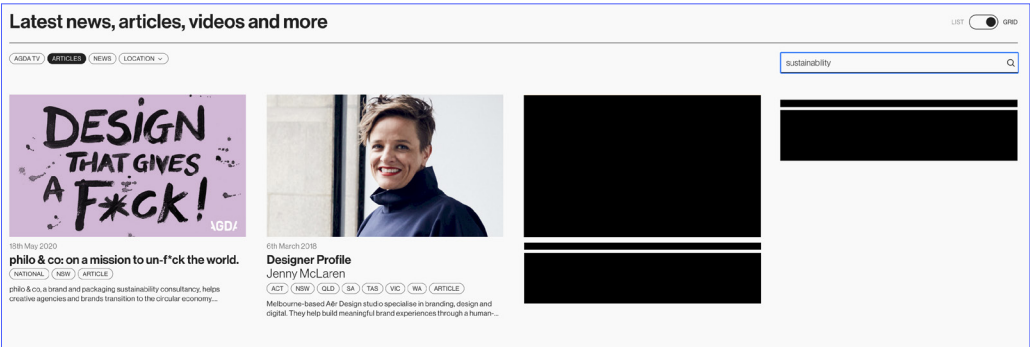


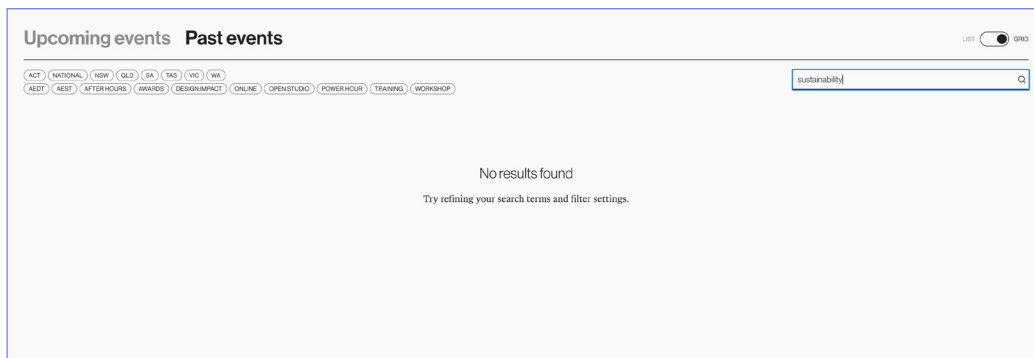
Figure 10.

Previous “Sustainability” AGDA Events on the AGDA Website as at 12 August 2022



Figure 11.

Upcoming “Sustainability” AGDA Events on the AGDA Website as at 11 June 2025



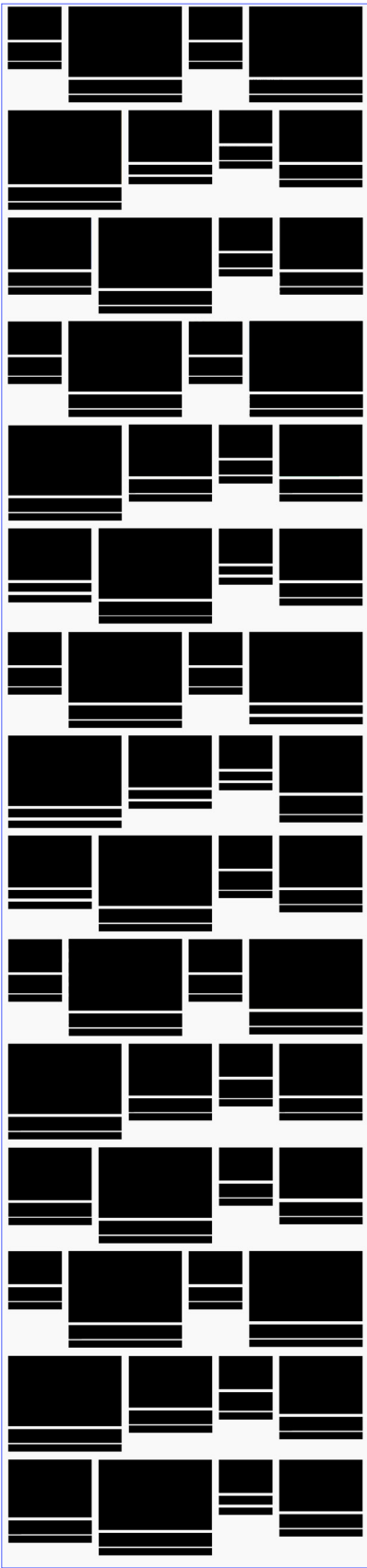


Figure 12.
*All Previous AGDA Events from the
Previous Six Months on the AGDA Website
as at 11 June 2025*

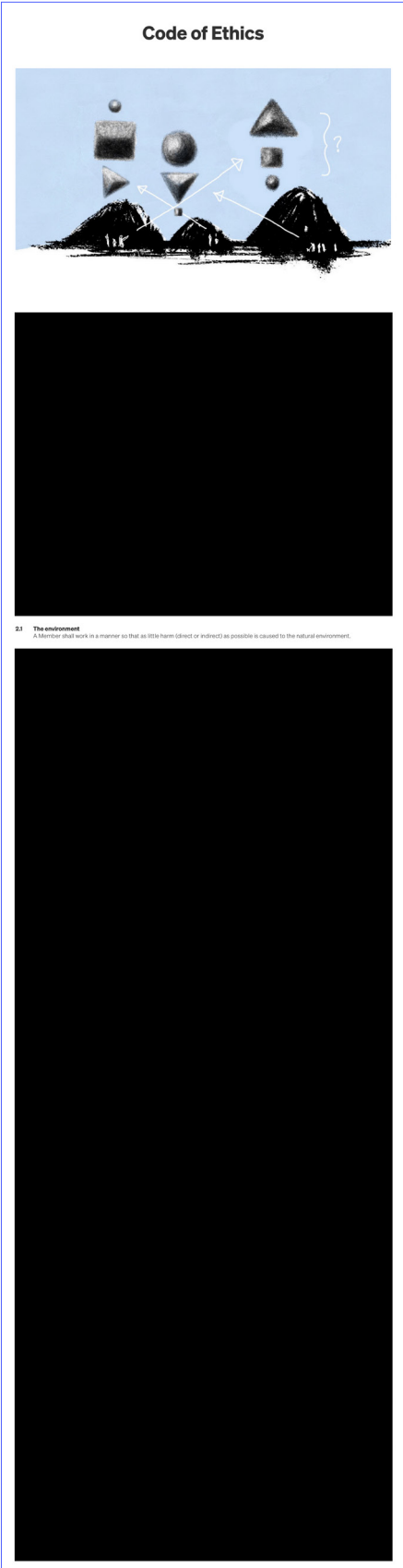


Figure 13.

AGDA Code of Ethics as at 12 August 2022

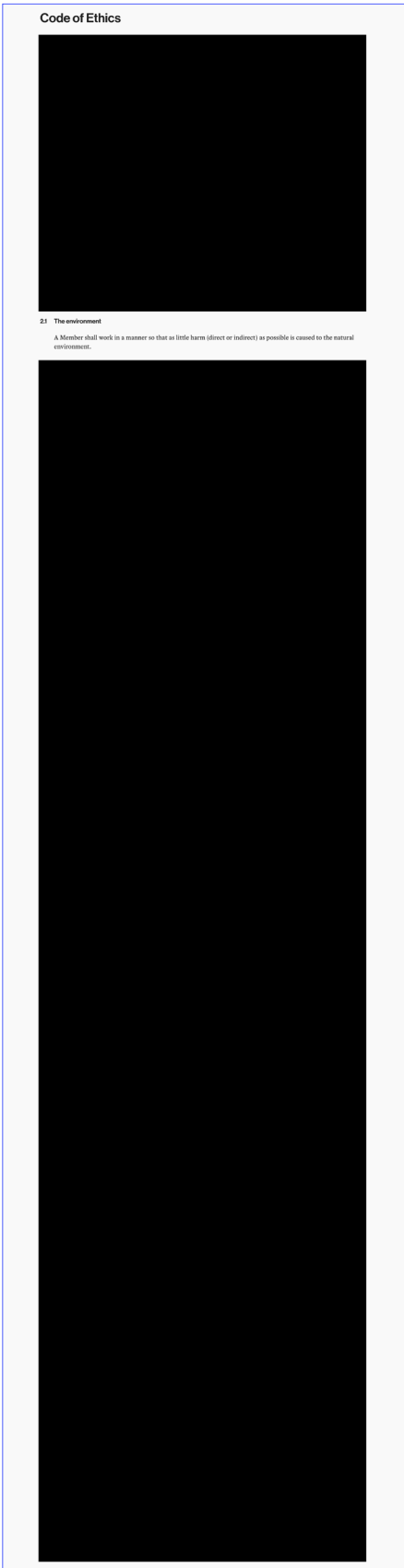


Figure 14.
AGDA Code of Ethics as at 11 June 2025

Nonetheless, AGDA does contribute significantly to the seen value of sustainable graphic design. AGDA was founded in 1988 and since 1992 has held graphic design competitions with submissions using pre-existing projects from the year(s) (AGDA, n.d.-b). 2014 saw both the last of the biennial awards and the first introduction of the “Design for Good” Category (AGDA Design Awards, 2014), making the value-focused design awards a recent addition. In 2015, the first annual AGDA awards competition was held (AGDA, n.d.-b) and in 2016 the sub-categories “Environmental Responsibility”, “Health & Wellbeing”, “Social & Community”, and “Miscellaneous” were added to the “Design for Good Category” (AGDA, 2016).

As these projects are not displayed on the AGDA site with any sort of project description, it is difficult to assess at face value what significance sustainability played in the involved design practices. However, a review of the winners and finalists over a six-year stretch from 2016 to 2021 (Appendix A) reflects a perception of “environmental responsibility” in design as work that develops branding or advertising for a sustainability-oriented company.

Of the 26 projects recorded as winners or finalists in the “Environmental Responsibility” category over six years, I only found three that made explicit mention of the material impacts of design work in their case-studies; Swear Words’ *Milk-in-Glass* brand and packaging design for Schulz Organic Dairy in the 2019 awards, Birdstone’s *Telstra Packaging Design System* for telecommunications company Telstra in the 2020 awards, and Paper Moose’s *Peachy Green* CO₂ absorbing billboard campaign for sustainability-forward telecommunications company Felix in the 2021 awards. Even within these three recognised projects, available details on how ecological sustainability factored into their design practices were minimal. 24 of the 26 projects recognised by these awards were for organisations where sustainability was explicitly part of their stated goal, purpose, or value-differentiation. The only two projects not for

damage to a member’s business are those that award projects or commissions on the basis of the commissioner’s acceptance of unpaid design submissions (e.g., unpaid competitive tendering or speculative work)” (n.d.-a, Section 6.2).

exclusively sustainability-oriented clients were Swear Words' *Milk-in-Glass* and Birdstone's *Telstra Packaging Design System*.

Though AGDA contributes to designers *seeing* sustainability as a concern, the organisation does not appear presently to be providing resources for designers to *know* how their practice integrates with larger ecological systems. As AGDA is a practice-focused industry body, the emphasis on industry perspectives is expected. However, it was apparent in 2022 that while sustainability was a held value within this organisation, it was not yet well supported for action. The similarity of findings when reviewing AGDA in 2025 suggests that sustainability has continued to occupy a similar level of consciousness without enactment or significant support in the Australian design industry within the past few years.

In looking for other sources of support for designers to be educated in sustainable design practices, I next turned to discipline development in higher education. Calls for sustainability to be “agenda-setting for universities” (Cohen et al., 2021, p. 364) are being heeded, though not at the rate or depth that sustainable design researchers would like. An apparent issue when seeking out data on the active integration of sustainability into tertiary design pedagogy is the separation between university course description, taught course content, and the lasting impacts or impressions on students. The following data comes from an exploratory data-mining experiment looking at the prevalence of words relating to *careers/products*, *ethics*, *politics/society/culture*, and the *environment* within the 2021 course description and core-subject handbook content of 10 Australian tertiary degrees in graphic design (Appendix B). An accurate and thorough evaluation of graduates' “knowledge ... skills and capacities to do something” (Boehnert, 2018, p. 183) would be a long term evaluation and is outside the scope of this doctoral research, but the information found through this experiment adequately demonstrates the repeated treatment of sustainability values as an addendum to student-facing course descriptions, particularly in comparison to the higher levels of emphasis on practice-oriented skills.

Figure 15.

Patterns in 10 Graphic Design Course Content Descriptions, 2021

AUSTRALIAN NATIONAL UNIVERSITY — BACHELOR OF DESIGN

Course Overview



Mandatory Subject Descriptions



DEAKIN UNIVERSITY — BACHELOR OF DESIGN (VISUAL COMMUNICATION)

Course Overview



Mandatory Subject Descriptions



MONASH UNIVERSITY—BACHELOR OF DESIGN (VISUAL COMMUNICATION)

Course Overview



Mandatory Subject Descriptions



ROYAL MELBOURNE INSTITUTE OF TECHNOLOGY—BACHELOR OF DESIGN (COMMUNICATION DESIGN)

Course Overview



Mandatory Subject Descriptions



UNIVERSITY OF SOUTH AUSTRALIA—BACHELOR OF DESIGN (COMMUNICATION DESIGN)

Course Overview



Mandatory Subject Descriptions



UNIVERSITY OF WOLLONGONG—BACHELOR OF COMMUNICATION AND MEDIA (VISUAL COMMUNICATION DESIGN)

Course Overview



Mandatory Subject Descriptions



UNIVERSITY OF NEW SOUTH WALES—BACHELOR OF DESIGN

Course Overview



Mandatory Subject Descriptions



UNIVERSITY OF TECHNOLOGY SYDNEY—BACHELOR OF DESIGN IN VISUAL COMMUNICATION

Course Overview



Mandatory Subject Descriptions



UNIVERSITY OF WESTERN SYDNEY—BACHELOR OF DESIGN (VISUAL COMMUNICATION)

Course Overview



Mandatory Subject Descriptions



VICTORIA UNIVERSITY—DIGITAL MEDIA (DISCIPLINE MINOR)

Course Overview



Mandatory Subject Descriptions



While all 10 courses mentioned the social or political influences of designers, only eight mentioned the environmental or ecological impacts of design. It also became apparent, when looking at patterns in word use (Figure 15), that most mentions of environmental/ecological/sustainable design were placed in sequence with the political and ethical responsibilities of design. This tracked within the underlying copy to ecology being included as a concern within repeated phrases throughout course learning outcomes, rather than a focus with independent prioritisation in course descriptions.

This kind of pattern was visible, for example, in the Royal Melbourne Institute of Technology (RMIT) course description and subject descriptions (Figure 16), with environmental concerns only being present within the repeated red-blue-red-yellow pattern: “Outcomes ... Work with others in a range of roles and contexts, demonstrating cultural, environmental and social awareness and ethical and reflective practice.” Similar patterns were visible in multiple courses, such as the University of South Australia (UniSA) course content (Figure 16).

Figure 16.

Excerpts from Appendix B. Pattern-Finding in the 2021 Graphic Design Course Content Description of Ten Universities

re principles it operates within. Integrate a broad and deep range of design skills for professional texts, demonstrating cultural, environmental and social awareness and ethical and reflective practice from a maker's perspective. Investigate and document the process within specific diverse design problems. Compare and contrast the different conventions that surround spe

responses relevant to purpose and context, with an understanding of the social, ethical, and environmental impact of their design practice. Students will further build the knowledge of and research into the development of effective communication design, using advanced skill and knowledge in typography, image design, and overall approach. Students will extend and apply skills in visual argument and critique designing strategies and responses to a range of issues and scenarios, and with increasing understanding of the social, ethical and environmental impact of their practice. **CRITICAL DESIGN PRACTICE** To extend students' ability to exercise critical thinking and judgement in the integration of the history, theory and social contexts of design through communication design practice. Students will consolidate knowledge of the discourses of design practice and identify contemporary influences on the making and reading of communication design as they integrate design theory with design practice. Students will review texts from a range of sources and use a critical approach to the analysis of relationships between image, text and historical/political/social conditions to articulate knowledge of the historical and ideological aspects of contemporary communication design. **PROFESSIONAL PRACTICE STUDIO** To consolidate students' intellectual and practical skills in designing visual communications of moderate complexity, and to extend the ability to respond creatively and critically to a range of situations through design, with advanced understanding of the social, ethical, and environmental impact of their independent and collaborative practice. Students will further develop knowledge of ways to apply research and experimentation, and utilise suitable methods to generate appropriate and valid propositions to communication design issues with cognisance of the social role of designers and in professional practice. Students will apply advanced knowledge and skill in typographic and image design and their approach, integrated with skills in visual argument and critique, and individual design perspectives will be consolidated. **PACKAGE DESIGN** To build on students' creative problem solving skills, their knowledge of

[Figure 16 Top: An excerpt from Appendix B showing an instance of the cultural/social-environmental-cultural/social-ethical pattern (red-blue-red-yellow) in RMIT's course content descriptions. Bottom: An excerpt from Appendix B showing multiple instances of the cultural/social-ethical-environmental (red-yellow-blue) pattern in UniSA's course content description.]

This visual notation makes the presence, or lack thereof, of environmental values in the course descriptions all the more apparent; the environment was repeatedly raised almost exclusively within this string of desired outcomes. Sustainability is visible, but most frequently within clustered values. Word use regarding the politics and ethics of design, while part of these clusters, also appeared more frequently than sustainability outside of repeated learning objectives. Though this reflects recognition of the value of sustainable practice within pedagogy, it does not indicate a significant inclusion of sustainability as agenda-setting, or even a standard aspect of practice.

The development of sustainable design practices requires the education and engagement of practitioners with local sustainability knowledge and information on implementation in practice. Unfortunately, few large industry spaces exist within an Australian context for working designers to be educated or engage in critique of educational institutions. The Australian graphic design industry does not have a hub for “open discussion on the topic of sustainable graphic design and a place to find in-depth resources” (Dritz, 2014, p. 47) and intra-industry knowledge sharing is limited.

1.5. Review of International Resources for Sustainable Design Practice

International English-language resources that target *sustainability* and *design* do exist but as they frequently treat one or both of these terms loosely, only a portion of the results are relevant. Notable reference resources such as courses, toolkits, books, and websites which were in some way applicable to sustainable Australian graphic design practice were collected between September 2021 and September 2024 and mapped based on their subjectively perceived relevance to ecological sustainability and professional graphic design (see Figure 17, pp. 44–45).

[Figure 17 Note: Sources that are relevant to professional graphic design and ecological sustainability are organised in the top right quadrant. The figure was redesigned in August 2025 and

many resources that were found to be defunct have been removed for clarity.]

Of the free resources identified in Figure 17 that are available to Australian graphic designers online, few are suited to working designers, fewer still are completely applicable to Australian audiences, and none specifically serve the audience of Australian graphic designers working in non-lead/c-suite positions (see Figure 18, p. 46).

[Figure 18 Note: Free resources identified in Figure 17 as being both related to ecological sustainability and graphic design practice are in Figure 18 divided into categories according to how applicable they are to working designers in Australia. The final row, which should hold resources specifically aimed at Australian graphic designers, is empty.]

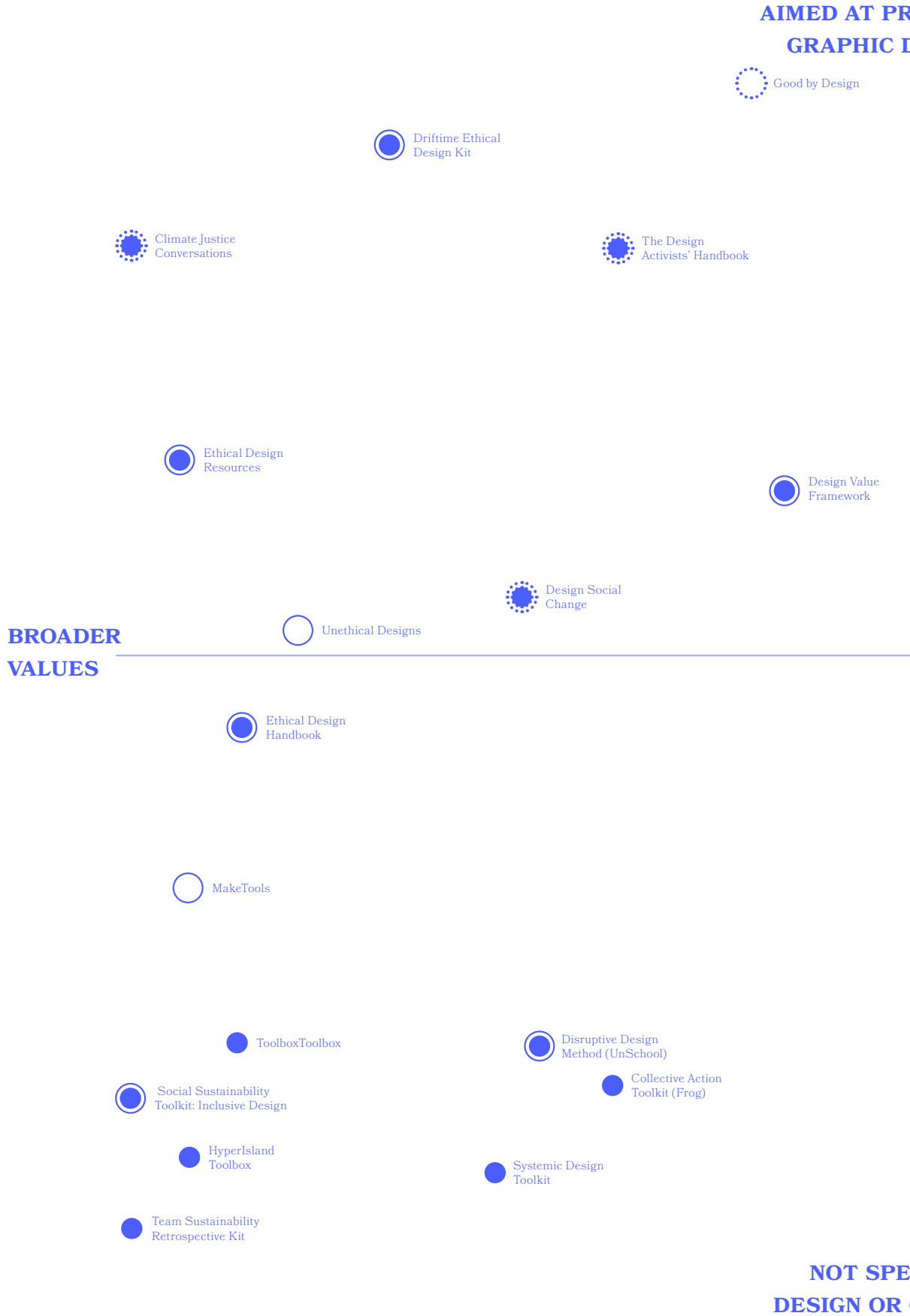
These visualisations act as overviews of available resources between September 2021 and September 2024 but greater examinations of this gap, such as by creating a rubric for assessing resources, warrants further exploration. The findings of Chapter 6, which discusses factors for the creation of successful sustainable design practice resources, offers a provocation to other researchers to extend the critique of existing resources.

There were books available within Australia that targeted both graphic design and ecological sustainability, such as *The Big Book of Green Design* (Stephens and Stephens, 2009), *Good by Design: Ideas for a Better World* (Cheung, 2022), or *The Design Activist's Handbook* (Scalin & Taute, 2012). These present design-specific expert knowledge through case studies and stories. Within these texts, responsible sustainable design is frequently represented as doing compelling design work for a responsible company, a perception of sustainable design mirrored within the previously discussed AGDA awards. Though this should not be downplayed as a crucial aspect of the ongoing development of sustainable design practices, the prioritisation of clients in the sustainability framework diminishes the perceived agency of designers in their own design processes.

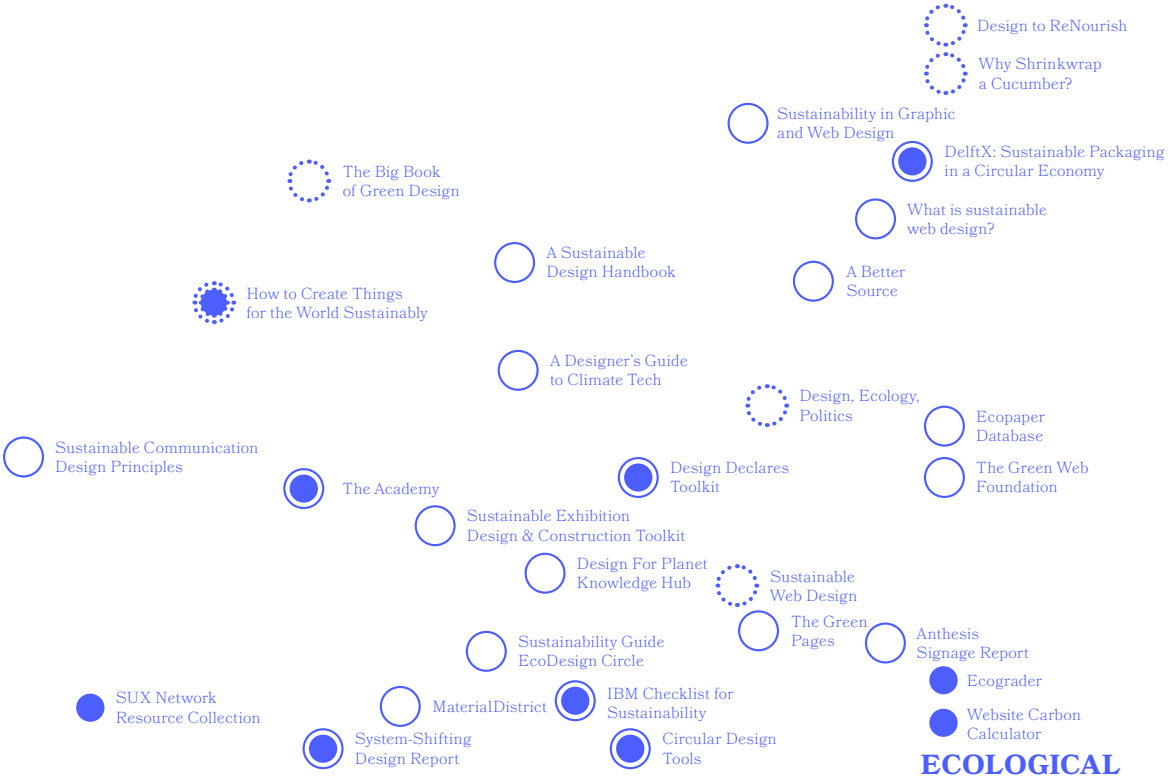
Figure 17.

International “Sustainable” “Design” Resources

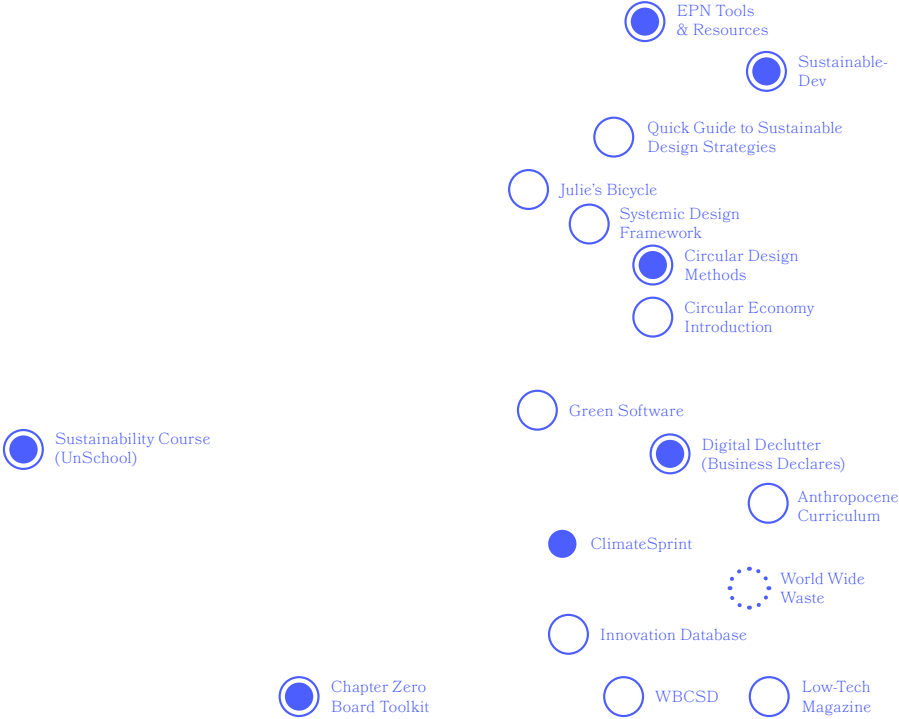
- ONLINE
- PRINT
- INFORMATIVE
- INTERACTIVE



PROFESSIONAL DESIGNERS



ECOLOGICAL SUSTAINABILITY



CRITICAL TO CREATIVITY

Figure 18.

Sustainable Design Resources Categorised

— ONLINE PRINT ○ INFORMATIVE ● INTERACTIVE

INFORMATION ON SUSTAINABILITY APPLICABLE TO GRAPHIC DESIGN

- System-Shifting Design Report
- Sustainable Communication Design Principles

INFORMATION APPLICABLE TO SUSTAINABLE GRAPHIC DESIGN PRACTICE BY TEAM MEMBERS WITH PROJECT/CLIENT CONTROL

- Design Declares Toolkit
- Circular Design Tools
- Sustainability Guide EcoDesign Circle
- A Designer's Guide to Climate Tech
- Design For Planet Knowledge Hub
- SUX Network Resource Collection

INFORMATION APPLICABLE TO SUSTAINABLE GRAPHIC DESIGN PRACTICE WITHIN WHOLE, SUSTAINABILITY-ORIENTED TEAMS

- IBM Checklist for Sustainability
- Anthesis Signage Report
- MaterialDistrict
- Sustainable Exhibition Design & Construction Toolkit

TOOLS APPLICABLE TO ONGOING SUSTAINABLE DESIGN PRACTICE BY INDIVIDUAL GRAPHIC DESIGN PROFESSIONALS

- DelftX: Sustainable Packaging in a Circular Economy
- A Sustainable Design Handbook
- What is sustainable web design?
- A Better Source
- Ecopaper Database
- Sustainability in Graphic and Web Design
- The Green Web Foundation
- The Green Pages
- Website Carbon Calculator
- Ecograder

TOOLS APPLICABLE TO ONGOING SUSTAINABLE DESIGN PRACTICE, SPECIFIC TO GRAPHIC DESIGNERS PROFESSIONALS IN AUSTRALIA

Unfortunately, this space is intentionally left blank.

A free text that did⁹ provide actionable knowledge to practise sustainability was *Re-nourish* (Benson & Perullo, n.d.), a website which provided tools and information as an extension of the book *Design to Renourish: Sustainable Graphic Design in Practice* (Benson & Perullo, 2017). The book expands on the

9 Since last reviewing this source in early 2024, the site has been updated and the tools, including a digital tool which calculated how to lay out non-standard-size print projects to save paper, are no longer available at all.

green design movement and espouses that designers should consider the long-term and unintended impacts of their products.

Eric Benson, Associate Professor of Graphic Design at the University of Illinois, and Yvette Gattineri, Assistant Professor of Graphic Design at Lasell University, use the physical book of *Design to Renourish* as a case study of the complexities of producing a sustainable piece of print design and, in the process, depict a work that took considerable time, expense, and additional education. Within the website, the authors share some of their tools and tips to streamline the process. These tools, however, were not well positioned for an Australian design audience; they were by and for American designers and therefore shared America-specific resources and focused on American standard paper sizes for their tools. A similar text found late in this research process, *Why Shrink-wrap a Cucumber?* (Aldridge & Miller, 2012), explores material impact within packaging through case studies and provides a translation of material information aimed at packaging designers. Although now respectively defunct and dated, the sharing of these tools and the journey can nonetheless be understood as the kind of situated knowledge and open-source sharing that is widely accepted as needed for further transformative change (Resnick, 2016).

1.6. The Problem with Garbage Information: Misinformation for Our Consumption and Comfort

The epistemological error in design is likely compounded by the prevalence of unattributed, unevidenced, and often contradictory information regarding the material impact of human actions on the environment. Misinformation, disinformation, and the confusion that they create pose a complex barrier to working designers trying to pursue information to inform their sustainable practices. In the absence of ongoing dialogues throughout the industry, designers seeking to understand how to change their practices may draw information from sources that are neither accurate nor industry appropriate. Sustainable design

practice is not an issue of information alone, as critical and reflective practices must be undertaken by designers. However, those practices are informed by the practitioners' knowledge. When practitioners are uninformed and uncritical, they risk perpetuating harmful systems of oppression and error (Boehnert, 2018; Costanza-Chock, 2020).

This section has its origin, not in the many theoretical and practical texts around sustainable practices for designers, but in my quest to collect and translate information on material lifetimes and life cycles for a working graphic design audience. My work researching and designing the *Small Handbook about the Big Idea of Ecological Sustainability for Emerging Designers* (hereafter the *Small Handbook*), a supporting resource for the Better Worlds Workshops Prototype discussed further in Section 5.4.1 and Section 6.1, catalysed this investigation.

What is explored in this section is one of many difficulties found in creating meaningful sustainability education for lay people, specifically, the tension between accurate complexity and impactful communication. In trying to develop a table of material information¹⁰ for designers, I found that few resources seemed targeted to the ways in which graphic designers, rather than industrial or architectural designers, understood these materials. This information was needed for the *Small Handbook*, which supported a workshop activity that asked designers to consider the long-term ecological impacts of their design practices. The planned *Small Handbook* required an easy-to-read table of material information aimed at working graphic designers, which was therefore low on technical terms, applicable to many different areas of graphic design practice, and brief. The impulse to say that designers could do this research themselves is muddled, first, by the time and effort that this would take from working designers and, second, by the complex web of misinformation that exists around sustainability and materials.

In an early test draft for the *Small Handbook*, information was collected from multiple sources including *Measuring Biodiversity*, an interactive

¹⁰ This table was intended to include each material's common name, variations, origin, disposal, lifetime, and possible closed-loop life cycle pathways.

encyclopaedia page published by the New Zealand government's Science Learning Hub Pokapū Akoranga Pūtaiao (2024). For the purposes of this early draft¹¹ and for working designers trying to identify at a quick glance what materials were “better” than others, this source seemed appropriate. The site is aimed at a science-interested audience with little existing knowledge, such as primary school students, and provides some sources and links. However, following the citation chains of the page to the origin of each factoid uncovered a significant problem; many of the easiest-to-find and -read sources that would appeal to time-poor designers contradicted each other and themselves. As is discussed further in Appendix C, these resources frequently either had no sources for their information or cited similarly mass-market sources with equivalently little evidence.

This issue of oversimplification of material information leading to misinformation was exemplified by the interrelated content of three sources: *Measuring Biodegradability*, published by Science Learning Hub Pokapū Akoranga Pūtaiao (2024) (henceforth *SciLearnNZ-Biodeg*), the *How Long It Takes 50 Common Items To Decompose* article hosted on Stacker (2024) (henceforth *Stacker-Decomp*), and the *Biodegradation* page of Wikipedia (2024) (henceforth *Wikipedia-Biodeg*). Here, I was specifically looking at the material lifetime tables on these pages; their lists of expected lifetimes of specific materials or products before degradation when disposed of as waste. Of interest were the similarities or differences in the given lifetimes, where the pages cited their information to and from, and how that information may or may not have evolved over time. The story of these popular material lifetime tables was one of layered misinformation, disinformation, and gaps of information, all of which may compound epistemological errors in design.

11 The creation of this particular section of the handbook was not meant to be of great consequence. At the time of designing it, the *A Sustainable Design Handbook* website seen in Figures 17 and 18 had not yet included significant material information and while some scholarly sources I had previously read contained material lifetime information, it tended to be singular mentions. This research wanted to collate these lifetime figures floating around into a single reference document for a workshop interaction that was only about 10 minutes long.

These pages (*SciLearnNZ-Biodeg*, *Stacker-Decomp*, and *Wikipedia-Biodeg*) appeared to be widely read. They were used to support information given in other sources, such as a blog posts by *The American Association of Textile Chemists and Colorists* (Forrest, n.d., para. 2) and *Reader's Digest* (Nargi, 2022, Section 12) citing *SciLearnNZ-Biodeg*, or a *Business Insider* (Allon, 2022, para. 8) article citing *Stacker-Decomp*. These were common, easy-to-read resources that displayed material lifetime information that, at first glance, appeared evidenced and reliable. Tools such as the Ahref Backlink Checker indicate that the figures from *SciLearnNZ-Biodeg*, *Stacker-Decomp* and *Wikipedia-Biodeg* alone have been linked to and repeated across hundreds of websites and there are countless other lists of material lifetimes like these out there across both print and web. They appealed to a desire for guidance regarding better materials that were simple and allow for linear comparisons. All three resources, however, were missing sources, misquoted their identified sources, or simply attributed information to entirely incorrect sources. These failings can be seen in more detail in Appendix C. While the content of these pages may have originally derived from evidenced research, their original sources were unclear at the time of this research.

Not only did these pages cite sources that did not match, that they predated, or that they were cited by in turn, they were all more fundamentally misleading. By providing the lifetimes as these concrete numbers, sometimes as exact as “5 days–1 month”¹², the given lifetimes seemed somewhat measured and assured. Material usage, however, is just not that simple. While all three sites included some form of disclaimer, implied or explicit, about the inherently inexact nature of material lifetimes, the very existence of the tables significantly downplayed the ways in which material-use cases, disposal environments, or specific combinations affected how long things last.

Take paper as an example: *Wikipedia-Biodeg*'s title included that its information was for waste “in a terrestrial environment”; *SciLearnNZ-Biodeg*'s

12 This is the lifetime given for vegetable matter by all three sites.

introduction stated that it was about waste “if left in the environment” (2024, para. 5), while *Stacker-Decomp*’s table title said “to decompose” (2024, para. 4) without specifying the decomposition context. *Wikipedia-Biodeg* and *SciLearnNZ-Biodeg* both listed paper as lasting for “2–5 months”, while *Stacker-Decomp* listed paper waste as taking “2–6 weeks” to decompose. These numbers did not hold up to scrutiny when I questioned the details. Was this wood-pulp paper or wood-free paper? What GSM was that paper? Was it manufacturer waste or post-consumer waste? Had it been printed on, glued, torn, wetted, or previously recycled? Had it been disposed of in residential compost, industrial compost, dry landfill, or discarded in the environment? All of these factors affect the decomposition rates of paper (Ahmed et al., 2018). These questions may have been answered in the sources these tables possibly originally drew their information from but, as detailed in Appendix C, these accurate sources were not communicated properly.

These questions are worth asking when given a concrete timeline. Uncoated paper degrades more quickly in a home compost environment than glossy coated paper and printed paper more slowly than unprinted (Ahmed et al., 2018). Landfill investigations have found low GSM printed paper, such as newspapers or office documents, legible and recognisable as much as 36 years after their publication (Rathje & Murphy, 1992), a far sight longer than the two-to-five months or two-to-six weeks given by these websites. These factors become even more complicated and nuanced for materials like plastics, which have mostly been invented within their expected lifetime. The first plastic toothbrush, for example, could well reside, intact and identifiable, in a landfill or a floating garbage patch somewhere¹³. How can decomposition lifetimes be given to materials for which, in many respects, we only have a half-life (Chamas et al., 2020)? How might providing practitioners making production choices with these simplified and decontextualised numbers materially affect what is produced?

These numbers, and the sources that provide similarly simplified lifetimes, are likely more useful as rhetoric rather than a reliable reference resource. They

13 Plastic-handled brushes with nylon bristles became available in the 1930s (Fischman, 1997), well within the expected degradation timeline of plastic.

are certainly compelling; I have found myself spouting similar kinds of numbers to people I know, holding up a disposable plastic water bottle and decrying that its half-life is 2,500 years (Chamas et al., 2020). These numbers are sometimes so appalling that they feel like they should just work. Once you are aware of material impacts, plastic, for example, feels ever present even just in the grocery store: plastic punnets of berries, plastic wrapping or packaging on meat, plastic lining in the carton of alternative milks, plastic bags for separating fruits and vegetables, plastic windows in the paper bags for bread, plastic lids and seals on glass bottles, plastic bags for all manner of dried goods, thin skins of plastic lamination on the external label of jars and cans or lining the inside of cardstock cartons. However, while the heightened awareness from the material lifetime numbers may affect mindfulness regarding what materials one purchases, they do not sufficiently inform knowledge regarding how to deal with these material choices in practice; how long do they really last, does that even matter, where do they come from, how should they be disposed of?

Material lifetimes are nonetheless persuasive rhetoric, despite their sometimes dubious veracity. The comments on the *Be Healthy and Relax* page on decomposition (2007), which was cited incorrectly on 7th of October 2008 as the source for the material information given by Wikipedia¹⁴, reflect the ways in which these seemingly concrete numbers affect people's consumption and disposal behaviour. Commenters wrote how about seeing the given figures encouraged them to bring lunch containers to work rather than use the provided styrofoam (brip blap, 2007) or to petition their condominium associations to get recycling bins (Alana, 2007).

Communication focused on the representation of material lifetimes can be fruitful for altering audience perceptions of waste. Megan Wong's 2021 master's thesis, *Tracing Afterlives: Visualising the Deep Time Persistence of Plastic Waste*, explored the use of visual communication in developing awareness of the persistence of plastic and to open up ecological conversations. Her research used

14 The citation was incorrect as (1) the blog did not predate that version of the Wikipedia information table, and (2) it was an exact match for none (0) of the 14 listed materials' lifetimes.

visual communication through photography, material experiments, speculative storytelling, and participatory design workshops. In particular, the research found that prompts that guided participants through the process of imagining the impact of a given piece of plastic over 1,000 years into the future resulted in strong emotional reactions from participants. When an audience meaningfully contemplates the lasting impact of materials, their perception of those materials is affected.

It is very difficult to understand the scope of lasting waste and damage that is out there and being able to draw a mental distance between the lifetime of, say, a glass bottle and a plasticised-paper milk carton can help form a kind of worldview. While the tangible rhetoric of concrete material timelines is compelling, so much of what is available is not evidenced, traceable, or clear about the complexity of the subject matter.

The worldview that is informed by material lifetime tables may perpetuate epistemological error. By de-contextualising material lifetimes from the actual attributes of those materials, their complex pathways into and out of use, their disposal or reuse, readers can continue to treat the world as “divisible, separable, simple, and infinite” (Meadows, 1982, p. 101). The prevalence of these material lifetime tables also means that the validity of the numbers used by practitioners cannot be guaranteed. While knowledge of material properties is needed to inform changing practices, resources that target the interconnected and complex navigation of material usage should also be developed.

SciLearnNZ-Biodeg, *Stacker-Decomp*, and *Wikipedia-Biodeg* are widely read and appear reliable, but these sites and those who cite them have been recycling oversimplified versions of crucially complex information for more than a decade. The research needed to verify material lifetimes for graphic design is not feasible for working designers to undertake in the pursuit of their practice. I suspect that most designers who want to learn such material information would turn to what is readily available, namely resources like *SciLearnNZ-Biodeg*, *Stacker-Decomp*, and *Wikipedia-Biodeg*.

Prior to this investigation and while creating the Better Worlds Workshops, I was interested in materials only as part of a sustainable design process and inasmuch as the designers themselves seemed to care. The pedagogies, epistemologies, and politics of sustainable design practice had been of significantly more interest than the numbers around material and waste. The search for material information for the *Small Handbook* greatly affected my consequent framing of material impact as I became more invested in what, exactly, happens to the things we make and how we talk about the material waste we produce.

There needs to be a clearer space for ecological literacy information for designers that is supported by people with the professional and context-specific knowledge needed to identify useful information and actionable advice for practitioners. This space should allow for complex discussions and education, because simplifying information for consumption means that it loses validity, evidence and, ultimately, clarity. The revised *Small Handbook* for the refined Better Worlds Workshops addresses this gap but can do so only partially. It guides designers in the process of reflecting on their practices, in seeking out more knowledge and support, and in understanding the use and impact of materials in graphic design. In addition to what can be developed for designers, there is a need for greater transparency in material and manufacturer labelling and certification. This is a space that demands more research and attention than was possible in this doctoral research but should be considered further.

Designers becoming educated around the ecological sustainability of their practice, whether they are self-directed in industry or working in an educational context, need resources that are curated for them by researchers with the time and skill to find evidence that is locally relevant and specific. This is a complex area to navigate and one that does not yet seem to be adequately addressed by design-oriented resources.

1.7. Conclusion: Seen, but not Known or Done

Much existing literature supports the belief that sustainable practices and epistemological frameworks are not being adopted by a significant portion of working designers despite being a value in the profession. A lack of clear information and targeted resources, compounded by the constraints of practice, inform the value-action gap for sustainable graphic design in Australia.

In order to support changing design practices, interventions must develop the seeing, knowing, and doing of sustainability. As the authors of *The Design Activists' Handbook* wrote, “No-one tells you, in practical terms, how to make socially conscious design a part of your day-to-day work life” (Scalin & Taute, 2012, p. 14). Available literature indicates that educational campaigns based on ecological knowledge, while crucial in many aspects, are not enough for concepts to move from recognition through to methodology. Instead, designers must be involved in continuing dialogues for change, supported by intra-industry knowledge sharing. Interventions into Australian graphic design communities of practice must support the knowledge and enactment of sustainable design. Without this, pathways to action are unclear for working designers and their sense of agency for change is limited.



(CHAPTER TWO)

**LITERATURE REVIEW:
HOW TO TALK ABOUT
SUSTAINABLE GRAPHIC
DESIGN PRACTICE IN A WAY
THAT MAKES A DIFFERENCE**

2. LITERATURE REVIEW: HOW TO TALK ABOUT SUSTAINABLE GRAPHIC DESIGN PRACTICE IN A WAY THAT MAKES A DIFFERENCE

The title of this chapter is taken from social theorist Rebecca Huntley's 2020 book, *How to Talk about Climate Change in a Way that Makes a Difference*. Her writing in this book, as will be discussed further in Section 2.4, was formative to this thesis' consequent questions of *how*; how do we navigate the many and varied factors influencing the sustainable design value-action gaps in Australia, how might the industry become less siloed when sharing sustainable practice information, how might designers examine their own practices and those of industry in a way that promotes change? *How do we talk about sustainable graphic design practice in a way that makes a difference?*

As was evident in the survey of practice in the previous chapter, support for ecological literacy and greater intra-industry knowledge sharing are desired by established design dialogues but not yet pervasive across the Australian graphic design industry. If educational resources alone are not enough to develop ecological literacy among design communities of practice, how might much-needed continuing dialogues for sustainable practice be developed and supported? This research proposes that multiple key factors need to be addressed in order to meaningfully shift designers' perspectives on their work, their industry, their responsibilities, and their possible future worlds. Here, I am expanding my research into practice theory and sustainability education to propose that designers' capacities for change must be bolstered by ecological literacy, practice critiques, and hopeful futures.

2.1. Criticality

Designers who choose to work outside of, or against, the status-quo of unsustainability are, by nature, demonstrating critiques of existing industry practices (Boehnert, 2014; Matos, 2022; Mazé, 2013). The research of Ramia Mazé, Professor of Design for Social Innovation and Sustainability at the London College of Communication, addresses the complexities of forming and articulating critiques through graphic design practices. In her lecture at the *IASPIS Forum on Design and Critical Practice* (Mazé, 2009), she spoke to the ways in which graphic design theory leans on the academic discourse of architectural and industrial design to articulate the potential conceptual roles of visual communication.

Mazé's lecture proposes that graphic design practice itself, not only the products of practice, is a means for designers to mount meaningful critique. Rather than "critical positions of design [that] could only be made from the outside" (Mazé, 2009, p. 387), she advocates for criticality in design developed through practice by practitioners. The lecture outlines three modes of critique formed by designers; reflective on their own practice, contributing to disciplinary level discourse, and on global or societal issues. By "reflecting on what they do and how they do it" (Mazé, 2009, p. 389), designers develop positions within their own practice that allow them to articulate their goals and actions with clearer intentions. These reflective practices sharpen critiques by the designer towards the actions of the discipline through the comparison of practices, through future imaginations, and through the re-contextualisation of own practices. While this doctoral research is concerned with sustainable practices, which are a global phenomenon and a pressing meta-level issue, Mazé's first mode of criticality provides a lens to target the actions of the individual designer.

This kind of critical and reflective practice is key, as "sustainability is always and continually at stake" (Mazé, 2013, p. 109) and is continually negotiated. Sustainable work is also inherently political and necessarily critical of current unsustainable practices as "'sustainable design' implies the un-sustainable" (Mazé, 2013, p. 9). In developing critiques of their own design practice, of who or what

they are working for, how the work is made, and how it is performing conceptual communication, designers are involved in a process of developing their own practices. The practices of designers themselves, not their work products alone, are a means to mount and pose a process of critique. This is an area of sustainable design practice discourse underexplored by present design theory discourses.

Designers have a shared understanding that graphics are a means to create, alter, and disseminate messages. By involving designers in the purposeful investigation of what they are making, how and why, they may be able to develop deeper critiques of their own practices and of those that they share with others, and to learn and share those with their communities of practice.

2.2. Situated Knowledge, Situated Change

It is crucial, when discussing changes to design practice, to understand the ways in which information is restricted in its uptake and application by designers. Situated knowledge, proposed in 1988 by prominent feminist author Donna Haraway, is a feminist science epistemology that accepts that knowledge is not universal. As all humans are unique and influenced by their unique contexts, their ability to attain, share, understand, and implement knowledge is inherently unique and thus partial. The capacity to share useful information is not found through disengagement with outside contexts, but through the awareness that all people are subject to “mutual and usually unequal structuring” (Haraway, 1988, p. 595) which affects what each person has learned to see and observe about the world and what they have access to. As such, it is crucial to understand when sharing knowledge that it will only be partially internalised, and when implementing or analysing knowledge that it has originated within specific contextual influences.

Situated knowledge proposes that all contexts are unique and all contexts of knowledge application are unique. This is an idea already acknowledged by design education, as in Lupton and Phillips’ seminal *Graphic Design: The New Basics*, where the authors state that “each producer animates design’s

core structures from his or her own place in the world” (2015, p. 14). As the introduction to that book sets out, while design can be understood as a “language of vision” (2015, p. 8), it is a language whose implementation and use shifts significantly based on individual and cultural context and the advancement of new technologies. As such, this thesis proposes that, for work that is all about the making, sharing, and implementation of sustainable design practices, we need to address the contexts surrounding new pieces of knowledge; how they are developed, who is sharing them, and how they might be applied in practice.

Researchers of practice theory—the examination of how and why practice is enacted—have proposed that knowledge is not sufficient to change practitioner actions. Instead, “it also requires changing the conditions that support their practices ... that enable and constrain their practices” (Kemmis et al., 2014, pp. 55–56). These conditions are practice architectures; structures and influences that may include cultural knowledge, social interactions, political messages, economic factors and geographic locations. The term *practice architectures* itself, coined by Grootenboer and Kemmis in 2008, provides a useful framework for understanding the often implicit or unspoken aspects of how, exactly, we think we can work. It provides a framework within which to discuss the ways in which practices are neither individual, objective nor isolated operations.

This research proposes that situated knowledge is needed to build designers’ capacity to engage with the practice architectures that influence them while being “ecologically informed, critical [and] reflexive” (Boehnert, 2018, p. 86). The articulation of situated knowledge by practitioners regarding sustainable Australian design practices is a crucial task for the engagement of designers in ongoing constructive dialogues as it contextualises and guides the development of possible pathways to action. This sharing of specific and situated knowledge is relevant in the realm of sustainable design practice research, as it is understood that “together and individually [we] must reflect upon our values” (Benson & Perullo, 2017, p. 115). The focus on situated knowledge and outcomes in this research was intended to develop work that is specific, appropriate, and actionable in various contexts.

2.3. Design Justice

Sasha Costanza-Chock, author of *Design Justice: Community-Led Practices to Build the Worlds We Need* (2020) and Associate Professor of Media and Screen Studies at Northeastern University, advocates the use of design justice as a framework for interaction design. Design justice is a critical approach to design which focuses on equality and individual standpoints, to inform participatory design. This, she argues, helps interaction designers address the ways in which harmful systems are perpetuated by uninformed and non-reflective design. Design justice is an approach to design that acknowledges and addresses the complexities of altering designers' perceptions of their work and practices by interrogating the normative goals and practices of design. The issues of uninformed and critical design highlighted in *Design Justice* (2020) are primarily addressed within an interaction design context, but the practice considerations proposed are applicable to all realms of graphic design.

The book explores contemporary methodologies of participatory design and the practice of design in various contexts, including activist work, pedagogy, and hackathons, to establish opportunities for the use of participatory design. The text also provides guidance regarding common instances of sometimes unintentional dis-affordance, failure, discrimination, and harm. Costanza-Chock proposes, through these examples, the use of the Design Justice Network's principles (2018) to guide participatory design. *Design Justice* as a text is grounded firmly in the practices of working designers and in the lived experiences of those who interact with those designed products; each chapter includes actionable recommendations for practices to adopt or avoid. This provides an orienting framework for developing mutually beneficial exchanges between participants and the design facilitator in a participatory design process.

Costanza-Chock indicates that the continual development of often unintentionally harmful work is due, in part, to a gap between the social and technical aspects of design practice. She proposes that it is not a lack of knowledge that is preventing the uptake of more just design, but a lack of critical practices implemented in everyday design work. This presents an opportunity

for this research to explore the development of such critical practices within the graphic design profession. However, *Design Justice* also establishes that tools alone are not enough; they must lead to changed practices and changed perspectives that alter how designers approach problems. The book offers, at each point of critique, suggestions for altered practices or changed points of view.

In *Design Justice*, Costanza-Chock additionally proposes a form of participatory design guided by a feminist and queer belief that “all knowledge is situated in the particular embodied experiences of the knower” (2020, p. 9). This aligns with the emphasis in this research on the utility of situated knowledge and the need for sustainable design discourse to draw out and share each practitioner’s knowledge from their unique contexts. Costanza-Chock prioritises non-extractive community engagement, that is, engagement that supports the community it is learning from through the reciprocal supply of design solutions or the exchange of knowledge, while designing for a breadth and depth of users to create “highly specific, intentional, custom design that takes multiple standpoints into account” (2020, p. 230). This research adopts an approach informed by design justice to address the issues of limited agency and resources for the Australian industry and the desire in sustainable practice research for multiple situated and local pathways to action.

The introduction of design justice to this research informed both its approach to engaging designers in drawing out situated knowledge and considerations of how the design outcomes of this research will aid practising designers. The Design Justice Network principles (2018) state that change emerges from collaborative, transparent processes that first look at what is working at a community level and that have a reciprocal relationship with researchers and designers. In line with these principles, this research positioned the research in the working community context and maintained a critical and reflective approach to participant engagement, as discussed further in Chapter 3.

2.4. Constructive Emotional Responses

Within this realm of shifting approaches to sustainability conversations, this research sought to extend existing theories around transformational paradigmatic and epistemological shifts. It is difficult to identify discussions in design literature of how we think about sustainability, or even why we think what we think about sustainability. As this research aimed to develop insights into how sustainability is understood in the Australian design industry and how that understanding might be changed or acted upon, I introduced research by sustainability education and communications theorists to strengthen these insights. In particular, I incorporated insights established by prominent Australian social researcher Rebecca Huntley, who extended the research of climate communication theorists George Marshall, Per Espen Stoknes and David Orr into an Australian context.

In her book *How to Talk about Climate Change in a Way that Makes a Difference* (2020), Huntley explores the immense difficulties of talking about sustainable futures and how communication impacts individual action. She draws on academic and global conversations in climate change communication that range from conversations with Anthony Leiserowitz, director of the Yale Program on Climate Change Communication, and Miranda Massie, the founder and director of the Climate Museum in New York City, to anecdotal reflections on the cultural and psychological impact of the devastating 2019/2020 Australian bushfires. An aspect of sustainability-focused social theory Huntley highlights is the necessity for people to find and discuss their own “climate stories” (Huntley, 2020, p. 244). In line with other literature regarding advocacy for climate action (Portus et al., 2024; Stoknes, 2015; Wong, 2021), the prevalence of education regarding the climate crisis is not sufficient support alone. Evidence for the climate crisis without a proposal of hopeful futures and pathways to action feeds into an anxiety-inducing dialogue for those already converted and becomes a “familiar script that can leave us cold” (Huntley, 2020, p. 16) for those who are not.

This is not to say that discussion of climate change should be so sanitised that there is no discussion of its negative impacts. What Huntley draws out is

the difference between *guilt* and *shame*; she explains that for these climate conversations, guilt is preferable. Shame makes us freeze, but there is a “constructive level of guilt” (Huntley, 2020, p. 71) found in reflecting on previous actions that may change how one acts moving forward. Both are possible consequences when discussing issues of personal practice, but critique is still necessary in order to identify a better path.

While climate change is a pressing concern and an imminent threat, it is frequently perceived as an emotionally distant issue. Psychological distance is a theoretical construct which represents the perceived gap by a person between that individual and the possible impacts of an issue on their life, with higher distance denoting a less relevant-seeming issue and likely less emotional investment (Wang et al., 2019). Ecological psychology researchers found that where there is significant psychological distance between individuals and the threat of climate change, there is less prevalence of *care* or action about climate change (Wang et al., 2019). The gap between value and action is widened the further away people feel from the impacts of climate change (O’Neill & Nicholson-Cole, 2009; Wang et al., 2018).

As the proliferation of evidence alone is not enough to bridge the value-action gap, other tactics and support must be gathered to create change. Huntley proposes that continuing conversations around climate change, which help form community bonds and individual action, should be centred on a shared locus, or *object*, of care. Huntley drew the concept of *objects of care* from a 2018 ecological psychology study of emotional responses to climate change that found a connection between emotional response to climate change and actions taken to support environmental policy (Huntley, 2020, p. 219). The paper found that scientists’ emotional responses frequently centred on the effect of climate change on the things and people that they love; that “one’s care for objects affected by climate change is central to caring about climate change itself” (Wang et al., 2018, Section 2.3). These objects of care act as *connectors* that make “the issue of climate change seem personally relevant to the individual” (Wang et al., 2018, Section 1.1). Following these ecological psychology studies, Huntley argues,

“What these studies show is that the starting point in any effective discussion of climate change is not climate change itself, but what we care about, what we love” (2020, p. 222).

Objects of care¹⁵ help to shorten the psychological distance between individuals and the real impacts of climate change and thus make discussions of climate change more tangible. These objects are nebulously *things* that act as connecting loci of care; they can be people, places, flora, fauna, situations, or experiences that the people included in the discussion are emotionally connected to and which may be threatened by the ravages of climate change. It is the anticipated harm, the perceived threat, to objects of care that may help bring fears of climate change into focus. As Wang et al. write:

These “objects of care” may bridge the psychological distance between the self and climate change, making the issue of climate change seem more personally relevant, evoking stronger emotions, and prompting action. (2018, p. 25)

While Huntley and the ecological psychology research she draws from are speaking specifically to climate change, these ideas are transferable to conversations about sustainability. The purpose of an object of care is not to cause fear or alarm; it is to find something that makes the issue of sustainability feel real in a way that it frequently does not. The term *object of care* is only briefly mentioned by Huntley, but it forms a fundamental aspect of her whole book. The catalyst for her writing is her own object of care; her children and her fear for their future. Huntley asserts that whether that shared love is birds, food, or work, discussions of sustainability must prioritise that which is personally relatable to the audience. Objects of care became an unexpected cornerstone of this research

15 This phrase is not entirely unique to ecological psychology, as seen in the 2022 design research paper titled *Objects of Care* (De Koninck & Devendorf, 2022) which uses this phrase to refer to objects that can be taken care of. However, “objects of care” in this thesis is referring to Huntley and Wang et al.’s use of the term as an ecological psychology connector that reduces psychological distance.

and were found through the Better Worlds Workshops Prototype (Chapter 5) to be a key path to bridging the sustainability value-action gap (discussed further in Section 6.5).

2.5. Envisaging Changed Practices through Worldbuilding

Rectifying the value-action gap will require people to engage with radical alternatives to accepted norms and to do so without becoming paralysed by fear or indecision (Fry, 2009; Huntley, 2020; Stoknes, 2015). As climate communication psychologist Per Espen Stoknes wrote, “We need new stories to make sense of the ongoing boisterous transition towards the greening of technology, business, and culture” (Stoknes, 2015, p. 120). Huntley posits that it is vital to sustainability communications to have narratives that “encourage a form of active hope” (Huntley, 2020, p. 236), while Boehnert argues that design should produce “something affirmative [that] must provide an alternative” (Boehnert, 2018, p. 141).

If “without hope, people are unlikely to take action” (Light et al., 2018, p. 3), then this research proposes that situated hope is exactly what is needed. Situated hope would draw on people’s own situated knowledge and that of their community of practice to develop a way forward. This research argues that Australian graphic designers need to not only be engaged in more effective actions, but to be motivated by hopeful futures rather than fear. This is critical as it moves the discussion of sustainability education away from the fear- and shame-based messaging of much established communication (Huntley, 2020).

The creation of imaginative work that speaks to different histories or different futures allows us, in some ways, to rehearse the future (Halse et al., 2010; Korsmeyer et al., 2024). Engaging with acts of imaginative creation allows for rich and persuasive conversations (Knutz et al., 2016; Knutz & Markussen, 2020; Zaidi, 2019) and may be instrumental in creating future-thinking pathways to action. Sustainability transition researchers have argued that “more effective

means to engage and empower citizens to effectively comprehend and actively take part in futuring processes should be developed” (Garduño García & Gaziulusoy, 2021, p. 11) By engaging designers with the speculative process, they may reflect on their own present situated experiences.

An area of speculative imagination that is of interest here is worldbuilding, the development of the internally coherent rules and context of a setting or storyworld. Leah Zaidi’s comprehensive examination of worldbuilding in her 2017 master’s thesis, *Building Brave New Worlds*, presents the process as a powerful tool for affecting the future. In particular, Zaidi discusses worldbuilding as a method in speculative design drawn from a literary, predominantly science-fiction, tradition of storytelling. As Zaidi argues, worldbuilding is not a solely authorial exercise but one that examines the “underlying systems that drive the worlds” (McDowell & Stackelberg, 2015, p. 26) and which, in its development, uses visual communication skills to develop robust images of probable imagined worlds. Worldbuilding allows those who create and engage with it to develop critiques of both imagined and real systems (Taboada & Turner, 2021). However, worldbuilding projects cannot be separated from, or be impartial to, the ideology and context in which they are created. Visions of speculated worlds are inextricable from practitioners’ own perceptions of the present, as they “end up embedding pieces of the past and the present in the future” (Zaidi, 2017, p. 31). Lived experiences form the basis for possible worlds (Korsmeyer et al., 2024). The perception of what constitutes a possible better world is inherently tied to what the creator views as both *better* and *possible*. Some projects account for this by drawing contributions for speculation from multiple participants to develop more democratic or diverse end products (Byrne & Kelliher, 2015; Bleecker, 2015; Zaidi, 2019).

An initial proposal of this research was that when the innately personal and individual nature of speculative worldbuilding is embraced, the comparison and analysis of these underlying values provides avenues for further critical analysis. When participants speculate collaboratively, they might provide a range of outcomes for analysis and mitigate homogeneous, hegemonic speculations.

Though sometimes dismissed as shallow or impossible (Slaughter, 2003), images of ideal change provide “a praxis towards a never-finished project of building a better world” (Baumann, 2018, p. 303). The collaborative development of worldbuilding may allow for the creation of “brief-but-vivid narratives to accentuate moments and perceptions that are highly personal” (Akama et al., 2020, p. 104). It was this combination of aspiration and brief-but-vivid imaginations that oriented the worldbuilding practices described in this thesis. This combined approach may help designer participants close the psychological distance between themselves and their future climates, oriented by their own situated experiences and hope, rather than fear.

As previously stated, complex phenomena such as climate change and ecological sustainability are difficult concepts with which to grapple. The defamiliarisation (Bell et al., 2005) of normal practices through collaborative worldbuilding may allow for deeper reflection. While the use of worldbuilding in design research is an emergent pursuit, the use of other, often playful, creative prompts for conducting serious real-world discourse has been successful.

Research by members of the CreaTures research group, an EU Horizon 2020 research project on creative practices to support eco-social change, reflected that “participatory creative practice can enable a shift from the design of universalizing solutions to the nurturing of stakeholders capacities and relations” (Dolejšová et al., 2021, p. 2). The creation of, and reflection on, collective creativity has been a means of researching social and political engagement for decades, from the taking part process (Burns & Halprin, 1974) and the experiment-oriented walking design games of the 1970s (Sanoff, 1979) to the rough prototypes (Vaajakallio, 2012), experiential futures (Candy & Dunagan, 2017; Byrne & Kelliher, 2015), futuring conversations (Grocott et al., n.d.), card-games (Candy, 2018), and experiential art projects (Houston et al., 2022) of more recent collaborative work.

One method of inquiry common to worldbuilding projects is design fiction, defined within this research as diegetic designed artefacts that belong to a storyworld and which can be examined or interacted with to further the narrative.

Though *artefact* implies a work of industrial design, in reality, design fiction projects vary in execution. They are:

(1) something that creates a story world, (2) has something being prototyped within that story world, (3) does so in order to create a discursive space. (Coulton & Lindley, 2015, p. 210).

Examples of design fictions include websites (Pescovitz, 2009), digital images with narration (Burdick, 2018), fabricated research papers (Coulton & Lindley, 2016; Coulton et al., 2017), or a series of guerrilla collateral printed elements (Candy & Dunagan, 2007). The application of visual communication knowledge to the construction of diegetic properties allows for strong aesthetic outcomes, outcomes that are both persuasive and discursive in their own right and can be used as focal points for further discussion and analysis.

Participatory worldbuilding, the collaborative creation of speculative stories, may act as loci for conversations regarding preferred change. The development of speculative stories allows those telling them to articulate and lay bare often uninvestigated values and actions and to do so using visual communication, such as design fictions. Participatory worldbuilding cannot be the sole construction or dissemination of discussions about sustainable change. However, reflections of common aspirations may help us better identify what we want to move to and what gets left behind.

2.6. Workshops for Sustainability and Changed Practices

Sustainable graphic design literature calls for situated and local resources for practice. However, there is a lack of resources that are appropriate to professional Australian graphic designers and that address the realities of their practice. How might we, in light of the need for situated and local interventions, create resources which are situated and help develop pathways to action? Workshops are one means to achieve these goals.

Workshops, meaning people in a shared space—digital, physical, or a mix thereof—working together through a script and possible associated materials (discussed further in Section 3.2.2.1), allow for extended conversation, physical interaction, creative responses, and collaboration among multiple participants. Workshops can at times be difficult to define because they are such an assumed part of the participatory practices of many different disciplines. This research aligns with the examination of workshops found in Anja Groten’s doctoral dissertation *Figuring Things Out Together: On the Relationship Between Design and Collective Practice* (2022a). The word *workshop* in modern parlance can mean the kinds of participatory engagements that this thesis is discussing, or an artisan’s workspace. The etymological origin of *workshop* as an educational structure is likely drawn from the latter definition, where apprentices, masters, and tradespeople improved their work by sharing their skills in a dedicated workspace (Groten, 2022a). To be in a *workshop*, in either sense, is to be in a place of learning, of practice, and of refinement of skills among peers.

Groten’s research speaks to the role of workshops in developing discursive action and collective creativity. Based on her own practice with the Hackers and Designers collective, she examines the effect of design, content, and delivery in collaborative change-making workshops with designers and practitioners. Through a comparative study of workshops for collective design practices, Groten concluded that workshops are “occasions for trying and testing articulations of other practices, experimenting with making oneself understood and understanding the other through different registers” (Groten, 2022a, p. 295). Workshops are a means of engagement that allows a variety of interactions, including education, upskilling, community organisation, and practice exploration.

This thesis argues that the temporal situation of the learning and collaboration environment that workshops provide may provide the detachment and suspension of the normal that enables “not necessarily coherent forms of knowledge and material of an actual present [to be] transformed into shared visions for a potential future” (Gunn et al., 2013, p. 66). The capacity of a form of participant engagement to educate, transform, and share knowledge is crucial

to addressing an issue that is compounded both by lack of education and lack of intra-industry knowledge sharing.

Multiple contemporary people-activity engagements have explored how to alter participants' attitudes and actions towards ecological sustainability. These engagements may allow participants a greater ability to express themselves and share their understandings of the systems in which they are embedded (Vaajakallio, 2012; Wong, 2021). Researchers from WonderLab at Monash University developed a play-based method, called the Tomorrow Party, that involves taking on future personas and engaging in speculative conversations as a means to share "affective perspectives on possible futures" (Korsmeyer et al., 2024, p. 2). This method presents a policymaking-oriented script that argues that "imagining new futures shifts peoples' perception of the future" (Grocott et al., n.d., para. 7) and involves participants in seeding "a belief that transformative change is possible" (Grocott et al., n.d., para. 7). Through taking part in the Tomorrow Party, participants create brief but detailed depictions of themselves and their world in the future, facilitated almost entirely by prompts on a slide and social interaction with other participants. The use of minimal prompting to elicit conversations on the climate is present here, as in other contemporary projects such as the discussion-focused Climate Justice Conversation card-deck, created by the CHASE Climate Justice Network (Boschen et al., 2023). While the Tomorrow Party's interactions might require less direct creative output from participants in the form of design or prototyping than other speculative methods, the brevity of the script means that a broader range of participants can take part and feel comfortable in imagining a better world.

By facilitating collaborative storytelling with minimal prompts, the play experience of the Tomorrow Party hearkens to the history of participatory worldbuilding in roleplaying games and creative writing. It is also a structured work that understands that "people bring their own personal histories and affective experiences to the encounter" (Korsmeyer et al., 2024, p. 7) and allows those perspectives to be held, shared and compared during the activity. Testing of this method found that conversational but structured worldbuilding led to

discussions of possible futures as “Time travel makes it easier to embed lived experience, emotion, and feeling into imagining speculative futures” (Korsmeyer et al., 2024, p. 6). The Tomorrow Party thus evidences the use of participant informed worldbuilding through social interaction for creating rich discussions of possible change.

There is a distinct benefit from people-activity engagements like workshops or collaborative storytelling events; the capacity for participants to inhabit shared time and space while contributing their knowledge towards collective action. By engaging with each other over the course of an activity, participants can negotiate and compare their experiences with others and learn through social interaction, while researchers or observers can capture multiple streams of input.

In her master’s thesis *Tracing Afterlives: Visualising the Deep Time Persistence of Plastic Waste* (2021), Megan Wong highlights the use of visual communication and workshops to affect participants’ values and actions regarding sustainability. Through a number of design research methods, including participatory design workshops, Wong expanded on prior sustainable design research to focus on communicating the longevity of plastic waste to a Sydney-based audience. She describes how workshops can “plant seeds of ecological responsibility” (Wong, 2021, p. 47). This insight was developed through the user-testing phase of her own workshops, which she found were a successful method for encouraging ecological perspectives in participants.

Wong drew on Light and Akama’s (2014) research into the potential for collaborative workshops about the environment to explore how such workshops might create social structures for connection and raise awareness of change. The workshops described in her thesis achieved two goals: they tested methods and processes of story generation identified in previous research experiments and they facilitated “these storytelling processes in others in order to enact considerations of the longevity of plastic within the participants themselves” (Wong, 2021, p. 45). By involving participants in their own speculative storytelling about waste and environmental impacts, Wong’s workshops encouraged participants to reflect on difficult ecological concepts. Her use of workshops

to engage participants with the thorny consequences of plastic use and waste affected the approach to workshop design in this research, influencing later choices to use speculative timelines and collaborative storytelling within the workshop method.

Previous research into workshops with communities of practice has established that creative collaboration, centred on the discussion of values or action, may build the capacity to form stronger community bonds (Groten, 2022a; McGonigal, 2011; Vaajakallio, 2012). Sustainability transition researchers Claudia Garduño García and Ídil Gaziulusoy point to the need for the “co-creation of knowledge for sustainability transitions and ... participatory methods to enable this” (2021, para. 2). It is also broadly understood that the collaboration of the workshop participants and their various levels of skill and knowledge created a stronger response for action than individual answers (Burns & Halprin, 1974; Vaajakallio & Mattelmäki, 2014).

Here, I argue that the development of participatory workshops in my research to explore collaboratively the realm of sustainable design practice may suit factors often recognised as crucial to sustainability transitions as a field: the need for education, for situated and local discourse, and for shared knowledge across industry. Discussion and reflection about the hard stuff, such as work and the climate crisis, needs scaffolding, guidance, and hope.

2.7. Conclusion

“Though the future looks precarious, a better world may be on the horizon if we work towards it” (Zaidi, 2019, p. 22).

Sustainability is both a held value and a pressing concern in the Australian graphic design industry. However, as discussed in the survey of practice, individual designers may find themselves with a limited sense of agency to develop their own sustainable practice in industry. This is despite an academic discourse that portrays design as being able to create a better world. This sense

of lessened agency is reinforced by a number of factors: a lack of sustainability resources for a specifically-Australian or specifically-graphic design industry, the perception of sustainability as a value-differentiation or a low-expediency concern within more vocational community organisations, and the inherent complexities of making value-based decisions in what is both a craft and a service industry motivated by client capital.

Attention must be paid to the context-specific concerns of sustainability education, particularly for Australian graphic design practice, considering that the contextual research in this area is primarily established by non-Australian scholars. This need for Australia-specific context was addressed in the Scoping Workshops, discussed in Chapter 4, which address that gap in knowledge by researching the existing practices of Sydney-based sustainable design studios and through the Better Worlds Workshops, discussed in chapters 5, 6, and 7, which target the communication of context-specific actionable support for Australian designers.

Huntley wrote that “one of the terrifying things about climate change is we know it will alter everything. One of the upsides of that is that we can find a way to connect it with anything that matters to anyone” (2020, p. 222). It is this idea of connection on which this thesis focuses; that communities of practice are connected by common actions—sometimes in spite of interpersonal relationships—and that all people, whether or not they have closed that psychological distance, are connected by the current threat that climate change poses to the things they care about.

Sustainability in design reflects the designer’s education, values, and ability to change their working practices (Boehnert, 2014) In order for designers to alter their practice towards sustainability, they must be sufficiently knowledgeable about the value of sustainable practice, adequately educated about the choices and evaluation of sustainable practice, and capable of navigating and negotiating the systems of their own industry. In addition, they need to be able to view the future of their practice as hopeful and rooted in care, so as not to be stymied by fear or shame. In the development of these pathways to action, we must consider

the complex context that designers face when approaching a more sustainable practice. This research thus establishes that for designers to develop a sense of agency and pathways to action for changing their practices, they must have:

- **ecological literacy:** to understand the ecological ramifications of their practices and be able to navigate those choices,
- **practice critique:** to articulate what they desire, like, and dislike about their practice, why it is that way, and who or what can help them change it, and,
- **hopeful futures:** to have a perspective of change that feels situated and positive towards which they can work.



(CHAPTER THREE)

METHODOLOGY

3. METHODOLOGY

The methodology used in the research experiments was participatory design workshops, chosen for their utility in both learning from and upskilling real-world practitioners. These are necessary capabilities as the literature and practice review in the previous chapters reveal that practitioners require ecological literacy, practice critiques, and hopeful futures to develop more sustainable design practices. To support designers in the pursuit of these practices, education to build these capacities must be situated, local, critical, and framed within real work contexts. The following experiments addressed the two research questions:

1. How are graphic designers in Australia currently engaging with and defining sustainable design practices?
2. What factors enable emerging Australian graphic designers to develop pathways towards more sustainable design practices, and a sense of agency for action?

Two major practice-based workshop experiments were developed and facilitated for this research (Figure 1). The first experiment was a scoping workshop that was run three times, each with a different established design studio in Sydney. These were followed by a suite of three workshops, run with nine Sydney-based emerging designers attending in smaller groups over a total of eight sessions. The Scoping Workshops focused on the first research question to identify insights regarding the sustainable design value-action gap with established design studios. The suite of three workshops that followed,

the Better Worlds Workshops Prototype, were developed to target the second research question and investigate how emerging designers might develop stronger pathways to action and a sense of agency to enact more sustainable design practices. The refined Better Worlds Workshops Prototype was a major practice component of this research and part of the iterative development of the Better Worlds Workshops, a tool for use in industry and practice outcome of this research as discussed further in Chapter 7.

The construction and facilitation of the workshop experiments were influenced by the literature review. They were designed to be reciprocal for the participants, rather than extractive, and to critique the normative goals and practices of design. I used a critical documentation format, discussed further in Section 3.2.3, to collect and synthesise the insights from my combined experiences as a designer and researcher.

3.1. Participatory Design

There is a prominent argument that discussion about change should be driven by those working in the systems, as they are not only the most affected but they also have the most insight into unseen knowledge and the insidious reproduction of systems of oppression (Costanza-Chock, 2020; Garduño García & Gaziulusoy, 2021). This development of specific and situated knowledge is prescient in the realm of sustainable design practice research, as it is understood that “together and individually [we] must reflect upon our values” (Benson & Perullo, 2017, p. 115) and seek out desired change.

Towards the goal of producing research that valued the lived experiences and situated knowledge of practitioners alongside practice-specific educational engagements, the workshop experiments followed a participatory design methodology. Participatory design draws participants who belong to an affected group into a research structure that guides conversation and design towards the development of insights, plans, and tools (Simonsen & Robertson, 2013). These outcomes are developed by the researcher, but use the knowledge and insights

drawn from the participant group through tools and processes specifically developed to facilitate participation. Participants are not responsible for the entire research or design process in a participatory design project but work within a project managed by a designer or researcher. Participatory design additionally holds that genuine participation involves the willing and active cooperation of participants with designers, meaning that participants are not simply being observed or having their knowledge extracted (Bødker et al., 2010). Structures for engagement in participatory design thus should “not take the shape of rules assuming expertise beforehand ... but facilitate the negotiation of expertise” (Light & Akama, 2019, p. 132). The work that is developed with a participatory design methodology is collaborative and is intended to be reciprocal.

Participatory design emerged from the political and civil rights movements of the 1960s and ‘70s, predominantly in Scandinavian information technology development (Asaro, 2000; Costanza-Chock, 2020; Simonsen & Robertson, 2013). In reaction to rapid industry development and fears of the negative effects of advancing technology in the workplace, there was recognition of the need to include affected people in research for and about their surrounding systems. Relevant in particular to the use of this methodology in sustainable design research is the aim of “provid[ing] people with better tools for doing their jobs, eventually enabling them to extend their skills” (Robertson & Simonsen, 2013, p. 2). It is this focus on equipping practitioners with the tools and knowledge to preconfigure their practices that makes participatory design a salient methodology for the challenges of sustainable graphic design.

As evidenced in the preceding two chapters, designers in Australia do not currently have the time, space, or tools for informed reflection and planning for sustainable design. Participatory design is thus understood here as a relevant process that combines the “expertise of designers and researchers and the situated expertise of the people whose work is to be impacted by a change” (Morales & Gonzalez, 2018, p. 134) and is therefore well positioned to address the current gaps and needs in the Australian graphic design industry.

3.2. Workshops

The use of workshops in this research was influenced by a number of factors; their contemporary use for sustainability conversations (see Section 2.6), and, as discussed in this section, their historic use in participatory design, their capacity for adaptability through workshop scripts, their affinity for playful design, and my own prior experience with workshops.

Workshops may support participants in developing critique by providing a structure; as Vaajakallio (2012, p. 235) said, "... users may need scaffoldings to express their creativity and to see beyond what exists right now." Previous research into workshops with people who share work or learning activities has established that creative collaboration and discussion centred on values or action may build the capacity to form stronger community bonds (Groten, 2022a; Burns & Halprin, 1974; Vaajakallio, 2012). For designers, "reflecting on what they do and how they do it" (Mazé, 2009, p. 389) allows them to develop their position within their own practice and sharpen their critique of the actions of their discipline. Workshops thus support designers with guidance and scaffolding to reflect critically on their practice with their communities and to form bonds and capacities through that reflection.

My choice to develop workshops for this research was additionally born out of my experience in my research practice. Although I would still consider myself an emerging designer, I have significant experience in designing and running workshops as well as participating critically in them. For example, with four fellow students, I designed and facilitated a systems mapping workshop for the Australian Circular Fashion Conference in 2018 which investigated sustainability definitions and engagement in a creative industry. I designed and facilitated workshops through my 2019 Visual Communication Design Honours¹⁶ project and replicated that workshop with cohorts of UTS Design Honours students as a guest tutor in 2021 and 2023. In 2022, I ran a workshop for the UTS Design Honours cohort on how to design workshops and in 2024

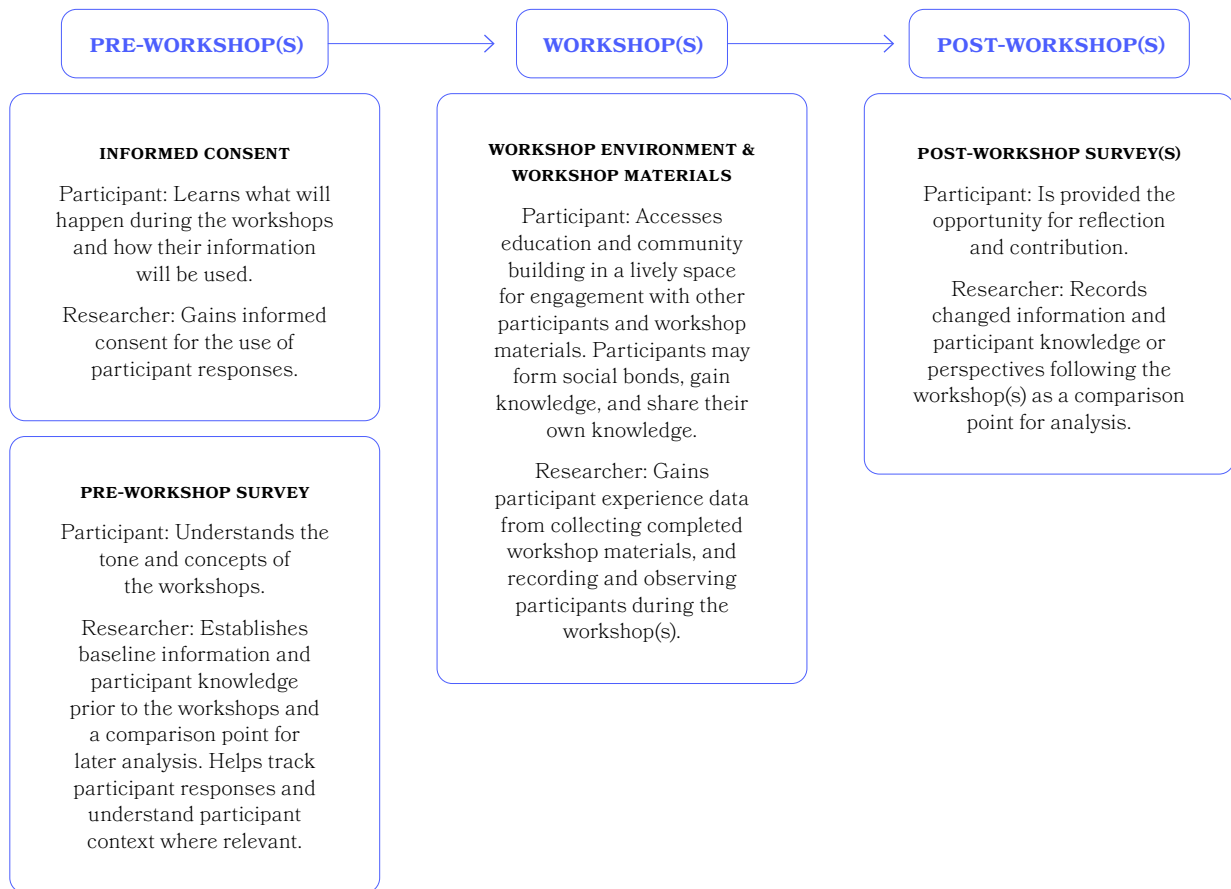
16 An optional fourth year of the undergraduate degree *Bachelor of Design in Visual Communication* at the University of Technology, Sydney.

I ran two different workshops for Design Honours and third-year students at UTS which focused on futuring for social change. In the same year I guest-lectured at UTS on the subject of participatory workshops. I contributed to the development and facilitation of the *Creative Problem-Solving* workshop with the UTS Visualisation Institute, as part of the 2024 Communicating the Arts: Culture Business Conference. I additionally assisted in facilitating Zoë Sadokierski's family-oriented *Wildlife Champions* workshop at the Australian Museum in 2025. In addition to workshops I have run, I have participated in several design research workshops, including the *Repair on the Move* workshop (Barnett & Schultz, 2023), Clare Cooper's (2022, 2023) *Futuring Cultures of Listening Workshop*, the *Museum of the Future* (Marshall et al., 2023), and a series of workshops through the Design Research Society Conference 2024, including *For My Friend, Earth*, led by Jihyun Park of Simon Fraser University. While a member of the graphic design community of practice with which I was researching, I chose to position myself as facilitator or researcher in the workshops, rather than participant, to foreground the situated knowledge contribution and reflections of the invited participants.

Workshops allow for engagement with participants at multiple stages (Figure 19, overpage); before, during, and after sessions. As detailed below, this allows for complex and full datasets to be formed from a variety of participant responses. Designing such interactions “requires an understanding of and sensitivity to what will work and what will affect the participants” (Johansson, 2005, p. 87), meaning that careful practice and literature research formed the foundations of the workshops of this research before the process of designing the workshops began.

Figure 19.

What Happens in a Workshop



3.2.1. Before Workshops: Preparation and Context

Before the research workshops took place, I needed to address three key elements: participant recruitment, consent, and baseline information including perspectives, knowledge, and prior experience or access to resources. The use of pre- and post-workshop tracking metrics is common in participatory and participatory design research. This collection of perspectives and knowledge before and after a workshop allows researchers to evaluate the impact on participants.

While the individual aims and datasets of the first (Figure 20, overpage) and second (Figure 21, overpage) workshop experiments differed, both were workshops that involved reflection by practitioners on the design work in which they were engaged. In *Practising Critical Reflection* (2007) by Jan Fook and Fiona Gardner, the authors state that while six people is an ideal size for running

Figure 20.

Scoping Workshop Aims

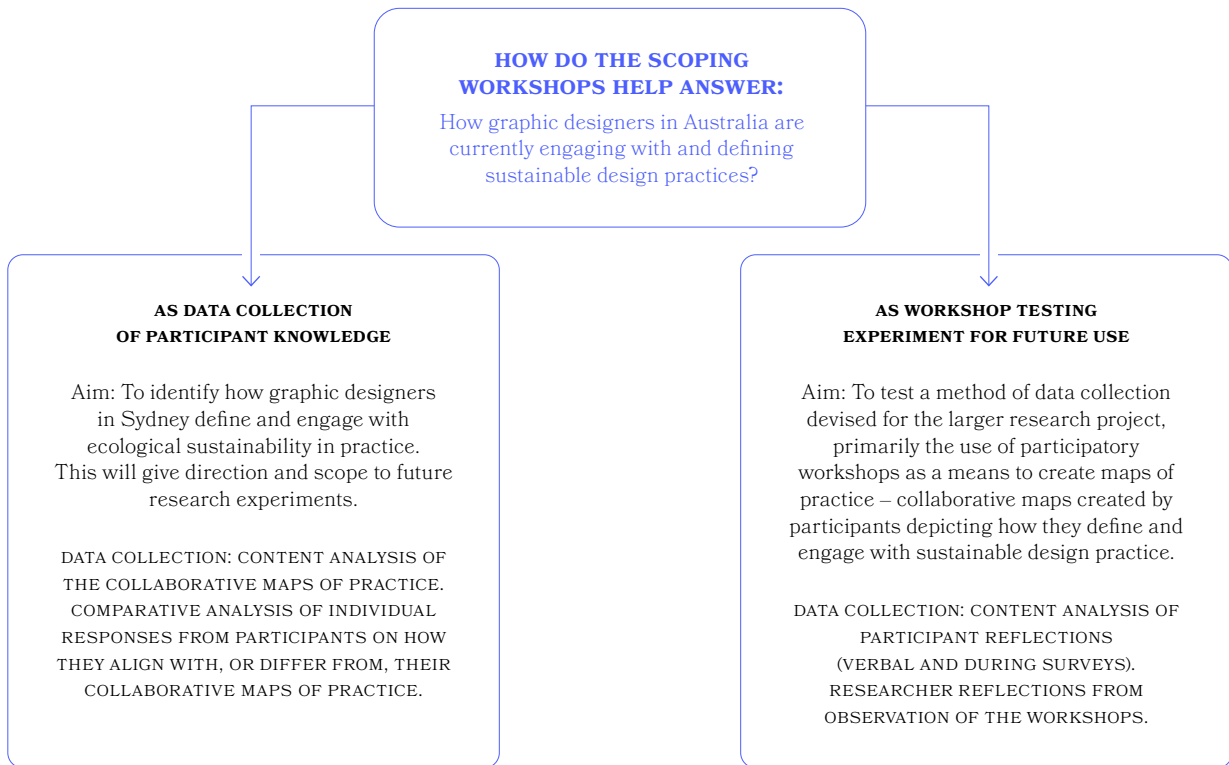
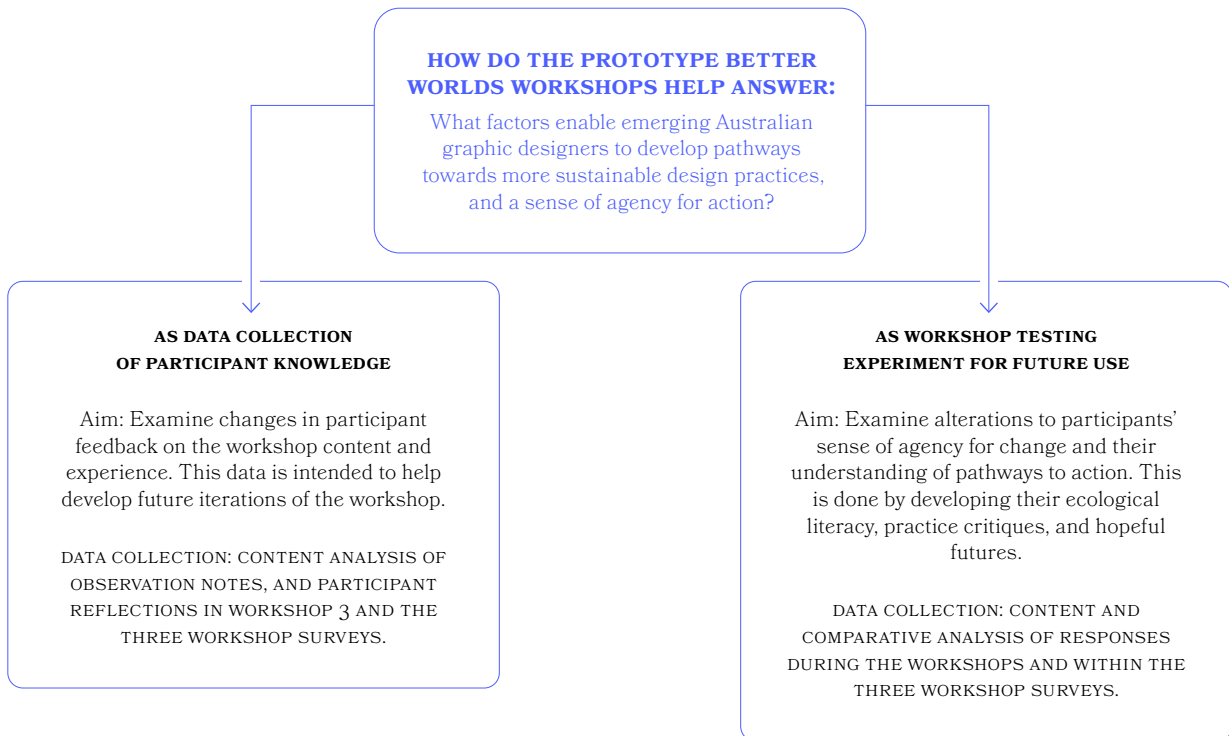


Figure 21.

Better Worlds Workshops Prototype Aims



reflective workshops on practice, the size of the group is determined by time available, so that, ideally, each participant has 20 to 30 minutes per activity to contribute. This was considered when proposing and designing my research workshops. As there was no monetary compensation for participants, time was kept to the most effective minimum. Groups of three to four people were desired for the Scoping Workshops as that would allow each member 20 minutes of contribution time for the main collaborative activity. Groups of two to four were ideal for the Better Worlds Workshops Prototype's collaborative work, as each member had around 20 minutes within the multiple group conversation activities. Inclusion and exclusion criteria were used when finding and refining participant groups. The criteria for each workshop are discussed in their respective chapters.

For both workshop experiments, informed consent and baseline information were collected together. Informed consent documents, detailing the workshop's content and possible risks, and future uses of participants' responses, were sent to the studios of the Scoping Workshops days prior to the workshop sessions. However, the consent and pre-survey documents were filled out at the sessions before collaborative activities started as in most cases the individual participants were not confirmed until the sessions began. With the Better Worlds Workshops Prototype, individual participants were recruited and confirmed in advance, enabling informed consent and pre-survey documents to be sent out, completed, and returned before the first workshop session was held.

3.2.2. During Workshop Interactions

The workshops held for this research operated through structured interaction in the form of scripts (instructions) and designed materials (artefacts) that had been carefully developed to guide participants and frame interactions through playful¹ engagements. Playful here denotes two key aspects of the workshop interactions. First, that the workshops are intended to be convivial and to contain creative and imaginative exercises which, while sometimes using design practices, are not typical of professional work. Second, as the workshops are not representative of their work or professional identity, there is social and

emotional support to encourage imagination and risk-taking.

Participants engaged with these workshops by holding conversations with other participants or myself, following the scripts, and completing the workshop materials. I then analysed the conversations, participant interactions, and completed materials to gain the data about what participants knew, thought, or did, and how the workshops may have affected them. Post-workshop surveys provided additional information and opportunity for reflection by participants.

Both workshop experiments were intended to be led primarily by the participants themselves following the workshop scripts, where I would act as observer and researcher rather than facilitator. Two key factors motivated this approach to workshop guidance: an emphasis on participants' conversations and the planned implementation of the design product following the workshops. Having a facilitator presence guiding the workshops appeared more restrictive than a guidebook, which participants could ignore if desired. While both approaches would inherently direct the conversation along paths that I expected to be fruitful, a guidebook would provide participants with conversational prompts that they could follow as they saw fit. Additionally, the Better Worlds Workshops Prototype was part of the iterative design of an industry resource for working designers in their communities of practice, designed to be run without a facilitator. As such, the workshops of this research were guided by participants using scripts, an approach that uncovered both strengths and weaknesses in the facilitator-less design of interaction, as will be discussed in Section 5.4.3.

3.2.2.1. Workshop Scripts

Anja Groten (2022a) refers to the instructions and designs of a workshop as the workshop script, a term that encompasses how long different activities might take, the aims or expected outcomes of each step, and where people should sit or how they should interact. Workshop scripts can be loose and open-ended or refined and finite; they are a way of understanding the format of a workshop as a series of intended activities and outcomes with structured interactions that allow for spontaneous and open conversations. They are not a finite definition of what

participants might say or do but rather a planned set of interactions navigated by facilitators, designers, and participants together. The materials that accompany them in this research are predominantly “predesigned” (Eriksen, 2009, p. 3) and “project specific” (Eriksen, 2009, p. 3).

In many ways, the workshop format used in this research was akin to a semi-structured interview. Though the workshops were held with groups and guided by materials, the fundamental aim was to elicit conversations that would uncover tacit insights from practitioners about their practices, guiding the participants in “externalizing implicit tacit knowledge while socializing” (Mitchell et al., 2022, p. 1670).

Similar workshop structures, though often with different aims, can be seen in the workshop practices of Burns and Halprin (1974), Megan Wong (2021), Time’s Up and FoAM (2013), and the Hackers and Designers collective (Hackers and Designers, 2020; Phillips & Groten, 2018). While this workshop model—where participants navigate themselves through structured interactions—has existed for decades (Burns & Halprin, 1974; Sanoff, 1979), the language used in this thesis relates most closely to the Hackers and Designers’ 2022 *Work the Workshop*¹⁷, a project that started as an exercise to:

Imagine the workshop as a set of instructions, almost like an algorithm or script that could be executed without the workshop facilitators being present. ... We prepared the script and workshop kit in such a way that it would explain itself. (Groten, 2022a, p. 133)

This approach to workshops as a script that can be followed and negotiated at will by participants and as guidance rather than deterministic instructions aligns with descriptions of participatory workshops as a structure that fosters collaborative work (Johansson, 2005, p. 87). As Eva Brandt, a seminal author on participatory co-design, writes, “... instead of spending the valuable time during events discussing how to collaborate, well prepared formats for exploration and

¹⁷ Itself inspired by *The THING* (Hampton & Meierhans, n.d.), a facilitator-less ‘automatic workshop’.

suitable materials can assist the participants” (Halse et al., 2010, p. 72). Not only did this workshop model allow me to examine the ways in which participants may be influenced by a workshop’s preparation and materials, but it alluded to Ann Light and Yoko Akama’s idea of obligation and care in participatory design as a negotiated *performance* (2019). Although workshop scripts tend to solicit participation through easily completed tasks, these contributions “flourish in unexpected ways when put into the context of a larger participatory project” (Resnick, 2016, p. 191). This is because scripts can structure and combine a process of creative collaboration that may become greater than the sum of its parts.

The user experience of a workshop, including the appearance and tactility of designed workshop materials, informs possible interactions. As such, this thesis will refer to the workshop’s scripts and materials as two linked categories of workshop construction where *scripts* refers to the framing and instructions of a workshop and *materials* refers to the interactive elements of the workshop such as printed material, designs of interactions, and the outcomes produced by participants.

Scripts are widely variable, and their content and enactment depend on the environments for which they are developed. The use of the term *workshop script* by Groten and the Hackers and Designers collective is an introduction of a critical approach to understanding workshops as methods for engagement, what makes them work, and how can they be changed. This is aligned with other research on design games and participatory engagements which propose that “the structure of the design game becomes a part of the design material, as a collaborative sketch” (Johansson, 2005, p. 115). This understanding also encompasses the knowledge that participant responses in a collaborative structure are bound or, at the minimum, significantly influenced, by “the possibilities afforded by the game artefact as a whole” (Markussen et al., 2020, p. 26). Thus, this research proposed that workshops should be treated critically, constructed with care, and addressed, through the frame of workshop scripts and materials, as a design intervention that structures collaboration.

Creating a participant-led workshop is a difficult task, as recognised by other workshop researchers; Groten, for instance, wrote that “writing a workshop script that can be executed without a facilitator present is a tedious process” (Groten, 2022b, para. 6). Design and content choices towards this goal are discussed in the chapters of the respective workshops.

3.2.2.2. Design, Play, and Playful Design

Research, particularly into the realms of design games and participatory workshops, have highlighted the benefit of tangible materials in enhancing playfulness and collaboration (Burns & Halprin, 1974; Sanoff, 1979; Vaajakallio, 2012). For the development of education and public engagement, *play* can act “as a gateway to making abstract concepts more accessible” (Grocott, 2022, p. 97) while “priming people to see situations from another perspective” (Grocott, 2022, p. 97). Participatory design has shifted in recent decades towards collaborative making to enable conversation and knowledge sharing, whereby the “playful nature of these activities encourages creative insights, while building community among the participants” (Armstrong, 2016, p. 210). As a workshop designer, I am unable to state before testing that an activity will be *fun*, but I am able to design something *playful*; creative, not-serious activities which provide support for social risk-taking and imaginative reasoning. By asking participants to engage with tactile and familiar aspects of design practice associated with ideation, such as sketching, mapping, drawing, and collaging, this research proposed that designers would be more creative in their responses.

This aligned with an idea explored by Kirsikka Vaajakallio in her doctoral thesis on design games of “design materials as tools in ideation” (Vaajakallio, 2012, p. 24). Through her analysis of her design games experiments, Vaajakallio establishes that tangible designed materials in collaborative spaces act as boundary objects that “scaffold collective idea generation” (Vaajakallio, 2012, p. 175). She proposes that the tactility and tangibility of such materials could encourage playful interactions and a freedom of dialogue. She drew on existing research of design for workplaces by prominent authors on design and

participation, Ehn and Kyng (1991), who conducted design experiments with working professionals and found that mock-ups, in this case cardboard stand-ins for advanced technology, helped their participants rehearse and negotiate future practices.

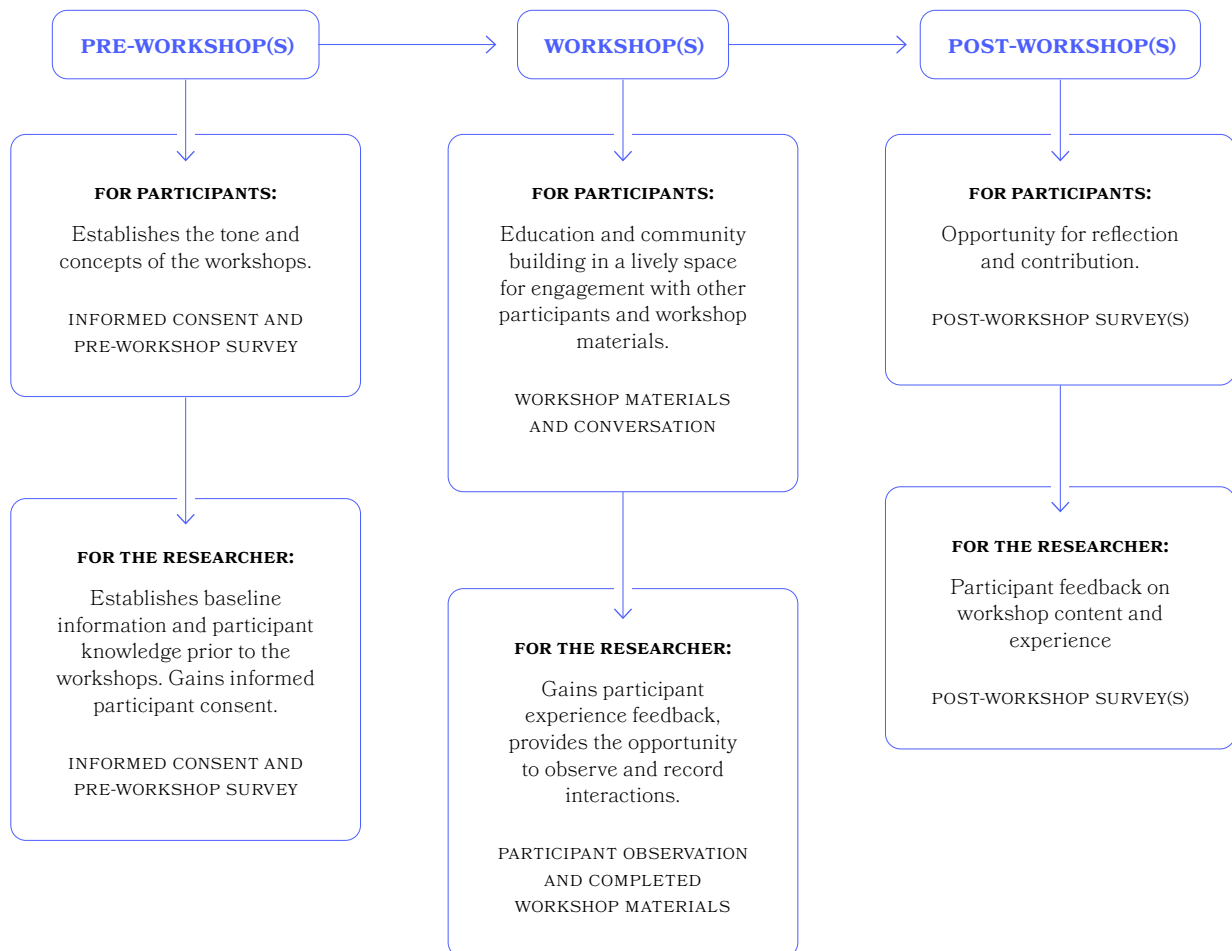
Vaajakallio argues that engagements with mock-ups or assemblages of simple objects are strengthened by their “unfinished nature ... people see them as ideation tools instead of considering them as representations of the final design” (2012, p. 24). This is a continuation of Ehn and Kyng’s proposition that mock-ups are useful in early design stages due to their low functionality; mock-ups encourage “active user involvement [and] help users and designers transcend the borders of reality and imagine the impossible” (1991, p. 172). Simple or rough prototypes facilitate hands-on experiences by users, are playful, and provide understandable simulations of different practices while having low-enough fidelity to avoid confusion with the actual artefacts they might represent as “There is no confusion between the simulation and the ‘real thing’” (Ehn & Kyng, 1991, p. 183). This history of design material for ideation supported the engagement of designers in this research with creative activities to generate and articulate new knowledge.

One such use of workshop materials as an ideation tool in my research was the *map of practice*, present in the Scoping Workshops (Chapter 4) and the Better Worlds Workshops Prototype (Chapter 5). This was a collaborative mapping method that I created during this research in which participants were asked to depict their practice through sketching, illustrating, writing, and diagramming. Mapping here does not mean a specific spatial or place-based visualisation, but rather a visual articulation of agents, decisions, and flows of practice. The use of collaborative visualisation and mind mapping is recognised in participatory design as a means of quickly generating and recording the knowledge of a group of people who are then able to assess commonalities through the theming and synthesis of their collective work (Burgess-Allen & Owen-Smith, 2010; Smith et al., 2025).

Designers are well-used to the creation of representations through this diagrammatic combination of image and text, as “designers use maps, charts, diagrams, graphs, timelines, illustrations, network visualizations, data visualization and information graphics” (Boehnert, 2018, p. 142) when exploring and communicating system information. The *map of practices* prompts participants to diagram their design practice focused first on a present and immediate project timeline and then expands further to the implications and impacts of their work. As a method it aligns with other time-and-impact visualisation methods which help the creator in their sense-making around complex issues such as Clare Cooper’s design timescapes (2022). Cooper found that her design timescapes, as visualisations of context and history, were successful in “cueing rich discussion, mapping conversation, and charting potential strategies” (2022, p. 182). Participatory map-making additionally encourages the construction of richly detailed accounts by experts to share knowledge, stories, and social/political struggles simultaneously (Morales & Gonzalez, 2018). Collaborative mapping, where conversation is involved, invites observers into the otherwise often silent consideration of steps and practices.

Given previous discussion of the threat that shame poses to conversations of climate change and sustainability, this thesis aligns with Vaajakallio’s promotion of playful design games to encourage creative interactions and free dialogue. Participants may talk, collaborate, and share more easily with playful materials than in an evaluative or strictly educational scenario. This was enacted for designer participants in the workshops in this research through what participants were asked to do, such as engaging with playful and iterative practices in design including mapping and sketching, and the materials they engaged with, which were tangible creative tools of design ideation such as pens, pencils, scrap paper, and collage tools.

Figure 22.
Workshop Data Collection



3.2.3. Synthesis and Evaluation

Workshops allow a significant amount of information and data to be gathered. By the end of every workshop experiment in this research, I had collected participant responses in the form of pre- and post-workshop surveys, completed workshop materials, and recordings of session conversations. Additionally, I had researcher observations of participant interactions and conversations based on my notes written during sessions. These datasets (Figure 22) became the basis for content and comparative analysis, discussed in more depth in Section 4.4, Section 5.5, and in Chapter 6.

The workshops themselves, their design and facilitation, were part of my creative practice research. The iterative development of each workshop was collected and annotated following a critical documentation practice (Sadokierski 2020). The framework for this practice was taken from Zoë Sadokierski's 2019 article, "Critical Journal/Contextual Portfolio: A Framework for Documenting and Disseminating RtD as Scholarly Research", which provides structures for critical reflective practitioners to document and synthesise the aims, content, actions, and reflections of their creative research practices. These included progressive overview maps, contextual research anchors, and experiment logs.

Progressive overview maps helped me capture snapshots of my research progress as I revisited and reframed my research, including the main questions and sources, to assess the evolution of the work (see selected progressive overview maps in Appendix D). These maps were used to support my reflection on my research practice and process overall, rather than to produce specific insights. Similarly, the contextual research anchor write-ups were used in my notetaking and referenced in the progressive overview maps and experiment logs, the latter of which led to the formulation of key insights. This documentation process established aims prior to the research itself and then guided my reflection on and for action. Two sample experiment logs from the Better Worlds Workshops Prototype are given in Appendix E, with findings from the process explored in more depth in Section 5.6 and Chapter 6.

Through this development and critique, I formulated insights not only into the content findings of the workshops but on how design could act as part of the research process. This format helped me synthesise what information or discussion I could bring into my workshop spaces, and why.

3.3. Conclusion

There is a gap between the values held in the Australian design industry and knowledge of sustainable design practices. Participatory design, as an approach that prioritises learning from and upskilling practitioners affected by


the design process, is primed for use in addressing this gap. While developing and testing participatory design workshops requires care in planning and execution, this research used a script and material approach that enabled the deliberate design of workshops prior to participant engagement and the critical examination and iteration of research experiments. This rigorous design process was developed through reflective and iterative design processes and was intended to lead to practice outcomes suited to and informed by the affected audience of working Australian graphic designers.

As established in the survey of practice (Chapter 1) and the literature review (Chapter 2), information on current practices and engagement with sustainability must be strengthened by learning from experienced practitioners. This examination of practice is described in the following chapter, Scoping Workshops, regarding how Australian graphic designers are currently engaging with and defining sustainable design practices.



(CHAPTER FOUR)

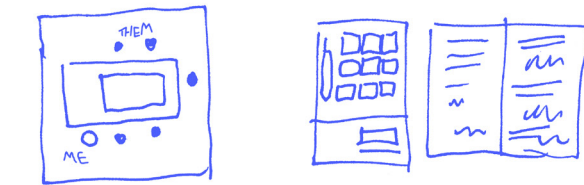
SCOPING WORKSHOPS



I'm THEA, A PHD CANDIDATE @ UTS AND I'M TRYING TO LEARN MORE ABOUT SUSTAINABLE DESIGN PRACTICES IN SYDNEY. I CHOSE YOUR AGENCY BECAUSE YOU HAVE A LOT OF GREAT WORK RECOGNISED IN INDUSTRY AWARDS. I'LL LET YOU GUIDE YOURSELVES USING THE WORKBOOKS, BUT BEFORE WE BEGIN PLEASE READ & SIGN THE CONSENT FORM.

Figure 23.

Illustration of a Scoping Workshop Session



4. SCOPING WORKSHOPS

4.1. Description of the Participant Experience

Setting¹⁸: A Scoping Workshop session (1½ hours). To help emulate the workshop experience, refer to the Scoping Workshop Guidebook (Appendix 5) while reading the following narrativisation.

You're sitting at a table in the meeting room of your workplace, a design studio in Sydney recognised for its sustainable design work, with three of your colleagues and a researcher. The researcher, Thea, is here to learn more about sustainable design practices in Sydney. Thea scheduled the hour and a half session with your boss, the founder of the studio, who picked employees to take part; themselves, a mid-weight designer, an accounts manager, and you (a creative director). The session begins with Thea introducing herself and her aims, then meeting the team members present. She hands out a guidebook to each person and as you read and fill out the consent form, she sets up a large piece of paper and some pens on the table.

Once everyone's signed the consent forms, you begin to follow the rest of the guidebook instructions. You begin by writing individual answers to questions about your work; what your role is, how long you've worked there, how you define sustainable design practice. They're written privately into your guidebook. They help set the stage for what topics will be discussed in this workshop and let you have a private moment of reflection before the activities begin.

18 In order to convey the vibrant and cheerful nature of the workshops of this research, I have included a narrativisation of each workshop. These sessions followed the guidebooks listed specifically within each section and any examples given are taken from real workshop sessions.

Then, you start to make a “map of practice” as a group—this is a great, sprawling thing moving from the start of a current project to its hand-off to the client. It’s like a project timeline with added notes of all the different practices and people encountered along the way. As you work, your group makes easy conversation; you’re talking about what you do and learning from your colleagues. It’s refreshing to write using pens and paper when most of your work is carried out on a computer and there’s something playful about making a large mindmap. People from different sectors of the studio speak up, adding in their knowledge on client negotiations or re-briefing, on packaging production and paper finishes. The guidebook instructions break the map’s creation into different prompts, such as, “How did that project arrive in the studio?”, and “Once the design project is released into the world, what happens then?”. Each person has their own marker, and a model of your project timeline emerges as people, practices, and projects are noted down in a mix of different colours. As different people jump in, it’s a rare opportunity to get together and consider the whole work process that you undertake, rather than focusing on just the daily tasks.

After your map of practice is complete, Thea lays out a translucent page on top, letting you still see the map underneath. You begin to make notes on this new layer as a group in response to new prompts, such as “Label where you think sustainability is considered in your map,” and “How could sustainability be better considered in your collective process?”. Thea jumps in occasionally to ask clarifying questions. It’s gratifying to add your voice into the conversation of sustainability in your studio, and to hear what others think could be improved. The process of annotating your map of practice prompts more reflection and critique from the group and you go down some rabbit-holes talking about strategy and client negotiations.

This leads you to a moment, again, of quiet and individual reflection. To end the workshop, you return to answering individual questions that let you add in extra comments on the process, identify sustainability resources you interact with or desire, and reflect on talking about this topic with your colleagues. As Thea packs up the completed workshop materials, your boss comments that it will be

good to see where this work leads in developing more support for sustainability in Australian graphic design.

4.2. Aims

The Scoping Workshop was run three times, each with a separate graphic design studio based in Sydney who was recognised in industry for their sustainable design work. These studios, ranging from small to large, were identified by exploring industry awards and community discussions from AGDA and the Good Design Awards. The workshops performed two functions (see Figure 20):

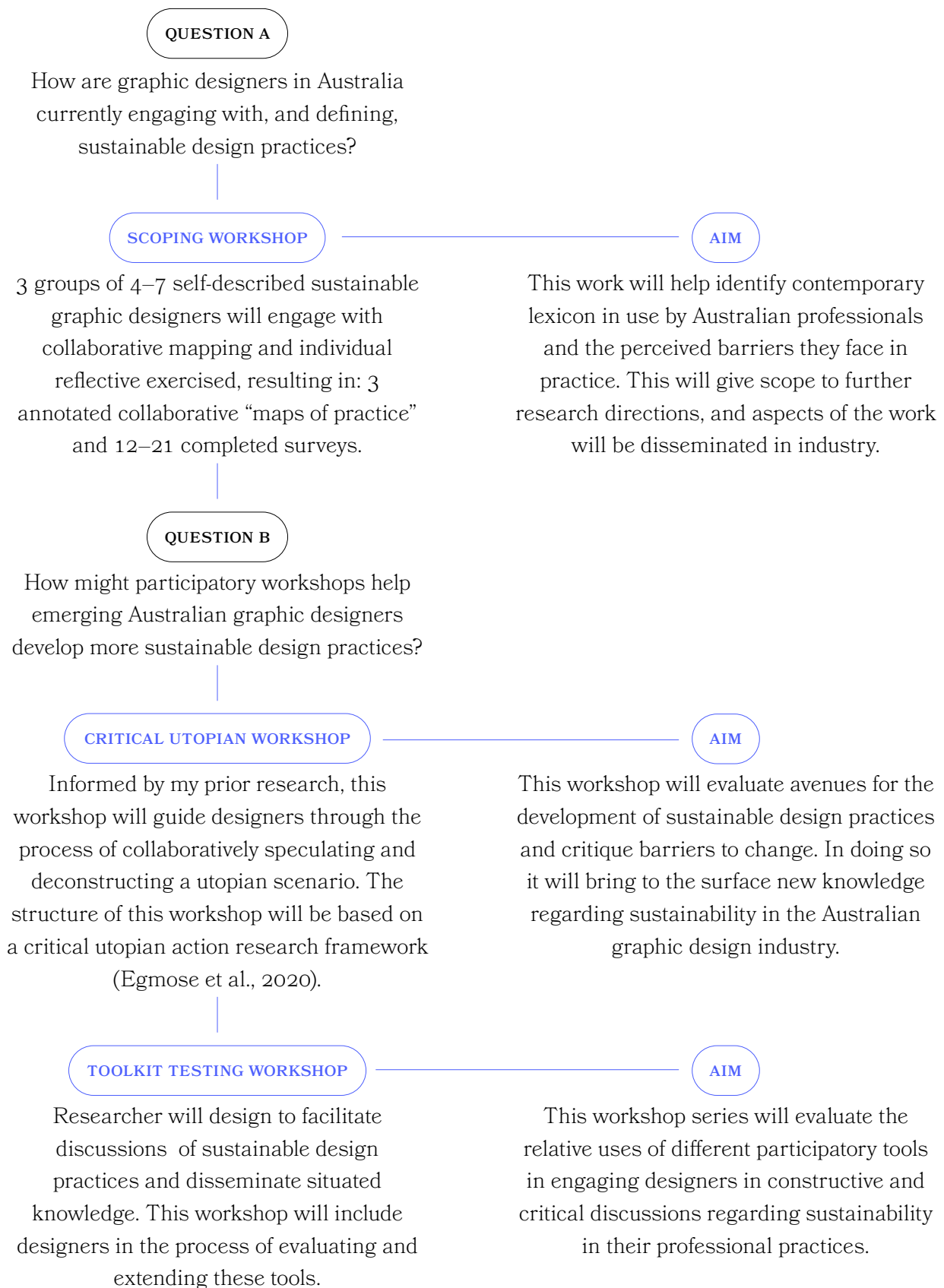
1. As a data collection method exploring experienced practitioners' knowledge regarding research question 1, *How are graphic designers in Australia currently engaging with and defining sustainable design practices?*
2. As a method-testing experiment examining the uses and opportunities of practice-based workshops for engaging with designers and of the map of practice method as a site for collaborative practice critiques.

This work sought to give scope to the ongoing research that would follow these experiments, both by establishing clearer information on sustainable design practices in Australia that might be translated to a wider audience and in exploring the workshop as a means of guiding designers through a critical reflective process. This validation was necessary to address the context-specific concerns of the research, considering that pre-existing contextual research was primarily from non-Australian scholars.

At this stage of the research, I had proposed developing two ensuing workshops; a secondary workshop focused on the potential benefits of collaborative worldbuilding for developing pathways to action and a toolkit testing workshop which would evaluate the success of a participatory resource that I would have designed for use by professional designers (Figure 24, overpage).

Figure 24.

2022 Research Diagram



However, I allowed the research process and research outcomes of the practice-based workshops to guide the ongoing research. As is discussed further in Section 4.5, I changed the course of my research and redirected my focus when I found through the Scoping Workshops that, even more so than the evident desire for tools and resources, there was a need for designers to view their individual and disciplinary agency differently. It appeared that emerging designers, in particular, were underserved by existing resources and disadvantaged in the pursuit of clients who desire sustainability.

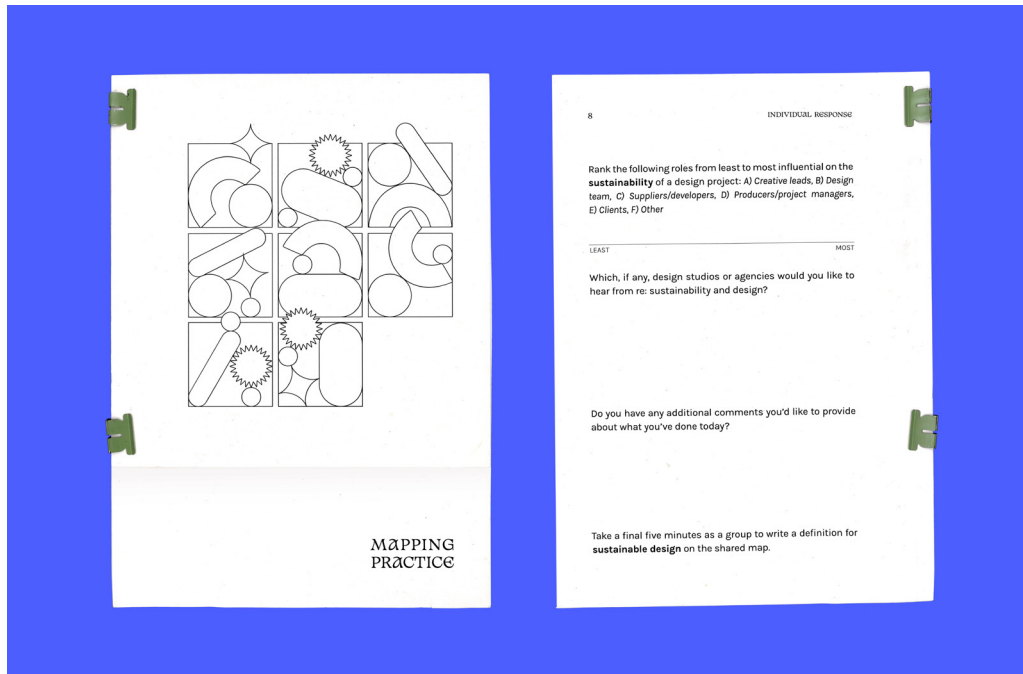
Due to the traditional hierarchies of the design industry, emerging designers are often involved in the more rote tasks of design where they use their technical skills but may not interact with clients, make brief or project decisions, or have creative control over the aesthetics or production of their designs. Emerging designers are trying to find their place in the industry and may have little security in their roles. At the same time, this group has the least access to existing resources, little ability to negotiate with or cherry-pick clients, and may have a low level of support for sustainability while getting established in the industry. This means that resources like the Better Worlds Workshops, which target this group, will be serving a cohort in dire need of support. Such resources may simultaneously be a translatable resource for other designers approaching sustainable design practice for the first time.

4.3. Structure

The survey of practice (Chapter 1) and the literature review (Chapter 2) revealed a need for greater research into practices specific to Australian systems and into the situated knowledge of practitioners. I therefore sought to conduct research with communities of practice in the Sydney graphic design industry that already identified as having sustainable design practices. The intention in focusing on organisations with sustainable design experience was that, through their situated knowledge, these practitioners would best be able to contribute to this ongoing research, in particular, regarding the definitions and successful

Figure 25.

Image of the Scoping Workshop Guidebook



practices of sustainable graphic design. The workshop guidebook (Figure 25 and Appendix F) was designed to lead participants through:

1. A series of questions, answered individually, to establish individual values, pre-workshop expectations, and experience as a designer¹⁹.
2. Two maps of practice²⁰, created in collaboration as a group. The first map depicted an average project process, documenting the people, practices, and considerations involved. The second map invited the participants to annotate the first map, noting specifically where sustainability was considered.
3. A series of questions to reflect on and discuss the previous activities.

¹⁹ As discussed further in Section 4.4.2, while this workshop series was planned for use with designers I had many participants who worked in other roles.

²⁰ As discussed in Section 3.2.2.2, a *map of practice* is a collaborative map-making method developed in this research. Participants visually articulate the agents, decisions, and flows of practice themselves by illustrating, writing, and diagramming often unaddressed systems.

A post-workshop survey was sent out to each participant a week after the workshop, offering an opportunity for further questions and reflections on the workshop experience. The surveys also allowed me to establish and later revisit a baseline of information regarding participants' knowledge and perspectives, and record participant reflections.

These Scoping Workshops were run with three different studios, named here Studio A, Studio B, and Studio C. The responses from these studios and their staff members were anonymised in response to the sensitivity of discussing the planetary impacts of their work, which could cause anxiety, distress and even shame (Huntley, 2020; Stoknes, 2015), and critiquing own practices, which can involve being critical of an employer, client, or boss.

These three studios differed in size and years active but were invited to participate due to the recognition and industry awards they had received for their work with pro-sustainability clients. Studio A had 2–4 full-time staff members, Studio B had 15–20, and Studio C had 60–90, providing a good range of small, medium and large-scale practices. It is worth noting that overall employee numbers fluctuate in studios regularly, as contract design positions vary with the scope of work studios have at any given time.

The workshops were designed to be run with 4–7 people, though that differed in reality. Not all members of Studio C could attend in person, so those participants were supplied with interactive PDF versions of the workbooks and collaborated with their group via Zoom. While the remote participants could not write directly onto the shared maps, much of the group interaction was verbal, so those participants could still contribute.

I met the participants at a location pre-determined by the group liaison; I met Studio A in a meeting space at UTS, Studios B and C I met in their respective workplaces. Using the workshop materials and scripts, participants led their own workshop experiences while I acted as an observer.

4.4. Findings

The Scoping Workshops were successful in eliciting knowledge sharing by practitioners in established studios regarding how Australian graphic designers are currently engaging with and defining sustainable design practices. There was a stronger presence of sustainable practices than I expected, given the seeing, knowing, and doing of these practices at present in the profession. These practices included selecting clients and negotiating with them, using sustainability consultants, re-using or re-purposing previous assets for new client work, planning for project longevity, and being discerning with manufacturer choice. However, the work of sustainability was often deferred to non-designers within the studios, to outsourced sustainability consultants, or to manufacturers. Despite working in agencies recognised for their sustainable design, the majority of participants did not frame themselves as having significant knowledge or agency for sustainable design.

While engaged in the collaborative creation of their maps of practice, participants explained their answers as they wrote them and talked in their groups to reach agreement on how to depict their practices. These conversations were captured through audio recordings and my observational notes. Knowledge sharing took place through the conversation around the maps' creations, more so than with the maps themselves. The creative activity of writing and drawing these maps elicited rich conversations, an insight that informed future workshops of this research.

The workshops predominantly worked as intended, though there were some complications. Studios A and B had three employees participate, while Studio C had seven. This difference in group size affected the amount each member was able to contribute to the discussion. This was particularly visible in Studio C as there was an added and unexpected limitation on time available (1 hour instead of 1.5–2 hours), and two members attended via Zoom at short notice. I also found that I had invited design teams to take part without considering that design teams are rarely composed of only designers. In attendance there were also copywriters, editors, account managers, and producers. These experiences helped form a

richer depiction of the interactions of practice for future research. It is worth noting that not all studios in industry have non-design employees, and that Studio C was both the largest studio and the studio with the most non-design staff in its workshop session.

4.4.1. Sustainable Practices

Studio A, a small group of three designers working primarily in interaction and experience design, cited sustainability as predominantly occurring in their company through their communication work for pro-sustainability clients. One member said, “You can only really do good work if you have good clients and good briefs. And [if] that relationship is strong.” Studio A members also discussed the role that choosing clients that aligned with their studio values played in ensuring their work felt rewarding, with the founder of the studio stating during discussion, “There’s some particular clients we would never really work with. We’re not going to ever do a project with coal mining.” These comments aligned with the understanding of the value-action gap found through the survey of practice, wherein sustainable design practices were tied significantly to a studio’s ability to work with sustainability-oriented clients.

Studios B and C, both larger and involved in the production of more tangible products—wayfinding, packaging, and publications—cited sustainability as being informed primarily by the client and by studio-instigated research. Both B and C cited sustainability consultants as a part of their frequent research process where, in the early stages of their project timelines, they would consult an outside sustainability firm to gain scope and recommendations for their pitch. Studio C also spoke about aspects of sustainability that factored into their daily operations outside of project-specific considerations, including consideration of what supplies to stock in the offices or how to source their utilities. All three studios spoke to the capacity of budget to determine design innovation and response to sustainability. Studio A had the following exchange, for example:

Speaker A-A: “Persuading a client to do something the sustainable way might not always be—”

Speaker A-B: “The cheapest way to do it.”

Speaker A-C: “Yeah.”

Speaker A-A: “Even just paying more for a sustainable hosting service or doing the extra time to find what those [best options] are and making sure you align with the extra supporting services you use...”

Speaker A-B: “I would say [it’s also] the time that due diligence takes. And the impact that that has on budget. But then, I don’t know ... I reckon most [clients] would be okay with it. But that is also a risk.”

Studio C expressed similar sentiments:

Thea [researcher]: “Are you ever in a position where you’re trying to argue a client towards a more sustainable outcome or do they come to you with those green star requirements?”

Speaker C-A: “I think some clients don’t realise that ... sustainable materials, especially in signage, can be more expensive. So it’s about finding that balance with clients where they have to understand it’s going to drive a budget up a little bit. Yeah, I guess that’s the main argument.”

Speaker C-B: “I think [clients] kind of buy into the ambition around sustainability. But a lot of the time you find yourself trying to save a lot of those sustainability measures in a concept rather than client driving it. As you say [Speaker C-A], it often costs more to be sustainable.”

In these cases, being in a position to negotiate with the client or to ensure sustainability from the re-brief level was acknowledged as key. Even when working with sustainability-oriented clients, the increased cost of the time and materials for a sustainable practice posed a risk to client relationships. For these agencies, sustainability costs time in terms of undertaking research and

negotiating with clients. These findings are aligned with those found through the survey of practice where clients play a significant role in the performance of sustainable design practices.

Studios B and C had access to sustainability consultants and cited them as key to their research process in the initial stages of the design development process. The use of sustainability consultants and the ability to select clients based on their sustainability interests were not a factor in all three groups due, in part, to the differing states of financial stability and industry recognition among the three groups. The studios I invited for these workshops likely had more power than other studios to negotiate with clients and gain higher budgets for sustainable design work because that is what they were established and recognised for; clients come to them knowing that sustainability was a potential consideration of the work. This aligned with existing literature on value-based professional design work such that by Boehnert and Matos that explores how making value-oriented decisions puts designers at odds with the profit-oriented desires of the design industry. The privilege of being able to choose one's clients is not shared by all professional designers.

What emerged from the Scoping Workshops was a perception by participants that their responsibilities and power were limited by the practice architecture within which they worked. This perceived restriction was compounded by a lack of readily available resources to provide guidance regarding sustainable suppliers, manufacturers, and materials. Even within the larger organisations, which had more access to sustainability research, designers themselves desired more resources. Limited transparency, both regarding production and across the design industry, also affected practice; studios must trust that manufacturers will meet the agreements set out between them, and mistakes lead to waste even if they can be rectified. Studio B, for example, spoke about recent project where sustainability was a value differentiation for their client but a manufacturing error led to the production of non-recyclable products. To compound an already present lack of industry transparency, when revealing the successes and failures of your key practices, you are both potentially devaluing

the differentiation of those practices and you are opening yourself up to further critique.

The areas cited as key intervention points by participants, primarily working for sustainable/value-led clients and material considerations in production, are those cited in many of the existing texts discussed in the literature review. However, as I set forth in my survey of practice chapter, these are not available to all designers. Even within Studios B and C, which used sustainability consultants, there was an explicit desire for resources that would make the material assessment of sustainability easier. These included clearer regulation of manufacturers and a database of sustainable materials. All three groups spoke of sustainability in design as including product longevity, even when speaking about publication, interaction design, wayfinding design, and packaging.

4.4.2. The Scoping Workshop as Method

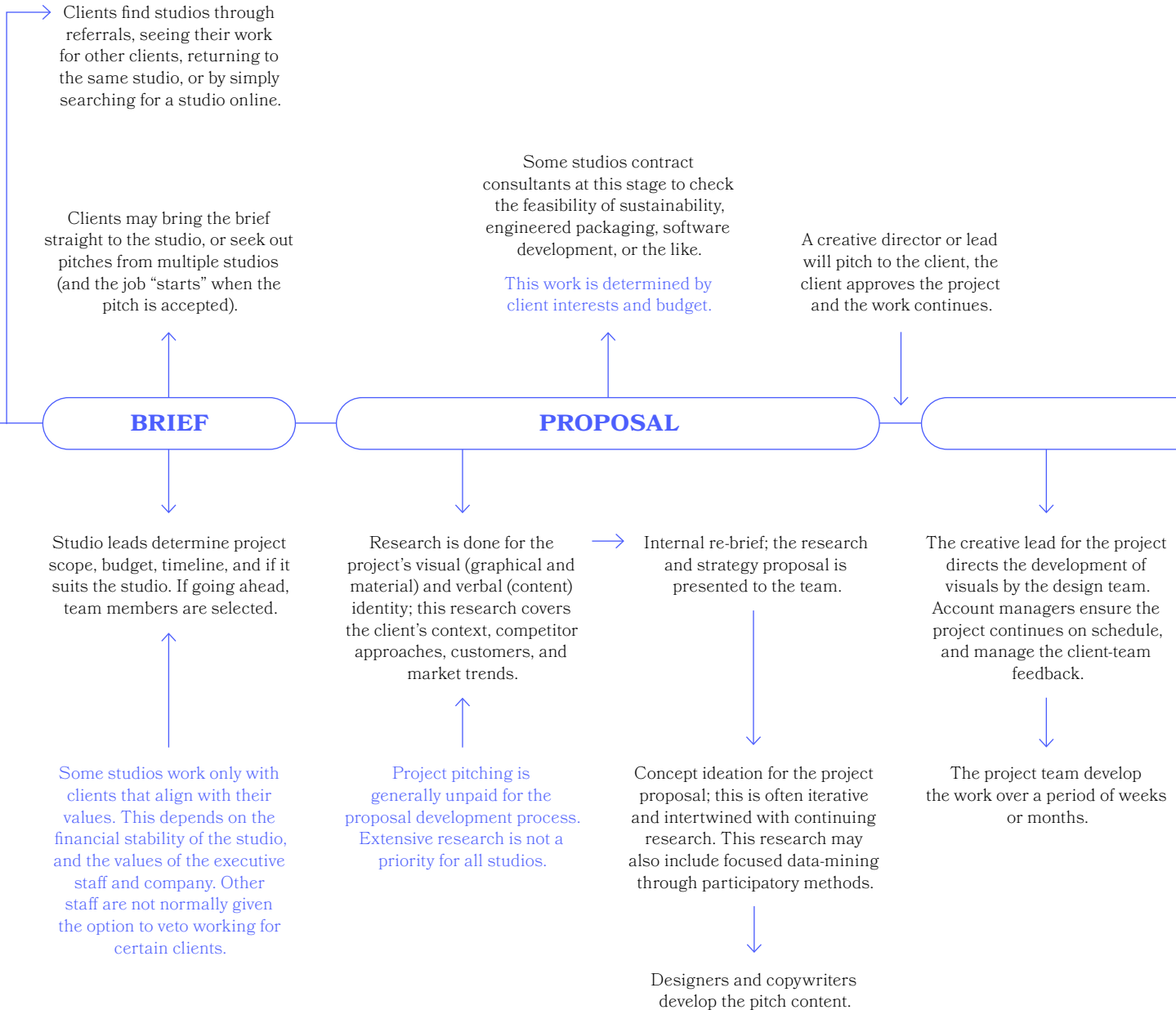
All three groups commented positively on the design of the guidebook and its production. Although they normally worked digitally, they noted that engaging with the physical workshop materials—the guidebooks and the mapping paper—was enjoyable. Studio B commented that working on paper slowed them down and made them think more about their answers. I found that the collaborative mapping was validated, as it elicited and recorded the details of the conversation about tasks and practices that might otherwise have been left undiscussed.

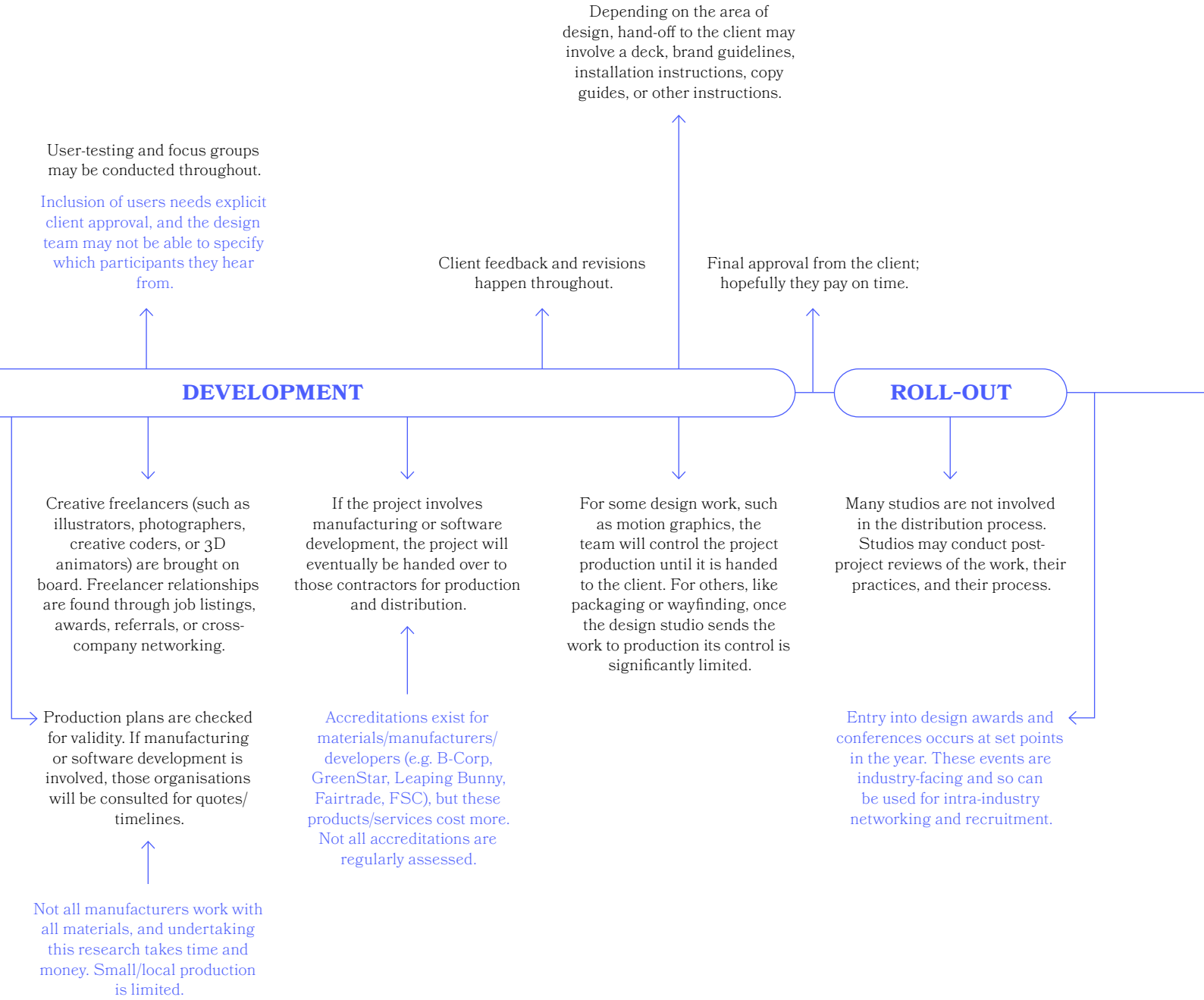
One aspect of the workshops commented on by all three groups was the luxury of having the time and space to reflect on their shared practice, and how much they appreciated the conversations during the workshops. In response, I allowed extra time for these conversations in the workshops that followed.

Prior to this preliminary study, I had not fully appreciated the complexity of the context of each kind of design work, in each sector, and in each role. I initially set out to develop a common map of practice that could be used in later workshops but then moved away from the idea that the design community could be adequately served by a generalised resource. When synthesising the maps of practice (Figure 26, overpage), I found that while the groups' practices and

Figure 26.

Synthesised Project Timeline from Scoping Maps of Practice





processes overlapped significantly, on a project basis the design work structures, timelines, interests, and considerations differed enough that rendering a specific universal map of practice was not useful. Perceptions of industry interactions differ significantly based on context and, while shared practices and common timelines emerged, I found that the use of this scoping workshop to make a model of best practices that could be applied universally was flawed. In short, the practice architectures within which individuals operate are not universally applicable.

All three studios created maps of practices that focused on the close-present; Studio A's map began with client and ended with product release, Studio B's began with client and ended with ongoing product management in the form of brand guidelines, and Studio C's began with client and ended with a post-marketing roll-out debrief. While the entry point was restricted by the guidebook's script²¹, the end-of-life consideration was more open, asking only, "Once the design project is released into the world, what happens then?" Participants were articulate and reflective on the parts of the project that were immediately tangible to them, but there was notable psychological distance between studio members and the longer-term impacts of the design; conversations revolved around a timeline focused on the immediate present and sustainability responsibilities were discussed only within the confines of that timeline.

Some aspects of this limited depiction of practice may be addressed in future work by shifting designers' understandings of their project timelines past the close-present (Anusas & Harkness, 2016) and towards a comprehension of work long before or after each single-project process. This research proposed that one component of the ongoing epistemological error of design was that graphic designers consider the design project lifetime as the amount of time that they work on a project, not how long that project lasts for and what happens after it is gone. As such, designers are psychologically distanced from the impacts of the things they help create. As evaluating material impacts of projects was outside

21 The map begins with the prompt, "How did that project arrive in the studio?"

the scope of this research, this recognition of long-term impact may be conducted through speculation and critical reflection.

While sustainable design practices exist and are used within successful Sydney-based studios, knowledge and access to these practices are not equally distributed amongst professional designers. Negotiating with clients, employing sustainability consultants, and using time and money to perform sustainability research are outside the capacity of many practitioners. Even among these industry-recognised studios, individual practitioners did not feel empowered to see, know, and do sustainable design practice when not working for pro-sustainability clients. As a result, these Scoping Workshops redirected the focus of my research towards creating pathways to action and a sense of agency for emerging Australian designers.

4.5. Shift to Designing for Emerging Practitioners

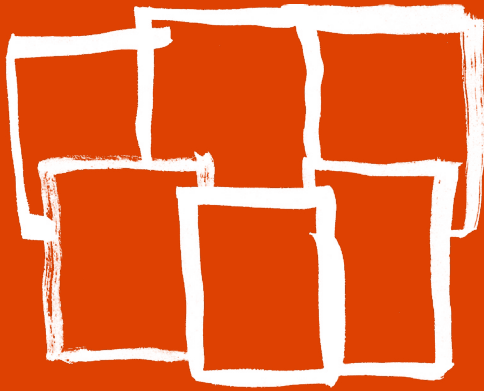
In questioning how design might help build a better world, we need to question who has access to the tools. As articulated through my Scoping Workshops and survey of practice, access to the means and knowledge of sustainable practices are distributed unequally across the discipline. Change requires a sense of agency and clear pathways to action. For a designer to do this, to change how they think about their practice and be able to plan towards change, they also require ecological literacy, shared hopeful futures and practice critiques.

Although the Scoping Workshops were conducted with fairly small groups, these findings overall helped give me scope and directed my research towards practitioners who lacked workplace support for this kind of situated knowledge. The Scoping Workshops and the prior review of sustainability in the Australian graphic design industry found that existing best practices included working mainly, or solely, for value-oriented clients, conducting research for sustainability innovations or hiring a consultancy to do so, designing for longevity, and prioritising the use of reusable and recycled materials often through their choice of suppliers and manufacturers.

This research found that even when bolstered by financial stability and an industry reputation for conducting sustainable design, such as with the groups in the Scoping Workshops, performing sustainable design practice was not all smooth sailing. There were many factors at work that influenced the sustainability value-action gap, both within the studios studied and in the profession at large; clients, budget, project timelines, resource access, and transparency all affect the ability of a studio to put its values into action.

In response to the findings from the Scoping Workshops, the next set of workshops were created to investigate *what factors might enable emerging Australian graphic designers to develop pathways towards more sustainable design practices, and a sense of agency for action*. These workshops addressed the identified factors of ecological literacy and situated knowledge to build hopeful futures and comprehension of practice architectures within the communities of practice of emerging designers, a group currently underserved by existing resources and disadvantaged in the pursuit of sustainable clients.

Emerging designers, as a demographic that had less industry-specific situated knowledge and was thus less informed about the practice architectures in which they worked, were the group I focused on for the second round of workshops specifically because they faced the highest barriers to sustainability due to their lack of industry experience and recognition and their limited access to pro-sustainability clients or resources. These were also the design leaders of tomorrow; what they learned and experienced at this stage of their careers would be carried into their developing work practices and their continuing community-of-practice engagement.



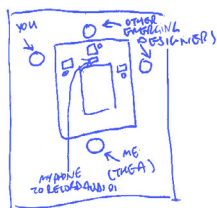
(CHAPTER FIVE)

BUILDING THE BETTER WORLDS WORKSHOPS



Figure 27.

Illustration of a Better Worlds Workshops Prototype Session

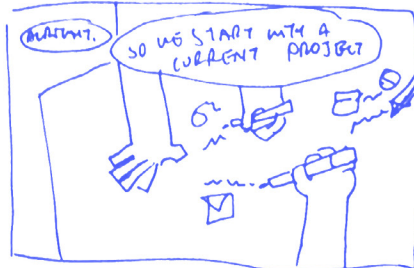


THANKS FOR COMING IN, EVERYONE! I'M THEA AND I'LL BE HERE TO OBSERVE HOW THE WORKSHOPS GO. THIS'LL HELP ME IMPROVE THE NEXT VERSION.

TODAY YOU'LL BE USING THE WORKSHOP BOOKLET TO RUN YOUR SESSION.



YOU ALSO HAVE A SMALL HANDBOOK WHICH UNFOLDS INTO A POSTER.



o o o

5. BUILDING THE BETTER WORLDS WORKSHOPS

5.1. Description of the Participant Experience

Setting: The Better Worlds Workshops Prototype—Workshop 1: Engaging Criticality (2½ hours). To help emulate the workshop experience, refer to the **Workshop 1 Guidebook (Appendix J)** and the **Small Handbook (Appendix K)** while reading the following narrativisation.

The Better Worlds Workshops Prototype sessions are vibrant and cheerful. This is the first of three sessions, each 2½ hours long. When you responded to the call for participants, you were given a Participant Information Sheet (Appendix G) and an Informed Ethics Consent Form (Appendix H) and then filled out a Pre-Workshop Survey (Appendix I). Now you're at UTS, chatting to the other three participants, eating snacks, and drawing, sketching, mapping, and collaging your way through a series of activities. When you arrived, you recognised one person as being in your cohort at university but the other two were strangers. The four of you are sitting around the end of a table in a UTS meeting room with your Small Handbooks (Appendix K) next to you as you begin reading the Workshop 1 Guidebook (Appendix J). Thea, the researcher and workshop designer, is sitting off to the side after giving an introductory spiel. There's music playing quietly and warm cups of tea. The atmosphere is comfortable and friendly; you're able to speak frankly and informally about design work and your experiences in the industry.

The workshops are focused on sustainability—you're all here because you responded to a call for participant designers interested in sustainability but with little sustainable design experience—but that's not the only discussion point of

the workshops. The other participants are also emerging designers and it's good to have the time and space to talk about what the profession is really like, how difficult valuing your own skills can be, which studios are the best aligned to your values, and what tips and tricks you've found useful for practice in your first few years of work.

You navigate your way through the workshop activities using the guidebook, a small and satisfyingly designed document. Workshop 1 begins with the Map of Practices module, where you each draw out a combination network-timeline of the people, processes, profits, and things that were involved in a recent project you worked on. This helps you introduce yourself to the other designers. Despite being from different design fields, you can see similarities and differences; your studio's timeline for free-pitching is completely different to someone else's but the iterative process of project development is mostly the same. After you've detailed all the known elements of your practice, you move on to speculation using the Small Handbook; 100 years from now, what impact will the materials from your practice have left on the world? The Small Handbook provides basic education on sustainability and sustainable design practices including core principles, material information, and suggestions for further reading. The material information prompts significant conversation about the aspects of design that are often left unexamined; what happens when your designs are no longer used and become discards in the world? If they continue to be desired and used, who keeps them running and available? What does that cost in money, materials, and energy?

Next, you move onto the Object of Care module which asks you to create an image in your guidebook using the collage and drawing materials supplied, of something that you care about that may be affected by climate change in the future. Your group ends up with responses ranging from local craft communities to the livelihood of bats. While you make your images, the guidebook asks you to reflect on how these objects of care are considered, treated, and impacted by design. Where does it fit in the map of practices you just created? How is your object of care affected by graphic design more broadly, or by the practices of those in your group? You chat with the other participants as you create your image,

handing around the scissors and glue and trading scraps of paper between you. In this process, you learn more about the other participants and you reflect on the impact your work has on the real world. After everyone's done with their images, you decide, without instruction from the guidebook, to go around the table and have everyone explain what they've depicted and why. You hear about the personal cares and concerns of these relative strangers, what they love and what they think they might change. It's comforting to hear that there are other emerging designers who care about these issues the same as you do.

Finally, you move into creating your Values and Actions. This is a fill-in-the-blanks format that helps you write a statement about yourself as a designer. In making this statement, similar to a manifesto, you create a list of seven values, actions, and concerns you hold for your design practice. This is a moment of quiet reflection where you can consider how you'd like to see yourself as a designer and what you think your work says or does.

The next module, the Logbook, is to be completed in your own time over two workdays. You'll track these values, actions, and concerns to see when they're actually present in what you make and do. Thea stresses that the logbook isn't an evaluation of your practice and won't be used to assess you. Instead, it's a kind of mindful tracking that you can complete and reflect on later.

As Thea packs up the workshop materials at the end of the session, you exchange social media details with the other participants. It's only been two and a half hours, but now you know these people—the work they do, what they care about, and what they want to see change in the profession.

The Better Worlds Workshops Prototype — Workshop 2: Engaging Hope (2½ hours). To help emulate the workshop experience, refer to the Workshop 2 Guidebook (Appendix L) while reading the following narrativisation.

Workshop 2, you learn from Thea's brief introduction, is all about how you can imagine design practice differently and work towards more sustainable futures. This session is taking place a fortnight after the first one, in the same meeting

room in UTS. In this session, there are three other participants with you; one you recognise from Workshop 1 and two you don't. There are snacks and tea to consume as you work and it's easy to get chatting with everyone around you. In front of each of you is a new guidebook (Appendix L), and in the centre of the table is a choice of pens and a small pile of A3 paper.

As a group, you begin by inventing speculative sustainable worlds with the Storyworld Rules module. As you pass the pages around, there's not much conversation as everyone is so concentrated on writing. Occasionally someone exclaims with amusement at one of the rules, or calls out, "Oh, I was going to write that!" It's a little stressful but also entertaining. You think back to the previous workshop and recall what it taught you about sustainability; you use the information it gave you on materials and sustainable practices to guide you, as well as your own experience and prior knowledge. You've kept the Small Handbook pinned to the wall behind your desk since Workshop 1, within easy reach when working. After everyone has in front of them six facts that would be true in a world where sustainable design is the norm, you read them all and decide which set of facts will form the basis of the next exercise. Each set of facts contains at least one piece of writing from each person at the table so there's a fun mix of perspectives and knowledge shared across different experience levels and areas of design. Thea informs you that you'll be splitting into pairs for the rest of the workshop. You and your partner decide to go with the set of facts in your book as it paints a clearer picture. The other small group decides to merge theirs into one storyworld as that set of facts lines up well.

In your pairs, you follow the next module to create Design Fictions. What kind of design projects might you work on in the better, more sustainable world that you're exploring? You talk animatedly with your partner as you design, draw, sketch, and collage images of this fictional design project. The two of you come up with a range of ideas, pursuing different areas of your storyworld before deciding that you'll focus on wayfinding and signage. You quickly thumbnail out ideas on the page, letting your sketches interact with and bounce off each other's concepts. In making this work, you discuss the aesthetic of the project as well as its social

role, the commissioning client, and the environmental impact. It's a playful process, proposing something seemingly unreal and ideal while basing it on your own expertise.

Next, you move to the Backcasting module where you discuss and make notations on your design fiction, reflecting on how far away or possible this better world is. There are some aspects that are very tangible and close, while others seem far off. It's interesting to consider which aspects you could incorporate into your current practices and which ones you think need more industry support.

Finally, you use the Strategies module to plan how you can move towards your ideal future storyworld using the skills, connections, and practices you already have, or those that you can start to discover. This is a quiet and reflective moment as you think about what you'd like to achieve and then how you might make it happen. Occasionally you chat with your partner about what they're writing but mostly it's a moment to plan out pathways to action. As the workshop ends and you start packing up, you and your partner share your design fiction with the other small group. Thea takes your guidebooks, scans them, and returns them to you so that you can take your strategies home with you. You snap some pictures of the things you drew and trade social media contacts with the other participants, continuing to chat as you leave the building.

The Better Worlds Workshops Prototype — Workshop 3: Paying it Forward (2½ hours). To help emulate the workshop experience, refer to the Workshop 3 Guidebook (Appendix M) while reading the following narrativisation.

Workshop 3 is about the workshops so far; what did you like and what could have been different? In this co-design session, you redesign the workshops and request future resources. It takes place a fortnight after the second session and this time you recognise three of the four other participants in the room; two from the first session and one from the second. As you arrive, the workspace is set up differently from the first two sessions. Today, there is just one set of instructions in the form of a single page (Appendix M, p. 1), and some A3 paper, pens, and what

looks like template guidebook pages to fill out (Appendix M, p. 2).

On the A3 paper, you complete the Reflections module by listing five new ideas or pieces of knowledge you gained through the workshops, five sustainable practice strategies from the workshops, five topics of strategies you wanted to learn about but did not cover, and five things you want other people to learn. One person undertakes the task of scribing everyone's ideas. Because not everyone was in the same sessions throughout, there's a mix of experiences to discuss. You take turns while speaking, bounce off each others' ideas and find an easy consensus.

Next, you use the Modules blank templates to propose new modules/activities that you think would be good in future versions of the Better Worlds Workshops. It's quiet as you write, everyone deep in thought. After you're all done, you share what you've proposed and listen as everyone else reads theirs out too. Some of the modules proposed by different people are very similar and you talk about combining them into a series.

Thea directs you over to a pair of tables set out end-to-end and provides you with copies of the previous two workshops' modules laid out in the same template format (Appendix M, p. 3–11). In the Construction module, you use these and the modules your group just proposed to begin as a group to develop a new format for the Better Worlds Workshops. What will you keep and what will you leave behind? The workshop planning becomes a physical activity as you and your group stand up and walk around, moving the various modules around until everyone in the group is satisfied with the plan you've laid out. After the structure is confirmed, you describe to Thea what the user journey through your group's new version of workshops would be, explaining how the modules fit together into a new whole.

When it's all done, Thea hands you back the guidebooks you've been filling in through the workshops and thanks all the participants. As you leave, you chat to rest of your group and trade contact details, waving goodbye as you split off back to work.

5.1.1. Introduction

Following the Scoping Workshops, this research narrowed in focus to investigate how emerging designers, as a sector of the profession who face significant barriers to sustainable action, might develop a clearer sense of agency and pathways to develop more sustainable practices. This investigation was conducted through the development and testing of the Better Worlds Workshops Prototype (Figure 2) which focused on the second research question (Figure 1): *What factors enable emerging Australian graphic designers to develop pathways towards more sustainable design practices, and a sense of agency for action?* These workshops had a dual function as both sites of data gathering and as creative interventions into the design of change-making engagements for sustainable practice.

The survey of practice (Chapter 1) and the literature review (Chapter 2) identified that changing practices requires a sense of agency and pathways to action, and that these capacities in terms of sustainability practices in design need to be informed by ecological literacy, practice critiques, and hopeful futures. The Better Worlds Workshops were developed to help emerging designers acquire a sense of agency and pathways to action by engaging with these three capacities.

Through the Scoping Workshops and the Better Worlds Workshops Prototype, this research identified five factors that would be crucial to the creation of ecological literacy, practice critiques, and hopeful futures for Australian designers. Those Five Factors for Better Worlds, a novel research contribution discussed further in Chapter 6, were:

1. (access to) sustainability education,
2. (belonging to) communities of practice,
3. (building on) situated knowledge,
4. (capacity to) speculate alternative practices, and
5. (having an) ethics of care.

The time, support, and conversation that the Better Worlds Workshops Prototype provided were more widely desired than my few facilitated sessions could offer. To address these gaps in industry, the workshops need to be widely available and accessible. Therefore, I will publish the refined Better Worlds Workshops online as an open educational resource following examiner feedback. This is an ongoing outcome from this research. This intention for future release affected aspects of the workshops' design and content throughout the testing, as is discussed in the following chapters. The refined outcome is discussed in Chapter 7, Discussion and Implications. In this way, this novel contribution to practice will be a situated, participatory resource for use professionally by graphic designers.

5.2. Format

Each workshop activity was constructed with an aim, script, materials, and an expected material outcome by participants. This group of elements is hereafter called a module. Each two-and-a-half-hour workshop session contained multiple modules, including both individual and collaborative material outcomes by participants. The workshop materials are listed in the Appendices section of this dissertation as follows:

- Prior to attending the workshops, participants were given a *Participant Information Sheet* (Appendix G) and an *Informed Ethics Consent Form* (Appendix H). Participants additionally filled out a *Pre-Workshop Survey* (Appendix I).
- The first workshop (Appendix J: *Engaging Criticality*) focused on practice critiques and ecological literacy supported by the *Small Handbook* (Appendix K).
- The second workshop (Appendix L: *Engaging Hope*) focused on hopeful futures and practice critiques.
- The third workshop (Appendix M: *Paying It Forward*) focused on the participatory design refinement of the workshops themselves.

- Participants then completed two *Post-Workshop Surveys*: the first (Appendix N) a week after the workshop, the second (Appendix O) a month after that.

5.2.1. Documentation and Analysis Plan

The research aims of the Better Worlds Workshops Prototype, as detailed in Figure 21, focused on developing two key areas of information:

1. Participant feedback on the workshop content and experience. This information was found through observation notes, participant reflections in Workshop 3, and the three workshop surveys. This data is intended to help develop future iterations of the workshop.
2. Insights into shifts in participants' sense of agency for change regarding design sustainability and their understanding of pathways to action. This information was found through their responses during the workshops and in the three workshop surveys and is intended to extend sustainability education for working graphic designers.

The Better Worlds Workshops Prototype, as practice-based research, followed the documentation and analysis plan set out in Chapter 3. Data was collected through written participant responses in the form of pre-and post-workshop surveys via email, completed workshop materials during sessions, and verbal/physical participant responses in the form of observation during the sessions, and recordings of participant conversations. The simultaneous development of the workshops as both an intended resource for industry and a doctoral research experiment are intertwined, creating a tension for participants that is discussed more in Section 5.4.2 below.

5.2.2. Design and Materiality

All the Better Worlds Workshops Prototype materials were printed, tangible items (Figure 28, overpage). Participants completed the guidebooks according to the instructions, created maps, took notes on scrap paper, proposed workshop modules on individual templates, and created collages with second-

Figure 28.

Tactile Workshop Materials



[Figure 28 First Row, Left to Right: Workshop 1 Group C's Map of Practices, Workshop 1 Guidebook cover, Small Handbook cover, Eugenie's Object of Care. Second Row: Workshop 2 Guidebook, Corey's Storyworld Rules, Monica's Design Fiction. Third Row: Workshop 3 instructions page and pre-designed modules, (back) Workshop 3 Group B's Reflection module. Fourth Row: A Module page by Hanzagu and one by Melissa, Workshop 3 Group C's Reflection module.

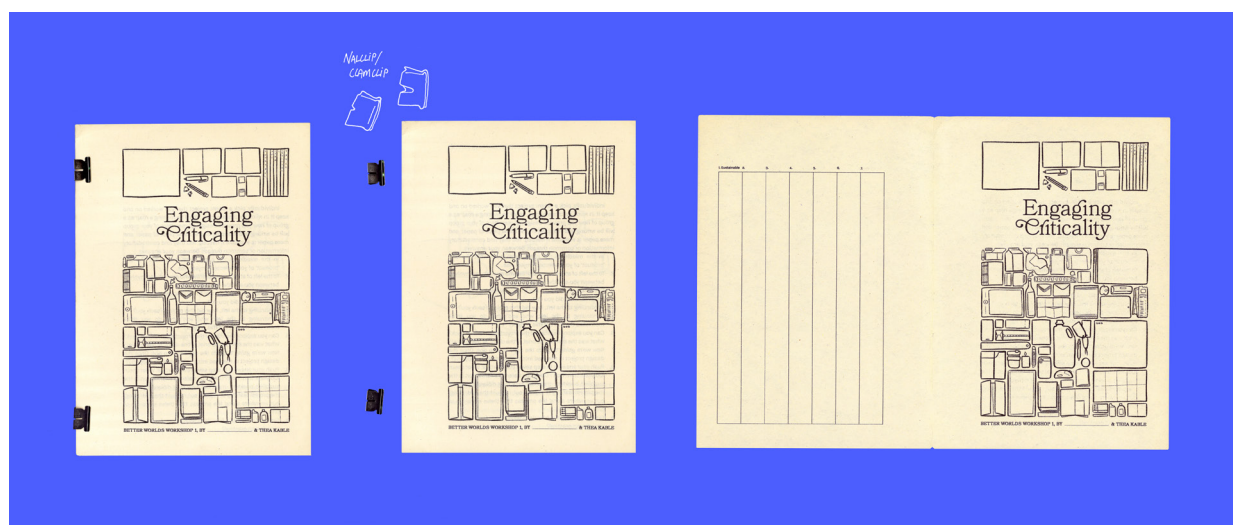
hand materials. Workshop interactions were designed to be hands-on as digital mock-ups look “done” more quickly than hand-generated mock-ups, and offer more opportunities for designers to become concerned with the aesthetics of the outcome rather than the conceptual exploration of the process.

The Better Worlds Workshops Prototype materials were easily reproducible with as little waste as possible; they were made using standard paper sizes, had simple binding with slide clips to make materials easy to detach and reattach, and were printed on a standard office printer. These design choices not only demonstrated the applicability of sustainable practice but also anticipated future publication of the workshop scripts for emerging designers to run the workshops with minimal production costs or expertise.

With data collection in mind, workshop materials were designed for easy documentation (Figure 29): easily removable and refitted bindings using clam-clips, folded paper rather than single pages where possible for faster scanning, and set areas for writing inside the guidebooks to minimise information loss. As part of the reciprocal research relationship, the participants were able to keep as much of their completed materials as possible. Because their design allowed for fast disassembly, guidebooks could easily be collected, scanned, and returned.

Figure 29.

Binding for the Better Worlds Workshops Prototype



In my experience as a workshop designer, facilitator, and university tutor, when participants engage with multiple formats for their instructions there is a higher chance of confusion. It also makes it more difficult to produce and collect sets of workshop materials if some aspects are print and some are digital. Keeping the scripts of each session in a discrete guidebook, one guidebook per participant per workshop, meant less confusion for myself and for participants.

The workshop materials were developed to encourage in-workshop interaction, particularly through the use of collaborative, hands-on modules. This was, in part, due to an interest in “design materials as tools in ideation” (Vaajakallio, 2012, p. 24). As discussed in Section 3.2.2.2, this concept reflects the idea that participants in research scenarios engage in ideation and storytelling more readily when prompted to engage with sketching and prototyping. Although the refined Better Worlds Workshops will be available online, the revised scripts preserve this emphasis on hand-made interaction by encouraging participants to read the instructions digitally but to work manually in their responses.

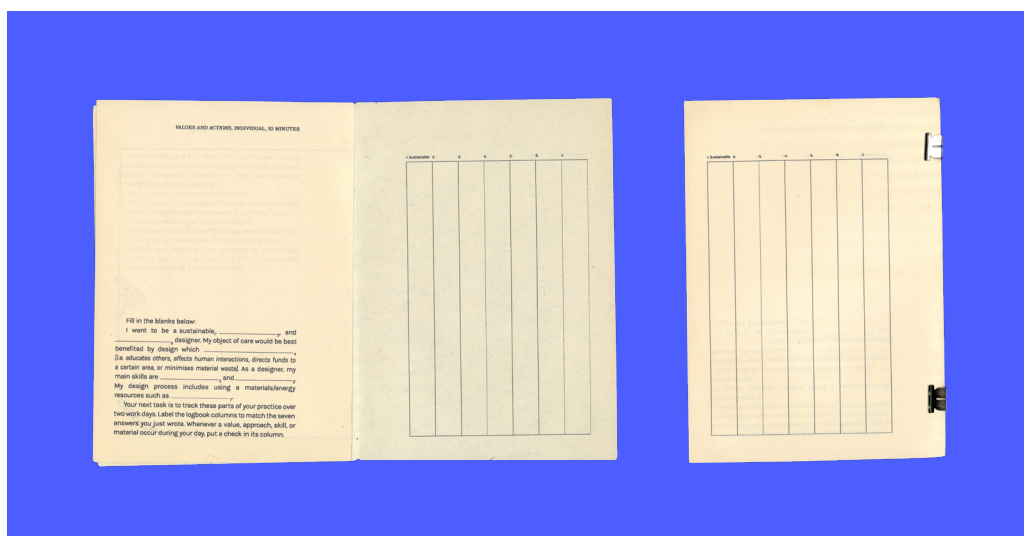
Although the workshops used familiar design exercises, like sketching and mapping, to engage participants, it was important that it did not feel like work or an educational task. As per the insights from Section 3.2.2.2, introducing elements of playful engagements helps participants in workshops and design games form collaborative bonds, and plan change together. Within the context of tertiary design education, with which all these participants, as current students or recent graduates, were familiar, early ideation is frequently hand-made while the design refinement and production is almost always digitally produced. For professional designers, collaborating with computers may be more reminiscent of their work environments than collaborating with pen on paper. This was supported by comments from participants in the Scoping Workshops who stated that all their work was done digitally and they rarely wrote with pens in their day-to-day work (Groups B and C).

Attention was also paid to what was being asked of the participants. There is significant interest in participatory design in creating genuine participation and developing environments in which participants are willing contributors of their

knowledge (Bødker et al., 2010). Language and activities were specifically chosen to avoid any discussion of sensitive workplace material, or any appearance that the workshops were centred on assessing the designers. The *Logbook* module (Figure 30), for example, which participants completed on their own between sessions 1 and 2, asked participants to track sustainability and six values/actions they identified as important to them over two workdays. While the module asked participants to track and reflect on their work practices, a crucial piece of real-world grounding for a practice-oriented engagement, it did not ask for any identifying or traceable information. Rather, the module focused on reinforcing the sustainability education of Workshop 1 by having participants track and reflect on their value-action gap.

Additionally, the Better Worlds Workshops were a considerable time commitment—10 hours per person including surveys—and so pre- and post-workshop material was limited to what was seen as necessary to evaluate feedback. These choices were made to maintain a research relationship that helped participants to articulate and share their situated knowledge among themselves and to assess the benefits of doing so.

Figure 30.
Logbook Module Pages



5.3. Participants

The Better Worlds Workshops were tested with nine emerging graphic designers who were either working, or looking for work, in Sydney, Australia. The participants were recruited through online communities of practice including university alumni sites and The Design Kids Facebook group. They were given the option to be credited by name for their contributions or to be de-identified; all participants chose to be credited by name. I am very grateful for the time and effort put in by these nine designers in helping develop this research; their contributions were invaluable, creative, and significantly informed the refined Better Worlds Workshops iteration. The participants were:

- Eugenie Dawson
- Monica Feng
- Corey Lange
- Melissa Lee
- Crystal Li
- Stephanie Lu
- Hannia 'Hanzagu' Ngo
- Ashley Tan
- Rachel Zhu

5.3.1. Group Sizes

The Better Worlds Workshops Prototype was tested with the above nine participants, with attendance at each session ranging from two to five people. The variation in attendance and group size was expected and allowed for testing of the workshop under different conditions.

The workshops were originally designed for up to 12 people, running in groups of six which could be subdivided into pairs or trios for activities. Although the actual smaller number of participants, nine rather than 12, was less than intended, it ended up being beneficial. I was the sole facilitator, documentarian, designer, and printer for this research. From the perspective of developing the workshops for use in industry by groups of designers without an external

facilitator, working as the sole organising party seemed more appropriate for testing the difficulties of running such a workshop as opposed equipping myself with a whole team. As a researcher, running one group per session, rather than two, was much easier to manage and track. However, in future extensions of the workshops where the focus will be on participant experience without gathering research data, larger groups would be possible.

All designers who participated studied graphic design and were either working or looking for work in Sydney. While this limited sample of emerging designers was manageable for the scope of this doctoral study, including more participants from a more diverse educational background post-thesis would be ideal. The refined Better Worlds Workshops, discussed in Chapter 7, are intended to reach this wider designer audience as a tool for industry, not as an extension of this doctoral research data collection.

5.3.2. Inclusion and Exclusion

Participants with the following qualities were sought:

- Less than five full years of relevant work experience in graphic design/visual communication.
 - Limiting participants to a certain amount of work experience would provide scope and keep participants on a level field in terms of experience, aiding in the design of the workshops.
- An interest in ecological sustainability, though this was determined by their self-selection to apply for an ecological sustainability-oriented workshop series.
- Proficiency in English, as that would be the language of the workshops.
- An interest, but not expertise, in sustainable design practice.
- Intention and availability to attend all necessary sessions.
 - Some potential participants were excluded because they would have been unable to attend all three sessions. However, unexpected scheduling issues could, and did, emerge. If a participant was unable to attend due to misadventure the approach depended on

how much notice I received. Options included rescheduling or having the participant miss that session. The latter was not ideal but was an option for a late-notice inability to attend.

5.4. Findings from the Better Worlds Workshops Prototype's Design and Experience

The following sections report on the insights gained from the Better Worlds Workshops Prototype experience and design, based on participant feedback and researcher observation on how participants interacted with the workshop scripts and materials. This research revealed a number of key factors affecting how creative interventions such as participatory workshops might be better used to engage designers in conversations around the complex topic of sustainable practice. As explored in the following chapter, these included:

- The need to negotiate complexity in sustainability education when targeting audiences with a range of contexts and levels of sustainability knowledge.
- The effect that framing and execution have on participant actions in research workshops.
- The need to understand and plan for how participants may misconstrue or fail to complete workshop scripts.
- The use of emphasising conversation and process over outcome-based engagements in practice critiques.
- That using prompts based on shared practices in scripts helps encourage participants to use those shared practices, such as mapping or thumbnailing, when communicating their ideas. This supports communities of practice to collaborate among themselves as they are instructed by, and use, the shared shorthand of common practices.
- The benefits of designing and producing materials specifically for a design practitioner audience.

In addition to informing my workshop research practice, these insights helped me refine the Better Worlds Workshops for publication online. When combined with the Scoping Workshops and preceding research, the Better Worlds Workshops Prototype experiment additionally identified the five factors that this thesis proposes are crucial to the creation of ecological literacy, practice critiques, and hopeful futures. Those factors will be discussed in Chapter 6, which explores what, according to the participants, happened to the values and actions of their practice as a consequence of the workshops, and which aspects of the workshops helped participants develop a greater sense of agency and pathways to action.

5.4.1. Complexity and Clarity in Ecological Literacy Education

As mentioned above, one aim of the Better Worlds Workshops Prototype was to explore what factors enable emerging Australian graphic designers to develop pathways towards more sustainable design practices, and a sense of agency for action. This is a difficult goal, in part, due to a number of conflicting aspects: the innate complexity of sustainability education and the need for that complexity to be accurately communicated, the context-specific and partial knowledge of practitioners, the need for sustainability education to engender emotional responses rather than providing knowledge alone, and the context-specific demands of sustainable design in practice.

The solution that the Better Worlds Workshops Prototype script worked towards was for the necessary complexity of situated climate education to emerge from the participants' responses to the script, rather than overly complicating the script itself. The only prior knowledge that the workshops required from participants was of their own practices. This approach meant that, in the sharing and comparing their unique situated knowledge, participants were experiencing emotionally resonant, practice-specific conversations. As the workshop scripts focus on participants' situated knowledge and their sharing, collaboration, and critiquing in the workshop process, they remain relevant to various practices.

Designing for a particular community of practice—emerging graphic designers in the Sydney region—meant that this research predicted or assumed prior knowledge or some overlapping situated knowledge and this was reflected in the script. Nonetheless, it is important to acknowledge that each participant engaged with the workshop script and materials from a different worldview. On a purely practice-related basis, they entered from different workplaces, different areas of practice, different existing knowledge of sustainability, and different comprehension levels of their own practice architectures. Participants' prior experience with ecologically sustainable graphic design practice ranged from non-existent to a fair working knowledge. While most participants had encountered sustainable design practices in the course of their studies, Hanzagu's first introduction to the concept of *sustainable design*, for instance, was reading the participant recruitment advertisement for the Better Worlds Workshops Prototype. That's to say nothing about the different social, cultural, linguistic, economic, political, or other personal aspects of their professional identities. All of these contexts, attributes, demographics, and prior education intersected to create unique practitioners, each with their own partial knowledge and each subject to unique practice constraints. The workshop scripts needed to establish significant information about sustainability in professional practice, and to ensure that everyone was working from a similar baseline. They also needed to be clear and brief enough to be read and followed in a workshop environment.

What this translated to, in practice, were workshop scripts that focused on prompting complex and rich discussion and reflection by participants based on their own situated knowledge, values, and actions, and then comparing their experiences with others. The scripts took the form of short instructions or questions for participants to work through. An example of complexity coming through participant responses, rather than from a complex script, was the *Storyworld Rules* module²², whereby participants imagined and described a *better world* in which sustainable design practice was the norm. This required

22 First module in Workshop (Appendix L, pp. 2–3).

participants to create a coherent vision of changed design practices informed by sustainability education.

Participants had already engaged with the *Small Handbook* in Workshop 1, the content of which was based primarily on the information found through the survey of practice, particularly the guidance for designers in *Design, Ecology, Politics* (Boehnert, 2018) and *Design to Renourish* (Benson & Perullo, 2017), and through the translation of material research papers to a design audience. The *Small Handbook* was aimed at an emerging design audience situated in New South Wales, and so contained information curated and translated for that audience: material lifetime information that focused on materials and energy consumption familiar to designers and linked sources such as Australian-specific printer directories, cartridge recycling programs, and consumer choice recommendations. As participants had already used the *Small Handbook* before interacting with the *Storyworld Rules* module, they shared common knowledge of sustainability in professional practice. This meant that the activity did not require extra research or promote uninformed speculations. As participants already had a shared baseline of sustainability education, they could bring in their situated knowledge to create complex and contextually-informed responses, as seen in Figure 31²³ (overpage).

An alternative version of this module might have dictated exactly what the storyworld would be, instituted rules in the module script on how *sustainable design practice* could be imagined, or provided narrative prompts for participants to respond to. These versions of the module script would necessarily be more detailed, more defined by my own point of view, longer, and directed towards a more strictly defined outcome. Instead, the module prompted a rich exchange of ideas by scripting the collaborative creation of storyworlds where no one participant was responsible for creating the vision of the future. In this way, participants shared practice critiques, knowledge of sustainability, and aspirations for change.

23 Participant responses to the *Storyworld Rules* module, script in Appendix L, p. 2–3

Figure 31.

Completed Storyworld Rules Module Pages



[Figure 31 Note: Five sets of Storyworld Rules, all made by the same group (Crystal, Eugenie, Hanzagu, Melissa, and Rachel). Even though all the storyworld rule sets seen above were written by the same five people, the act of taking turns and following others' ideas meant that each storyworld rule set was different.]

This process, where speculation was broken down into much smaller collaborative steps, was well received and prompted conversations in the workshop sessions. Participants in the Workshop 3 Group B session, reflecting on key new ideas or strategies they learned through the workshops, had this to say about their experiences in Workshop 2 Groups A-I and A-II²⁴:

24 Workshop 2 Group A had five people in a session, more than suited the workshop modules. They were split into two smaller groups for collaborative work; A-I was Crystal and

Rachel ^{Group B (A-II)}: “I think that ‘future thinking workshop’ [is a new idea/strategy from participating]. So, thinking more than just one idea ahead, actually you’re thinking 100 years, or 10 years.”

Eugenie ^{Group B (A-II)}: “Yeah. Letting yourself imagine is challenging.”

Crystal ^{Group B (A-I)}: “But also how it’s structured, where you have insights from other people. I learned about, for example, [plastic microcycling] from [Melissa and Thea]. It just allows you an easier way to work as a group to share their insights and ideas.”

Eugenie ^{Group B (A-II)}: “We gained momentum as we passed it around. At first, I was like, what do I write?”

Rachel ^{Group B (A-II)}: “[It was] another point for sharing ideas and information.”

This exchange reflects the ways in which participants not only felt enabled to speculate, but to exchange ideas and build knowledge in and through the workshops. These exchanges may not have been possible had the script taken a different approach, one that offered no opportunity for participants to share and compare information.

While the speculative modules of Workshop 2 were vocally appreciated, I received feedback regarding making the speculative modules feel grounded and purposeful. While the script was written to prompt reflection on the speculative storyworld to create critiques of present practice, that interaction was difficult for some participants. This surfaced particularly when participants were talking about how the preferred world felt too far away or difficult to reach. This was experienced by participants in different sessions, and so was not group specific:

Corey²⁵ (in Workshop 2 Group B about that session):

“What do others need to do differently to be better? Okay, well, dismantle capitalism.”

Melissa, Group A-II was Eugenie, Rachel, and Hanzagu

25 Corey uses they/them pronouns.

Melissa (in Workshop 3 Group A about Workshop 2 Group A):

“One of the limitations I saw with the fictional world thing; ... what will it take to get there? And [you’ve] got to convince the council, you’ve got to convince the government. It’s kind of hard to do that.”

These quotes expose a level of frustration that may come with critiquing present practices or in framing a workshop script to reach a speculative preferable world. In response to this, the Better Worlds Workshops script was iterated so that the discussion of perceived barriers to action was brought to the fore for group discussion. Optional introductory materials which strengthen participants’ comfort with worldbuilding will also be added to the refined Better Worlds Workshops. This allows for more purposeful conversation regarding how to navigate those barriers from the situated perspective of the real world.

The complexity of conversation may also be lessened if participants are not appropriate. Prior to testing with the participants recorded above, the Better Worlds Workshops were tested informally with a cohort of Design Honours students at UTS. These students completed a test version of Workshop 1 in a significantly shorter period of time than was expected; of the three groups of students that participated, the fastest group completed the workshop in one hour, and the slowest took 75 minutes. To put this in perspective, of the three groups of working designers who participated in the official testing of Workshop 1, two groups completed it in two and a half hours but said that they could have continued longer, and one group spent two and half hours on the first module alone. In short, the students completed Workshop 1, in an almost identical version²⁶ to the formal tested workshops, in less than half the time that the working designers took.

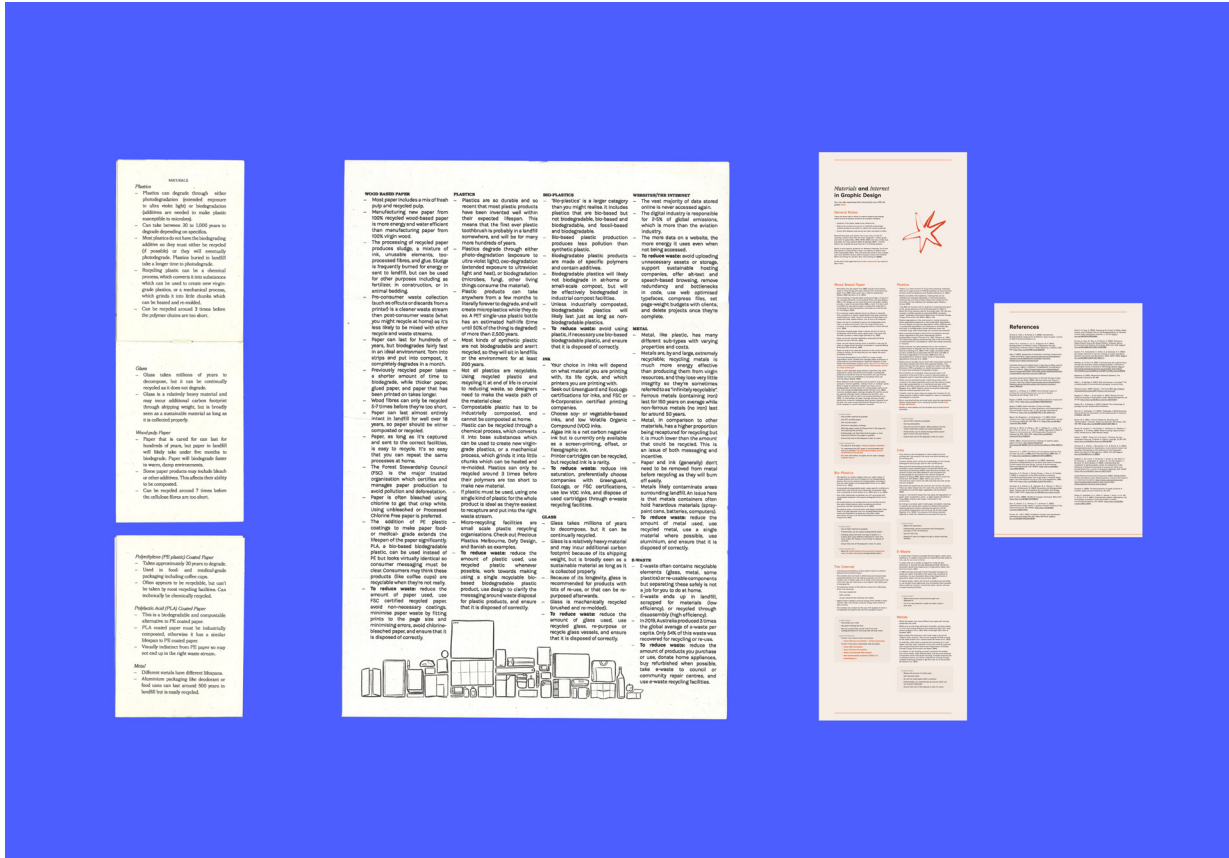
26 The *Small Handbook*’s material information underwent significant changes and there were some minor alterations to script copy, but the modules, estimated completion times, and structure were identical between the Honours-tested prototype and Better Worlds Workshops Prototype testing.

When compared to the formal Better Worlds Workshops Prototype testing, it became apparent that a lack of work experience may have led the Honours cohort to complete the workshop as quickly as they did. This hypothesis was supported by the difference in timing and complexity of the answers from the more experienced Better Worlds Workshops participants²⁷. The Better Worlds Workshops were developed to target a specific group—emerging graphic designers in NSW with an interest, but not expertise, in sustainable design practice. In accordance with these disparate levels of comprehension and engagement, the refined Better Worlds Workshops homepage is clear that it is recommended for groups with some level of prior professional work experience.

While participant responses were successfully developed through the workshop scripts to create rich knowledge sharing, complex information is necessary for sustainability education to avoid oversimplification or misinformation. This was a particularly crucial consideration as providing an educational resource in the form of the *Small Handbook* meant the group started with the same baseline knowledge, which enabled them to have richer conversations. While the original goal for the *Small Handbook* was to create a simple reference table of materials and their lifetimes for participants to use to move past the close-present, the use-cases for materials in design, their thicknesses, treatments, compositions, and consumption, were too varied to draw into a neat table. These complexities were discussed in Section 1.6. Due to this variability, the complexity of environmental education won out and the table shifted significantly between iterations (Figure 32, overpage).

²⁷ It is worth noting that how tertiary education and professional practice education are designed is inherently different; the understanding of specific practice architectures and the complexity of working within systems can only be understood through practice experience. While there are universities and outside projects working to educate students on sustainable practice, this was outside the scope of this research.

Figure 32. Iterated Versions of the Small Handbook



[Figure 32 Left: Iteration of the full material lifetime table used in a test draft. Middle:

Iteration of the full material lifetime table used in the Better Worlds Workshops Prototype. It was more than twice the size, and contained more detailed notes for each material on how to reduce waste in design practice. Right: The *Small Handbook* was revised again for the refined Better Worlds Workshops, discussed in Chapter 6. Seen here is the material information and the reference list.]

The revised *Small Handbook* was well received by participants as both a broader resource and a designed object; it was mentioned by all groups in Workshop 3 as a key resource which they kept and consistently referred to when working. Multiple participants referenced keeping the *Small Handbook* near their workspaces as a reminder or resource.

This continued presence of the *Small Handbook* in their practice was specifically mentioned in the first post-workshop surveys of Hanzagu²⁸, Monica²⁹, and Crystal³⁰. Two participants, Rachel and Crystal, whom I encountered more than six months after the workshops, still had the *Small Handbook* pinned up in their workspaces. The appropriate design of the materials to appeal to the audience meant that participants found it appealing enough to keep and refer to continually.

One discussion that supported this positive reception took place in a Workshop 3 Group C session, when participants were identifying the five key lessons or strategies they found through the workshops:

Monica: “In the booklet there was that little poster [the Small Handbook]. I thought that was really handy.”

Stephanie: “It’s so hard to curate quality information ... What’s so amazing about the little book [is] ... it’s curated by a legitimate expert, so I actually trust what I’m reading.”

Monica: “Yeah ... because it’s made by someone in your field or someone that understands what I would need compared to someone in corporate, like you might not need the same specific GSM. It’s just very nice. I agree.”

Stephanie: “It’s written by someone with not only the breadth but the depth of [knowledge].”

In this exchange, the perception of the *Small Handbook* as trustworthy and curated was supported directly by the perception that it had been researched, developed, and designed by a working designer; someone who shared common practices and concerns with the audience and thus understood the specifics of

28 “The booklet that contains information about several materials in design is really useful. I would say it has its worth and value to be used and implied in every design practices.”

29 “[I] look into the materials suggested in the smaller booklet and try to apply it when researching other ways to print sustainably.”

30 “The Small Handbook we received in workshop 1 is a great informative and impactful guide which I still refer to from time to time.”

material concerns in practice.

In addition, Monica, in the first post-workshop survey, commented that she was “look[ing] into the materials suggested in the smaller booklet and try[ing] to apply it when researching other ways to print sustainably.” Corey, in Workshop 3 Group C, stated:

The little zine slays³¹. Having the actual ‘this is what the impacts of things are’ and ‘these are the material impacts and these are the choices that you can make’ — actually having the [Small Handbook] that is consolidated resources that give you options of how to be more sustainable. That is, I feel, the most important thing to actually get people making sustainable [choices].

Due to the rapid rate of change in industry knowledge and resources, this printed resource will no doubt need updating frequently. This reflection led, in part, to the development of the refined Better Worlds Workshops online platform which would allow me to host and update a version of the *Small Handbook* online and in print as new resources become available.

While the *Small Handbook* continued to be popular and referenced after its use in Workshop 1, it was too densely written to be used in the way it was intended. For its use in the *Map of Practices* module, I ended up intervening; I had participants ask me questions about materials and would then pull answers from the document for them. I made changes to the instructions for this module to ensure that if the Better Worlds Workshops are run without a trained facilitator, participants can still use the *Small Handbook* in the session.

This research aligned with Boehnert’s (2018) discussion of epistemological errors as it found that clear instructions should not be created at the expense of education that is accurate and reflect the complexity of sustainability education. As an online resource, the Better Worlds Workshops will make sustainability education easier for participants to access and share. The workshop scripts also

31 Meaning that it is aesthetically appealing and functions well.

advance the idea that participants' situated knowledge is more than sufficient to create complex conversations around practice, particularly when participant interactions are encouraged to share, layer, and compare their knowledge. At the same time, the physical presence of the *Small Handbook* in their workspace may act as a tangible reminder of the workshop content.

The aim of the Better Worlds Workshops Prototype script was to break large, complex, and difficult conversations about industry critique and transformation into smaller, easier-to-process parts. Although the workshop modules could work well alone, the content and experience are strengthened by experiencing the modules in sequence together as planned. As discussed earlier in this section, the *Storyworld Rules* module was created to follow the sustainability education of Workshop 1. Throughout the workshops, each module builds on the knowledge gained or shared in previous activities. For example, the *Stratégies* module at the end of Workshop 2 asks participants to reflect on the preceding workshops in order to develop pathways forwards. The workshops effectively script smaller conversations within the larger narrative structure to build designers' sense of agency and pathways to action.

As discussed in Section 1.1, Donella Meadows stated that our global problems with climate communication may come from the mismatch between our vision of the world as simple and the reality of the world as a “complex, interconnected, finite, ecological-social-psychological-economic system” (Meadows, 1982, p. 101). This aligns with Boehnert's warnings regarding epistemological error; the gap between how designers think about ecological systems and how they actually work. This mismatch of perceptions was considered in the workshops' creation. Rather than simplifying representations of practice or the environment to serve as better rhetorical devices, the Prototype Better Worlds Workshops had simple workshop modules supported by the more complex resource of the *Small Handbook*. The participants thus responded to the workshop modules by creating complex, layered representations of their practice as they knew it: situated, local, and personal.

5.4.2. Awareness of the Workshops as Research

Although the intention when making the Better Worlds Workshops was that they would eventually be able to be used by a community of practice and without an outside facilitator, in this testing phase I was present as a researcher. This enabled me to observe participants and note where the script needed clarification or where workshop materials could be improved. However, my presence in the room as a researcher was often read by participants as facilitator or assessor, which affected their experience of the workshops.

I was occasionally asked to clarify instructions and questions and to contribute to the conversations; at times participants expressed the desire to do the workshops “correctly”. Once, a group was taking turns to write on their map of practices rather than moving the paper and thus risking making something that would have to be rotated to be read fully. I offered that they could move the paper so they could all reach at once, but they initially refused because they wanted it to be easier for me to read later. I clarified that that was not the point; the point was for them to share and connect³². After I reassured them, they agreed to work in the way that was easiest for them, rather than better for me. Similar interactions happened a few more times, though these worries seemed to ease as the workshops progressed and were not brought up after Workshop 1.

Regarding the iteration of the Better Worlds Workshops Prototype into the refined Better Worlds Workshops, this research proposes that removing the presence of a facilitator from outside the participant group would likely ease these stressors around working “correctly”. The scripts were designed and improved, based on participant feedback, specifically to be followed without a facilitator. Further clarification that participants did not need to complete all the work components exactly as specified has since been written into the refined Better Worlds Workshops instructions.

32 Stephanie: “Is it- would it be more helpful for you if we all drew and wrote in the same orientation? Because I feel like that’s true.”

Thea: “It doesn’t really matter to me. The map is just a vehicle for discussion.”

Given previous research into the negative impacts of shame and despair on environmental education, the workshops were scripted to avoid those attitudes as much as possible. Modules that addressed information that participants might want to keep private, such as the *Values and Actions* and *Logbook* modules, were individual and reflective. I was very aware of fear of shame as a concern, but the workshops consistently had a jovial atmosphere. At no point did anyone mention feeling uncomfortable in the workshops; rather, participants repeatedly commented that they were a positive experience. In one Workshop 3 session, multiple participants reflected on how the absence of fear of judgement impacted their workshop experiences. Stephanie, for example, stated:

I think what makes yours so powerful is the fact that by giving options [in the *Small Handbook*] it's not about, like, shaming the 'worst option', but it's about educating people on the alternatives that can be available, or are available, or could be available if other things came into practice. ... It's about committing to the part [of practice] that we can genuinely change with the hopes that as we change, the people who can also make those changes can start to make them too.

Stephanie made this comment during a discussion on what the group thought non-participant designers needed to know in order to develop more sustainable practices. Other group members agreed with this idea, which indicated that they perceived this lack of shame as key to changing practices. These sentiments were shared by multiple participants; Rachel wrote in the first post-workshop survey: "I enjoyed the workshops and have gained a lot of valuable insights I would have otherwise not considered as part of my practice."

The workshop testing supported that practitioners need to feel able to make changes and they will not do so if they are afraid or shamed; workshop structures that support sharing and minimise shame are successful in creating change-making environments. This aligned with the approach to climate communications

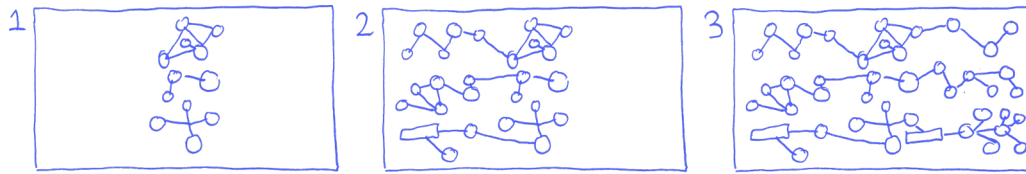
proposed by Huntley (2020) and discussed in Section 2.4, that while knowledge of unsustainability and the guilt associated with it is useful, it is necessary to navigate conversations of climate change around shame and towards hope. The script for the refined Better Worlds Workshops maintains this focus in that it avoids judgement or shame.

5.4.3. Scripting for Incomplete or Unexpected Action

Consistent outcomes cannot be assured or even assumed from a workshop script. Scripts must allow for unexpected outcomes; participants will respond to identical instructions in different ways. Similar to the scripts used by Anja Groten and the Hackers and Designers collective, the scripts for the Better Worlds Workshops contain expected times for completion for each activity as well as written instructions and considered spaces for participants to connect and share. While the scripts of materials of this research were intended to elicit certain responses from participants, they were created with the knowledge that participants would respond in their own way to the prompts.

Participants sometimes had difficulty with the workshop scripts, though they predominantly resolved these issues during their group sessions. Issues about the clarity of the script were most obvious in the *Map of Practices* module, the only activity to cause confusion in all sessions. The module asked participants to create a map of the people, places, and materials involved in a recent project of their choice. All participants would create their map on the same shared page, starting with their finished projects in the middle of the page, then working to the left to go backwards in time towards the origin of the client's needs, and then working from the middle to the right to envision the impact of their project 100 years³³ into the future (Figure 33, overpage).

33 100 years, as the figure used in the Map of Practices module, was inspired by Wong's practice-based research where she prompted her participants to imagine how specific discarded plastic items might exist in 100 years (2021, p. 142). This was a question her participants acknowledged as prompting longer conversations while being difficult (Wong, 2021, p. 199).

Figure 33.*Diagram of Intended Action for the Map of Practices Module*

It was this moving backwards and forwards across the page, and the corresponding moving backwards and forwards in time, that caused the most confusion. This confusion was frequently worked through verbally by the group, as seen in this exchange in Workshop 1 Group A:

Stephanie: “I just understood what the instructions were this whole time. I was trying to look for the words step one and step two on the page, which is what was offered. And that’s why I was like, is it on the other side?”

Melissa: “I just realised, no, this is that one.” [pointing at the guidebook script] “It’s to the left of that one. I mean, I guess we then just write or draw who or what was involved between you and the end product. So, to the left, how were you [hired]?”

Participants’ experiences indicated a desire for a clearer delineation of the stages and design hierarchy, which led to a revision of the script content and material hierarchy for the refined Better Worlds Workshops website. While issues with script clarity prompted a refinement, the ability of groups to negotiate and resolve their confusion internally suggested that possible future sticking points could also be resolved by participants without a facilitator or outside help.

Each group progressed through the scripts with similar experiences regarding timing; activity completion times differed across the groups, but the participants of any given session progressed cohesively with the rest of their group. Within each group, participants tended to work through the guidebook questions at the same time, possibly because they were talking about their

answers while writing. Most of the sessions ran close to the timing given in the script and while sticking points were uncommon, they resulted principally from confusion about the instructions³⁴ or from user experience bottlenecks. These bottlenecks primarily occurred when participants were waiting their turn to write on a shared piece of paper or during the Workshop 3 modules, which required the most original writing of any workshop. When delays happened, participants who were already done would wait for each other, make conversation about the workshops, or add more detail to their answers until everyone was ready to move on.

Participant self-regulation in the workshop experience kept conversations on track and workshop-relevant. While some participants strayed off course more than others, the rest of the group would bring the conversation back to the script. My observation of the participants in the Better Worlds Workshops Prototype testing suggested that the combination of an appropriately-developed script with accurate timing and the self-regulation of interested participants negated the need for a facilitator. This group self-regulation was likely strengthened by all participants being interested in the workshop topics; they volunteered to take part, rather than being recruited. The same is expected for future iterations, where interested individuals may join facilitated sessions or interested groups of practitioners who will run the scripts themselves. Once the workshops have been made public, a future study will investigate the performance of these workshops in communities of practice without a facilitator.

From a data gathering perspective, pre- and post-workshop surveys are a valuable source of information regarding participants' changed perspectives over the course of the workshops. The Better Worlds Workshops Prototype included a *Pre-Workshop Survey* (Appendix I), and two *Post-Workshop Surveys* (Appendices N and O). Some questions were repeated to assess patterns in changing answers, and some differed to introduce new points of reflection (Figure 34, overpage). However, given the time that was required of participants and from

34 As discussed with the *Map of Practices* module above.

Figure 34.

Similarities and Differences in the Three Surveys

	PRE-WORKSHOPS	FIRST POST-WORKSHOP	SECOND POST-WORKSHOP
What is your work title / role?	Y	N	N
How long have you worked as a designer?	Y	N	N
Do you work in a studio, in-house, as a freelancer, or otherwise?	Y	N	N
How would you describe sustainable design practice?	Y	Y	N
How sustainable would you say your work is? (0-10 scale)	Y	Y	N
Before signing up for these workshops, had you previously discussed sustainability with your design community? Where, why, how? / Have you discussed sustainability as a value in design with your design community more since participating in these workshops? If yes; why and how? If not, why not? / How would you describe your design community?	Y	Y	Y
Are there any resources you turn to for guidance regarding sustainable or 'good' design practices?	Y	N	N
What kinds of resources would you like to have access to? / What kinds of resources for sustainable practice would you like to have access to?	Y	Y	N
What are the different roles involved in your design process? Rank the previous roles from least to most influential on the ecological sustainability of a design project.	Y	Y	N
Which of those roles do you best identify with? Why did you rank that role at that level of influence?	Y	Y	N
What are your expectations of these workshops?	Y	N	N
How much agency do you believe that you, specifically, have on your own design practice?	N	Y	N
What did you find useful within the workshops?	N	Y	N
Are you using any strategies developed in the workshops in your practice? If yes, which ones and why? If no, why not?	N	Y	Y
Do you have any additional comments about the workshop experience?	N	Y	Y
In workshop 2, you wrote the attached letter. What is your response to it now?	N	N	Y
How have the strategies that you're using changed since you developed them in the workshops?	N	N	Y

my prior experience with workshop facilitation and participation, I anticipated that workshop content completed outside of in-person sessions such as the *Logbook* module or the post-workshop surveys might not be finished on time or at all.

Among other questions and prompts, the *Pre-Workshop Survey*, established what an object of care was and asked participants to choose one before the workshops began. Despite all participants responding to this survey before the workshop began, there was some minor confusion in the *Object of Care* module because some participants had either missed that section of the survey or forgotten their answers. While most participants did eventually respond to the post-workshop surveys³⁵, the return timelines ranged from a day after receiving the survey email to just over five months. Although the pre- and post-workshop surveys provided significant information for this research, responses to surveys could not be depended on for future research. As a result, the Better Worlds Workshops was refined to offers areas for feedback and for sharing proposed modules or participant stories but will not have surveys to be completed outside the workshop sessions.

Similarly, the *Logbook* module used by participants between Workshop 1 and Workshop 2 asked participants to track their chosen values over two days. However, not all participants used or completed the logbooks consistently over that period. The *Logbook* module was not intended to test or evaluate these values rigorously and so would not produce complete datasets about their workplaces. Rather, this module focused on increasing participant awareness about the alignment of their values and actions. Despite this inconsistency, the *Logbook* module was still seen as a valuable exercise by multiple participants. Crystal, during Workshop 3, said:

Since we recorded what we did, I became more mindful. ...

Small changes which I wouldn't have done if I didn't record what I was doing to see the amount that I was wasting.

35 Seven participants responded to the first post-workshop survey (Corey, Crystal, Eugenie, Hanzagu, Melissa, Monica, and Rachel), and seven responded to the second post-workshop survey (Ashley, Corey, Crystal, Eugenie, Hanzagu, Monica, and Rachel).

As a reflective practice exercise, the *Logbook* helped participants identify an aspect of their practice they could improve. The module was included in the refined Better Worlds Workshops scripts as it was beneficial for those who completed it, even though it would not interrupt the workshop flow if it was not complete.

A workshop, as “a structure which fosters collaborative work” (Johansson, 2005, p. 87), must be designed to allow unexpected or incomplete participant responses. The Better Worlds Workshops Prototype and the refined Better Worlds Workshops accommodate this variability by using a module structure whereby the script is strongest when all modules are used but almost any³⁶ one module could be used alone and still be of benefit. By anticipating that not all work outside the workshops would be completed, key content was prioritised in the in-session scripts. Participant collaboration cleared up any confusion about the scripts that emerged during the workshops, and the refined Better Worlds Workshop scripts addressed areas of confusion or delay. Although the scripts allowed for unexpected outcomes, they were designed to mitigate the negative impact that confusion, misunderstanding, or failure to complete would have on the sessions.

5.4.4. The Importance of Conversation

The workshop script for the Better Worlds Workshops prioritised workshop-relevant conversations. This was based on the knowledge that the rich insights of situated knowledge came out most clearly in the conversation of the Scoping Workshops participants, rather than their written work. This was also informed by the belief the participants in the Better Worlds Workshops Prototype would benefit from sharing their critiques and reflections with other designers.

36 The *Backcasting* or *Strategies* modules could not be completed without first completing at least one of the preceding speculative modules (*Storyworld Rules*, *Letters from Better Worlds*, *Design Fiction*).

The generation of conversation was successful; the transcripts for the Better Worlds Workshops Prototype alone sat just under 156,000 words³⁷. Participant feedback indicated that these were frequently appreciated and relevant discussions. In the first post-workshop survey, for example, Melissa wrote:

I thoroughly enjoyed the discussion aspect of the workshop with fellow designers. It brought the workshop in a whole new direction I wasn't expecting, and I find the knowledge and motivation I left with to be a lot richer than if it was just the activities alone.

Participants often had insights or assumed knowledge that were voiced but not written, and they shared their situated knowledge when discussion was prompted by the workshop script. Throughout their reflections in Workshop 3 and the post-workshop surveys, participants commented on the strength of the conversations in the sessions. This feedback reflected that the scripts were successful in stimulating rich and impactful conversations.

Activities such as the *Map of Practices*, the first module in the workshops, were a non-judgemental way for participants to introduce themselves and their work. The *Map of Practices* script avoided asking for commentary or documentation by participants on their workplace, both out of ethical concerns and due to the workshops' focus on the participants' own practices. As described in detail in Section 3.2.2.2, the activity required the participants to work together to create a map, and thus holding conversations while doing so, and it was effective across all user-testing sessions. All participants, while completing the *Map of Practices* module, ended up commiserating over common challenges, experiences, and practice architectures.

37 The workshop recordings were transcribed using AI. Although AI made the transcription process simpler and faster than doing it myself, there were some issues; it struggled with Australian accents and often missed exact language. All verbal quotes, therefore, were found by using the transcription as a tool to review the workshop recording but were then verified and re-transcribed for accuracy.

Another example of this verbal sharing was the first group to attend Workshop 1³⁸, who became so invested in their discussion of their map of practices that they completed no other exercises in that workshop. They spent the full two-and-a-half-hour session on the first spread alone. I could have intervened to adjust their timing, but I let the conversation run its course. Focusing only on the prompt to create a layered map of practices and extending it over time, the participants discussed almost all the elements that I wanted them to cover in the workshop and did so focused on their situated knowledge. In the process, they formed and shared practice critiques and ecological literacy. Due to its success in engendering such discussion and critique, the *Map of Practices* was kept as the first module in the refined Better Worlds Workshops.

For me, there was a tension here, between my role as researcher who needed to collect data and my role as a designer of a necessarily unique educational experience. The workshops were not a coursework-based credential nor was there any assessable outcome for participants. Rather, their aim was to explore how they might help Australian graphic designers develop more sustainable practices and the wealth of conversation that emerged from fairly straightforward prompts indicated that the workshops successfully encouraged the development and sharing of situated knowledge. While most participants did not actually draw or write out their answers to all the scripts' prompts, their conversations contained sufficient insights to both fulfil my research needs and share their knowledge among their peer groups.

Larger groups, as with the Workshop 2 group that had five people³⁹, devoted more time and conversation to the collaborative work. When there were more people in the room collaborating, there was a greater convivial, casual atmosphere that was missing from a group of just two people. However, larger groups were harder to hear and to scribe from their recording. For the purposes of this specific research test, smaller groups were easier to manage. Nonetheless, the success of larger group sessions, as long as they were subdivided into groups

38 Crystal, Melissa, and Stephanie.

39 When doing the collaborative activities, they split into smaller groups of two and three.

of two or three for collaborative modules, indicated that the refined Better Worlds Workshops could accommodate larger groups even without a facilitator.

As previously discussed, the workshops were designed to elicit conversations that might then lead to the sharing of critique, knowledge, or insights about practice. My observations during the workshops indicated that participants who knew each other before the workshops collaborated more efficiently but with less depth to their discussions. In one session with the only two participants who knew each other well, they completed Workshop 2 faster than equivalent groups but had less nuance and details in their conversation. When participants were required to explain their work, their choices, and their context, they articulated their practices, and thus discussed insights and knowledge that might have otherwise been assumed and unvoiced. Therefore, the refined Better Worlds Workshops will offer two avenues for participation, one with existing communities who may know each other but will not have discussed these topics in depth, and one through community organisations such as AGDA, which will draw in unrelated members of the diverse design community.

A key finding from these workshops was that the participants' complex and rich conversations in response to the scripts were more important than completing the workshops *correctly* or any aesthetic outputs. The Better Worlds Workshops scripts have thus been refined to ensure such conversations are the main focus of participant engagement.

5.4.5. Common Practices, Common Language

As discussed in Section 3.2.2.2, Vaajakallio's wrote in her doctoral investigation of design games about the ability of materials to promote participant ideation, when appropriate to the creative capacities of the target audience. These ideas were supported by the testing of the Better Worlds Workshops Prototype with emerging designers.

The activities, knowledge, and materials of design acted as a common language among the designers. While the script did include instructions for how participants should respond to activities, using words like *map*, *sketch*,

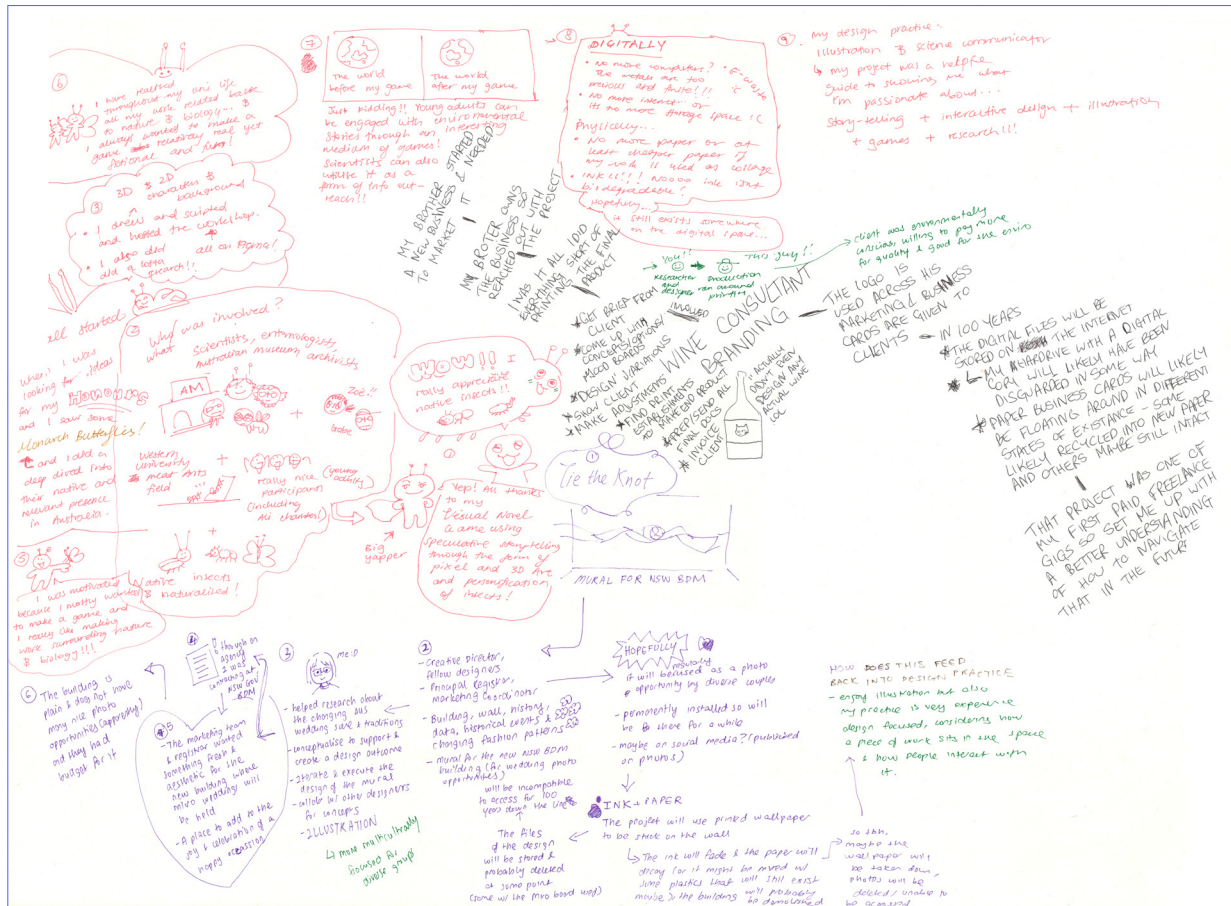
write, design, or thumbnail, they rarely needed additional structuring for these responses. They understood that when I, a design researcher, asked them to *map out* a response, they should not only use the location on the page, as instructed, but also colour, lines, illustration, and text decorations to convey information relationships, as seen in Figure 35 (overpage). Here, designer participants are also displaying their expertise-enabled implementation of “diagrammatic writing” (Drucker, 2014, p. 1) where the use of space and relationships of text on a page demonstrate and inform the relationships between that text. When asked to *create* and *play* when making their objects of care, their responses were personal and experimental, as seen later in Section 5.4.6. When asked to *thumbnail* and *draft* their collaborative design fictions, as discussed below, they frequently created iterative versions of their plans and sketched out possible avenues on the page before settling on a final design.

These rough forms of design practices worked well in these workshops, as “people see [mock-ups] as ideation tools instead of considering them as representations of the final design” (Vaajakallio, 2012, p. 24). This research posits that rough visual communications are particularly useful tools for design audiences because of the common nature of the design practices and participants’ implicit understanding of and interest in the nuances of visual languages.

An example of this use of common language of design in the workshop script was the *Design Fiction* module in Workshop 2, which specified that participants should collaboratively “thumbnail out a design project you’d work on in the fictional setting you just wrote about” (Appendix L, p. 5). They were given pens and sheets of scrap paper to create their responses. While this instruction gave participants a high degree of freedom in their responses, it restricted the design fiction to a project that they would work on and therefore a graphic design project. This specification seemed to remedy an issue I had found in previous design fiction exercises when teaching wherein students tended towards product design fictions rather than graphic design fictions. Given that this was part of a reflection on specifically graphic design practice, I wanted to keep their responses grounded in their own expertise.

Figure 35.

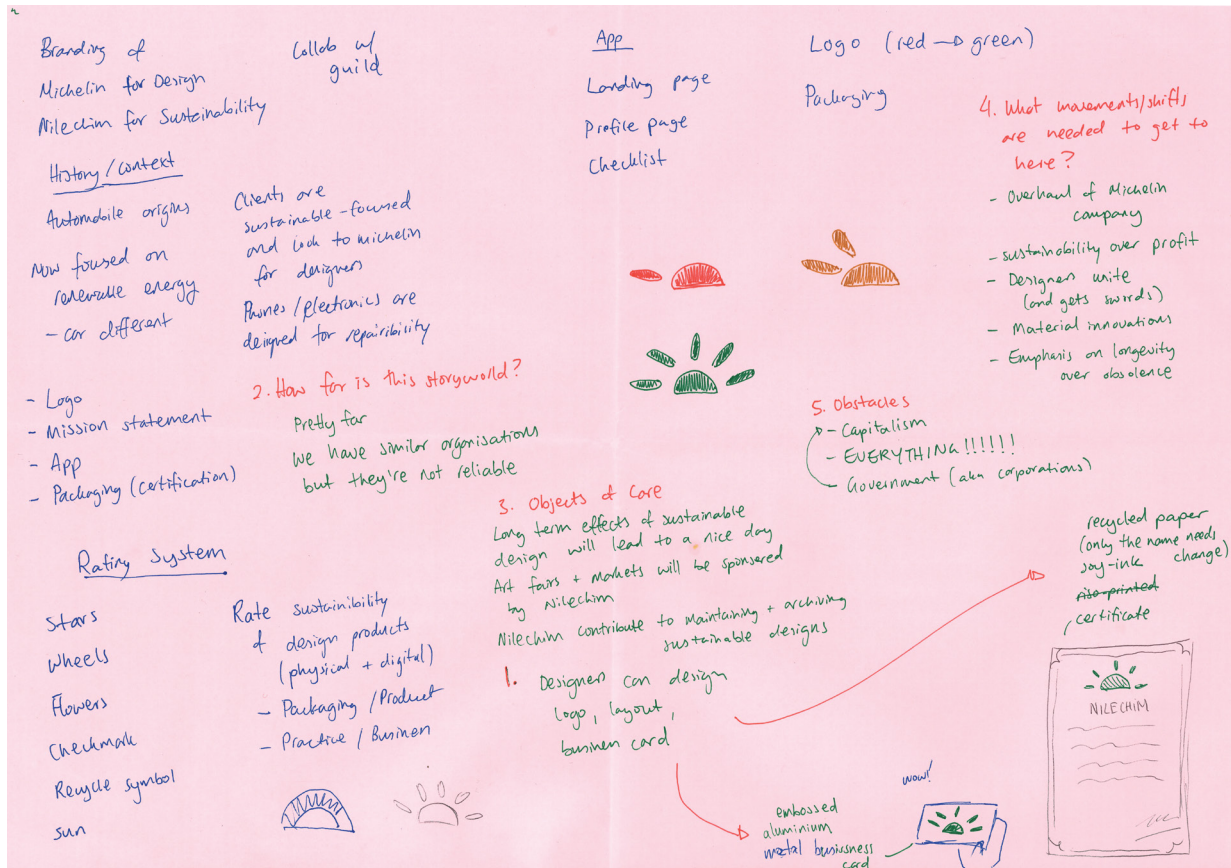
Map of Practices Module Completed by Group C



The design fictions produced in the Better Worlds Workshops Prototype were not necessarily visually refined, but they were conceptually rich and the product of collaborative iteration, which was the intention of the module. In the design fiction created by Eugenie, Hanzagu, and Rachel (Figure 36, overpage), the blue writing shows the participants working through which elements of their storyworld they could respond to (“Collab w/ Guild”), what kinds of projects they might work on (“Logo, Mission Statement, App, Packaging (Certification)”), and what that project might look like, in the form of options under the headings of “Rating System” and “App”, alongside sketches based on their sun/flower idea. They refined their design from the sketch at the bottom left through to the three versions in red, orange and green, which represent a rating system.

Figure 36.

Design Fiction Module Completed by Group A-I



They additionally sketched possible applications for this rating system, and the purposes it would serve.

While the script for this page contained explanations of what “design fiction” meant as a term, there was little instruction on what the participants’ outcome could look like or how they should go about developing it. Their iterative process emerged from their own practices and the instruction to “thumbnail out a design project you’d work on in the fictional setting you just wrote about” (Appendix L, p. 5). Through this process, they developed the conceptual construction of their storyworld and strengthened their speculated alternative practice. The richness of these responses from participants using familiar practices highlighted the potential for participatory workshops to better engage designers through the

language of design. The common language of design is emphasised in the refined Better Worlds Workshops.

By using common practices, such as *sketching* and *thumbnailing*, the workshop scripts could take advantage of designers' own skills to avoid being too prescriptive about the *how*, *why*, and *what* of each module. My understanding that designers are best able to talk about design practice by using the language of that practice enabled me to curate workshop scripts that appealed to them. By deliberately avoiding overly prescriptive scripts, the refined Better Worlds Workshops' emphasise participant engagement over outcomes; in other words, this was a process-based rather than an outcome-based engagement, aimed at shifting participants' practices in an exploratory environment.

5.4.6. Visual Communicators Communicate Visually

The design materials of a workshop, including workbooks, writing media, reference materials and props, should appeal to the aesthetics and familiar actions of the target group (Vaajakallio & Mattelmäki, 2014). The workshops that I developed were designed to be device-free, requiring handwritten/sketched responses from participants, in the expectation that this would allow participants to work quickly and collaboratively without focusing too significantly on the finished aesthetics of their responses. This proved to be the case; throughout the workshops, participants were willing to use their design practices such as collage and drawing to engage with the workshop activities. Participants additionally complimented all manner of aspects of the workshop material designs, ranging from the layout, to paper stock, to binding choices, indicating that the workshop design appealed to them.

Participants put time and care into their hand-generated responses. The *Object of Care* module (Appendix J, pp. 4–5), for example, said: "Create an image of your object of care ... This is a moment for reflection and play. Use the collage materials and markers supplied." Participants created the following pages (Figure 37, overpage) with a mixture of drawing, writing, and collage.

Figure 37.
Completed Object of Care Modules



[Figure 37 First Row, Left to Right: Rachel and Hanzagu. Second Row: Eugenie and Crystal. Third Row: Corey and Ashley. Fourth Row: Melissa.]

Of the seven⁴⁰ completed object-of-care responses (Figure 37), five included collage and two were purely drawn/written. Some included notes following the prompts for reflection on the page or from conversations in their groups around their *Object of Care* image. These personal creative responses then facilitated conversation among participants about what they had chosen for their object of care and why. This was key as the objects of care acted as a personal intervention into the complex and difficult reflection of practice; they made the impact of climate change more tangible. Corey, for instance, spoke about zines and the community of practice in zine markets, while Melissa's choice of pollinators and Eugenie's choice of "a nice day out" prompted conversations around access to greenspaces and the role of wildlife in the local environment. Participants built interpersonal connections when discussing their answers and the visual attributes of their images.

The section below explores how participants used discussion of their visually communicated responses within the workshops to deepen conversation about their professional practice. One example of this is the following conversation in Group A in the early stages of the *Map of Practices* (Workshop 1) which shows how the participants' innate consideration of their drawn responses to workshop materials (Figure 38, overpage) drew out larger conversations around how graphic designers work and the complexities of their recent projects.

Crystal: "I made an explainer video for [my client] and it was very digital ... I was thinking [of drawing] maybe frames, or just a video. It was mainly to advertise their website..."

Stephanie: "So maybe a play button?"

Crystal: "Yeah, maybe."

40 Two participants, who belonged to the Workshop 1 group, spent their whole first session on the *Map of Practices* and did not complete the *Object of Care* module in their own time. This was not seen as a failure to complete the workshops, as the workshops were self-directed and a process of sharing by social engagements rather than a certification or assessment. The participants had spent their time on the evidently needed discussions and shared points of care, they simply did so through the *Map of Practices* rather than the following modules.

[2 minutes of back-and-forth conversation about the project, what it looked like, who it was with, and her role in the work.]

Crystal: “[The project involved] figuring out the service [system mapping], presenting it, and designing how it looked like as a video, and everything. Doing a bit of a brand uplift ... and motion.”

Stephanie: “They put a lot of hats on you.”

[Another minute discussing details of the project.]

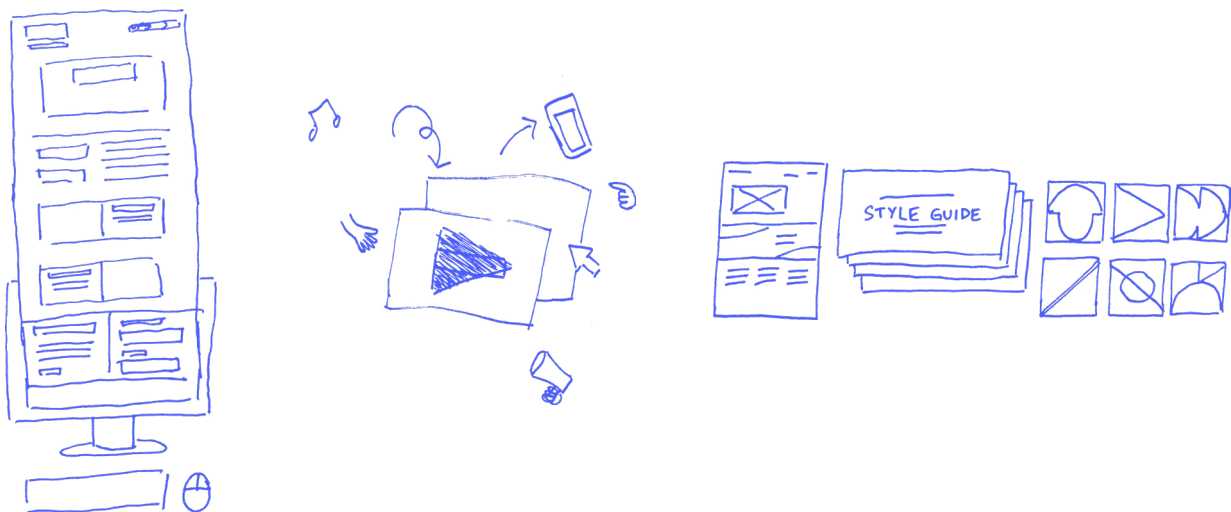
Crystal: “If I draw, I’ll draw a screen with panels.”

Initially described as “an explainer video”, conversation around visual communication for their map of practices revealed a greater depth to Crystal’s project and workload. All three participants shared similar detailed descriptions of their work, the barriers they faced, and the tools they used to create the projects to best depict their work.

Participants used visual shorthand (Figure 38) in their included sketches to convey additional information, likely legible to design peers. Within the above group’s discussions of their map of practice, participants’ use of visual shorthand and the consideration thereof facilitated greater conversations of their practices, leading to the discovery of shared practices and barriers. Crystal’s illustration of a “play button” expanded to have layers and surrounding icons, suggesting

Figure 38.

Illustrations extracted from Group A’s Map of Practices Module (Stephanie, Crystal, Melissa)



the additional complexities of creating the video project. Stephanie's illustration of a whole website design was representative of a project in her user experience design role. Melissa's illustrations of a website, style guide⁴¹, and style tiles were representative of her recent branding project and the different forms that project took. Those illustrations, whether or not they were accurate in terms of the final aesthetics of the projects they made, used common visual language in design sketches to convey detail. When designer participants explained their work through illustration as well as text, they shared greater levels of detail about their situated practices. This demonstrated the main benefit of design materials provided in workshops for designers; they were an avenue for participants to think through what they were contributing to the discussion with their hands as well as their voices.

As discussed in Section 3.2.2.2, a playful approach helps people feel creative, talk, collaborate and share more easily. From my observations of students through my studio-based teaching, as well as reflections on my own practice, I understood that designers anticipate imperfection and abstraction in hand-generated work that is not as associated with digital work. This acceptance of imperfection was useful in the Better Worlds Workshops as it allowed designers to continue to iterate ideas and to roughly sketch and share, in a way that is hampered by the inherent visual refinement of digital work.

This idea of rough iteration aligned with the prototypes and mock-ups used in Vaajakallio's exploration of design materials and their role in inciting play⁴². Additionally, the focus on participants working by hand encouraged

41 Melissa: "I guess a brand style guide was my main deliverable. That was my thing. I mean, I did dabble a little bit in the UI work."

Stephanie: "How would you draw that?"

Melissa: "Probably like, you know [when] they have a 'here's your deliverables' image? That slide deck icon."

42 As discussed in Section 3.2.2.2, Vaajakallio found that prototypes and other rough material interventions were beneficial in workshop environment for their ability to be understood as something greater than its physical appearance. Unlike this research, Vaajakallio used rough-hewn prototypes that were assemblages of basic objects in addition to sketching, illustration, and other materials. Vaajakallio's prototypes were both predesigned and generated during play.

the development of visual communication in the form of illustrations, visual shorthand, or mapping, which supplemented their conversations. This productive implementation of visualisation as sense-making for visual communicators aligns with an insight by Cooper regarding the use of her design timescapes method (see Section 3.2.2.2) with design students. When discussing student engagement with the method she reflected on the “remarkable” (2022, p. 182) impact of asking students to use the creative, visual method versus creating a purely text-based response. In specific reference to the utility of visualisation, Cooper stated, “It was through the visualizations that students identified historical parallels as well as patterns” (2022, p. 182). These texts informed the workshops’ focus on working by hand, using rough and iterative design language, and responding visually. The benefit of these choices for design participants is distinct; visual communicators communicate visually and benefit from interactions which encourage visualisation as part of the ideation and sense-making process. Following these findings, the refined Better Worlds Workshops, although distributed online, are scripted for hand-generated participant responses on their own paper in order to preference iteration and development over aesthetics.

In the Better Worlds Workshops Prototype, participants talked while they wrote and drew; they talked about what they were thinking, about how their creation compared to other participants’ work, about what they made and why. These avenues of conversation may have been unheard if the primary interactions of the workshops were something more private and finite, like typed responses. The Better Worlds Workshops Prototype supported the idea that designers found their shared practices appealing and easy to work with. In addition, they understood sketching, drafting, and mapping as aspects of the ideation phases of a design process and therefore treated activities that contained these ideation practices as creative exercises.

5.5. Conclusion

The topics of these workshops were complex. The conversations and reflections they incited aimed to be even more so. The Better Worlds Workshops Prototype successfully addressed learning as a process of social participation through the combination of educational and creative materials, and a workshop script that scaffolds self-reflexive critiques and the development of individual pathways to action.

The development of practice critiques may be stymied by fear of retribution and a lack of established pathways for conversation; prioritising atmosphere and open conversation and creating a baseline of information for conversation is vital to the development of practice-focused conversations through a workshop format. Through the practice-based research of designing and reflecting on the workshops, the Better Worlds Workshops Prototype supports that engagements with practitioners should leverage the common languages, actions, and knowledge of their practice to better guide and engage participants.

My plans for continuing and publishing the Better Worlds Workshops online (see Chapter 7) were supported by this user testing. Participants overwhelmingly communicated that they felt these workshops were needed for their own practice and for disciplinary change, and that they did not have adequate time, space, or support to hold similar discussions and developments without the Better Worlds Workshops. These workshops helped identify that designers in the Australian graphic design industry need *more* than is currently available outside the Better Worlds Workshops; more support, more research, more conversation, more diversity, more time.



(CHAPTER SIX)

**FINDINGS:
THE FIVE FACTORS
FOR BETTER WORLDS**

6. FINDINGS: THE FIVE FACTORS FOR BETTER WORLDS

The survey of practice (Chapter 1) and the literature review (Chapter 2) revealed that individual designers need both a sense of agency and situated pathways to action to develop more ecologically sustainable practices. These in turn require that practitioners have:

- **ecological literacy:** to understand the ecological ramifications of their practices and be able to navigate those choices,
- **practice critique:** to articulate what they desire, like, and dislike about their practice, why it is that way, and who or what can help them change it, and,
- **hopeful futures:** to have a perspective of change that feels situated and positive towards which they can work.

In the Better Worlds Workshops Prototype suite, participants developed more nuanced and incisive individual and discipline-level critiques of the roles and practices of design. Following the workshops, participants indicated that they had altered their practices to align more closely with the value of sustainability. Six of the seven respondents to the first post-workshop survey indicated that they were actively changing their practices based on strategies that they developed within the workshops. Six of the seven respondents to the second post-workshop survey said that they had continued to change their practices based on the workshops. The remaining responder had re-enrolled in study and was no longer working as a designer, though she indicated that she was actively discussing sustainability with her communities of practice and that it would be a focus when she re-entered the design industry.

Through the Better Worlds Workshops Prototype, this research identified what I have called the “Five Factors for Better Worlds” to help enable participants’ engagement with ecological literacy, practice critiques, and hopeful futures. These factors were crucial within the Better Worlds Workshops Prototype to change how participants engaged with and addressed sustainability in their practices as these factors gave participants a greater sense of agency and situated pathways to action. The factors offer guidance for the development of future engagements with practitioners. The Five Factors for Better Worlds are:

1. sustainability education,
2. communities of practice,
3. situated knowledge,
4. speculate alternative practices, and
5. ethics of care.

6.1. Sustainability Education

Here, sustainability education means the fundamental education of designers about the ecological impact of the materials, processes, resources, and messages that they may encounter in their practice. This information must be curated for the specific practitioner audience user-base. This research found that sustainability education is needed prior to the introduction of the full breadth of social, political, and economic education that comprises deeper ecological literacy.

The Better Worlds Workshops Prototype revealed that practitioners benefited from sustainability education that had been curated to their interests and contexts. Based on this finding, it is vital that practitioners are educated in sustainability that is accurate and appropriate to their context and practice. This is not presently available to many designers, particularly emerging designers in Australia. As found through the review of available international resources (Section 1.5), few resources that might develop ecological literacy in design are targeted at working designers and none are suited to emerging designers in Australia. The Scoping Workshops additionally found that practices modelled by

agencies experienced in sustainable design were restricted by access to clients and budget and not shared among the profession.

This perceived lack of resources was made apparent by the Better Worlds Workshops Prototype participants' pre-workshop survey responses to the question, "Are there any resources you turn to for guidance regarding sustainable or 'good' design practices?" This was a broad question, inviting resources or interests outside of strictly ecologically sustainable design practice. None of the nine respondents named specific sustainability-oriented resources, and four respondents could not name any guiding resources at all. Of the remaining five respondents, Monica said that she would search for sustainable options in the stock of her usual printers, Corey would ask their peers for help on design problems, Melissa would read articles and posts on LinkedIn occasionally, and Stephanie⁴³ and Rachel⁴⁴ named experienced designers with newsletters covering a broad range of design practice topics but with no particular focus on sustainability. Although two of the nine respondents named specific sources that they turned to for *good* design information, none of the resources named by the Better Worlds Workshops Prototype participants focused on sustainable design practices. This showed a gap in the targeting and communication of sustainability education for this audience.

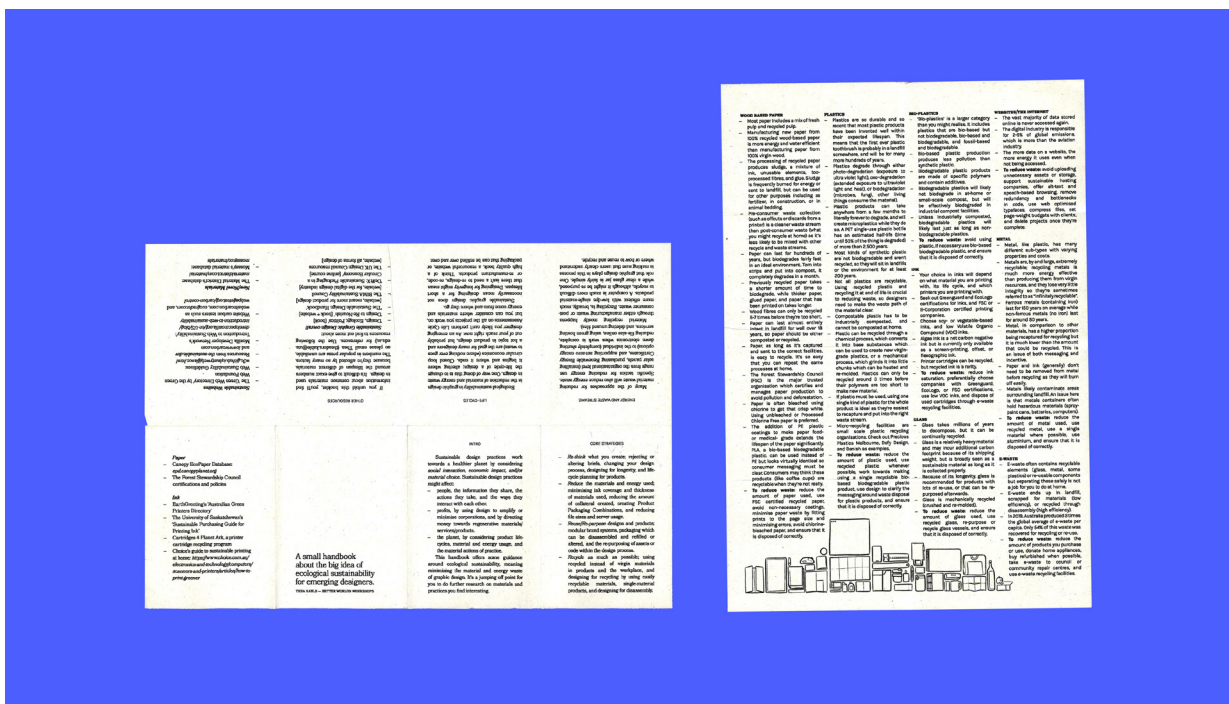
43 Stephanie named three authors on design research for an industry audience: Pavel Samsonov, who writes about interactive product design innovation (2025), and Erika Hall and Mike Monteiro, authors and co-founders of Mule Design. Hall and Monteiro (n.d.) have written individually about ethics, activism, research, humanising design interactions, and project management. Neither Samsonov nor Mule Design offer consistent resources for sustainability.

44 Rachel named Gabby Lord and her newsletter OMGLORD; the newsletter and associated website cover a wide range of concerns in design and compile links to related products or external blog posts. The OMGLORD website provides some referral links on the topic of sustainability. As of 20 March 2025, there were three links to sustainability-oriented stores/products, one link to suggestions for Australian-specific sustainability-oriented economic choices (banks, supers, utilities, journalistic organisations), and one link to an international intersectional sustainability organisation (Lord, 2025).

Sustainability education was a necessary component of the reflective practices of the Better Worlds Workshops, as it meant that the participants gained a shared baseline of sustainability education from which to extend their knowledge and practices. The workshops did so primarily through the *Small Handbook* (Figure 39), both as part of the *Map of Practices* modules in Workshop 1 and as a take-home resource. Sustainability education was also reinforced by the *Logbook*, completed between Workshop 1 and Workshop 2, an awareness-building reflective module.

The *Small Handbook* was a successful and valued resource; it acted well as a prompt for conversation in Workshop 1 for reflecting on and sharing information regarding the impacts of practice and participants continued to refer to it when working in practice. Group C in Workshop 3 identified the *Small Handbook* as a main point of learning in the workshops and described it as a “convenient resource of sustainable resources that is trustworthy and [from] a relevant practitioner in the field (nicely curated).”

Figure 39.
Better Worlds Workshops Prototype Small Handbook



In Group C's discussion around this answer, Stephanie commented that the *Small Handbook* is particularly useful for emerging designers because "It's crystallized with concrete things which they understand", meaning that the *Small Handbook* provided information relevant to design practice. A different group, Group A in Workshop 3, agreed that the *Small Handbook* was particularly necessary to help other designers to be sustainable. As part of that group, Melissa stated, "Where you don't feel guilty about it, you're more mindful about it. I think that booklet [the *Small Handbook*] is very helpful for that, definitely—it's a short, quick read, concise."

These comments reflect the perceived utility of the *Small Handbook*; it was seen as well-executed for the target audience, gave participants access to information on sustainable practices targeted specifically at them, and was a novel, useful resource. Participants were consistently positive about the design, content, and implementation of the *Small Handbook* (see Section 5.4.1.). This positive reception of the *Small Handbook* was consistent with participants' pre-workshop lack of sustainability resources; participants desired, but did not yet have access to, targeted sustainability education that was suited to their practices.

In the first post-workshop survey, Eugenie noted that while she did not continue using the *Small Handbook* or *Logbook* exercise anymore, "Having done them, I am a lot more conscious of my actions." Hanzagu similarly noted in her first post-workshop survey, "The way of thinking [about] a project, from the start to the end point and its lifetime. It expands my view and consideration of sustainability in [the] design process." Melissa stated in her first post-workshop survey that the "... resources and activities [helped her become] more educated about [what] the alternatives to resources are and learning to think more big-picture and long-term after reflecting on my own practice." The *Small Handbook* and the *Logbook* module produced lasting shifts in how participants viewed sustainable practice, making sustainability considerations more consistently embedded in their work.

Of additional interest in the Better Worlds Workshops Prototype was the participants' perceived shifts in their own sense of agency and pathways to action.

Regarding sustainability education, those shifts were apparent in how capable participants felt in enacting sustainable practices, continuing their sustainability education through their own research, or sharing their sustainability knowledge with other designers.

The sustainability education content in the Better Worlds Workshops Prototype was intended to give people a baseline of information and language, and the motivation to educate themselves with the support of their community of practice. Prior to the workshops, seven of the nine participants acknowledged that they saw the value of sustainable design and knew that it included minimising the ecological effects of design practice, but they felt only minimally capable of performing sustainable practices. While this reflected what this research saw as a need to make sustainable graphic design practices more widespread in industry, it also reflected my focus on recruiting designers who viewed sustainability as important but did not consider themselves sustainable designers. The question then was how participants' perspectives changed over the course of the workshops and the following months. The other two participants had either not come across the term *sustainable design* before the workshop advertisement but saw the value of it (Hanzagu), or, like some of the Scoping Workshop responses, attributed *sustainable design* to the longevity of careers and projects, and the preservation of work-life balance (Corey).

While all post-workshop responses reflected an increased sense of agency and knowledge in relation to sustainability, and many reported more conversations with their communities of practice (see Section 6.2), their assessments of their own practices as *sustainable* painted an interesting picture. As seen in Figure 40 (overpage), only three of the seven respondents rated the sustainability of their practice higher post-workshops, while four respondents rated their sustainability lower than before they began. Given that all seven respondents also gave more comprehensive definitions of sustainability and reported changing their practice to be more mindful of materials and energy resources, this research does not propose that their practices actually changed towards non-sustainability. Rather, these responses convey that, post-workshops,

Figure 40.

Responses to “How sustainable is your practice on a scale of 0–10?”

	ASHLEY	COREY	CRYSTAL	EUGENIE	HANZAGU	MELISSA	MONICA	RACHEL	STEPHANIE
PRE	4?	3	3?	5 & 8	9	7	4–5	5?	4
POST (1)		7	4–5	3–4	6–7	6	1?	5–6?	

participants possessed more developed and articulate understandings of their practice architectures, of the sustainability considerations of their practice, and a heightened mindfulness of the often unseen and unaddressed aspects of waste in the Australian graphic design industry.

Despite this shift downward in self-rating by just over half the participants, they all reflected in the Workshop 3 discussions and post-workshop survey responses that they had changed practices and had a greater sense of knowledge and agency around their practices. When asked in the post-workshop surveys about their use of sustainable practice strategies, all respondents mentioned some level of change towards sustainability. This ranged from greater awareness, mindfulness, and purpose, to active alterations in how they interacted with the social and material aspects of practice. Strategies identified included minimising material waste through altering how they sourced, used, and/or disposed of materials⁴⁵, minimising energy waste through file management and altered online behaviour⁴⁶, changed awareness of their communities of practice or advocating for change in their workplace⁴⁷. Participants’ definitions of sustainable design practices also, largely, became more precise and tended to include mentions of material lifetimes and the social aspects of sustainable practice, which they had not done before. Examples of this can be seen in Melissa and Rachel’s responses

45 Mentioned specifically by Ashley, Corey, Crystal, Eugenie, Hanzagu, Monica, and Rachel.

46 Mentioned specifically by Crystal, Hanzagu, and Rachel.

47 Mentioned specifically by Corey, Crystal, Eugenie, Hanzagu, and Melissa.

pre- and post-workshops. Melissa's pre-workshop response to "How would you describe sustainable design practice?" was:

Design practices and development (regarding waste, resources, and any other production) that have been evaluated and considered to have minimal negative impact on the wider ecology and environment.

Her response in the first *post-workshop* survey (emphasis added by the researcher) was:

Design processes that are mindful of the impact resource use has in the **long-term**; looking to minimise the negative impact of the **design output over its life cycle**. In essence, having a **big-picture understanding of where your design sits in the wider ecology and affects other entities without severe detriment**.

New to Melissa's post-workshop response are the concepts of lifetimes and life cycles, and the positioning of a sustainable practice within a larger landscape of practices and ecologies.

Rachel's pre-workshop response to "How would you describe sustainable design practice?" was:

A practice that limits waste and is eco-conscious leaving limited negative long-term impacts to the environment through methods such as engaging with eco-friendly materials and processes.

Rachel's response in the first *post-workshop* survey (emphasis added by the researcher) was:

A sustainable design practice limits its negative ramifications **or has a positive impact** on the environment's future taking into consideration long-term effects in addition to short-term. This involves **the designer being ecologically conscious and responsible-minded, incorporating this mindset from beginning to end rather than as an afterthought**.

Rachel's post-workshop response included the newfound focus on sustainability as a core consideration of practice, rather than an incidental addition, and the idea of positive effects as a consequence of sustainable design, in addition to minimising harmful effects.

These responses convey that more nuanced understandings of sustainable design practice were gained over the course of the workshops and later sharing with peers; they discuss elements of design practice, including long-term impacts, positive impacts, sustainability as a core aspect of design practice rather than an addendum or facet, and an understanding of design practice as embedded within ecology.

Also apparent through the workshop feedback was a pervasive desire for more sustainability education resources, particularly those founded on the situated knowledge of practitioners. In Workshop 3, the second module asked participants to individually or collaboratively propose new modules or resources for the Better Worlds Workshops: what was needed that was not covered, what did they desire more of? All participants in Workshop 3 suggested at least one original module that would involve additional sustainability education in some form. Suggestions included social events⁴⁸, extensions or alterations to the *Map of Practices*⁴⁹, static resources for reflection during the workshops⁵⁰, modules where participants would create sustainability education based on their own research and provide it to their communities of practice⁵¹, visiting or creating maker-spaces⁵², and crowd-sourced online or print resources for practitioners to refer to when working⁵³. These desires were thus not just for sustainability education, but sustainability education created through the situated knowledge of communities of practice disseminated through intra-industry knowledge sharing.

48 Ashley, Crystal, Eugenie, Melissa, and Rachel.

49 Crystal, Eugenie, Rachel, and Stephanie.

50 Hanzagu, Melissa, and Monica.

51 Ashley, Crystal, Eugenie, Melissa, and Rachel.

52 Crystal, Eugenie, Monica, and Rachel.

53 Ashley, Crystal, Corey, Eugenie, Hanzagu, Melissa, and Rachel.

All three restructurings of the Better Worlds Workshops created by participants (Appendix P) in Workshop 3 included at least two participant-proposed modules where users would share their situated knowledge, and at least two additional participant-proposed resources for practitioners to refer to in their own time. Their desire for more sustainability education was not limited to the redesign of the workshops. In response to the first post-workshop survey question of “What kinds of resources for sustainable practice would you like to have access to?”, every participant expressed a desire for a database about sustainable education, with most stating a need for a particular focus on materials in Australia.

Reflections by participants pre- and post-workshops revealed significant shifts in their knowledge about sustainability and sustainable graphic design practice. Greater knowledge through curated sustainability education heightened participants’ ability to assess and change their own practices, and their perceived agency to do so. It was this targeted and context-specific sustainability education, grounded in practice applications, that enabled these shifts, and thus it is this specific and situated sustainability education that must be encouraged in ongoing sustainable practice change discussions.

6.2. Communities of Practice

This research positioned communities of practice as a key means by which designers share, learn, and design; this is how sustainability might move from seeing to knowing and doing. Following the Better Worlds Workshops, multiple participants reported themselves to be more equipped and active in discussing sustainable design practice with their personal communities of practice in the form of their friends, peers, and colleagues (see Figure 41, overpage). Giving designers a greater ability to advocate for sustainability in a way that is engaging for other designers helps build community-of-practice bonds and develops greater shared knowledge of sustainable practice and ecological literacy.

Figure 41.
Engagement with Communities of Practice

	ASHLEY	COREY	CRYSTAL	EUGENIE	HANZAGU	MELISSA	MONICA	RACHEL	STEPHANIE
PRE	Y	N	Y	N	N	Y	Y	Y	Y
POST (1)		Y	Y	N	Y	Y	N	Y	
POST (2)	Y	Y	Y	Y	Y		Y	N	

[Figure 41 Note: The four levels of colour density reflect how frequently participants reported the conversations happening, where more saturation indicates it was more often.]

Participants also regarded design as a collaborative industry following the workshops, as seen in the Workshop 3 Group C commentary on major ideas from the workshops where the participants wrote, “[We] don’t get anything done alone- need connection to channels and process and outputs not just design.” See Appendix Q for more statements by this group relevant to communities of practice; these participants repeatedly recognised the needs for a space carved out for sharing and learning with community, and that communities of practice need to be more clearly recognised and enabled to share their knowledge. Engagements aiming to change practitioner actions could adopt this research’s understanding of practice as collaborative and leverage it to create extended intra-industry knowledge sharing. The Better Worlds Workshops Prototype’s focus on collaboration strengthened practitioner abilities to alter and engage with communities of practice, a needed capacity for change.

Within Workshop 3’s *Modules* task, all three groups of participants proposed new workshop modules that would involve intra-industry knowledge sharing or engaging with communities of practice⁵⁴. Some participants proposed that engagement could be performed through existing communities while others

54 See the modules labelled “Factor: communities of practice” in Appendix R.

proposed building new communities. These suggestions were aligned with further suggestions in the workshop surveys for community-of-practice resources (see Appendix S). These responses indicated a consistent desire for more sharing across industry and for this to be done—often informally—among designers, rather than through strict, inflexible, informative guidelines for practice. Following the Better Worlds Workshops Prototype, a significant number of participants indicated that they were more enabled to share and learn about sustainability with their communities of practice. However, they also indicated that there were insufficient opportunities for intra-industry knowledge sharing.

The findings from the Better Worlds Workshops Prototype regarding community-of-practice engagement supported a two-fold approach in the refined Better Worlds Workshops towards developing community-of-practice bonds. These approaches for community-of-practice engagement are a provocation for further research, and were that:

1. Emerging designers who may not have strong community-of-practice bonds or feel enabled to share in their work environment may find and develop those bonds through carefully scripted collaborative activities and feel more capable of taking their collaborative approach into practice.
2. Intra-industry knowledge sharing was seen by participants as an activity that would greatly benefit the emerging designer demographic but is currently lacking in Australian industry. The refined Better Worlds Workshops, as a more easily available version of the workshops as a resource, might help existing communities of practice share their knowledge more widely.

6.3. Situated Knowledge

Practice contexts are necessarily unique, and practitioners face constraints and opportunities that may be difficult to articulate or discuss directly. As such, situated knowledge must be addressed when developing practice-oriented engagements to create work that suits the unique constraints of each practitioner.

The situated knowledge of each practitioner must also be treated as a relevant and constructive element in the development of their agency for change and their creation of actionable pathways to sustainable design practices.

While “everyone is an expert based on their own lived experience” (Design Justice Network, 2018, para. 8), not all practitioners are equally aware or capable of articulating that knowledge on their own. As a provocation for future research, this thesis proposes that sustainable practice resources should be constructed to make use of the unique knowledge and experiences of each individual practitioner. The findings of this research support this approach, demonstrated by the fact that participants of the Better Worlds Workshops Prototype shared their unique knowledge and moved towards considered and situated better practice following the workshop experiences.

The conversation and education around sustainability for practitioners is inherently complex; it should address not only what improved practice would be, but also the actual capacities of practitioners to create change. The Better Worlds Workshops Prototype expected that the use of situated knowledge when engaging professional practitioners would make the work of change feel more grounded and applicable, and therefore actionable. Following the Better Worlds Workshops Prototype, participants not only engaged with intra-industry knowledge sharing using their situated knowledge, as discussed in Section 6.2, but gained a greater capacity for describing and “reflecting on what they do and how they do it” (Mazé, 2009, p. 389). Through the workshop modules, participants developed critiques on the industry and practice architectures that they navigated daily and compared those critiques with others.

In the scripting of social interactions and knowledge building, the Better Worlds Workshops Prototype was guided by the principles of situated knowledge and design justice. Situated knowledge frames information as inherently developed in “mutual and usually unequal structuring” (Haraway, 1988, p. 595) and posits that information cannot be extracted out of these multifaceted contexts into a finite, objective, disengaged other world of impartial information. Situated knowledge is a provocation to understand knowledge as always subject to unique

contexts. Through practice theory and situated knowledge, this thesis claims that all practitioner contexts and all contexts for the application of knowledge are necessarily unique. Thus, to develop, share, and strengthen practitioners' knowledge about practice to create action, it is crucial to understand and acknowledge the contexts surrounding each insight. The contributions of different practitioners should be held as equally valuable. Practitioner knowledge is no worse for being partial and influenced by context; it is a layer of understanding necessary to any conversation about changing practice.

As discussed in Section 5.4.4, this emphasis on sharing without judgement or correction was recognised and appreciated by participants. This sentiment was common in participant feedback, as with these excerpts from the *First Post-Workshop Survey*:

Rachel: I found it useful to be in an open space to discuss topics relating to sustainability in design practice, admit my blind spots and learn new recommendations or resources from my peers.

Monica: I also liked that I was able to listen to others and their thoughts as I was able to just take in their [knowledge] as I felt a bit inexperienced.

These reflections on the workshop environment indicate that the purposeful scripting of social interactions made the workshop experience more pleasant, and that this made the practitioners feel more able to admit to and share the perceived faults with their own practices. In this community-oriented atmosphere, participants were thus comfortable developing and comparing critiques of their own practices, and of industry practices. Establishing a workshop environment where participants were encouraged to share their contextual, plural experiences and to build on them was key to the development of relevant, actionable pathways towards sustainable design practices.

The findings from the Better Worlds Workshops Prototype support the idea that all practice contexts are unique, and thus resources should build on the

inherently situated knowledge of each participant. This should be enabled through careful scripting to avoid the introduction of judgement or shame and should be conducted within a supportive structure that embraces and values the context-specific and individual nature of practice knowledge.

6.4. Speculate Alternative Practices

Discussions of practice in design often focus on the close-present (Anusas & Harkness, 2016), where the responsibilities of designers are constrained to a project timeline and to known and relevant people, places, profits, and environments. This restrictive close-present was reflected not only through the survey of practice, which identified shortfalls in the Australian design industry's actions and attitudes towards sustainable design, and through the Scoping Workshops, where even sustainability-oriented design studios presented their work on a project timeline scale, but also through the consistent calls by sustainable design practice theorists such as Boehnert for more extended and systematic understandings of the long-term ecological impacts of design.

Through speculation, practitioners may expand their understanding of their work to meet a greater system of interconnected influences and impacts, to identify and articulate their values for practice, and to become more capable of envisaging the positive benefits of changed practices (Egmose et al., 2020; Garduño García & Gaziulusoy, 2021; Halse et al., 2010; Mazé & Interactive Institute (Sweden), 2010).

This thesis argues that by envisaging possible alternative practices, participants develop individual and discipline-level critiques of practice as it is and formulate real steps to imagined change. It additionally proposes that participants' positive shifts to a sense of agency and pathways to action discussed in Sections 6.1, 6.2, and 6.3 were strengthened as a consequence of speculating about alternative practices.

Participatory worldbuilding cannot be the sole construction or dissemination of discussions about sustainable change. However, reflections of

common aspirations may help us better identify what we want to move to and what gets left behind. The speculative modules⁵⁵ of the Better Worlds Workshops Prototype were not focused on changing participants' perspectives but rather on bringing their values and actions into sharper focus and making change seem possible. Following their experiences with these modules, participants frequently referred to the long-term impacts of their projects and criticised the fast-paced and close-present view of design within their workplaces. As participants had varying levels of comfort with speculative tasks, future versions of these workshops will incorporate optional materials which introduce participants' to these ideas.

The sense of scale that designers have about their work can be difficult to shift, particularly given the ways that design work frequently prioritises short and fast turnarounds. The speculative modules of the Better Worlds Workshops Prototype allowed participants the space and structure within which to critique their existing views of practice. During the *Backcasting* module in Workshop 2, in response to questions regarding what parts of the group's storyworld she wished were real, Ashley^{Group B} answered:

[Design being more] ethical in process but also just better long-term systems thinking. ... We just don't think beyond 'the now'. I think my main obstacle is really time. People don't have time to consider other functions besides the ones they're paid for. We just think so short term due to our fast-living environments because things just keep coming.

This was not an idea placed in Ashley's mind by Workshop 2; she stated in the same conversation, "This is something I've been thinking about since, like, first year university." As is reflected in her comment, critiques of the fast-paced

55 Most Workshop 2 modules used speculation; participants collaboratively developed idealised storyworlds (*Storyworld Rules* module), expanded those storyworlds through individual reflection and collaborative creativity (*Letters from Better Worlds* and *Design Fiction* modules), and used the differences between the idealised storyworld and the real world (*Backcasting* module) to develop individual and industry practice critiques and individual pathways to action (*Strategies* module).

nature of the design industry are restricted because of that very same fast-paced work. The speculative modules of Workshop 2 allowed such critique to come to the fore and be shared, through the speculation about alternative practices. This conversation was continued and shared with more of Ashley's peers in Workshop 3^{Group C} in a number of conversations, including the following exchange:

Stephanie: Architecture students are taught to think that way [about the long-term impact] though, because that's in the practice itself. ... What might that look like [for graphic design]? Because a book breaking apart is less devastating than a building falling. But ... that element of decay still exists in all forms of design.

Ashley: We don't really think about the long term. Like, not just the physical, material, [but the] conceptual sense, too.

These considerations of time as an important aspect of design practice considerations were developed through conversations during and about Workshop 2's speculative modules. Speculative modules created ongoing shifts in participants' actions as they brought their values and actions into sharper focus, and made change seem possible. These ongoing shifts to practice are examined here through the experiences and feedback of Corey, during and following their Workshop 2^{Group B} experiences. Similar anecdotes and journeys, though centred on different individual values for sustainability, were identified in many participants' experiences.

Corey and Ashley's *Storyworld Rules* in Workshop 2 (Figure 42, overpage) reflect a collaborative and shared set of values. The *Storyworld Rules* module provided a structure for participants to develop sustainable practice-oriented storyworlds collaboratively. It is worth noting that in this session, as with all the groups in Workshop 2, there was a lot of playful conversation. While the content at the core of these modules was serious, the worldbuilding elements and the ways in which they were scripted appeared successful in minimising conversational friction about such a grim concern. In their sustainable storyworlds, both Ashley and Corey proposed new core tenets of design, including

explicit attention to the long-term impacts of design projects⁵⁶, and diverting waste streams through design for recycling, reuse, and trade⁵⁷.

56 Ashley: “Your design process must consider what it’ll be like in 5-10 years to ensure it carries longevity or thoughtfulness in purpose/form.”

Corey: “Long term impacts do not get lost in time but are affectively (sic) acted on/built on along the way!”

Ashley: “Have to always think of the environment it’s in e.g. is it outdoors, the effects of weather/people.”

57 Corey: “Every element of everything will be 100% recyclable and easy to recycle.”

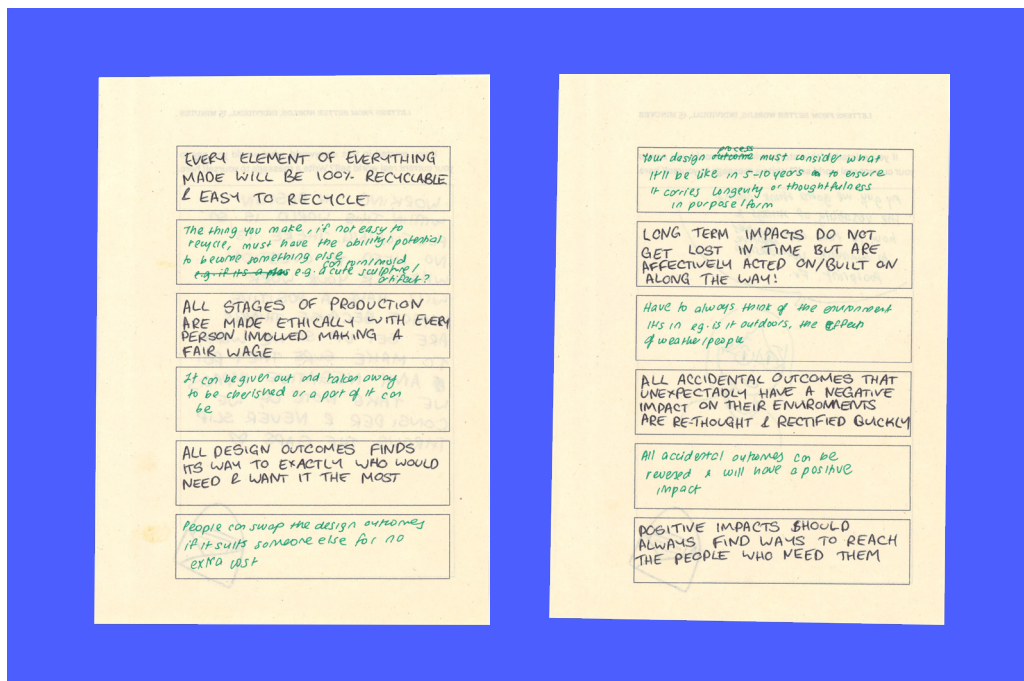
Ashley: “The thing you make, if not easy to recycle, must have the ability/potential to become something else e.g. can turn/mold a cute sculpture/artifact?”

Ashley: “It can be given out and taken away to be cherished or a part of it can be.”

Corey: “All design outcomes find its way to exactly who would need & want it most.”

Ashley: “People can swap the design outcomes if it suits someone else for no extra cost.”

Figure 42.
Storyworld Rules from Workshop 2 Group B



[Note: In Figure 42, Corey’s writing was in black, beginning on the left page, Ashley’s writing was in green, beginning on the right page. They switched pages after every completed box/fact.]

Reading their collective rules, it becomes apparent that their values and knowledge combined and layered during the activity. This is seen in exchanges such as the one starting in the fourth box in the right image of Figure 42 where Corey's rule talks about rectifying accidental outcomes. This prompted Ashley to write about accidental outcomes turning into positive impacts, and then Corey to write that positive impacts will always have the right audience. Key phrases are picked up and shared across the rules, as the participants collaborate in the speculation of alternative practices. The pair elected to combine their two storyworld rule sets for use in the following modules.

Concepts from the *Storyworld Rules* module, such as the inherent positive impacts of design work and the mandatory immediate rectification of negative impacts, are repeated in Corey's *Letters from Better Worlds* Module (Figure 43, overpage). In their *Letters from Better Worlds* module, Corey describes work in the speculative world as fulfilling, and lacking doubt and guilt. Their letter reflects the positive and jovial atmosphere of Workshop 2; participants were imagining different, better worlds and found in those speculations some hope. This was gratifying for me to see as a researcher; while I established that joy and hope are strong motivators for climate communications, they are difficult emotions to elicit while also embracing the reality of climate change and the critique of current practices. The workshop scripts were successful in directing conversation, however, and conversations throughout all three workshops were hopeful and full of laughter, personal connections, and comfort.

Speculative aspirations came to the fore in Corey and Ashley's conversation following the *Design Fiction* module. Corey's *Letters from Better Worlds* (Figure 43) continued the ideas from their *Storyworld Rules* module, with a particular focus on the reuse and trading of design outcomes post-consumer interaction. Their design fictions were a set of sustainably-created packaging that could be disassembled to reveal origami patterns inside for reuse and trading, and wax-coated promotional posters that could be adhered to surfaces without glue to later be collected and traded by consumers. After the *Design Fiction* module, Ashley and Corey discussed ideal ways to work, which led to this exchange:

Ashley: "A better world is a trade economy."

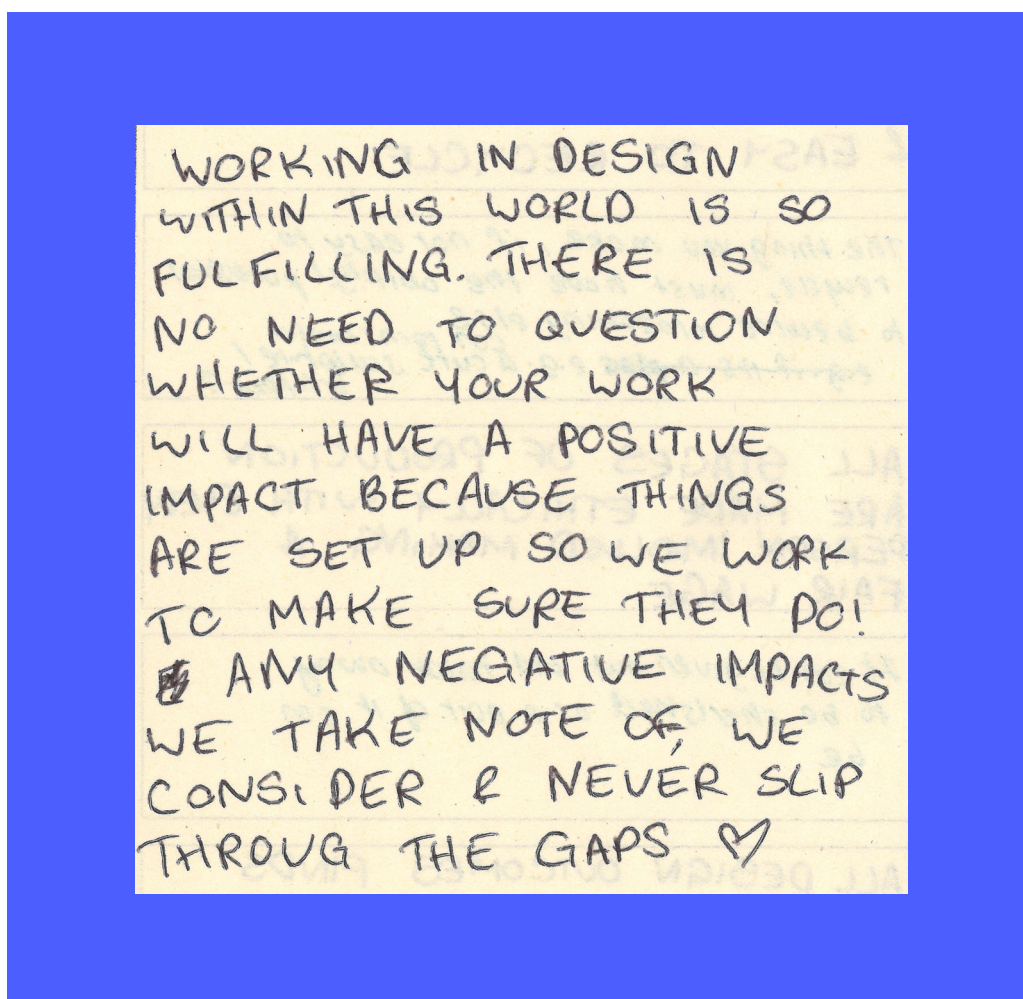
Corey: "Oh, a better world is a trade economy!"

In the following *Backcasting* module, the pair began to continued the conversations around reuse and trade, leading to:

Corey: All design outcomes can find its way to exactly who would need it and want it the most. And people can swap design outcomes if it suits someone else for no extra cost. ... There's nothing I love more than a bartering system and trade economy.

Figure 43.

Corey's Letters from Better Worlds



These conversations were light-hearted and followed a thread of personal values established in their storyworlds rules. Although it was Ashley who first raised reuse and trading as a core concept of the storyworlds⁵⁸, it became influential in the continual shifting practices of Corey's design identity following the Better Worlds Workshops Prototype. In the first post-workshop survey⁵⁹, Corey wrote:

In talking about sustainability in these workshops, investing in trade economies came up and was something I noted down - since then I've done a lot of talking with people about trade and gifting in design and creative spaces and pushed to include that more as a part of my practice.

Following this, in the second post-workshop survey, they wrote:

I somewhat off-handedly noted trade economies as a part of building sustainability in my workshop zine but that has actually become a bigger part of my engagement with design work and working with other independent artists which has been really valuable.

The speculative work of the Better Worlds Workshops helped Corey identify, discuss, and elevate a key value of their practice. Similar journeys from aspiration to application occurred in other participants' workshop materials and responses. Hanzagu, for instance, moved from speculating about the possible impact of taking many small steps to later actively attributing her changed practices following the workshops to the success of taking small steps and how important she found the discussion of possible, actionable changes with her community of practice. These participant experiences indicate that speculating alternative

58 "It can be given out and taken away to be cherished or a part of it can be."

59 In response to the question "Have you discussed sustainability as a value in design with your design community more since participating in these workshops? If yes; why and how? If not, why not?"

practices meaningfully shifted participant perspectives regarding their agency to pursue change and their ability to align their practice actions to their personal values. While these interactions did not change those personal values, they were not intended to; the workshops were targeted at people with an interest, but not necessarily proficiency, in sustainable design practice and focused on how values might be moved into action. The speculative modules were successful in helping participating designers identify what about sustainable design practice was valuable to them, and how they might move towards those practices.

The exchanges from Workshop 2 mentioned so far in this section were often playful, with participants laughing, joking, and building off others' comments. Encouraging playfulness in the *Storyworld Rules*, *Letters from Better Worlds*, and *Design Fiction* scripts allowed participants to feel free in their creative interactions⁶⁰; it was in the later modules of *Backcasting* and *Strategies* that they reverted to specific critical reflections on practice. As Melissa reflected in Workshop 3 ^{Group A} on her experiences in Workshop 2 ^{Group A},

I liked the activity of going around and doing the story worlds because then you could consider different aspects of sustainability. The idea that you can think a bit absurdly as well, because it's a hypothetical. ... I like that, because you can see how [sustainability] differs and then there's the intentionality [of] 'What will it take for us to get to that point?' I think that's good.

As discussed in Section 5.4.1, participants appreciated the structure and scripting of the speculative activities of Workshop 2. This was in line with the Vaajakallio's call for structured design-participant engagements as "users may need scaffoldings to express their creativity and to see beyond what exists right

⁶⁰ Although the participants were prompted to be as silly or creative as they liked, they self-regulated towards possible and preferable futures. This may have been informed by the knowledge gained through Workshop 1; by grounding the workshops early on in the personal values, actions, and cares of participants, their speculations may have then been kept more in line with those ideas. This is a consideration for worldbuilding that might be pursued in further research.

now, thus enabling them to envision the future” (2012, p. 235). However, the introduction of speculative activities to the workshop environment may not be comfortable for all participants and future versions of the workshops will provide optional support for these modules such as idea-generation activities and further explanation of why these modules are relevant.

Imagining alternative practices was not a common activity in the everyday work of the participants. This research supports that other engagements with practitioners to change practices could incorporate speculating alternative practices to great effect, although those instances of speculation should be collaborative, grounded, reflective, and creative.

6.5. Ethics of Care

As discussed in Section 2.2.1, climate change is often perceived as an emotionally distant issue, and one with significant psychological distance between individuals and the threat that continued unsustainability poses. It is a problem for the future, for someone else, for people who know more or can do more than us. Nonetheless, all people, whether or not they have closed the psychological distance between themselves and the threat of climate change, are connected by the current threat that climate change poses to the things they care about. This research supports that these shared points of tension, care, and hope are foundational to creating participants’ ethics of care; a grounded and personal commitment to change.

A cornerstone of both the Better Worlds Workshops and the Five Factors for Better Worlds is closing designers’ psychological distance from climate change without introducing fear or alarm that might impede action. This focus was oriented by Huntley (2020), and by the research of Wang et al. that inspired Huntley’s writing on objects of care (2018, 2019). The consideration of psychological distance by this research aligns with the consistent argument in this thesis following the survey of practice that while there is a visible lack of support for Australian graphic designers to develop ecological literacy, a greater

supply of targeted resources alone would be unlikely to change sustainability-as-value to sustainability-as-action.

To return to Stephen Sterling's three parts of a paradigm model (2014) (Figure 3), this research proposes that an ethics of care is necessary to move from *seeing* and *knowing* to *doing*. The *Object of Care* module in this research was an interaction that clearly altered participants' perceptions on the need for knowing and doing. It guided participants to reflect critically on the impact of the design industry on aspects of the world that they love. Following the Better Worlds Workshops Prototype, participants described greater personal commitment to changing their actions to align with their values.

The *Object of Care* module was intended to help participants find something that made the issue of sustainability feel real in a way that it frequently does not. It was developed for the workshops as the main space to share emotional and personal perspectives in addition to practice discussions. I anticipated that the *Object of Care* module would resonate with participants, and participant feedback showed that it was seen as one of the most significant parts of the workshop experience. Participants recognised that attaching ideas of sustainable practice to a tangible point of care affected their perspectives on sustainable design practice, even if the language used by participants varied.

The *Object of Care* module was listed by all three groups in Workshop 3 as one of the most important aspects of the workshops⁶¹. It successfully reduced the psychological distance between participants and the impacts of design work on the planet. Group B noted that the module "frame[s] how you approach sustainability". Group C, when asked to identify key aspects of the workshops, wrote that "Relating info and resources to an 'object of care' is a cool way to put ideas into practice and conceptualise ideas". In that group's discussion around the object of care as a new insight, Monica commented:

61 Groups A and C listed the Object of Care in response to as one of the key new ideas of pieces of knowledge discovered through the workshops (Workshop 3, question 1), while the third group (Group B) listed it as a new sustainable practice strategy learnt through the workshops (Workshop 3, question 2).

It's hard to just start speaking about these things [sustainable practices], ... but having everyone write their own object of care, that kind of made me think ... [and] then you also get to hear what other people like. You're so in your own world, you forget that people have bigger ideas or even more personal ideas.

Not only did this group identify the object of care as key to framing their discussions of sustainability, they also agreed that sharing those objects of care in their workshop groups strengthened the module's impact. A participant from this group, Melissa, later wrote in the first post-workshop survey, "Yes, [I still refer to the] object of care. Helps me stay grounded and more aware of a bigger purpose behind my deliberate choices rather than simply 'it's a better way to work'". Participants found, in the *Object of Care* module and the sharing of their chosen objects of care, a concrete conversational focus that continued its utility past the workshops.

Participants' discussions around their object of care reflected that, even though they did not have the specific language for it, they recognised that the module affected how they viewed their relationship with sustainability and that it connected them to the issue of climate change. The other modules in Workshop 1⁶² scripted participant discussion and individual- and practice-level critiques, particularly on the complexity of design practice and the sustainability value-action gap in their own work. The *Object of Care* module provided the first step for participants to develop their own pathways, as it made the value-action gap feel both more concrete and more relevant. The success of the *Object of Care* module was supported by the fact that it was remembered and reused by participants when discussing shifts in their perspectives on sustainable practice. This is a provocation for future research to explore how the non-judgemental centring of shared care within sustainable practice resources and discussions may create deeper, more effective participant responses as participants develop their own

62 *Map of Practices, Values and Actions, and the Logbook.*

personal ethics of care.

Participants post-workshops spoke emphatically about communicating with others about sustainability (see Section 6.2) and indicated post-workshops that their successful conversations with their peers often centred on things that were personal or shared. For example, Stephanie wrote that prior to the workshops, while she was interested in sustainability, “it might be potentially just the space I’m in but often sustainability isn’t a top priority.” In the second post-workshop survey, in response to the question, “Have you discussed sustainability as a value in design with your design community more since the last survey? If yes; why and how? If not, why not?”, she wrote:

I find that sharing experience and stories of other people or other examples that’s not just limited in design, e.g. fashion or lifestyle, [creates] a more casual approach and allow[s] space for them to be interested. In fact, I feel more strongly about making the discussion about sustainable design more casual. I find that in terms of strategies, rather than approaching it in an informative way, having a casual approach makes people more receptive to change and interest.

These responses indicated a significantly increased emphasis by Stephanie on climate communication with her communities of practice, with importance placed on casual and personal approaches including sharing experiences and personal climate stories. Her approach to caring for sustainability in her community was characterised in this response by a casual, personal approach to sharing knowledge.

Workshop 3 Group B commented on the need for a grounded approach, writing collaboratively in answer to the key lessons from the workshops that they had learned a “technique to encourage people around us to be more sustainable”, which included “to approach in a way that makes a difference”, meaning focusing on objects of care, and to “speak from experience”. Participants here were demonstrating that, following the Better Worlds Workshops Prototype, they

were developing ethics of care about potentially difficult conversations with their communities regarding sustainable practice, characterised by a focus on non-judgemental casual conversations and shared care and interest.

Similar to the *Object of Care*, the *Letters from Better Worlds* module in Workshop 2 acted as an emotionally resonant moment of reflection. The letter writing did prompt some intriguing reflections on how the workshops were shaping participants' view of change; most participants wrote letters in which they told themselves to take steps towards action and assured themselves that change was possible. The major benefit of the *Letters from Better Worlds* came in the second post-workshop survey, where participants were asked to re-read and respond to their letter.

Rachel: "The letter makes me feel hopeful and determined for a better future. ... I am reminded of the power I can hold in pushing towards a better, more sustainable future."

Corey: "This letter is definitely a quite optimistic reality that I would love to get to."

Eugenie: "The parts about the design fiction sound so idealistic from the outside but it's still something to strive for."

Hanzagu: "I did take baby steps and I am so proud of me. ... I took some dramatic actions in the past trying to live 'green', but it all failed. Now I am changing little by little. ... I am proud because I am taking action now, instead of thinking 'one day, I will be.'"

These responses expressed a range of reactions; for some it was a reminder of the change that they thought was possible when in the workshop environments, for others it was a motivator, and for others still it was an opportunity to reflect on how much they had changed. This module offered an interesting and novel means to prompt psychological distance reflections using a participant-generated

speculative scenario.

The ability to reflect on the impacts of climate change while maintaining shared hope and care as the conversational focus was essential to developing transformative conversations with emotional resonance. These conversations addressed the psychological distance that participants felt for climate change; about how real or far away it seemed. Participants seemed to align with this idea, even though the term *psychological distance* was not used or referenced in the Better Worlds Workshops Prototype⁶³.

Participants proposed multiple modules⁶⁴ to close psychological distance; through the visual communication of ecological impact of the daily life of a friend (Crystal, Rachel, and Eugenie^{as Group B}), through asking workshop participants to identify objects of care among their possessions and mapping the lifetime of the object of care from cradle to grave (Monica^{Group C}), and through the extension of the *Map of Practices* exercise to follow all aspects of practice through to their final impacts (Stephanie^{Group C}). When Workshop 3 Group A were discussing what people need to know in order to be more sustainable, Melissa said, “It definitely needs to make them feel it’s also something that will impact them personally. ... We need to [convince them] not only will it improve your life, it’ll improve your future too.” It was in the evident participant interest in these careful conversations around closing psychological distance that the impact of their developing ethics of care could be seen.

This research found that, while participants did not use terms like *psychological distance* among themselves, they were aware that through the Better Worlds Workshops modules they had changed their perspective on how tangible and concerning sustainability felt and that these changes affected their design practices following the workshops. They were also sufficiently cognisant of this as a positive change to mention their appreciation of relevant modules, mainly

63 This was not an aspect of change that was originally considered so influential and thus was not targeted by any of the tracking metrics of the surveys or directly spoken to in the workshop scripts.

64 See the *Modules* section in the Workshop 3 guidebook (Appendix L, p. 1) for the script.

the *Object of Care* module, and proposed through Workshop 3 that changing others' perspectives on sustainability and helping others develop their own ethics of care was key to making a difference.

6.6. Conclusion

Findings from the Scoping Workshop and the Better Worlds Workshops Prototype helped me isolate and identify the five factors that this research proposes are crucial to the creation of ecological literacy, practice critiques, and hopeful futures in the Australian graphic design industry. These factors were essential in participants developing a sense of agency and pathways to action. These change components, the Five Factors for Better Worlds, were:

1. **Sustainability Education:** access to information curated for the specific practitioner audience on the ecological impact of the materials, processes, resources, and messages that they may encounter in their practice bolsters their ability to enact changed practices. There is a desire and opportunity for greater and more accessible sustainability education resources to target emerging Australian graphic designers.
2. **Communities of Practice:** belonging to groups of people with whom they feel confident in sharing knowledge and experiences strengthens commitment and confidence regarding sustainable practice. Communities of practice help increase the visibility of sustainability as a value and contribute to much-needed intra-industry knowledge sharing.
3. **Situated Knowledge:** building on the inherently unique knowledge of participants and acknowledging the necessarily unique practice constraints and architectures that each individual faces allows for more nuanced, rich conversations on practice. As a provocation for practice, these findings encourage sustainable practice education research to respect the value of situated knowledge, eliciting and embracing it as a relevant and constructive element in the development of actionable pathways to sustainable practice.

4. **Speculate Alternative Practices:** the ability to envisage sustainable practice as a possible and positive alternative to current practice allows participants to identify what they find valuable in those future scenarios, and what they would like to work towards. Such speculation, however, must be structured, collaborative, grounded, reflective, and creative.
5. **Ethics of Care:** having a personal commitment to change, oriented by hope, care, and attitudes towards interpersonal interactions, meant that participants implemented the sustainability practices discussed in the Better Worlds Workshops and changed their perspective on how tangible and concerning they found sustainability. These ethics of care were found through modules that highlighted the value-action gap and made climate change feel real and personally relevant.



(CHAPTER SEVEN)

DISCUSSION AND IMPLICATIONS

7. DISCUSSION AND IMPLICATIONS

Why, in an industry with so much talk about better worlds and such a significant history of sustainability in discipline discourses, is sustainable graphic design practice not seen as the norm? In response to the possible global value-action gap in graphic design, the Sydney graphic design industry was used in this research as a case study for two research questions:

1. How are graphic designers in Australia currently engaging with and defining sustainable design practices?
2. What factors enable emerging Australian graphic designers to develop pathways towards more sustainable design practices, and a sense of agency for action?

Throughout, this research pursued new knowledge regarding the sustainable design value-action gap in Sydney and in Australia, including contributing factors and possible approaches. It is a complex gap, as there are many interlinked aspects of individual and industry practices and perspectives which trouble transitions. As this research has found, catalysing movement between value and action is enabled through the combination of (1) ecological literacy—understanding the ecological ramifications of their practices and be able to navigate those choices, (2) hopeful futures—having something that they can work towards and (3) practice critiques—being able to articulate what they like and dislike about their practice, why it is that way, and who or what can help them change it.

Through the critical analysis of literature, design education, and professional resources alongside the review and introduction of sustainability

education and practice theory, this research established that not only is there a value-action gap in the Australian graphic design industry, but there are also few resources or networks that target working designers appropriately. Through participatory workshop experiments, this research developed new insights into the enactment of sustainable graphic design in Australia, and refined tools for the development of pathways to action and a sense of agency for emerging designers.

As novel contributions to graphic design theory and sustainable graphic design practice, the Five Factors for Better Worlds and the refined Better Worlds Workshops offer a two-fold approach. The former contributes to the continued development of sustainability education for graphic design by identifying crucial components in the creation of successful engagements for practitioners. The latter offers much-needed support in industry by providing targeted sustainability education and workshop scripts. This resource enables working designers to develop a sense of agency and pathways to action within their communities of practice.

7.1. Reaching Better Worlds through the Five Factors

By separating aspects of the larger issues of sustainable practice change into smaller constituent parts, it becomes easier to construct educational engagements that might create lasting change. Through participatory research, these factors were identified as successfully influencing designers' sense of agency for change and ability to develop and enact pathways to action. They address the need, identified in this research, for education about sustainability that creates practice critiques, hopeful futures, and ecological literacy. The factors do so by ensuring that emotional and social influences are considered alongside knowledge, and that these are all viewed within a compassionate and situated framework. These factors thus offer a research contribution to sustainable graphic design theory and sustainability education research.

The unique constraints and contexts of practice mean that a straightforward handbook for change is not applicable; not only are practice architectures unique, so too is the knowledge that individuals hold and apply. Guidance for sustainable design practice needs to be situated and based on the unique practice architectures of each practitioner, but also able to be meaningfully disseminated to affect multiple people. By using the Five Factors as guidance, future research could engage practitioners more effectively with moving from seeing to knowing and doing.

7.1.1. Provocations

The Five Factors for Better Worlds established a much-needed framework for understanding the necessary capacities to change practices. They extended and recontextualised established sustainability education research to target working professionals through the addition of elements of practice theory, social theory, and climate communications research.

This framework provides an opportunity for future research to further evaluate the impact of these factors on a practitioner audience when they are incorporated into sustainability education. While the factors proved fruitful when addressing an emerging graphic design audience, I would like to extend their use and testing into different contexts, such as other disciplines, geographical areas, or greater levels of professional experience in the graphic design industry.

As a provocation for further research; how might future practitioners and researchers use the Five Factors for Better Worlds to address and build capacities in professional cohorts? How might the Five Factors for Better Worlds be used in communities of practice to identify areas for strengthening, or in the assessment of sustainability education programs to ensure that they are contending with the social and emotional aspects of change alongside the educational? I hope to pursue these questions in future research and offer them as provocations to other researchers in the fields of sustainability education and research.

7.2. The Refined Better Worlds Workshops

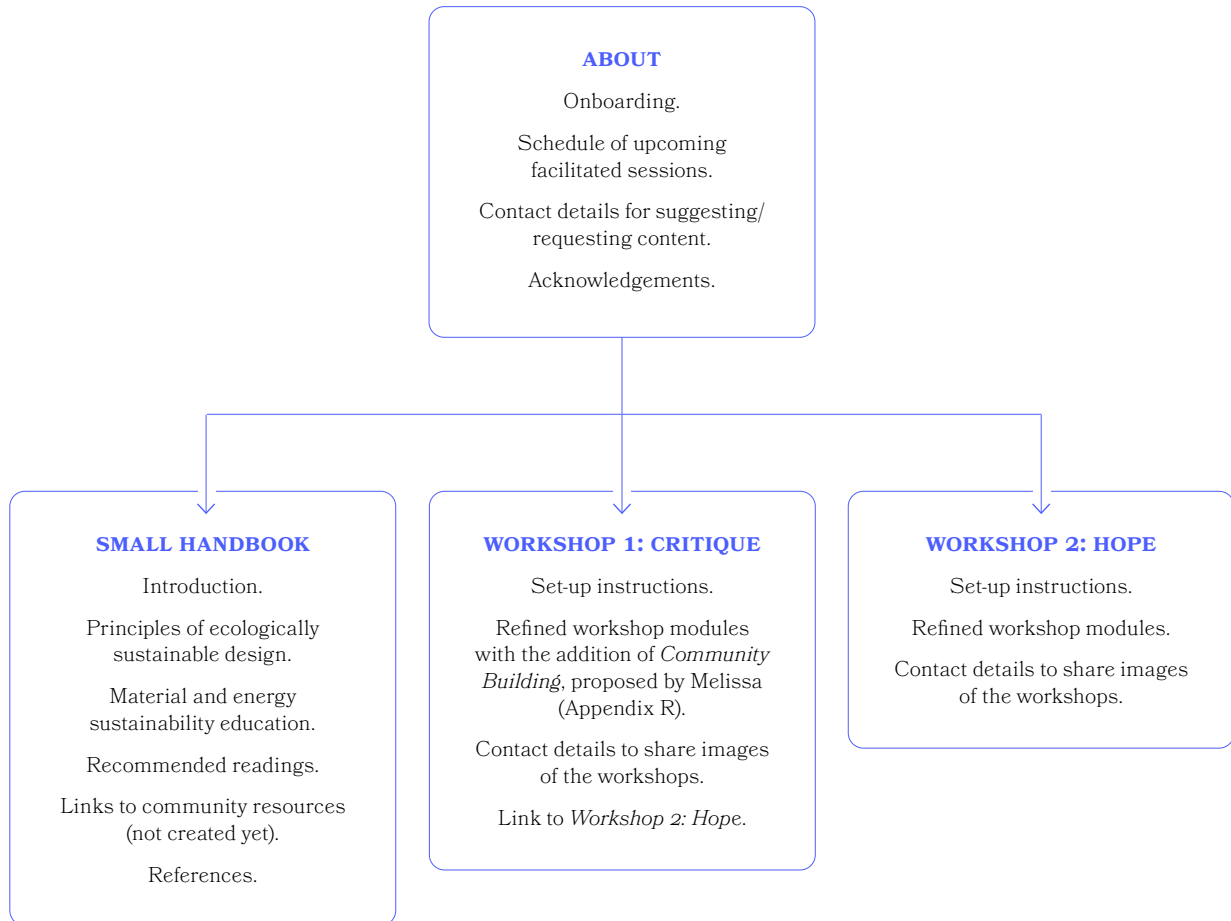
Considering the findings from the development and testing of the Better Worlds Workshops Prototype, I am extending the workshops in my own research practice by publishing them online. This next iteration, the refined Better Worlds Workshops website (Figure 44, overpage), is intended to be used by groups of designers, either self-organised or formed through community events, to build their community-of-practice bonds, share and combine their knowledge, and improve their sense of agency for transitioning to more sustainable practice. The interactive prototype site, a practice outcome for this research, can be found here: <https://www.figma.com/proto/fB90QJdNgIIJ5fvmeFqdCX/refined-Better-Worlds-Workshops-site?page-id=226%3A2&node-id=2003-837&viewport=975%2C361%2C0.18&t=QF3AXvuKrfiDiEeF-1&scaling=min-zoom&content-scaling=fixed&starting-point-node-id=2003%3A837>. The site will be available at betterworlds.now when published.

The refined Better Worlds Workshops are just one of many needed interventions for industry. The site will be a contribution to practice and will evidence the use of sustainability education and practice theory in sustainable design practice education. There are two key aspects to discuss here: publication and implementation.

7.2.1. Publication

As discussed throughout this thesis, following the Scoping Workshops I wanted to develop a project that could help Australian graphic designers develop more sustainable design practices. At the time of performing the survey of practice, there were no identified published resources in this space targeting professional graphic designers working in the Australian industry. I additionally did not want to restrict the reach of the workshops solely to situations where I could act as a facilitator. I wanted the workshops to continue to grow using participant reflections, and for practitioners to feel capable of adapting the workshops to suit their situated contexts.

Figure 44.
Website Site plan



For these reasons, the refined Better Worlds Workshops, following incorporated feedback from examiners, will be released as an open educational resource, under a Creative Commons Attribution-Non-Commercial 4.0 International licence, hosted online with a permanent DOI through UTS ePress and Zenodo. This licence allows alteration, reuse, and re-distribution without consultation as long as the project contains appropriate attribution and is not done for profit.

The workshop scripts and materials have been altered to better suit this web platform, and issues raised by participants such as script confusions have been rectified. The refined Better Worlds Workshops are intended to be used in

two different settings; self-facilitated by communities of practice and facilitated externally at design groups or events. These possible implementations align with my goal of sharing the workshops without profit to as wide and diverse a group of participants as possible within the scope of the audience.

Accessing the Better Worlds Workshops online and running sessions from the workshop scripts is an avenue for existing communities of practice to find the time, space, and structure to hold much-needed conversations around sustainable practice. This is envisaged for peer groups or for use inside workplaces. Imagine a group of creatives around a table with one or two screens showing the workshop script, laughing, talking, drawing, sharing, and working together to identify what change they desire and what they need to do to get there. This would not necessarily need to be performed solely with emerging designers, as the conversations are needed across all levels of industry and the scripts work for various levels of experience. If used within a studio or agency environment, they might well reduce the value-action gap of that organisation.

However, as proposed in Section 4.5 and explored through the Better Worlds Workshops Prototype, many emerging designers do not have strong community-of-practice connections which facilitate sustainable practice. As seen in the Better Worlds Workshops Prototype testing, the workshop scripts were successful in promoting relevant, insightful conversation among practitioners without inducing judgement or shame. This allowed practitioners who were not familiar with each other to share their knowledge and critiques freely. To allow designers to meet, share, and form bonds, I am proposing that I will also facilitate Better Worlds Workshops sessions in addition to offering the scripts online for use by communities of practice. These facilitated sessions may be run alongside established design community events such as Sydney or Melbourne Design Week, or through community of practice organisations such as AGDA, the Australian Book Designers Association, or The Design Kids. As the Better Worlds Workshops develop and reach a larger audience, the role of facilitator could be extended to previous attendees or other experienced workshop designers.

7.2.2. Implications

As stated throughout, the Better Worlds Workshops are not proposed as a singular, finite solution to the sustainable design value-action gap. This gap is a complex area with many contributing factors and more research, time, and support are still needed. While the workshops address an acute need in the Australian graphic design industry, it would be beneficial to see other resources like this which are situated and aimed at working graphic designers becoming available globally. Additionally, there were a number of aspects that participants in the Better Worlds Workshops Prototype said that they desired that fell outside the scope and capacities of this project. One such aspect of this was more community-of-practice integration through collaborative, user-generated resources, such as recommendations for manufacturers or suppliers, or the ability to network with or message other workshop participants. The ability to create an openly collaborative educational platform was outside the capacity of this research but is an area for further investigation.

I would like to expand and support the Better Worlds Workshops across Australia and welcome any like-minded projects that address the need for designers to possess ecological literacy, practice critiques, and hopeful futures. As it stands, the Better Worlds Workshops offer a significant and desired contribution to practice in the form of an actionable, evidenced resource to support working designers. This resource is unique in sustainability education in how it approaches the sustainable design value-action gap; not just with information but with the practice-specific and locally-situated engagement of designers with their communities of practice to develop pathways to better worlds.

Figure 45.

Refined Better Worlds Workshop 2: Hope

[Figure 45 Note: An excerpt of the larger design, showing the *Backcasting* and *Strategies* modules.]

Backcasting

20 Minutes

STEP 1 OF 1 - COLLABORATIVE
On a shared page, discuss and answer these questions as a group:

- How would your design fiction be made? How would each of you be involved in using your skills to make it happen?
- How far away is your storyworld from the present?
- How are your objects of care treated in the design practice of your storyworld?
- What would have changed between now and the storyworld? What cultural ideas, social relationships, material innovations, or economic shifts?
- What are the key obstacles stopping you from being in that storyworld right now?

Strategies

30 Minutes

STEP 1 OF 2 - INDIVIDUAL
To start developing strategies for change, we first need to ask a few key questions. Write your answers to these down.

- What aspects of your storyworld would you like be real?
- What are your obstacles?
- Which people/groups could you work with to get there?
- Which of your skills will help?
- What new knowledge do you need?
- What would you need to do differently?
- What would others need to do differently?

STEP 1 OF 2 - INDIVIDUAL
Create three pathways to action by putting your answers from the previous page into this structure three times:

- I want [storyworld aspect] to be real. For that to happen, I need to [overcome an obstacle] by [collaborating with this group] / [using this skill] / [gaining new knowledge about this area] / [changing how these people act] / [other].

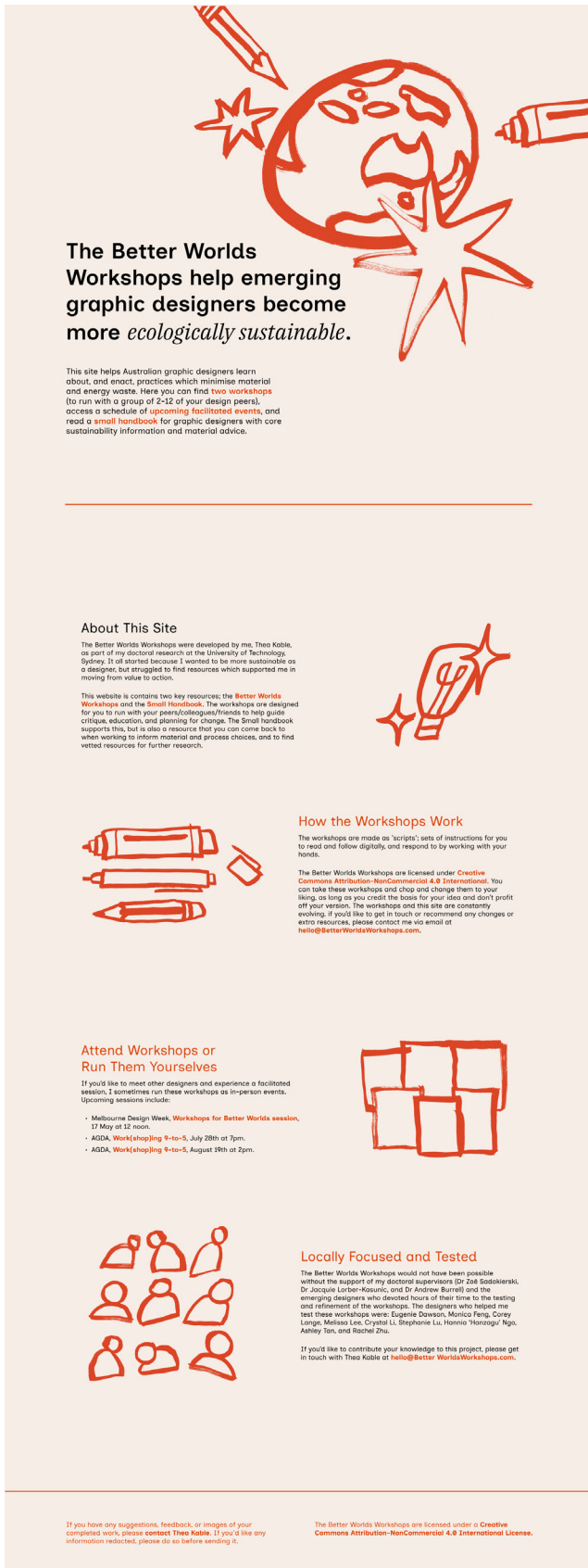


Figure 46.
Refined Better Worlds Workshops About Page

A small handbook about the big idea of ecological sustainability for emerging designers.

This handbook is about ecological sustainability, meaning minimizing the material and energy costs of goods and services. It's a jumping off point for you to do further research on the subject and to explore the field of sustainability. It includes case studies, questions, and material resources and links to additional resources.

When you see whole systems, you start noticing where things come from and where they go. You begin to see that there is no 'away' to throw things to.

People, Profit, Planet

Sustainable design practices seek to create a better world for all people, including future generations, without harming the planet. Sustainable design practices are:

- people the intention they play, the actions they take and the ways they interact with each other.
- profit, by using design to improve or enhance products, and to improve the way business is run.
- the planet, by reducing the use of resources, reducing and reusing energy and the materials needed to produce goods.

Core Strategies

- 1. Reduce** your energy consumption by using energy-efficient lighting, appliances, and electronics.
- 2. Reuse** materials and products. Use recycled materials and products. Use recycled materials and products. Use recycled materials and products.
- 3. Recycle** your energy and products. Use recycled materials and products. Use recycled materials and products. Use recycled materials and products.
- 4. Recover** your energy and products. Use recycled materials and products. Use recycled materials and products. Use recycled materials and products.

Energy and Waste Streams

Many of the opportunities for reducing material costs will come from the energy and waste streams of a product. Energy and waste streams are:

- energy, which is the amount of energy used to produce a product.
- waste, which is the amount of material and energy used to produce a product.

Life-Cycles

Ecological sustainability is a design strategy that focuses on the life cycle of a product. It is a design strategy that focuses on the life cycle of a product. It is a design strategy that focuses on the life cycle of a product.

Materials and Internet in Graphic Design

General Notes:

- Use the internet to find information on a PDF or other format.
- Use the internet to find information on a PDF or other format.
- Use the internet to find information on a PDF or other format.

Wood Based Paper

- Use the internet to find information on a PDF or other format.
- Use the internet to find information on a PDF or other format.
- Use the internet to find information on a PDF or other format.

Plastics

- Use the internet to find information on a PDF or other format.
- Use the internet to find information on a PDF or other format.
- Use the internet to find information on a PDF or other format.

Inks

- Use the internet to find information on a PDF or other format.
- Use the internet to find information on a PDF or other format.
- Use the internet to find information on a PDF or other format.

The Internet

Use the internet to find information on a PDF or other format.

Other Resources

Use the internet to find information on a PDF or other format.

Community Resources

Use the internet to find information on a PDF or other format.

References

Use the internet to find information on a PDF or other format.

E-Waste

Use the internet to find information on a PDF or other format.

Metals

Use the internet to find information on a PDF or other format.

Figure 47. Refined Better Worlds Workshops Small Handbook

7.3. Conclusion

I want better things for the profession that I love, and this research was undertaken with a sense of urgency regarding this desire. As the impacts of climate change on the planet worsen, graphic designers must engage more responsibly with the ecological costs of their professional practice. The outcomes of this research are shared with the purpose of supporting continuing expansions of sustainability education and the greater adoption and capacity for sustainable design practice by those working in an industry that does not always value or share the knowledge of how to do such things.

The Five Factors for Better Worlds and the Better Worlds Workshops provide actionable, grounded support to help designers bridge the sustainable design value-action gap. By supporting sustainability education, the Five Factors for Better Worlds support ongoing exploration of how to educate in a way that makes a difference, and by supporting working designers, the Better Worlds Workshops could guide a new generation of creatives through the process of aligning their values and actions. These contributions are actionable, immediately applicable, and specifically help practitioners and researchers see, know, and do the work needed to bring us to better worlds.



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APPENDICES

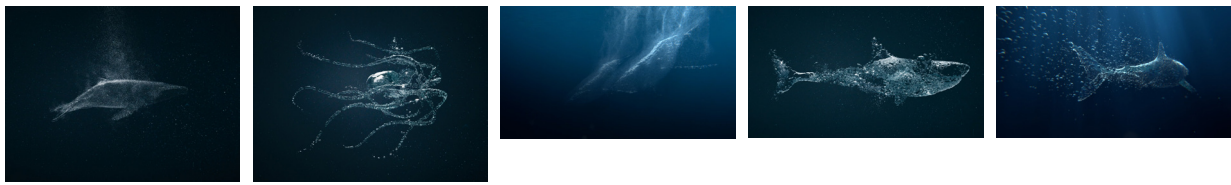
APPENDICES

A. AGDA “Ecological Responsibility” Winners and Finalists (2016–2021)

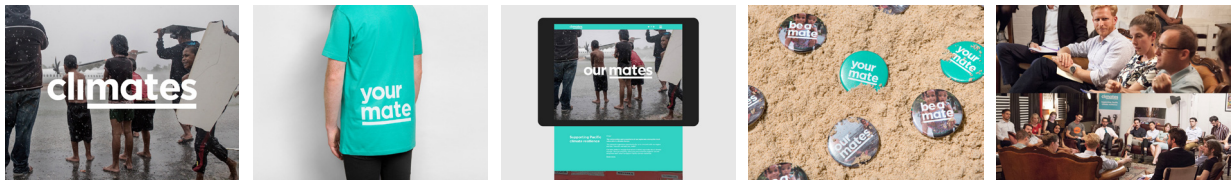
The following pages contains all winners and finalists in AGDA Awards’ “Environmental Responsibility” category from 2016 through 2021 within the AGDA Awards archives. Projects where the design studio provided information regarding the ecological impact of their design practices are marked with a [dot](#).

2016

FRAGILE OCEANS (COLLIDER)

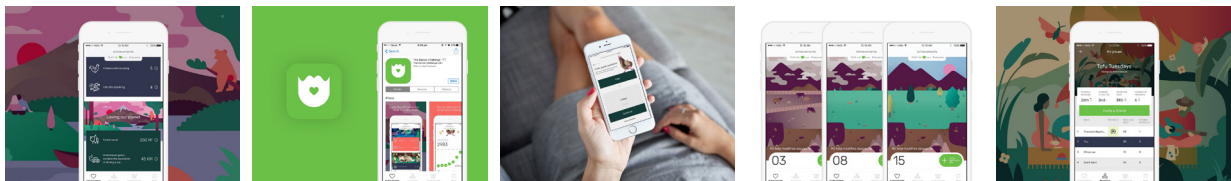


CLIMATES (AER DESIGN)



2017

THE DARWIN CHALLENGE (UNIVERSAL FAVOURITE)

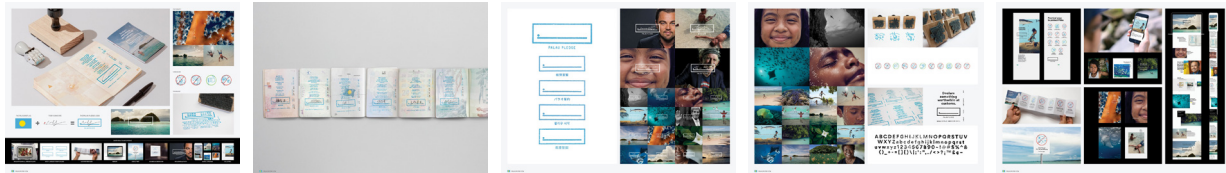


DESIGN FOR GOOD (MARX DESIGN)

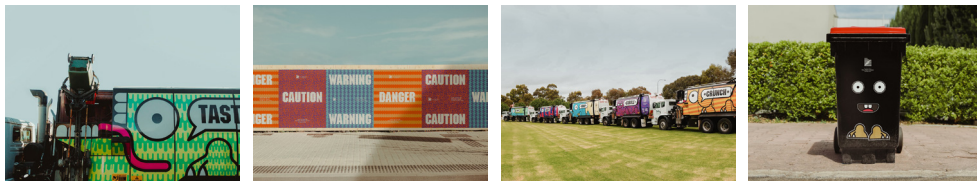


2018

THE PALAU PLEDGE (HOST/HAVAS)



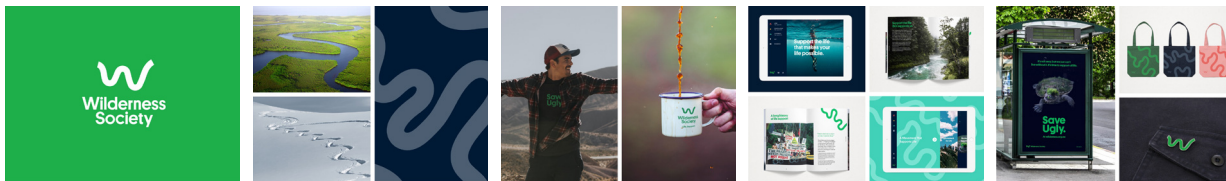
CITY OF TEA TREE GULLY WASTE INITIATIVE (SIMPLE)



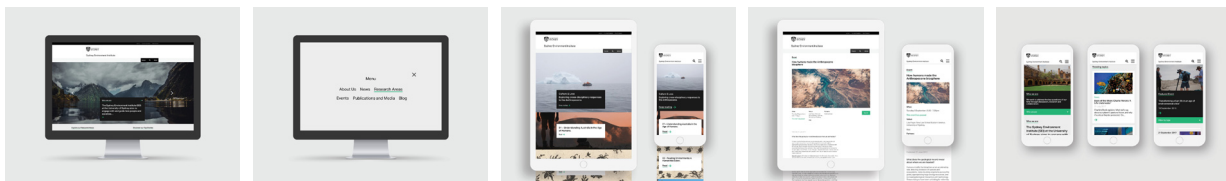
FIGHT FOOD WASTE (FOLK)



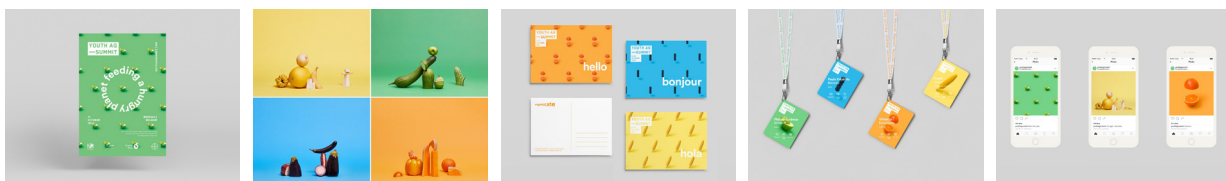
THE WILDERNESS SOCIETY (ALTER)



SYDNEY ENVIRONMENT INSTITUTE (EXTRABLACK)



YOUTH AG-SUMMIT (KIDYOUNOT)



2019

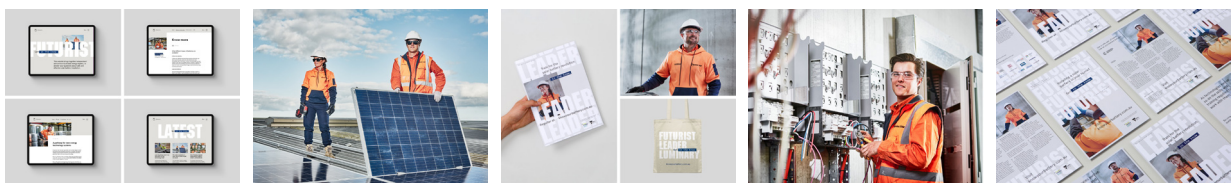
FEAST (GRAZIELA MACHADO)



MILK-IN-GLASS (SWEAR WORDS)



FUTURE ENERGY SKILLS (ELLIS JONES)



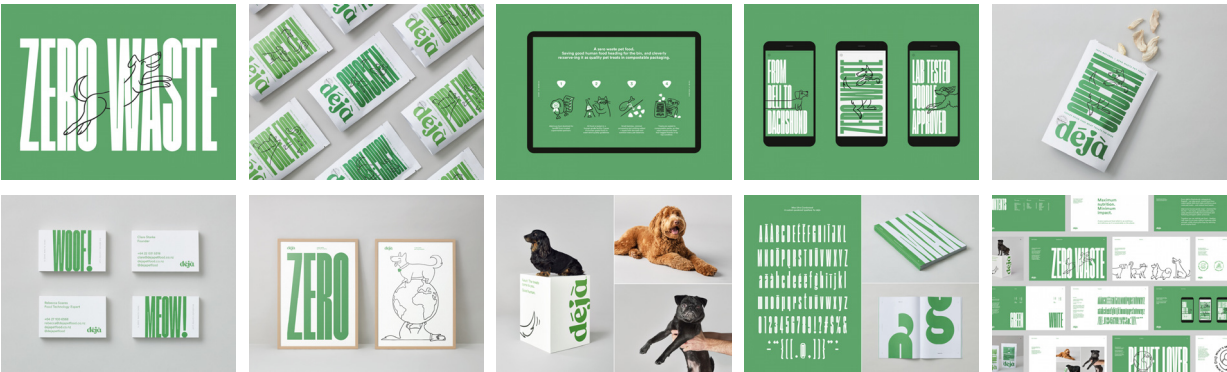
YARRA WASTE REVOLUTION (ELLIS JONES)



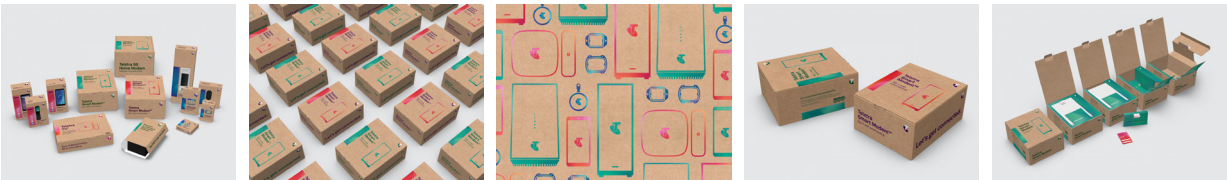
WORKSHOPS FOR BETTER WORLDS

2020 (CONTINUED OVERPAGE)

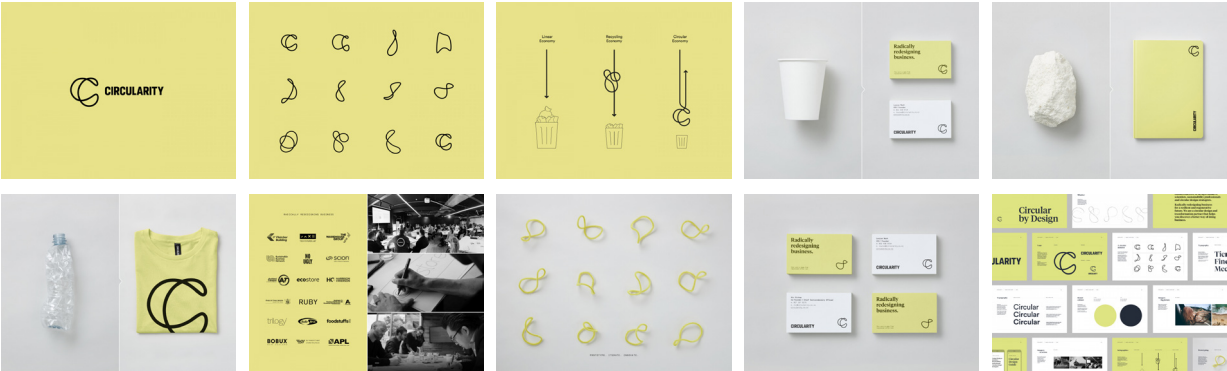
DÉJÀ (MILK)



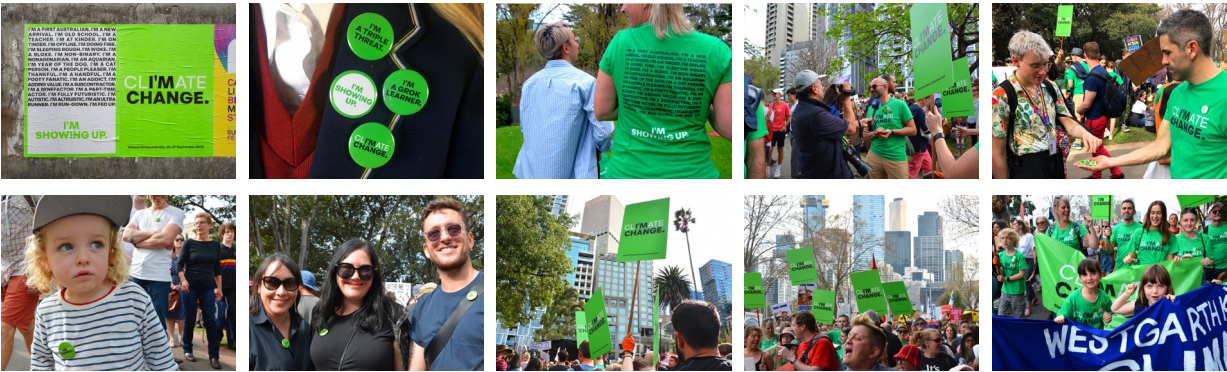
TELSTRA SUSTAINABLE PACKAGING DESIGN (BIRDSTONE COLLECTIVE)



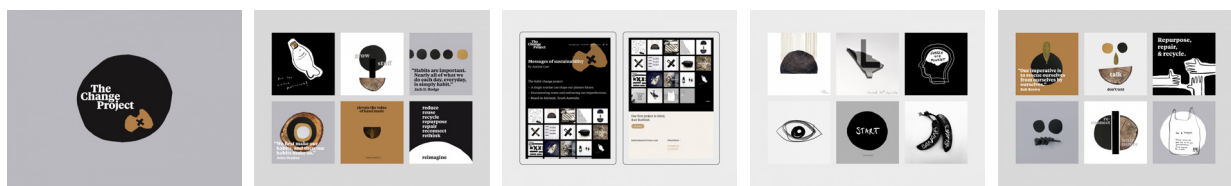
CIRCULARITY (MILK)



I'M CHANGE CLIMATE CAMPAIGN (PUSH COLLECTIVE)



THE CHANGE PROJECT (SECTOR7G)

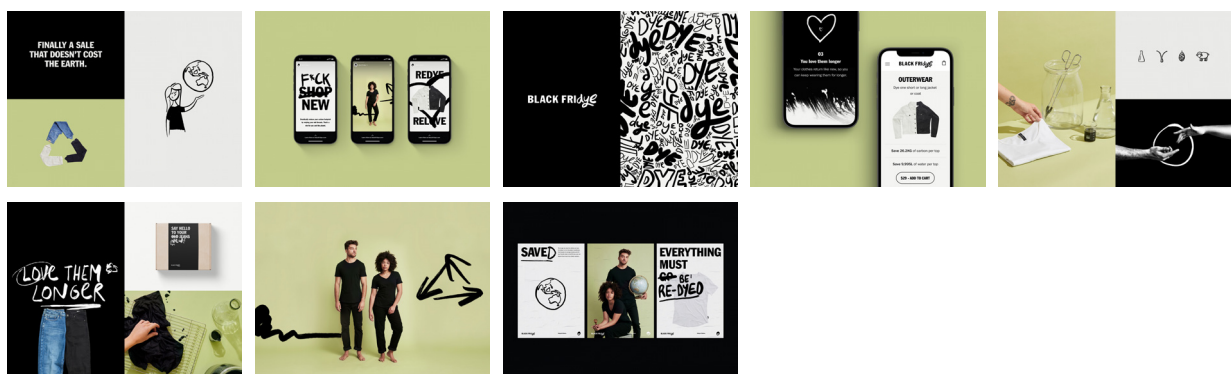


MY DAD, THE SECRET SUPERHERO (THE BRAND AGENCY)

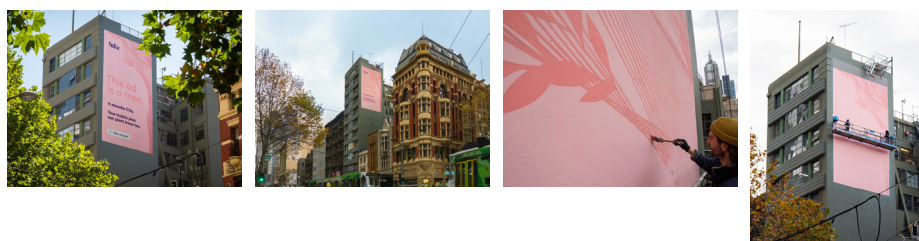


2021 (CONTINUED OVERPAGE)

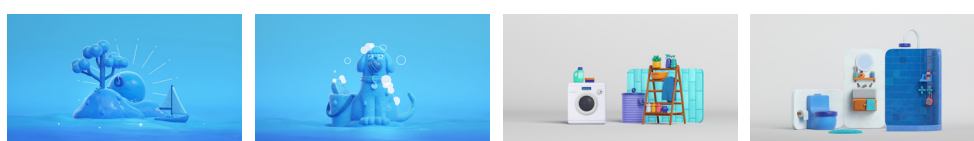
BLACK FRIDYE (FOR GOOD DESIGN LAB)



PEACHY GREEN (PAPER MOOSE)



SYDNEY WATER "IT'S AMAZING" (BUCK)

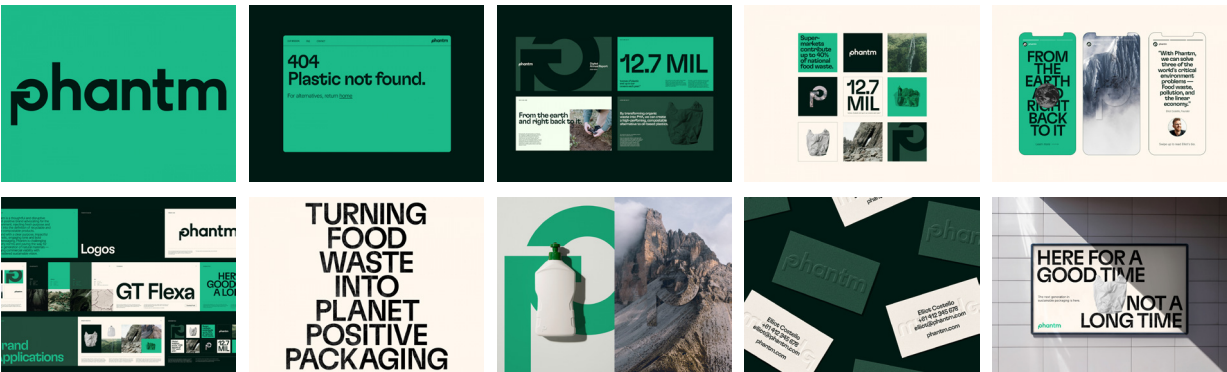


WORKSHOPS FOR BETTER WORLDS

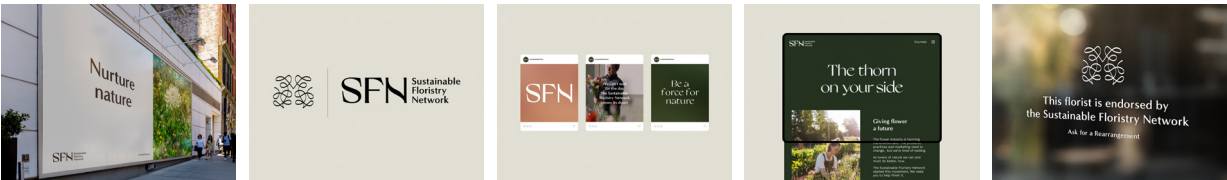
CYCLPAC (ALL OR NOTHING)



PHANTM (SMACK BANG)



THE SUSTAINABLE FLORISTRY NETWORK (ALL OR NOTHING)



B. Pattern-Finding in the 2021 Graphic Design Course Content Description of Ten Universities

The following pages display an exploratory data-mining experiment conducted in 2021 to examine the course overviews and mandatory subject descriptions of ten Australian universities' graphic design courses. The text within these pages was copied from each university's official website.

AUSTRALIAN NATIONAL UNIVERSITY—BACHELOR OF DESIGN

● ENVIRONMENT/SUSTAINABILITY ● SOCIAL/POLITICAL/CULTURAL ● ETHICAL/RESPONSIBLE ● PRODUCTS/CAREERS

COURSE OVERVIEW

Digital + Material + Innovation + Engagement Combine cutting-edge digital practices with internationally-renowned art and craft studio disciplines in the Bachelor of Design. Design students will benefit from deep immersion in digital, manual and theoretical studies and a wide overview of creative practices. From coding, to making, to manufacture, students apply hands-on design to digital and physical materials. Students delve into web design, data visualisation, and interaction design, and experiment in studios to develop expertise in the latest digital form and fabrication processes. This degree prepares students with transferable knowledge and skills required to make their mark on a rapidly changing world. **CAREER OPTIONS** ANU ranks among the world's very finest universities. Our nearly 100,000 alumni include political, business, government, and academic leaders around the world. We have graduated remarkable people from every part of our continent, our region and all walks of life. **EMPLOYMENT OPPORTUNITIES** Graduates of the Bachelor of Design may find careers in fields including object design, visual communication, data visualisation, user experience design, graphic design, web design, interface design, design thinking and strategic design. **Learning Outcomes** demonstrate skills and knowledge of the practices, languages, forms, materials and technologies in their relevant discipline; research, develop and evaluate design concepts and processes by thinking creatively, critically and reflectively; apply skills and knowledge to the creation, visualisation and production of design projects; work independently and collaboratively on design projects and respond to project demands; interpret, communicate and present ideas, problems and arguments in modes suited to a range of audiences; and recognise and reflect on social, cultural technological, environmental and ethical issues of creative practice and design considering local and international perspectives.

DESCRIPTIONS OF MANDATORY SUBJECTS

VISUAL COMMUNICATION: DESIGN AND PRODUCTION This course provides students with an introduction to the field of visual communication design, and equips them with the knowledge and skills to more effectively communicate their ideas and processes in a visual form. Students conduct research and produce practical projects as a means to interrogate and apply fundamental theories, concepts and techniques. The course examines the foundational elements of visual communication and how context shapes production and reception of visual forms. Students address visual design for print, screen and environmental graphics and gain a practical grounding in relevant design software packages, different file formats and technical production requirements. **Learning Outcomes** Upon successful completion, students will have the knowledge and skills to: strategically apply visual communication design concepts and techniques; demonstrate competency and creative ability operating design software; produce creative design solutions for specific cultural and technical contexts; conduct research into design artefacts and processes, and apply findings to creative production; substantiate design outcomes with research and rationale. **CONTEMPORARY DESIGN IN CONTEXT** Contemporary design is a vibrant field of practice characterised by applied creativity, engagement and collaboration as well as the art and craft of making. Definitions of design practice are being reformulated in response to rapid changes in technology, society and environment; design now moves across a wide range of different media, materials and contexts. In the early decades of the twenty-first century we take stock of contemporary design practice, where it has come from, and where it is going. This course provides a grounding in concepts, practices and issues in contemporary design. Through a combination of practical work, case studies, readings and research, students will develop a critical understanding of design as a discipline in the modern context; its concepts, artefacts, processes and practices. Key themes include functional and aesthetic value; design methods and processes; planning, intention and making; and the social roles and cultural contexts of design. **Learning Outcomes** Upon successful completion of this course, students will have the knowledge and skills to: develop and produce designs in response to a creative brief; articulate design processes applied in practical design projects; demonstrate knowledge of the contemporary forms of design and their historic origins; and demonstrate a critical perspective on design concepts, artefacts and practices. **THE PAST AS PROTOTYPE: HISTORY, ETHICS AND CONCEPTS FOR DESIGN IN THE TWENTY-FIRST CENTURY** The early decades of the twenty-first century have been marked by substantial ecological, economic, political, technological and social transformation, compelling us to ask how it is that we have arrived at this contemporary moment? As designers, what strategies can we employ to combat the grand challenges currently at stake? How have the innovations, social movements and seismic events of the past influenced our ethics, methods and ideas? This course introduces students to the historical precedents for contemporary design practice and the research and communication methodologies required to contextualise them. Students will learn how to research and analyse the objects, movements and systems of design and how these legacies have impacted design practice today. Employing written, verbal and visual communication, we will explore the cultural conditions that have historically produced innovation and change, the ethics of design history research and the analytical and critical skills to explore and communicate these ideas. This course is suitable for students of design and those with an interest in critically examining the historical conditions that have shaped the designed world in which we live. **Learning Outcomes** Upon successful completion, students will have the knowledge and skills to: research, develop and evaluate design concepts and processes by thinking creatively, critically and reflectively; interpret, communicate and present ideas, problems and arguments in modes suited to a range of audiences; and; recognise and reflect on social, cultural technological, environmental and ethical issues of design in local and international contexts. **DESIGN STUDIO: INDEPENDENT PRACTICE** The course provides students with a grounding in professional design practice. It requires students to research, develop and justify independent projects informed by a critical and ethical understanding of contemporary design practice. It develops professional skills in documentation and communication, and extends understandings of design through practical and theoretical perspectives on fundamental processes: problem framing, ideation, prototyping and evaluation, and reflective practice. **Learning Outcomes** Upon successful completion, students will have the knowledge and skills to: develop and articulate design problems and address them effectively through creative practice; apply and engage with contemporary design practices and methods; conduct research into design artefacts and processes, and apply findings to creative production, and document and critically reflect on design processes and outcomes.

DEAKIN UNIVERSITY—BACHELOR OF DESIGN (VISUAL COMMUNICATION)

● ENVIRONMENT/SUSTAINABILITY ● SOCIAL/POLITICAL/CULTURAL ● ETHICAL/RESPONSIBLE ● PRODUCTS/CAREERS

COURSE OVERVIEW

Enter the dynamic world of professional design with Deakin's Bachelor of Design (Visual Communication). Learn the tools, strategies and design thinking methodologies required to be an adaptive, multidisciplinary communications designer. From day one you'll learn to shape your ideas into smart and influential concepts under the guidance of industry leaders and established designers. Combine studies from related disciplines, including creative coding, photography, and animation, and enhance your skills through practical learning. Let your creativity run free and practice with the same tools and technologies professionals use in our world-class design facilities. In your final year, you'll enter the studio to work on real client projects, with the opportunity to showcase your finished product to the public. This practical experience prepares you for the challenges of your future role, and ensures you graduate ready to make a real impact in the rapidly changing field of design. Want the skills to thrive in a career in communication design? You'll learn how to interpret design briefs and develop specialised skills in web design and user experience (UX), as well as traditional skills in typography, illustration, branding and print design. Benefit from Deakin's networks and relationships within the design industry and have opportunities to include your work in exhibitions and showcases. Take your learning further and develop skills in: creative coding 3D environments digital photography motion graphics animation.

DESCRIPTIONS OF MANDATORY SUBJECTS

DESIGN THINKING This unit will investigate 'design thinking' as a strategic methodology and problem solving process. Taking a multi-discipline, interdisciplinary approach, students will be required to use 'design thinking' as a problem solving process. 'Design thinking' methods will require students to adopt a human-centred approach to innovation that draws on their skills to integrate the needs of people, the possibilities of technology, and the requirements of business and society as a whole. Students will work individually and in workshop teams, the final assessments will be a combination of research and practice outcomes. Students will use 'Design thinking' methods to address a 'wicked problem'. **DESIGN SKILLS AND TECHNOLOGIES 1** This unit introduces students to the tools necessary to represent ideas through static and moving imagery. This is achieved through a combination of research and experimentation with processes on and off the computer. Students will be introduced to techniques for composition, mark making, digital imaging, storyboarding and animation. Practical and research projects will require students to: understand and apply design principles, create a digital composition, build an animated sequence. A research report will take the form of a concept plan and time based storyboard. **DESIGN SKILLS AND TECHNOLOGIES 2** This unit introduces students to object design and prototyping. Students will have the opportunity to design an object, make it in a 3D software program, create a 3D printable file (which can be printed into a real-world object) and then bring the virtual object into a game engine. How people interact with and receive the designed objects, in their different virtual and physical states, will be a key consideration in our creative, practical and theoretical investigations. **DRAWING AND ILLUSTRATION** Drawing skills and the speed in which you get ideas on the page, are still essential skills regardless of the broad digital environment. Conceptualising and communicating ideas in sketch form, through to having the ability to demonstrate a complex idea quickly and easily, drawing is still a process that is valuable to a design thinker. In this unit, students will think fast and draw fast with work completed in class time. There will be time to choose your best ideas and develop them further as folio pieces but the challenge in this unit will be to conceptualise ideas and put them on paper maximising this most essential communication tool. **TYPOGRAPHY AND PUBLICATION DESIGN** Typography is an essential component to communication and this unit explores the theory and application of forms and structures of typography including the anatomy and applications of type and font families across print, digital and web applications. This unit will address and engage with the impact and implications of selecting and applying typography to a variety of design scenarios in historical and a multifaceted contemporary setting. This unit introduces and reinforces industry standard typography practices for both print and screen based environments. Student creative thinking ideation and project strategies for design briefs are developed to enable the advancement of information technology skills, design thinking and design construction methods. This unit engages self-directed learning in conjunction with a focus on attention to discipline specific scholarly research, conceptual analysis, and global industry practice. **PROFESSIONAL PRACTICE IN DESIGN** In this unit, students will concurrently investigate 2 topic areas. The first is the professional role of a designer in industry considering their many extended roles and responsibilities. Areas explored will include liaison with printers including prepress preparation and production. This area will also include issues associated with client liaison, project management, freelance contracts, ethics and copyright law. The second topic area will focus on preparing students for industry including career path planning, professional practice branding and positioning. Students will develop their own self-promotion material and a portfolio as well as discuss topics such as interview techniques, employment issues and presentation skills. **DESIGN LABORATORY** This unit advances students' ability to identify, assess and integrate emerging technologies into the design process. The unit's goal is to apply this integrated knowledge to address real life design challenges. In a laboratory environment students work both individually and collaboratively in response to design briefs. This involves a dynamic combination of strategic project planning and roll out, international industry-based research, team building, experimentation and application. Students are introduced to agile team structures and design methods with a complementary focus on technology to solve complex problems in a creative way. This unit requires students to prepare a case study which demonstrates and explains the process, development and strategic integration of technology and design within their project. Students critically analyse findings delivered in both written and oral formats that culminate in a showcase pitch of final outcomes to explain ideas, design rationale, strategy and processes. **WEB DESIGN AND INTERACTIVITY** This unit explores the applications and implications of designing for interactivity and the web. Central to this understanding is the relationship between design principles and the efficient usability in an interactive environment. Students will learn to design and construct strategic, interactive, energetic and visually imaginative solutions that carefully consider site, audience, navigation structure and engagement. **BRANDING DESIGN** The unit will introduce the key concepts involved in building a visual brand strategy culminating in the development of a style guide for a real world business. Students will learn branding theories and practices including marketing, positioning, business practices, visual consistencies, stakeholders and practical design issues. These topic areas will be explored in part through a redesign problem for a real world company or organisation. **DESIGNING USER EXPERIENCE** In this unit, we explore the practices and techniques of designing user experiences. Emergent technologies have a profound impact on practices of reading, experiencing and consuming media. This unit addresses this dynamic situation introducing user experience design for human-centred and agile environments, which leverage emergent technologies, consumer electronics and/or mobile devices. Learning about and utilising visual communication design, navigation, flow, information, semiotic hierarchy, and data will be negotiated through consultation, research and practical exercises. This unit is geared towards the production of strategies and design processes to capitalise on new developments. Here, we focus on understanding and implementing digital project management practices, wire framing, design patterns, visual design comps, whilst working with the Adobe Creative Suite. **TYPE AND ICONS** The importance of understanding type and icons as methods of communication is vital for designs to be successful and appeal to varied target audiences across a range of media. Iconography communicates direction and information using visual signs and symbols that crosses language barriers and allows for simple instructions to be made and followed and well as express emotions. The careful pairing of fonts with icons and considered typographic hierarchy allows designers to provide directions to viewers and information to be read as intended to ensure instructions are clear. This unit will examine methods of instructional communication using typography and iconography to inform best practice. Students will then learn to develop their own set of visual instructions to inform and communicate messages to target audiences. **COLLABORATIVE DESIGN PROJECT** In this unit, students explore the practices and processes for multidisciplinary design collaboration. Students will form multidisciplinary teams that will collaborate with each other, their clients and the target audience to resolve complex creative projects from conception to completion. This unit will provide the opportunity for students from all Bachelor of Design courses to work in a studio setting to connect with industry and commercial partners. They will work on real-world projects to solve real-world problems through design. The process of collaboration identifies design and designers as integral to the development and success of any project. This unit identifies effective design collaboration as integral to development and the success of any project. Students will get the opportunity to exhibit their work in a public environment at the completion of the unit. **INDIVIDUAL DESIGN PORTFOLIO** This unit takes its focus on your portfolio to critically evaluate and improve the work you will present when applying for employment opportunities. Students will undertake a process of critical evaluation and reflection collectively and individually to analyse and evaluate current design work. Students will then take focus on improvement and refinement followed by additional content to advance their folio. **DESIGN TO CHANGE THE WORLD** This unit will focus on the requirement of design to act as an agent of change. Design has matured as an industry and designers are required to do more than develop and materialise ideas using contemporary technologies. Design practitioners are now called on to conceptualise experiences and facilitate social, cultural, environmental and economic outcomes that can improve the human condition. This unit will unpack and expand on the World Economic Forum statement that, "Design is an agent of change that enables us to understand complex changes and problems, and to turn them into something useful. Tackling today's global challenges will require radical thinking, creative solutions, and collaborative action (World Economic Forum, Global Agenda Council on Design, 2009). Students will explore design as an agent of change by researching design activism and design thinking to analyse systemic problems that empower and deliver creative outcomes to complex challenges. Students will be presented with a selection of wicked, social problems and will be required to consider ways of combining different design disciplines to address these issues using design as an agent for change; addressing big picture problems in the world and taking a step towards change. **CREATIVE DESIGN STUDIO** Creative Design Studio considers the broader applications of all forms of Design in an evolving contemporary environment. This involves negotiating the expectations of industry and the functions, processes, languages and materials of a range of complex design scenarios. Students work with project strategy, incorporating practical and theoretical considerations for physical and digital systems of branding properties and environmental design. This includes the independent and self-directed development of project scope, from inception and ideation and managing workflow, to provide a range of solutions. Demonstrating outcomes within budgets and on time.

MONASH UNIVERSITY—BACHELOR OF DESIGN (VISUAL COMMUNICATION)

● ENVIRONMENT/SUSTAINABILITY ● SOCIAL/POLITICAL/CULTURAL ● ETHICAL/RESPONSIBLE ● PRODUCTS/CAREERS

COURSE OVERVIEW

With specialisations in Communication Design, Industrial Design, Spatial Design or Collaborative Design, our Bachelor of Design degree responds to the increasing global demand for designers who can respond to the complexity of contemporary global society, be inclusive and ethical and contribute sustainably. Our most complex challenges are a call to action for all designers. Your qualification will be a Bachelor of Communication Design. Be a bold, imaginative Communication Designer with our Monash degree. Being a design professional is a creative and varied career with endless opportunities to work with different clients and projects and at Monash you will receive a design education that will enable you to make a sustainable difference and have impact. You apply for the Bachelor of Design, and then choose your specialisation - Communication, Industrial or Spatial after first semester, or you can change to Collaborative Design after second year. Our four specialisations build a high level of design expertise and you will graduate with a degree in your specialisation. All our design degrees are recognised by the Design Institute of Australia (DIA). With no folio entrance requirement, this degree is open to anyone who is curious and passionate to make a difference and you will learn the technical capabilities and strategic skills to be a successful designer. Communication designers use visuals to strategically communicate information and ideas. They help shape the visual language of society through creative visual narratives and in so doing can help change attitudes and behaviours. Communication designers do not simply create beautiful graphics, but develop the skills and capabilities to powerfully communicate complex ideas and messages that can have an impact and effect. Communication designers work in unexpected places like improving health outcomes, improving transportation and wayfinding, designing new services, creating new sustainable responses and even helping organisations adjust to change. In our Communication Design studios, you'll use both hand-generated drawing and computer-aided design applications like Photoshop, Illustrator and InDesign developing technical ability in these essential design applications. You'll be encouraged to experiment with image making, typography, analogue and digital media, UX and more, as tools and techniques to solve specific design challenges. In the workshops you'll learn how to work with different materials and learn how to use digital tools like laser-cutters, 3D printers, robotics, coding and animation software. Group design projects will teach you how to think like a designer, developing the strategic skills to identify design problems and working your way through the design process. Working with a range of industry clients on real projects, you will gain first-hand experience of professional practice and build a folio of work that will support your entry into a design career. Communication Design is not just about creating work that looks good. We think that design can make a valuable contribution to visual culture, as well as enhancing social engagement and supporting economic and environmental futures. You will use your creative and technical skills to create visually arresting graphics, communicate complex ideas combined with the professional skills to handle large, complex projects. You could be hired to work as the designer for one company, be part of a design agency, or work independently and take on clients as a freelancer. You graduate with a Bachelor of Communication Design which is recognised by the Design Institute of Australia (DIA). **CAREER OPTIONS** Communication designer, brand strategist, multimedia designer, web/UX designer, art director, interaction designer, information designer, publication designer, advertiser, packaging designer, animator, television and motion graphic designer, illustrator, stage/set production designer, experience designer.

DESCRIPTIONS OF MANDATORY SUBJECTS

INTRODUCTION TO THE HISTORY AND THEORY OF ART, DESIGN AND ARCHITECTURE This unit examines the history of European Modernism as it relates to the disciplines of visual communication, industrial design and spatial design. Key Modernist movements and practices are studied with particular consideration given to their ideological, political and cultural contexts and motives. The critical tendencies of twentieth-century avant-garde practices are considered in terms of their lasting implications for the social role of design. You will develop a range of critical approaches to analysing design in relation to its historical, social and cultural context skills necessary to your disciplines and practice. **Learning Outcomes** On successful completion of this unit you will be able to: 1. Identify works of art, design and architecture and place them in their social and historical contexts; 2. Recognise relationships between art, design and architecture throughout their recent histories; 3. Engage with key social, ethical, and cultural concerns in contemporary culture, as these relate to art, design and architecture; 4. Critically analyse artworks, design objects and architectural structures from recent periods in the history of art, design and architecture; 5. Critically discuss and reflect on the relevance of various historical style and movements in art, design and architecture to present day concerns in these fields. **DESIGN AND THE AVANT-GARDE** This unit explores key developments in the recent histories of art, design and architecture. In it, you will analyse key objects and practices belonging to these histories and reflect on their importance for the way we live today. Through written assessments and tutorial discussions, you will develop communication skills as you learn to express your point of view and develop the language of the creative disciplines. You will also develop your ability to engage critically with key issues and concerns in the cultures of art, design and architecture. **Learning Outcomes** On successful completion of this unit you will be able to: 1. Identify and describe the major movements of modernism in Design; 2. Recognise and analyse key examples of practices in design; 3. Discuss the legacy of the European avant-gardes and their lasting influence upon the social role of the designer; 4. Translate basic theoretical contexts in to practice; 5. Critique works of design, and articulate these analyses in both spoken and written form; 6. Identify questions and consider ways to search for information. **SOCIOLOGIES OF DESIGN** This unit introduces you to a range of sociological, anthropological and critical theories as applied to the production, consumption and exchange of designed objects, spaces, experiences and images. You will develop your ability to analyse works of design from a range of theoretical perspectives and apply this knowledge to your own disciplinary contexts and practices. **Learning Outcomes** On successful completion of this unit you will be able to: 1. Understand and discuss key sociological, anthropological and critical theories of objects, spaces, experiences and images; 2. Critically discuss the systems of production, consumption and exchange that impact upon design; 3. Analyse works of design from a particular theoretical perspective, using the correct terminology and appropriate analytic emphasis; 4. Present critical arguments in an informed and articulate manner, whether spoken or written; 5. Relate and apply theoretical content to your own practice. **RESEARCH FOR DESIGN** This unit develops the capacity to understand and apply the methodologies of current design research practice. Through using research processes appropriate to their discipline, you will investigate contemporary issues that penetrate the links between design, society, culture and the environment. You will be required to use your research to uncover existing knowledge; use it to articulate and substantiate an argument; and build on it to formulate your own critically informed ideas. Through acquired research skills you will be able to interrogate a range of contemporary design issues and consider these in relation to your own disciplinary context and practice. **Learning Outcomes** On successful completion of this unit you will be able to: 1. Demonstrate a capacity to undertake design research appropriate to your level; 2. Identify relevant design research theories, practices and methods and apply these to individual practice; 3. Critically analyse the currency of design practice; 4. Construct an argument informed by thorough and appropriate research methods, in verbal and written form; 5. Synthesise a range of relevant sources to plan and manage your research. **DESIGN STRATEGY AND PROFESSIONAL PRACTICE** This unit develops the capacity to understand the expectations of professional practice in your specialisation area. Through collaboration and critique you will examine a practice precedent from your field. Using this precedent you will investigate and determine the project stakeholders and understand their respective contributions. You will prepare a project return brief, design a project plan and prepare a strategy presentation for the various stakeholders. Working in partnership with your peers you will learn and apply skills in negotiation, teamwork, written and verbal communication and project management. **Learning Outcomes** On successful completion of this unit you will be able to: 1. Demonstrate an understanding of the design process in a business context, from briefing to project completion; 2. Identify and apply the consultative and investigative processes appropriate for your specialisation; 3. Design a project plan that demonstrates a well-developed understanding of your specialisation's conventions; 4. Justify your project plan in relation to client requirements and creative rationale using a written report and presentation. **DRAWING 1** An intensive program facilitating the acquisition and development of practical and intellectual skills required by art and design students in the practice of drawing. This unit explores the ways drawing methodologies can contribute to the development and communication of creative practice and research. The unit challenges and expands how you engage modes of expression, develop ideas and record the world around you. Observation, analysis, interpretation and expression are studied through drawing processes in varied media and mark-making methods - becoming a generative tool for the expression of ideas, forms and narratives. A range of built and natural environments, figures and models are used within sequential projects to explore key visual elements and principles. The projects will also equip you with visual problem-solving techniques and experimental approaches to materials, that you may then apply to issues pertaining to contemporary cultural production. **Learning Outcomes** On successful completion of this unit you will be able to: 1. Demonstrate an understanding of the formal elements and principles of drawing as they are incorporated within compositional dynamics; 2. Develop an experimental approach to mark making techniques through a diverse range of media in relation to image production; 3. Analyse the processes of perception and observational drawing to represent spaces, objects, forms and structures, in relation to ideas, narratives and research; 4. Develop drawing skills and strategies to translate data, concepts and communication as a formative skill in studio research; 5. Explore the historical, theoretical, philosophical and aesthetic contexts of drawing. **COLLABORATIVE DESIGN STUDIO 1** Collaborative design studio 1 will immerse you in the essential, foundational learning required of all fields of design. You will understand how design thinking informs design outcomes and their impact; have the capacity to identify design problems before navigating solutions; locate the user at the centre of all design challenges; identify and apply design methodologies and processes in ethically and culturally sensitive ways; and understand design is beyond an aesthetic, artefact-centred practice, and one that also embraces embodied, temporal and dematerialised modes of engagement. Through studio-based project learning, this unit will introduce its cohort to collaborative activities that encourage thinking beyond traditional discipline specificity, and help you develop hybrid competencies that can be built upon in all ensuing studio units. The projects will blend traditional modes of making with new and innovative ways of doing. Project learning will encourage personal and collective curiosity through applying a range of design enquiry processes such as ideation, prototyping and observation. You will also learn to be critically reflective, able to review and re-evaluate your design solutions and those of others with clear and constructive communication capabilities. **Learning Outcomes** On successful completion of this unit you will be able to: 1. Demonstrate skills in interpersonal communication and collaboration; 2. Respond to real and speculative challenges through design thinking and making processes; 3. Locate design's role in the expanded realm of contemporary systems of social, economic and political operation;

WORKSHOPS FOR BETTER WORLDS

4. Navigate complexity through an iterative process of prototyping and ideation; 5. Utilise and value transdisciplinary modes of design enquiry and apply them in inventive ways. **COMMUNICATION DESIGN STUDIO 4** Communication design studio 4 will advance to a high level the practical, technical and conceptual skills developed in preceding studios. Having been exposed to a broad range of creative communication processes in the prerequisite units, you will be required to identify an area of specialisation in which to participate in CDS3001. Specialisation areas will be identified upon enrolment into the unit and may include (but will not be limited to) publication design, typography, image, brand, animation, sound and motion, interactivity and others areas that develop as the communication design field continues to broaden. Within their area of specialisation you will explore the breadth of communication possibilities through a carefully composed program of studio-based projects relevant to your chosen area. These projects, though different in each specialisation, will be comparable in assessment tasks and learning outcomes. Within each studio, you will develop your skills in both the technology and conceptual thinking required of your specialisation to a high level of competency. You will be encouraged to approach this unit with the utmost care in your selection of specialisation. General exposure to the areas of specialisation will have occurred throughout the preceding units, but counselling from the unit's chief examiner and the course coordinator will be made available to assist your selection of your particular area of study. The projects undertaken in CDS3001 will contribute towards a body of work intended to demonstrate your refined level of competence within the communication design field, and assist you to either progress into further study or gain appropriate employment in the communication design arena. **Learning Outcomes** On successful completion of this unit you will be able to: 1. Engage with the communication design process to plan and manage your design outcome from initial research and concept development to final resolution; 2. Construct communication design solutions utilising the media and processes expected in your specialisation; 3. Produce design solutions that demonstrate a clear understanding of communication conventions, but with an open attitude to inquiry and experimentation; 4. Identify and expertly use the technology appropriate for each design outcome; 5. Critically assess your design solutions in order to improve your final outcome; 6. Articulate an informed rationale for each communication design solution. **COMMUNICATION DESIGN STUDIO 5** Communication design studio 5 will advance to a high level the practical, technical and conceptual skills developed in preceding studios. Having been exposed to a broad range of creative communication processes in the prerequisite units, you will be required to identify an area of specialisation in which to participate in CDS3002. You may choose to continue the same area as that selected in CDS3001 to hone your specialist skills, or opt for a different area in order to broaden your expertise. Specialisation areas will be identified upon enrolment into the unit and may include (but will not be limited to) publication design, typography, image, brand, animation, sound and motion, interactivity and others areas that develop as the communication design field continues to broaden. Within their area of specialisation you will explore the breadth of communication possibilities through a carefully composed program of studio-based projects relevant to your chosen area. These projects, though different in each specialisation, will be comparable in assessment tasks and **learning outcomes**. Within each studio, you will develop your skills in both the technology and conceptual thinking required of your specialisation to high level of competency. You will be encouraged to approach this unit with the utmost care in your selection of specialisation. General exposure to the areas of specialisation will have occurred throughout the preceding units, but counselling from the unit chief examiner and course coordinator will be made available to assist your selection of your particular area of study. The projects undertaken in CDS3002 will contribute towards a body of work intended to demonstrate your refined level of competence within the communication design field, and assist you to either progress into further study or gain appropriate employment in the communication design arena. **Learning Outcomes** On successful completion of this unit you will be able to: 1. Engage with the communication design process to plan and manage your design outcome from initial research and concept development to final resolution; 2. Construct communication design solutions utilising the media and processes expected in your specialisation; 3. Produce design solutions that demonstrate a clear understanding of communication conventions, but with an open attitude to enquiry and experimentation; 4. Identify and expertly use the technology appropriate for each design outcome; 5. Critically assess your design solutions in order to improve your final outcome; 6. Create a body of work indicative of your highest level of competency to showcase your abilities to potential employers or aptitude for further education.

ROYAL MELBOURNE INSTITUTE OF TECHNOLOGY—BACHELOR OF DESIGN (COMMUNICATION DESIGN)

● ENVIRONMENT/SUSTAINABILITY ● SOCIAL/POLITICAL/CULTURAL ● ETHICAL/RESPONSIBLE ● PRODUCTS/CAREERS

COURSE OVERVIEW

Communication design applies to the shaping of communication across all aspects of contemporary society, from commercial, entertainment, and education, to environmental, cultural and civic sectors. This degree prepares you to be a locally and internationally-aware communication designer capable of working across a range of domains and industries, including graphic design, advertising, branding and illustration consultancies, as well as design and communication units within corporate, government and non-government organisations. You'll learn skills alongside a strong selection peers in studio-based facilities. Throughout the degree, you will develop skills in negotiating a consensus among participants with a range of interests in the design outcome. You will also learn how a visual strategy can contribute to all phases of the problem-solving process. This course has a strong focus on studio learning, enabling you to learn by doing. All lecturers have worked in the design industry throughout their careers, and will offer you key insights into the contemporary design world. Most of the work is individually assessed through submission of printed artefacts (books, logo, objects), digital submissions, class presentations and client and peer review of work. **INDUSTRY CONNECTIONS** RMIT runs an internal mentor scheme, as well as a number of industry events where students and design professionals work together on projects or professional practice. This course maintains strong industry links, and many opportunities exist for students to work with industry professionals. You will work on projects with industry partners, including: Australian Graphic Design Association Penguin Books Deloitte Kit Cosmetics Hardie Grant Jacky Winter Group ABC CFA Roger Sella de Bono Institute MECCA. International opportunities Students have the option to study overseas for a semester as an exchange or study abroad student. Past students have studied in North America and Europe. As design is an international language, your skills will equip you to work in the Australian design industry as well as overseas. There are also opportunities to study abroad through global work, exchange and study experiences with over 165 partner universities worldwide. This course is also delivered as a top-up in Singapore in partnership with the Singapore Institute of Management. **Learning outcomes** The knowledge and skills you will acquire throughout this degree and how they can be applied in your career are described in the learning outcomes. Electives and program structure In the first two semesters, you are taught in a series of assigned sequential, interrelated projects, which cover a broad spectrum of communication design activities. The following four semesters see you participate in a range of design and communication studios that support the sequential study pattern of this course. Software delivery is taught in association with the design process, rather than in isolation. On completion of the degree, your software knowledge will be of industry standard for print and digital media. Major areas of study are: communication strategies conceptual thinking design process media publication strategic branding typography. You can also undertake study in courses within other media, design and communication programs as electives or interdisciplinary projects.

DESCRIPTIONS OF MANDATORY SUBJECTS

IMAGE AND IDENTITY This course is an introduction to image-based communication – image as language, and visual personality. You will explore visual literacy and design principles through graphic, illustration and photographic-based imagemaking. Emphasis will be placed on building a foundation for strategic thinking, exploration, experimentation and self-discovery when creating or manipulating imagery and designs that respond to general themes, ideas and contexts. **Learning Outcomes** You will be assessed on your development against the following Program Learning Outcomes: Integrate a broad and deep range of design skills for professional and creative problem solving. Demonstrate creativity, critical thinking and innovation when identifying and solving problems in diverse contexts within the discipline. Communicate using diverse formats and strategies to audience within and external to your discipline. Upon successful completion of this course, you will be able to: Analyse symbolism and how meaning is represented through composition and art direction. Use image-making to construct and communicate ideas clearly and effectively to defined audiences. Produce a range of communication design outcomes in a variety of forms to convey different meanings. Interpret and discuss communication design outcomes in relation to visual literacy and design principles. **COMMUNICATION DESIGN STUDIES** Design and the world This course introduces you to communication design theory and history in a global context. You will explore the history of communication design from pre-print culture, through the print revolution and into the digital age. You will approach the history with a focus on the various design movements of that time; how they were influenced by and embodied their political, social and economic contexts. You will develop skills in descriptive and reflective writing, as well as investigation and analysis to inform your practice as a communication designer and prepare you to challenge, question and justify your design decisions. **Learning Outcomes** You will be assessed on your development against the following Program Learning Outcomes: Demonstrate broad and coherent knowledge of the place of Communication Design in society and the principles it operates within. Apply a body of theoretical and practical knowledge and specific skills in your discipline in which to base your professional practice or future study. Apply initiative and judgment in planning, problem solving and decision making in your practice or future study. Upon successful completion of this course, you will be able to: Identify and describe key movements and periods in the history of Communication Design. Describe the roles that social movements and social contexts play in the development of Communication Design. Identify key design movements and examine their influence on the practice of Communication Design. Reflect on and discuss the place of design in society. **COLOUR AND INFORMATION DESIGN** Colour and information strategies In this course you will explore how theories of colour inform design strategies and colour models that are key to successful production for screen and print-based design outcomes. You will examine the theories and models relating to colour and be encouraged to apply and reflect upon the theories and models so you understand how theory can support effective design. You will investigate the role and importance of both traditional and contemporary practices of design, building your capacity to communicate information effectively through words, image and graphic composition. The course will introduce you to the knowledge, skills and strategies that are utilised to produce creative responses to communication tasks. The design principles and studio techniques that underpin effective design solutions will also be addressed. **Learning Outcomes** You will be assessed on your development against the following Program Learning Outcomes: Demonstrate broad and coherent knowledge of the place of communication design in society and the principles it operates within. Integrate a broad and deep range of design skills for professional and creative problem solving. Upon successful completion of this course, you will be able to: Examine the use of colour in communication design within particular global and historical contexts. Select and implement colour and information graphics as a part of screen and print-based design problem-solving. Identify and describe strategies for effective visual communication in diverse contexts. Develop creative responses to communication design problems in the area of colour and information design. **STUDIO 1 COMMUNICATION DESIGN** How to use this Program: an introduction to design studio learning This course provides you with an introduction to Communication Design Studio practice at RMIT. You will be inducted into the Design Studio system, which is the foundation of our practice of inquiry based learning and teaching. Drawing on your own experiences, knowledge and abilities, and supported by an integrated program of theoretical and practical study, you will construct responses to issues in design and society. The studio is an expanded space to work in, and offers several options for you to explore, ranging from craft-based approaches to forward-looking design. You will meet design practitioners and educators who are directly involved in the issues covered. **Learning Outcomes** You will be assessed on your development against the following program learning outcomes: Demonstrate creativity, critical thinking and innovation when identifying and solving problems in diverse contexts within the discipline. Communicate using diverse formats and strategies to audiences within and external to your discipline. Work with others in a range of roles and contexts, demonstrating cultural, environmental and social awareness and ethical and reflective practice. Apply initiative and judgement in planning, problem solving and decision making in your practice or future study. Upon successful completion of this course, you will be able to: Use critical thinking and enquiry-led processes to research contemporary issues and develop targeted design communications. Produce design artefacts through creative methods that incorporate material, critical and reflective practices. Discuss how design interfaces with society and identify the characteristics and needs of specific audiences. Identify and apply effective collaborative design methods, including critiquing the work of peers and constructively reflecting on feedback received. Apply project management skills that support your creative practice. **TYPOGRAPHY IN DESIGN** Type and meaning In this course you will explore the cultural influences on typography and the ways in which typography conveys different messages to readers. You will develop strategies to analyse spatial relationships and apply information hierarchies to create different types of reading experiences. You will explore the rich history of type design and investigate the typographers who have been influential in our discipline. **Learning Outcomes** You will be assessed on your development against the following Program Learning Outcomes: Critically analyse, synthesise and reflect on your discipline in both local and global contexts. Integrate a broad and deep range of design skills for professional and creative problem solving. Upon successful completion of this course, you will be able to: Explain the fundamental role that typography plays in developing legibility for the reading audience. Analyse the cultural significance of typography as a means to convey messages. Compare and contrast different typographic approaches and how they influence and change meaning. Apply a range of typographic approaches in response to specific design problems. Critically reflect upon design responses incorporating different typographical approaches for a range of media and audiences. **INTRODUCTION TO PUBLICATION DESIGN** Managing complex information In this course you will combine images, text, and other design elements into design publications to inform or entertain a specific audience. You will identify and develop strategies for effective design of different types of publications for print and screen based use. Through an introduction to different theories and principles of design, you will develop skills for spatial organisation and hierarchy of compositional elements and type using design strategies including grids, flow lines, hero elements, colour and contrast. **Learning Outcomes** You will be assessed on your development against the following Program Learning Outcomes: Critically analyse, synthesise and reflect on your discipline in both local and global contexts. Integrate a broad and deep range of design skills for professional and creative problem solving. Upon successful completion of this course, you will be able to: Analyse and interpret the way complex information is presented in a range of publication forms, including print and screen based outcomes. Describe and apply a range of methods to construct hierarchies of information. Integrate type, image, colour and flow of information in response to specific publication briefs. Evaluate the strengths and weaknesses of design responses for specific publication briefs. **STUDIO 2 COMMUNICATION DESIGN** Consolidating and extending your design knowledge Design Studios aim to develop, apply and test your communication design skills, and form the foundation of our inquiry based learning and teaching. Design Studio learning is iterative and generative. It allows you to construct your own creative design practice as you move through the program. At this level you will be expected to formally locate your work within the relevant historical, theoretical, social and technical contexts. An emphasis on global practice and design innovation is part of

WORKSHOPS FOR BETTER WORLDS

the focus of this studio. You will be able to choose from a range of Studio projects framed by themes of Communication Design Craft, Strategy and Futures. Details of each project are set out in the individual studio guides. During your program of study you will have the opportunity to select studio options from each of these program themes. You will work with students from different levels and entry points in the program, supported through a range of seminars, lectures and workshop activities. **Learning Outcomes** You will be assessed on your development against the following Program Learning Outcomes: Critically analyse, synthesise and reflect on your discipline in both local and international contexts Demonstrate creativity, critical thinking and innovation when identifying and solving problems in diverse contexts within the discipline. Communicate using diverse formats and strategies to audience within and external to your discipline. Upon successful completion of this course, you will be able to: Design outcomes from specific industry based briefs. Analyse how design functions in relation to its audience and discuss the influence of audience behaviours. Examine the principles of design thinking as applied to design research and making. Plan a design response, incorporating time management, prototyping and production processes. Provide constructive feedback to your peers. **DEVELOPING COMMUNICATION DESIGN EXPERTISE** Developing your design practice. This course is designed to give you the opportunity to develop your expertise in a field of communication design, such as illustration, book as object, packaging, typography, web and mobile development, event design and experimental practices. Through projects, presentations and coursework you will develop concepts and skills to compliment Communication Design Studios. You are encouraged to push the boundaries of design, take risks and experiment with different techniques and materials. There is an emphasis on technique and making in this course. The works you produce will demonstrate a high level of crafting and attention to detail. You will be introduced to practitioners in the field and how they operate in the design community. You will also be exposed to the employment opportunities in each field. **Learning Outcomes** You will be assessed on your development against the following Program Learning Outcomes: Demonstrate broad and coherent knowledge of Communication Design in society and the principles it operates within. Integrate a broad and deep range of design skills for professional and creative problem solving. Upon successful completion of this course, you will be able to: Explore design practice using a specific design medium or practice perspective. Investigate media and practices, including conventional and non-conventional approaches. Design responses to a range of design problems. Review and report on how this medium or practice extends your knowledge and skills. **STUDIO 3 COMMUNICATION DESIGN** Discovery and insights Design Studios aim to develop, apply and test your communication design skills, and form the foundation of our inquiry based learning and teaching. Design Studio learning is iterative and generative. It allows you to construct your own creative design practice as you move through the program. At this level you will be expected to take risks and challenge conventions in order to test the limits of your design prowess. You will be able to choose from a range of Studio projects, framed by themes of Communication Design Craft, Strategy and Futures. Details of each project are set out in the individual studio guides. During your program of study you will have the opportunity to select Studio options from each of these program themes. You will work with students from different levels and entry points in the program, supported through a range of seminars, lectures and workshop activities. This is the designated Work Integrated Learning (WIL) course for BP115 Bachelor of Design (Communication Design). This course includes a work integrated learning experience in which your knowledge and skills will be applied and assessed in a real or simulated workplace context and where feedback from industry and/or community is integral to your experience. **Learning Outcomes** You will be assessed on your development against the following Program Learning Outcomes: Apply a body of theoretical and practical knowledge and specific skills in your discipline in which to base your professional practice or future study. Work with others in a range of roles and contexts, demonstrating cultural, environmental and social awareness and ethical and reflective practice. Apply initiative and judgement in planning, problem solving and decision making in your practice or future study. Upon successful completion of this course, you will be able to: Evaluate a design project through its inception to completion. Critically analyse opportunities and what is at stake in taking risks. Devise design project responses for a specific outcome integrating research, alternative design methods and approaches. Communicate your responses in an innovative and critical manner, taking into account the selection of appropriate media and communication strategies. Critically reflect on the role and implications of risk taking for innovation. **COMMUNICATION DESIGN PROFESSIONAL PRACTICE** The business of design Communication design is a profession that spans creative and commercial pursuits. Designers need to be entrepreneurial regardless of being employed or self-employed. In this course you will explore the commercial and professional side of design: how a range of design businesses are setup and run; the value of design artefacts and concepts; professional, ethics and legal, and intellectual property obligations; and entrepreneurial strategies. You will explore Asia/Pacific regional design organisations and practices. You will build your knowledge of the region and its design industries and specialisations. **Learning Outcomes** You will be assessed on your development against the following Program Learning Outcomes: Apply a body of theoretical and practical knowledge and specific skills in your discipline in which to base your professional practice or future study. Work with others in a range of roles and contexts, demonstrating cultural, environmental and social awareness and ethical and reflective practice. Apply initiative and judgement in planning, problem solving and decision making in your practice or future study. Upon successful completion of this course, you will be able to: Describe and evaluate a range of positions in the design community, with regard to the social, cultural and professional practice of communication design. Analyse how your creative, practical and professional expertise prepares you for future study and a career in the creative industries. Identify a range of roles and tasks within conventional and emerging communication design practices. Critically discuss how these roles are combined in collaborative and/or hierarchical production structures. **STUDIO 4 COMMUNICATION DESIGN** Shaping your design practice This design studio provides an advanced level of engagement in communication design. It represents the transition towards becoming an emerging creative practitioner. At this level you will be expected to develop your position in relation to contemporary practice and the creative industries, framed by a sound knowledge of the place of communication design in society. An emphasis on global practice and design innovation is part of the focus of this studio. You will be able to choose from a range of Studio projects; framed by themes of Communication Design Craft, Strategy and Futures. Details of each project are set out in the individual studio guides. During your program of study you will have the opportunity to select studio options from each of these program themes. You will work with students from different levels and entry points in the program, supported through a range of seminars, lectures and workshop activities. **Learning Outcomes** You will be assessed on your development against the following Program Learning Outcomes: Critically analyse, synthesise and reflect on your discipline in both local and international contexts. Demonstrate creativity, critical thinking and innovation when identifying and solving problems in diverse contexts within the discipline. Communicate using diverse formats and strategies to audiences within and external to your discipline. Apply initiative and judgement in planning, problem solving and decision making in your practice or future study. Upon successful completion of this course, you will be able to: Produce creative and innovative design outcomes and insights for specific industry based briefs. Analyse and synthesise research about how design functions in relation to diverse audiences. Formulate design responses based on the principles of design thinking and material research. Plan and lead design responses, incorporating time management, prototyping and production processes. Evaluate and respond to feedback on your own work. Extending Communication Design Expertise Extending your design practice This course is designed to give you the opportunity to extend your expertise in a field of communication design, such as illustration, book as object, packaging, typography, web and mobile development, event design and experimental practices. Through projects, presentations and coursework you will develop concepts and skills to compliment Communication Design Studios. You are encouraged to push the boundaries of design, take risks and experiment with different techniques and materials. There is an emphasis on technique and making in this course. The works you produce will demonstrate a high level of crafting and attention to detail. **Learning Outcomes** You will be assessed on your development against the following Program Learning Outcomes: Demonstrate broad and coherent knowledge of the place of Communication Design in society and the principles it operates within. Integrate a broad and deep range of design skills for professional and creative problem solving. Work with others in a range of roles and contexts, demonstrating cultural, environmental and social awareness and ethical and reflective practice. Upon successful completion of this course, you will be able to: Evaluate design practice from a maker's perspective. Investigate and document the process within specific design media and practices. Design and creatively express your responses to diverse design problems. Compare and contrast the different conventions that surround specific media and communication design practices. **STUDIO 5 COMMUNICATION DESIGN** Transition and trajectory This final design studio is your opportunity to define yourself as a designer with a breadth of knowledge and ability and a depth of attainment in your chosen field. In this course, you will be expected to consolidate your position in contemporary practice and the creative industries. You will demonstrate your abilities to analyse, synthesise, evaluate, and apply your design skills within complex problems. In this studio you will produce persuasive design outcomes that will inform your capstone course. You will be able to choose from a range of Studio projects; framed by themes of Communication Design Craft, Strategy and Futures. Details of each project are set out in the individual studio guides. During your program of study you will have the opportunity to select studio options from each of these program themes. You will work with students from different levels and entry points in the program, supported through a range of seminars, lectures and workshop activities. **Learning Outcomes** You will be assessed on your development against the following Program Learning Outcomes: Demonstrate broad and coherent knowledge of the place of Communication Design in society and the principles it operates within. Apply a body of theoretical and practical knowledge and specific skills in your discipline in which to base your professional practice or future study. Work with others in a range of roles and contexts, demonstrating cultural, environmental and social awareness and ethical and reflective practice. Apply initiative and judgement in planning, problem solving and decision making in your practice or future study. Upon successful completion of this course, you will be able to: Interrogate complex problems to produce creative and innovative design outcomes. Identify and apply the principles of design thinking to design-research and design-making. Propose and execute design projects that reflect your expertise and knowledge within the design or creative arena you plan to enter. Critically evaluate and reflect on design projects and identify areas for future development. Critically reflect on your professional learning and apply it to future scenarios. **COMMUNICATION DESIGN CAPSTONE PROJECT** What I bring to design practice/what design gives me This capstone course requires you to define and demonstrate your own design practice to a professional standard. As a capstone experience it is designed to enable you to synthesise and integrate knowledge, connect theory and practice as well as demonstrate holistic achievement of program learning outcomes. You will identify the area within the design community/industry that is most relevant to your practice. This forms a context for your proposition: 'What I bring to design practice/what design gives me'. From this experience you will design and produce a design profile made up of your ideas about your future and a suite of design/communication artefacts. **Learning Outcomes** You will be assessed on your development against the following Program Learning Outcomes: Demonstrate broad and coherent knowledge of the place of Communication Design in society and the principles it operates within. Integrate a broad and deep range of design skills for professional and creative problem solving. Apply a body of theoretical and practical knowledge and specific skills in your discipline in which to base your professional practice or future study. Critically analyse, synthesise and reflect on your discipline in both local and international contexts. Demonstrate creativity, critical thinking and innovation when identifying and solving problems in diverse contexts within the discipline. Communicate using diverse formats and strategies to audiences within and external to your discipline. Work with others in a range of roles and contexts, demonstrating cultural, environmental and social awareness and ethical and reflective practice. Apply initiative and judgement in planning, problem solving and decision making in your practice or future study. Upon successful completion of this course, you will be able to: Demonstrate your knowledge and expertise as a designer within contemporary creative industries. Critically evaluate and articulate your practice as a designer and creative practitioner. Create a profile of yourself as a designer, evidenced by a range of industry-related career materials. Critically analyse and discuss the agency of design within contemporary social relations.

UNIVERSITY OF SOUTH AUSTRALIA—BACHELOR OF DESIGN (COMMUNICATION DESIGN)

● ENVIRONMENT/SUSTAINABILITY ● SOCIAL/POLITICAL/CULTURAL ● ETHICAL/RESPONSIBLE ● PRODUCTS/CAREERS

COURSE OVERVIEW

DEGREE OVERVIEW Gain specialised training in typography; image design; print and electronic publications, designing for digital media platforms; brand and identity design; information graphics and packaging design through user experience awareness, concept development, problem solving and design processes. Learn to create innovative design outcomes that motivate and inform through design practice and design thinking, contributing to the cultural and social life of the wider community. Benefit from the opportunity to work on projects addressing real-world issues. Learn from teachers who are established designers and academics, offering insight into what it takes to create effective visual communications and graphics. Learn in on-campus studios and workshops in the vibrant west-end creative precinct in the city. Benefit from our networks and relationships with the design industry – locally, nationally and internationally, and gain valuable practical experience. Gain in-demand skills in concept development and technical skills that industry are looking for. UniSA is the only South Australian university ranked for Art and Design. Be taught by world-class leaders in research – UniSA's research in communication design is ranked world class2. Study at a university that developed the first Bachelor of Design degree in the world. 1 2021 QS Subject Rankings 2 Results in Design Practice and Management - 2018 Excellence in Research for Australia (ERA) **SNAPSHOT** Communication Design involves creating innovative identities, messages, ideas and images that inform, motivate and educate across a range of sectors, from logo and identity design, to posters, apps and packaging design. Communication Design contributes to contemporary society through visual strategy, problem solving and design research in various areas of communication. This degree has been the starting point for many of the country's leading communication and graphic designers, and it will prepare you for a vibrant career in the design industry. Taught by established academics and designers, you will graduate with an industry-relevant qualification. A focus on practical learning integrated with design thinking means you will gain the skills and knowledge needed to design stimulating, effective visual communications, and the confidence to create across a range of communication platforms and contexts. **WHAT YOU'LL LEARN** With an emphasis on practical studio-based learning, creativity and teamwork, you will graduate with the ability to design effective communications applied to diverse contexts. You will: cover topics including: typography, brand and identity design, packaging, drawing techniques, image design, information graphics, app layout and communication, user experience design, web and publication design, learn to design for digital and print platforms, including motion graphics, interaction design, and design strategy, develop practical and technical skills in a variety of media for diverse outcomes, learn how to integrate creative skills with design thinking methods to address wide-ranging communication tasks and scenarios The Bachelor of Design (Communication Design) is practice-based, involving creative and critical thinking integrated with craft and technical skill. Throughout this degree you will learn how to respond effectively to communication problems through design as you develop the skills to articulate ideas and approaches and to working independently and in a team. As part of your studies you will also be required to complete design electives. These provide the opportunity for you to further explore areas and pathways of interest, and to build an individual and effective portfolio. You can gain an extra qualification and broaden your career prospects by completing a Diploma in Languages. This industry is expecting strong growth1. Designers work within diverse areas of business and community requiring skills and knowledge of graphic software to create still and animated images for use in promotions, branding, advertisements, magazines, packaging, greeting cards and much more. Graduates enjoy careers in a variety of roles and job opportunities: communication (graphic) designers are employed in graphic design studios; multi-disciplined consultancies; publishing houses; museums; government and advertising agencies; corporate and local business, digital media studios; printers and new start-ups. They specialise in concept design and strategic planning to coordinate and co-design within multi-disciplined teams and organisations. Communication (graphic) designers generate a variety of design outcomes for corporate and community areas producing digital and/or print outcomes. art director/creative director: who are responsible for coordinating teams through design direction and co-design as the leading liaison between clients and other disciplines and subcontractors. There is also strong demand for well-designed and maintain websites, so graduates can secure positions as either an in-house designers or as freelance designers. There is also design work across the development of 2D graphics and 3D forms for packaging, exhibitions and signage. Creativity, curiosity, interpersonal skills, motivation, commitment and, of course, communication skills, are all qualities of a successful Communication Designer. **PROFESSIONAL ACCREDITATION AND RECOGNITION** Graduates of this program are eligible for Graduate Membership of the Design Institute of Australia. Graduates are eligible for Associate Membership of the Design Institute of Australia after two years of professional practice.

DESCRIPTIONS OF MANDATORY SUBJECTS

DESIGN FOUNDATION STUDIO To introduce students to the practical and theoretical knowledge in the fundamentals of design, and to develop student skills in the application of this knowledge toward design outcomes, establishing the relationship between design principles and practice through creative processes. Students will explore the nature of design. Emphasis is placed on the elements and principles of design and the visual relationships between them. Students will develop skills in the application of diverse approaches to creative problem solving based on methodologies and conceptual frameworks in contemporary design practice. **INTRODUCTORY DRAWING FOR DESIGN** To introduce students to the basic principles and practice of communication design drawing and drawing as a means of visualising ideas. Students will gain knowledge of drawing systems, materials and techniques as an observational and idea generation tool and will become familiar with studies in composition, ways of seeing and critical analysis. Drawing skills will be developed in exploration of design principles and methods of applying ideas. **VISUAL ARGUMENT AND DESIGN CULTURE** To encourage students to think in critical ways about design, to understand how visual arguments are produced in culture and society, and to develop their skills in communicating effectively using appropriate approaches and formats. Students will develop skills in understanding how visual arguments are constituted in culture and society, and explore modes of representation and meaning production. Students will develop a basis for understanding and reading visual culture as it relates to design practice; methods for decoding the language of visual communication and gain insight into critical social perspectives. **COMMUNICATION DESIGN STUDIO 1** To introduce students to skills in the process of design, and to establish the relationships between design theory, research, creative processes and practice as a general principle of communication design procedures. Students will develop ways of working using methods such as: idea generation, the analysis of function, basic research skills, and creative problem solving. Students will use these methods in specific projects to explore ideas and image development in design for communication within a collaborative studio environment. **DESIGN, CULTURE AND SOCIETY 1** To develop students' understanding of the history and theory of modern design, within its changing cultural and social contexts, and their continuing relevance to design practice today. Students will be introduced to a broad knowledge of the social, cultural and technological changes shaping the development of modern design, from the Industrial Revolution up to Post-Modernism. Students will become familiar with key design movements and theories, significant designers, exemplary works of design, and important technological and social changes affecting both every-day life since the mid-nineteenth century and the world of design. **COMPUTER GRAPHICS AND IMAGING FOR DESIGN** To develop students' practical computer graphics skills and the application to print based publications within a commercial design context. The students will develop knowledge and skills in using industry standard illustration, image editing and page layout software on industry standard hardware to produce effective print publications for different purposes and target audiences. **COMMUNICATION DESIGN STUDIO 2** To develop and apply skill and knowledge in typography, graphic and image design and diverse approaches to visual communication. To further develop skills in creative, iterative and critical thinking, in order to respond appropriately to a range of communication design problems and situations. Students will develop knowledge to investigate and critique the fundamental aspects of design for communication. Students will practice idea generation and build their skills in visual literacy and design methods to supplement problem-solving skills learnt in first year, integrating the principles of typography with work in studio practice. **DESIGN FOR PUBLICATION** To develop students' practical computer graphics skills within a professional design practice framework, develop practical skills required to communicate with the commercial print graphics industry and produce effective print ready publications. Students will further develop and apply their knowledge of design and visual communication principles when designing print publications, and become familiar with construction, pre-press and communication skills required by the print industry to successfully produce professional publications. Students will use industry standard illustration, image editing and page layout software on industry standard hardware. **DESIGN, CULTURE AND SOCIETY 2** To develop students' theoretical awareness of contemporary responsibilities and issues that shape design practice through social, cultural, environmental and ethical scenarios. Students will further develop knowledge about important themes and methodologies in contemporary design discourse and practice through a survey of themes related to process, identity, meaning, products, technology, etc. in relation to historical, cultural, and social context. They will develop an understanding of how these issues are related to and influence their own design practice. **COMMUNICATION DESIGN STUDIO 3** To further develop students' practical skill and theoretical knowledge for higher levels of research-led communication design practice, and to develop the abilities required for increasing levels of independence and collaboration, with awareness of the social, ethical and environmental concerns related to design practice. Students will build on their skills in visual communication, design research methods and media to explore and generate effective propositions to communication design tasks. Students will undertake research into the narrative structures and functions of design and further investigate its relationship to all aspects of communication design and its visual and functional possibilities related to design in context. Students will develop knowledge and skill in practices relevant to professional practice, developing awareness of the social, ethical and environmental concerns related to design. **TYPOGRAPHY: DESIGN FOR READING** To provide an advanced knowledge and understanding of typography and typographic principles in history, research, and application. Students will gain an advanced knowledge of history and context of use of type, setting type, layout, grid use, type structures, typographic cueing, and legibility. Students will apply the typography and typographic principles in design for reading, document, and information design. **DESIGN FOR WEB** To further develop students' understanding and experience of conceptualising, designing and testing the functionality of websites using industry standard authoring software. Students will develop design concepts for website interfaces of varying complexity and for diverse audiences. They will devise all content - written and visual - applying advanced typographic principles, understanding of hierarchies and web authoring techniques to specific design problems. They will also test a site's usability - navigation and function - and conduct evaluation and revision. Students will be made aware of copyright issues in relation to the web medium and will use industry standard authoring software for web design. **COMMUNICATION DESIGN STUDIO 4** To further extend students' ability in communication design by researching a range of issues and scenarios. Students will be able to design appropriate

WORKSHOPS FOR BETTER WORLDS

responses relevant to purpose and context, with an understanding of the social, ethical, and environmental impact of their design practice. Students will further build their knowledge of and research into the development of effective communication design, using advanced skill and knowledge in typography, image design, and overall approach. Students will extend and apply skills in visual argument and critique designing strategies and responses to a range of issues and scenarios, and with increasing understanding of the social, ethical and environmental impact of their practice. **CRITICAL DESIGN PRACTICE** To extend students' ability to exercise critical thinking and judgement in the integration of the history, theory and social contexts of design through communication design practice. Students will consolidate knowledge of the discourses of design practice and identify contemporary influences on the making and reading of communication design as they integrate design theory with design practice. Students will review texts from a range of sources and use a critical approach to the analysis of relationships between image, text and historical/political/social conditions to articulate knowledge of the historical and ideological aspects of contemporary communication design. **PROFESSIONAL PRACTICE STUDIO** To consolidate students' intellectual and practical skills in designing visual communications of moderate complexity, and to extend the ability to respond creatively and critically to a range of situations through design, with advanced understanding of the social, ethical, and environmental impact of their independent and collaborative practice. Students will further develop knowledge of ways to apply research and experimentation, and utilise suitable methods to generate appropriate and valid propositions to communication design issues with cognisance of the social role of designers and in professional practice. Students will apply advanced knowledge and skill in typographic and image design and their approach, integrated with skills in visual argument and critique, and individual design perspectives will be consolidated. **PACKAGE DESIGN** To build on students' creative problem solving skills, their knowledge of elements and principles of design applied to packaging design, its function and technical requirements within a professional and industry framework. Students will develop knowledge of the requirements to design effective packages for a diverse target audience and become familiar with how materials, production techniques, industry regulations and ecological factors influence package design. Students will use creative problem solving and the elements and principles of design to produce specific packaging solutions in relation to consumer and industry needs.

UNIVERSITY OF WOLLONGONG—BACHELOR OF COMMUNICATION AND MEDIA (VISUAL COMMUNICATION DESIGN)

● ENVIRONMENT/SUSTAINABILITY ● SOCIAL/POLITICAL/CULTURAL ● ETHICAL/RESPONSIBLE ● PRODUCTS/CAREERS

COURSE OVERVIEW

The Visual Communication Design major allows you to develop skills in graphic design for both traditional and new media. You will learn graphic design principles and practices, while working on client-driven design projects for print, online, mobile and emerging platforms. You will graduate with flexible visual design skills, ready for new career opportunities that focus on communicating messages visually across a broad spectrum of contexts and media. The Bachelor of Communication and Media enables you to expand your career options by combining the Visual Communication Design major with one of four other majors in the degree: Digital and Social Media; Journalism; Screen Media Production; or Marketing Communication and Advertising. This is an ideal degree if you are interested in more than one area of media and communications and want a flexible future career path. **WHAT YOU WILL STUDY** You will learn about typography, layout, photography, design thinking, vector-based imaging, animation and design for both online and mobile platforms. You will also learn the professional skills involved in working with clients, responding to briefs and developing visual strategy. Alongside these practical skills and experiences, you will study the ways in which emerging digital platforms are changing the context for visual communication design, both in Australia and internationally. In addition to the core subjects and a major in Visual Communication Design, there is also the opportunity to complete another major from the below list. This will increase your knowledge and employability in the media and communication industries. Digital and Social Media Screen Media Production Journalism Marketing Communication and Advertising Visual design is at the heart of our contemporary communications landscape. It is a dynamic and essential part of the way we communicate with a wide range of audiences and users. Graduates who have the ability to adapt their visual communication design skills to new platforms are in high demand.

DESCRIPTIONS OF MANDATORY SUBJECTS

INTRODUCTION TO COMMUNICATION AND MEDIA This foundation subject introduces students to ways of understanding media and communication practices, institutions and technologies. The subject takes an interdisciplinary approach to understanding how producers and consumers interact in a media saturated world. The subject will begin with the ways in which the media has been discussed in theory and in practice, and go on to examine how our communication practices and adoption and use of different technologies are integrated with our professional, social and political lives. **Learning Outcomes** On successful completion of this subject, students will be able to: 1. Demonstrate commencing level knowledge in the identification, and discussion of key scholarly approaches to the study of media and communication 2. Demonstrate commencing level skills in producing and presenting online content that facilitates professional communication in a public facing setting 3. Develop sound skills in critical thinking and analysis, collaboration, and oral presentation. **GLOBAL MEDIA AND CULTURE** In an era of globalisation, communication across cultures is key to our capacity to thrive in diverse workplaces. This subject introduces students to the key issues of intercultural communication, and how these interrelate with developments in transnational media industries and practices. We examine the historical impact of media technologies and institutions on the formation of local, national and international cultural communities and explore contemporary sites of opportunity or crisis produced by the emergence of global communication networks. **Learning Outcomes** On successful completion of this subject, students will be able to: 1. Identify and discuss ways in which communication within and across cultures is affected by media practices and transnational media flows. 2. Demonstrate skills in essay writing appropriate to first year university level 3. Demonstrate beginning skills in small group work. 4. Demonstrate awareness of benefits and challenges of intercultural interactions and understanding of strategies to improve communication across cultures. **MEDIA ETHICS AND LAW** All people working in communications require a solid understanding of the legal and ethical minefields they may face. This subject provides you with a strong introduction to a range of topics, including defamation and contempt, trespass, race-hate laws, copyright, privacy and even the use of drones. But it is not just the law that we need to be aware of. Today, increasingly communicators need to be aware of the language they use and how this can impact on people, be it social media users, or people working in other, more traditional, media platforms, including print and broadcast. This is the ethical dimension and it can manifest itself when we are considering the language we employ to talk about people with disabilities, particular racial, ethnic or religious groups, or other groups within society. Ethical issues arise whenever we choose photographs or video images to splice into our stories or even private conversations. As professional communicators we need to be aware of the damage that a wrong or misguided decision can have on a person's reputation or mental well-being. In this subject you will be equipped with the tools required to address these and other questions you may confront while working in a position that involves communicating with people. **Learning Outcomes** On successful completion of this subject, students will be able to: 1. Understand and be able to discuss ethical issues as they apply to journalism in its various forms (print, broadcast and online) 2. Understand critical legal issues, including defamation, contempt of court and other pitfalls that might impact on media outputs 3. Understand and be able to discuss the interplay between media law and ethics. Be able to write authoritatively about these issues in both an academic and practical way. **MAKING MEDIA** The subject introduces students to key concepts in digital media making, using a range of materials and approaches spanning the majors in the BCM program. The primary aim of the subject is to encourage student experimentation, entrepreneurship, innovation, and a speculative approach to media making. The secondary objective of the subject is to expose all BCM students to fundamental techniques in media project development, including idea mapping, rapid prototyping and feedback-based iteration. The subject is organized in three modules mirroring key stages in a media project production process: mapping ideas, prototyping, and making. Students will work on their own projects mapped to these stages, reflect on the production process, and present their work. **Learning Outcomes** On successful completion of this subject, students will be able to: 1. Effective presentation and iteration of a media project 2. Demonstrate an understanding of media making through experimentation, innovation and speculative mapping of ideas and production 3. Acquire basic digital and media literacies expressed as a publicly shared digital artefact. **UNDERSTANDING RESEARCH PRACTICE** This subject examines the nature and practice of research in media and communications, as well as the ways in which media and communication professionals report on research across many disciplines. We look at what makes research and research communication messy, creative and ethically challenging. Students gain practical experience in designing, managing, and reporting on a small research project. **Learning Outcomes** On successful completion of this subject, students will be able to: 1. Demonstrate understanding of key challenges in media research practice 2. Apply an understanding of the fit between research methods and project aims 3. Develop beginning capacity to design and conduct research, and report research findings 4. Compose an appropriate communication strategy for a research project. **GLOBAL MEDIA AND SOCIAL JUSTICE** This subject introduces students to the key concepts and debates in the study of global media and social justice. Part one looks at the role of media and communication in mapping the planet and in imagining global connection. Part two examines how the media themselves have changed in the era of globalisation. We look at issues surrounding the key players global media corporations such as Facebook and News Corporation and key hardware focusing on the smartphone and issues of e-waste and conflict minerals. We also look at who owns the global imagebanks. In part three we focus on what how to navigate this new global media environment, exploring concepts of citizenship, empathy, the global public sphere, and the movement of people and ideas on global survival circuits. **Learning Outcomes** On successful completion of this subject, students will be able to: 1. Develop broad and coherent knowledge of the field of global media studies through weekly readings/viewings and test their knowledge in online quizzes 2. Explore real world problems in global media and its impact on social justice through weekly seminar discussions and a final project focused on developing innovative solutions 3. Develop skills in effective and creative visual communication through their final visual essay project 4. Develop an understanding of the exercise of judgment and responsibility in global media and cross-cultural contexts. **MEDIA ETHNOGRAPHIES** What does it mean to watch movies on a train, wear a fitness tracker, or take selfies at work? In this subject we use ethnographic research practice as a means of understanding what media users do, and how media use is experienced in material, social and practical ways. We do this against a background of historical assumptions about audiences, technologies and markets. This subject extends student capacity to manage small projects that have a public presence. **Learning Outcomes** On successful completion of this subject, students will be able to: 1. Demonstrate understanding of research practices used in media and communication industries 2. Design and conduct an ethnographic media use research project 3. Extend capacity for public communication of research practice.

UNIVERSITY OF NEW SOUTH WALES—BACHELOR OF DESIGN

● ENVIRONMENT/SUSTAINABILITY ● SOCIAL/POLITICAL/CULTURAL ● ETHICAL/RESPONSIBLE ● PRODUCTS/CAREERS

COURSE OVERVIEW

Design is a vast and fluid field leading to countless career paths. As a designer, you have the potential to shape the way we think about the world and how we can influence it going forward. Whatever your interests, at UNSW our 'thinking through making' approach helps you take your career in a meaningful direction where you can make a real impact. This three-year degree emphasises a conceptual understanding of how design reflects historical, social and cultural values, and how it can change the future. You'll learn to combine independent thinking and creativity with practical and technical skills. The degree encourages you to challenge conventional applications of materials, systems, processes and technologies, and to seek new solutions to problems. The integration of digital and physical production, critical thinking, emerging technologies, design research, management and entrepreneurship provides you with the skills for careers across a range of established and emerging design fields. **WHY STUDY THIS DEGREE AT UNSW?** Adobe Creative Cloud subscription included from the day you start your degree for the duration of your studies Be supported by our diverse, open and inclusive Arts, Design & Architecture community. Learn through research-informed teaching Prioritise career success – UNSW won the Australian Financial Review's Most Employable Students Award in 2020. Benefit from strong industry links and partnerships Access world class alumni connections Join a global top 50 university (QS World University Rankings, 2021) Join a community that's part of the prestigious Group of Eight (Go8) universities Different from other more rigid and narrow degrees, our interdisciplinary approach supports you to develop your own degree and solve problems your way. You'll nurture your creative identity and grow confident in celebrating work that is impactful, innovative and rewarding. This will culminate in deciding on the right combination of studio specialisations for you – one that naturally evolves with your passion and process to kickstart your design career. **PROGRAM STRUCTURE** The Bachelor of Design is comprised of three year levels that help you to incrementally develop your design knowledge and skills. Our innovative structure allows you to develop depth, specialising in two design disciplines while also crossing boundaries in a series of core studios. In parallel, you'll also take complementary courses that introduce and expand on historical and theoretical concepts and develop your professional practice skills. In your first year, you'll explore the fundamental process of design and be introduced to a range of design discipline areas. In your second year, you'll build on these fundamentals and gain focus and depth in two design specialisations. You'll also engage in real-world projects with our extensive range of industry partners. In your third year, you'll then develop and deliver a major design project that integrates your studio areas and enables you to individually demonstrate your emerging design practice. You'll also undertake an internship locally or internationally expanding your professional networks and capabilities. While studying at UNSW School of Art & Design you'll be guided by dynamic design staff with an outstanding depth of international, industry based and academic experience. You'll have access to studios, workshops and making facilities that are among the best in the world to realise your design projects and have chances to share your work in our network of galleries and exhibition spaces. **STUDY AREAS** Choose two of the following disciplines to specialise in: Graphics Engage with the manipulation of image and type for applications including publications, visual identity and digital spaces. Textiles Advance the rich histories of textiles to form an experimental practice in textile design, textile art, interior textiles and fashion textiles. The Bachelor of Design helps you to develop a robust set of skills that are framed within a strong ethical context. You'll have the best opportunity to become a nimble and entrepreneurial designer who can adapt to real global issues. Object Bring together ceramic, furniture and jewellery design to explore materiality, form and practice. Interaction Learn to design interactive experiences for digital systems, products, websites, environments and services preparing for a career in User Experience (UX). 3D Visualisation Delve into the computergenerated world learning key technologies such as virtual reality systems. Experience Explore the way people experience and interact with space and design for fields such as exhibitions, events and performing arts. **CAREER OPPORTUNITIES** Graphic designer, illustrator or digital media producer Interaction and user experience (UX) designer Exhibition, experience and event designer Jewellery, wearable and textile designer Furniture, object, ceramics or lighting designer Virtual reality, visual communication and 3D Visualiser Design instructor or design strategist Film, television and mobile producer

DESCRIPTIONS OF MANDATORY SUBJECTS

DESIGN STUDIO 1 - DESIGN NARRATIVES This course introduces you to contemporary design as an integrated practice, which involves creative understanding and engagement with design elements, principles, contexts, experimentation and research. The course covers 2, 3 and 4 dimensional aspects, processes and precedents of design. There is a practical focus on drawing, prototyping and making to represent a range of design concepts. **DESIGN STUDIO 2 - DESIGN COMMUNICATION** Design Studio 2 builds on the fundamental principles and processes of design as learnt in Design Studio 1. You will be introduced to a range of methods, purposes and application of design communication. You will develop skills in engagement, collaboration and presentation to a range of stakeholders and contexts. **DESIGN STUDIO 3 - COLLABORATIVE INDUSTRY/STAKEHOLDER PROJECT** This course is an agile, industry focussed project that provides a platform for collaboration across real-world industry and stakeholder project possibilities. Collaboration and followship are the key drivers of the design process. You will experience the dynamics of individual achievement and contribution in a collaborative outcome. **DESIGN STUDIO 4 - INTERDISCIPLINARY PROJECT** This is a culminating design course that encourages you to draw together insights and expertise from two or more specialisations from within the Design program. You may also collaborate with other creative or professional disciplines, subject to approval. You will respond to a socially-engaged design brief to investigate a given situation, design context, and nominated themes. Using professional studio practice models, you will work in collaborative teams, drawing on different skill sets and knowledge. An informed project proposal will be supported by rigorous research, concept development and appropriate material explorations. A final project presentation will address user needs, constraints and the synthesis of multiple areas of practice to generate unique and innovative outcomes. **DESIGN STUDIO 5 - DESIGN STUDIO PROPOSAL** This course requires you to generate a rigorous, detailed and theoretically based design project proposal, brief and schematic design for development in Design Studio 6. Applied research, investigation and reflection on the nature of contemporary design practice will inform this self-initiated project. The project will be positioned in a real context and provide you with further experience of the multi-disciplinary nature of design. It will be developed in conjunction with selected professionals and/or with a client who presents a real-life design problem. The design proposals must address complex contextual issues and fully address the constraints of the brief. You will work collaboratively in studio to develop a peer mentoring culture through critique and evaluation. **DESIGN STUDIO 6 - DESIGN STUDIO PROJECT** This culminating capstone studio project will extend from research and development undertaken in Design Studio 5 through to the translation of research findings into realised design solutions in the form of a major project. The completed project will demonstrate the synthesis of previously learned disciplinary specialisations, theory, research, and practice studies with reference to more than one studio area in the finished project. You will be required to develop a rigorous and legible design process, investigation of additional areas of knowledge, to demonstrate design management of the project. You will show leadership in the social, ethical and environmental impact of your design solution and apply your skills to clear documentation and presentation of an integrated design outcome. **GRAPHICS 1: IMAGE AND TYPE** This course offers you an introductory opportunity to develop critical skills in the creation of graphic images through photography and various types of illustration. You will then begin to understand how to manipulate typography within formal grids and structures, and as an expressive medium. Graphic design is built on a sound understanding of the relationship between image and type. Whether you are intending to work either commercially or experimentally within the visual communications industry, or as a design entrepreneur working in another context, this course will provide you with fundamental graphic design skills. Through application to your individual practice, you will understand the importance of research, an iterative design process, ethical considerations, as well as the personal and presentation skills required to communicate a [sic] **GRAPHICS 2: IDENTITY AND FORM** This intermediate course within the Graphics disciplinary studio will introduce you to research-based responses to developing a visual identity in the context of a broader understanding of brand design. You will build on the typography and image fundamentals acquired in the introductory course, and develop an understanding of how to apply strategic thinking to your design process when developing visual identities and sophisticated graphic systems across a range of media. Your approaches will be framed by theory, as well as a consideration of end-users, naming and tone of voice, and practical issues such as copyright. Your knowledge of visual identity will be further advanced by applying graphic solutions to three-dimensional forms, as well as developing an understanding of issues such as materiality, life-cycle analysis, and responsible practices such as sustainability and ethics in the context of graphic design. **GRAPHICS 3: PLACE AND SPACE** This advanced course within the Graphics disciplinary studio will extend the skills you have developed in the introductory and intermediate courses into three-dimensional places and spaces, with an emphasis on research and critical thinking. You will develop interpretive narratives through graphic interventions, alongside strategies for the installation of your responses. Expressed through a design proposition and subsequent development of a graphic design project, we will continue our established disciplinary focus on typographic skills alongside a broad range of image making techniques. By the end of the course, you will have a strong portfolio piece that reflects your emerging graphic design voice.

UNIVERSITY OF TECHNOLOGY SYDNEY—BACHELOR OF DESIGN IN VISUAL COMMUNICATION

● ENVIRONMENT/SUSTAINABILITY ● SOCIAL/POLITICAL/CULTURAL ● ETHICAL/RESPONSIBLE ● PRODUCTS/CAREERS

COURSE OVERVIEW

This distinctive degree explores diverse forms of visual communication across design, culture and media. Visual communication students acquire in depth understanding of the histories, practices and meanings of the visual world. In turn, obtaining the visual knowledge and skills required to negotiate rapidly changing technology, visual media and culture while becoming skilled in apprehending the unprecedented pace at which visual images, visual technologies and information data are produced. Students immerse themselves in a practice-oriented, studio-based culture, studying a range of interdisciplinary subjects encompassing typography, interaction and image-making. Taught by experts in visual communication, students learn everything from the history and theory of visual culture and technology to producing cutting edge creative work in digital media, photography, editorial design, information visualisation, web design, wayfinding, mobile apps, code, interaction design, machine learning, motion graphics, the internet of things and 3D technologies such as VR/AR and 3D printing. Exploring both traditional and experimental research methods students learn to produce conceptually rigorous and socially responsive work. They graduate with the capacity to work across and between disciplines, to articulate design practices and processes, and to apply them to complex problems. Graduates develop industry experience through the degree's emphasis on addressing real-world issues in collaborative and team-based work.

COURSE AIMS The degree has a hands-on, studio-based culture that is supported by a strong historical and theoretical component. Academics encourage both innovation and experimentation in research and practice to help students make work that is conceptually rigorous and ethically responsive. Offering a variety of interdisciplinary subjects, graduates are able to move into their professional lives with the diverse knowledge and skills required to work collaboratively and across disciplines. All students work with industry clients on real-world projects and undertake work experience during their degree. There are many career options in a range of fields for graduates, such as digital media, publication designer, graphic designer, interactive media designer, web designer, branding specialist, art director, motion graphics designer, advertising, illustrator, and exhibition designer. Graduates are also equipped with the skills to become writers, researchers, editors and critics, and to apply design thinking in a non-design industry business.

DESCRIPTIONS OF MANDATORY SUBJECTS

VC DESIGN STUDIO: THE POLITICS OF IMAGE AND TEXT This studio subject introduces the core formal and theoretical foundations of visual communication design and practice. A series of studio-based briefs explore the fundamentals of image and text through the framework of social activism. In response to the briefs, students engage in a variety of creative experiences, developing skills and understandings central to the power of image and text to make meaning. These include research and communication skills, technical skills and the development of conceptual and critical approaches to visual communication. **Learning Outcomes** On successful completion of this subject, students should be able to: 1. Create designs that respond to their context in formally or conceptually innovative ways. 2. Develop an iterative design process. 3. Understand the value of participation and professionalism in studio practice. 4. Develop a research practice that begins to position you within a wider field of design. 5. Develop and maintain high level craft skills for the production, presentation and documentation of work. 6. Understand professional as well as academic ethics and copyright issues. 7. Develop a critical awareness of the political, social, environmental and ethical considerations of working as a visual communicator. This subject also contributes to the following Course Intended **Learning Outcomes**: Establish and develop a sustainable, informed and ethical position towards social and cultural issues. (A.1) Work cooperatively and professionally as part of a team, initiate partnerships with others, take a leadership role when required, and constructively contribute to peer learning. (C.1) Communicate an informed well-researched viewpoint. (C.2) Communicate ideas effectively in a variety of ways, including oral, written and visual. (C.3) Advance ideas through an exploratory and iterative design process. (I.2) Independent development of high level technical and craft skills for the production, presentation and documentation of work. (I.3) An ability to critique your own work and the work of others with reference to standards drawn from contemporary design practice. (P.1) Source, evaluate and utilise appropriate academic and professional references. (R.1) Analyse, synthesise and formulate complex ideas, arguments and rationales and use initiative to explore. (R.3) Reflect and engage in self-critique and critical thinking. (R.5) **VC DESIGN THEORY: CRITICAL APPROACHES TO VISUAL CULTURE** This subject provides a framework for understanding the techniques and technologies of visual culture. The subject investigates major theories of the image, both historical and contemporary. The subject examines ways that visual culture can be contextualised and critically examined, enabling students to place their own design practices, as well as giving them the tools to analyse and respond to the work of other practitioners. Through lectures and tutorials, students investigate historical and emerging discourses that bear on visual culture. This includes discussions of what an image is and the media environments in which images appear within visual culture, from Renaissance painting to photography, television to digital networks. **Learning Outcomes** On successful completion of this subject, students should be able to: 1. Develop your ability to visually analyse images and apply a range of frameworks in visual culture to consider images. 2. Develop your ability to critically analyse written texts, give public presentations and develop sound essay writing skills. By the end of the semester you should be able to identify arguments in academic texts and critically respond to them. You should be able to develop an argument in your own essay writing, as well as employ visual examples to support your argument. 3. By the end of the semester, you will be able to undertake visual and theoretical research and be able to employ the Harvard style of referencing in your assessments. 4. Develop your knowledge of the social and technical history of visual culture. This subject also contributes to the following Course Intended **Learning Outcomes**: Communicate ideas effectively in a variety of ways, including oral, written and visual. (C.3) An ability to critique your own work and the work of others with reference to standards drawn from contemporary design practice. (P.1) Source, evaluate and utilise appropriate academic and professional references. (R.1) Analyse, synthesise and formulate complex ideas, arguments and rationales and use initiative to explore. (R.3) Demonstrate knowledge of design history and theory and to place creative practice within a historical and theoretical framework. (R.4) **RESEARCHING DESIGN HISTORIES** Designers need to communicate with funders, suppliers, logisticians, craftspeople, marketers and users. In addition to portfolio work, designers benefit from supplementing their practice with rhetorical skills that assist in offering direct and distinctive accounts of their concerns and abilities. An understanding of design history and key design concepts enables them to make more convincing arguments for their work. Through familiarity with a repertoire of key historical examples, students build the foundations on which to confidently describe and distinguish the emerging ideas in their own design practice. **Learning Outcomes** On successful completion of this subject, students should be able to: 1. Discuss the significance of key historical events and contexts important to design. 2. Describe and analyse the relationship between form, style, material and idea across a diverse range of design artefacts. 3. Access and analyse data from a range of sources (analogue and digital). 4. Communicate verbally and visually according to specifications in the creation and size management of digital files and original work. 5. Demonstrate awareness and understand the value of Indigenous research perspectives. **VC DESIGN STUDIO: THE ETHICS OF IMAGE AND TEXT** This studio subject introduces the core formal and theoretical foundations of visual communication design and practice. A series of studio-based briefs explore the fundamentals of image and text through the framework of social activism. In response to the briefs, students engage in a variety of creative experiences, developing skills and understandings central to the power of image and text to make meaning. These include research and communication skills, technical skills and the development of conceptual and critical approaches to visual communication. **Learning Outcomes** On successful completion of this subject, students should be able to: 1. Create designs that respond to their context in formally or conceptually innovative ways. 2. Develop an iterative design process. 3. Understand the value of participation and professionalism in studio practice. 4. Develop a research practice that begins to position you within a wider field of design. 5. Develop and maintain high level craft skills for the production, presentation and documentation of work. 6. Understand professional as well as academic ethics and copyright issues. 7. Develop a critical awareness of the political, social, environmental and ethical considerations of working as a visual communicator. This subject also contributes to the following Course Intended **Learning Outcomes**: Work cooperatively and professionally as part of a team, initiate partnerships with others, take a leadership role when required, and constructively contribute to peer learning. (C.1) Advance ideas through an exploratory and iterative design process. (I.2) Independent development of high level technical and craft skills for the production, presentation and documentation of work. (I.3) An ability to critique your own work and the work of others with reference to standards drawn from contemporary design practice. (P.1) **VC DESIGN PROJECT: SYMBOLS, SYSTEMS AND VISUAL PLAY** This subject gives students the opportunity to synthesise and apply the foundational principles of visual communication design through sustained projects. A series of lectures and studio tasks assist conceptual development, with an emphasis on the relationship between word and image to communicate. Weekly tasks guide students through the iterative design process: starting with research, conceptual development, roughs to comprehensive visuals, and finally, refined outcomes. Topics covered in the lecture series include: form and materiality as communication strategies; constraints; graphic wit; series design; sequencing; and, visual metaphor. How to be an active member in critiques, and how to give and receive critique is also part of tutorial tasks. **Learning Outcomes** On successful completion of this subject, students should be able to: 1. Investigate and experiment with organisational systems and metaphorical visual language, through the design process and final outcomes. 2. Develop original designs (typography and images) relevant to the specific demands of the project brief, through an iterative process of experimentation, critical reflection, evaluation and refinement. 3. Select appropriate media to the project brief and development of craft skills, as evident in refinement of process and final work. 4. Communicate in a clear and engaging way, as outlined in the project brief. 5. Independently manage project development and completion within the timeframe of a project brief, as evident in work presented in studio and the process journal. This subject also contributes to the following Course Intended **Learning Outcomes**: Practice cultural principals and protocols required to work in Indigenous contexts. (A.3) Work cooperatively and professionally as part of a team, initiate partnerships with others, take a leadership role when required, and constructively contribute to peer learning. (C.1) Create designs that respond to their context in formally or conceptually innovative ways. (I.1) Advance ideas through an exploratory and iterative design process. (I.2) An ability to critique your own work and the work of others with reference to standards drawn from contemporary design practice. (P.1) Awareness of and/or engagement with the local and global design community. (P.2) Source, evaluate and utilise appropriate academic and professional references. (R.1) **THINKING THROUGH DESIGN** The aim of this subject is to help students develop their attitude, behaviour and thinking as designers. It aims to show them what the field of design looks like from the inside and to challenge preconceptions. Students develop their knowledge of design processes and design research techniques that are common to all

WORKSHOPS FOR BETTER WORLDS

design disciplines. Students learn a range of strategies for working in teams, defining design problems, researching design contexts, generating creative responses, evaluating proposals from different perspectives, and visualising the arguments for proposals. The subject also introduces students to the rigorous and self-directed learning environment of the School of Design. **Learning Outcomes** On successful completion of this subject, students should be able to: 1. Work iteratively within a series of design frameworks to produce outcomes which evidence a developing knowledge of design thinking and revision of your own work 2. Demonstrate participation in collaborative learning opportunities in the subject, including tutorials and group work 3. Make connections between creativity, criticality and reflection 4. Demonstrate the application of curiosity, experimentation and risk taking in design 5. Manage briefs, deadlines and feedback in design projects 6. Critically reflect on own learning demonstrating awareness of strengths and weaknesses 7. Show cultural awareness and sensitivity towards Indigenous perspectives through project site research. VC Design Studio: **NARRATIVE, FORM AND TIME** This subject further develops students' skills and knowledge in making and analysing hand and media-generated images, expanding their possibilities beyond the static to time-based media. Students actively build image-making skills in the context of visual narratives, moving image design and interactive design, reflecting the social and cultural dimensions of contemporary professional practice in a global setting. While the primary focus of this subject is experimentation and investigations of visual form that occurs over time, an emphasis on the relationship between images and text remains, with a strong focus on producing formal outcomes. Students continue to develop their analytic skills, critically reflecting on the development of their work and its context. The lectures explore the historical and technical developments and contemporary uses of sequential art and moving image design in the context of visual communication design. Students engage in practical activities and collaborative peer group feedback sessions, with assistance by studio leaders. In addition to the subject outline, students are given briefing documents for each of the individual projects and their assessable items. **Learning Outcomes** On successful completion of this subject, students should be able to: 1. Use iterative process and rigorous research methodologies that apply correct referencing in the creation of a finished product 2. Demonstrate culturally appropriate conceptual and critical thinking in the production of a creative concept and final outcome in relation to Indigenous peoples and their cultural production and materials. 3. Develop original and culturally appropriate visual language evidenced through iterative visual processing in creating an aesthetically resolved final outcome in relation to Indigenous peoples and their cultural productions and materials. 4. Apply appropriate levels of technical skill in the use of new forms and/or technologies in visual communication design 5. Use critical reflection methodologies to reflect on content delivered in the subject 6. Participate in and respond to peer and group feedback and critique This subject also contributes to the following Course Intended **Learning Outcomes**: Practice cultural principals and protocols required to work in Indigenous contexts. (A.3) Create designs that respond to their context in formally or conceptually innovative ways. (I.1) Advance ideas through an exploratory and iterative design process. (I.2) An ability to critique your own work and the work of others with reference to standards drawn from contemporary design practice. (P.1) Independently engage in self-directed learning and select and apply appropriate methodologies specific to the project. (P.4) Employ a range of qualitative research approaches including practice-led visual and material exploration and social and participatory methods. (R.2) **VC PROJECT: CONTEXTS OF VISUAL COMMUNICATION** In this subject, students explore a range of historical contexts from which visual communication practices have emerged. Students also consider how political, social and technological shifts have shaped contemporary practices, and in turn, how design might respond to issues such as living in the anthropocene and the impact of technological determinism on global inequalities and ecological survival. This approach to design history enables students to propose 'what-if' scenarios about the past and shows how history can encourage new interpretations of particular events and present alternate futures. **Learning Outcomes** On successful completion of this subject, students should be able to: 1. Demonstrate a critical and contextual understanding of historical and/or contemporary practice 2. Effectively analyse and synthesize complex ideas generated by a range of secondary and visual research methods 3. Communicate relevant insights and design persuasive arguments from historical, theoretical and visual research 4. Effectively design for visual, oral and/or written contexts 5. Use appropriate academic referencing protocols to demonstrate research This subject also contributes to the following Course Intended **Learning Outcomes**: Communicate an informed well-researched viewpoint. (C.2) Communicate ideas effectively in a variety of ways, including oral, written and visual. (C.3) Source, evaluate and utilise appropriate academic and professional references. (R.1) Analyse, synthesise and formulate complex ideas, arguments and rationales and use initiative to explore. (R.3) Demonstrate knowledge of design history and theory and to place creative practice within a historical and theoretical framework. (R.4) **VC PROJECT: TYPOGRAPHY IN CONTEXT** This subject expands upon typographic principles introduced in previous subjects. Students are required to undertake or develop: empirical research on reading habits; critical analysis of written texts; an understanding of grid structures and visual hierarchy; a highly refined awareness of typographic detailing leading to the processing and execution of sophisticated typography and print design. Topics covered include legibility, readability, communication-interface and navigation systems in print design. Computer lab practice in relevant software develops the essential skills in synthesis of typography and images required for later subjects. **Learning Outcomes** On successful completion of this subject, students should be able to: 1. understand the origins and development of letterforms, typefaces, grids and typographic principles 2. originate and investigate the production of images by hand and technological generation 3. develop imaginative visuals relevant to the specific demands of the project brief 4. thoughtfully structure the visual organisation of words and images in a given format 5. indicate a growing awareness of and sensitivity to the application of visible languages 6. process visuals through critical reflection, evaluation and progressive digital refinement 7. indicate attention to typographic detailing and visual refinement showing thought, care and skill. 8. work with others in a small group 9. understand design context through relevant research This subject also contributes to the following Course Intended **Learning Outcomes**: Work cooperatively and professionally as part of a team, initiate partnerships with others, take a leadership role when required, and constructively contribute to peer learning. (C.1) Create designs that respond to their context in formally or conceptually innovative ways. (I.1) Advance ideas through an exploratory and iterative design process. (I.2) Independent development of high level technical and craft skills for the production, presentation and documentation of work. (I.3) An ability to critique your own work and the work of others with reference to standards drawn from contemporary design practice. (P.1) **VC DESIGN STUDIO: VISUALISING EXPERIENCE** This subject explores visual communication design in the context of complex informational and technological systems. Students design interactions within these systems that are a response to what they observe in the world through basic design research methods. Through these research methods, students identify and frame relationships among people, environments, and technology and use their findings to drive the production of novel design outcomes. In response to a brief, students develop design concepts focused on interactive or responsive applications, objects or environments. Initially, students are introduced to ways of developing, communicating, and presenting their ideas using visual techniques. This is combined with the delivery of introductions to digital technologies in order to develop students material understanding and their ability to produce prototypes. Students are then guided through a process of selecting appropriate technical media and prototyping methods to develop an interactive prototype through which they can test, iterate and refine their designs. **Learning Outcomes** On successful completion of this subject, students should be able to: 1. Employ primary and secondary research methods including but not limited to observation, the analysis of material culture, library and internet research 2. Devise creative designs in response to the specific objectives of a project brief and/or insights from research 3. Iterate and refine a design concept and outcome through processes of critical reflection, feedback, and prototyping 4. Develop refined and original visuals through which to communicate design concepts with clarity 5. Present design processes and outcomes in visual, oral and written forms with thought, care and skill. 6. Demonstrate a basic understanding of the fundamentals and possibilities of digital technologies covered in the subject material This subject also contributes to the following Course Intended **Learning Outcomes**: Communicate an informed well-researched viewpoint. (C.2) Communicate ideas effectively in a variety of ways, including oral, written and visual. (C.3) Create designs that respond to their context in formally or conceptually innovative ways. (I.1) Advance ideas through an exploratory and iterative design process. (I.2) Independent development of high level technical and craft skills for the production, presentation and documentation of work. (I.3) Ability to innovatively and critically use a variety of digital technologies. (I.4) Employ a range of qualitative research approaches including practice-led visual and material exploration and social and participatory methods. (R.2) **VC DESIGN STUDIO: DESIGN PRACTICE** Professional practice, responding to real-world design briefs, and gaining an understanding of industry best-practice form the basis of this subject. This subject prepares students with the practical skills for their transition into the design industry. Both primary and secondary research methods are used to develop an understanding of the workplace and prepare for employment by developing a personal visual identity and a professional portfolio. Lectures and workshops orient students with skills for professional practice, and encourage a social understanding of visual communication design practice locally and globally. Students are guided through the process of interpreting a design brief, pitching a design response, presenting process work for critique, incorporating critique into a design solution, and producing highly refined design outcomes to a professional standard. The professional experience program (PEP) is introduced as part of this subject. **Learning Outcomes** On successful completion of this subject, students should be able to: 1. Investigate professional design practices, in order to develop an understanding of the workplace and develop a relevant portfolio 2. Design a personal identity and portfolio to professional standards 3. Critically analyse a project brief, in order to clarify project parameters and develop a project management plan 4. Develop diverse and imaginative concepts and a refined design project through a process of critical reflection, responding to feedback, and iterative refinement 5. Visual, oral and written presentation skills for research, process and design outcomes. This subject also contributes to the following Course Intended **Learning Outcomes**: Communicate ideas effectively in a variety of ways, including oral, written and visual. (C.3) Advance ideas through an exploratory and iterative design process. (I.2) Independent development of high level technical and craft skills for the production, presentation and documentation of work. (I.3) Awareness of and/or engagement with the local and global design community. (P.2) Analyse, synthesise and formulate complex ideas, arguments and rationales and use initiative to explore. (R.3) **VC PROJECT: VISUAL COMMUNICATION AND EMERGENT PRACTICES** This subject introduces students to emerging areas of change in visual communication design practice. Students explore the role of the visual communication designer as collaborative, participatory and research-focused, redefining the designer's role within cultural, environmental and political contexts. By engaging with theories and methodologies that foreground Indigenous thinking and scholarship, de-colonisation, transdisciplinarity and situatedness, students challenge dominant anthropocentric views of the world, developing approaches that value humans and non-humans equally. **Learning Outcomes** On successful completion of this subject, students should be able to: 1. Experiment with and document design-led research approaches in the research, development and evaluation of a brief and a knowledge object. 2. Demonstrate professionalism within the context of a self-determined design-led project including the conceptualisation of the brief for a knowledge object, the design, production and evaluation of the knowledge object and the documentation and reflection on the research methods and approaches. 3. Work towards culturally sensitive conceptual and critical thinking in relation to Indigenous peoples and their cultural knowledge in an annotated portfolio, design brief, knowledge object and research visualisation. This subject also contributes to the following Course Intended **Learning Outcomes**: Work cooperatively and professionally as part of a team, initiate partnerships with others, take a leadership role when required, and constructively contribute to peer learning. (C.1) Create designs that respond to their context in formally or conceptually innovative ways. (I.1) An ability to critique your own work and the work of others with reference to standards drawn from contemporary design practice. (P.1) Source, evaluate and utilise appropriate academic and professional references. (R.1) Employ a range of qualitative research approaches including practice-led visual and material exploration and social and participatory methods. (R.2) **VC PROJECT: RESEARCH THROUGH DESIGN** In this subject students are led through a series of research methods drawn from professional design practice. Through a structured sequence of activities students apply these methods to a local dimension of a complex, global problem. A sequential, iterative process of problem definition, ideation, and testing is applied to demonstrate how research is employed throughout the design process from thinking, to making, to responding and refining. The subject's emphasis is on the

application of these methods and the visual communication of the insights drawn from this research through a refined presentation portfolio. A key aspect of this subject is the necessity for students to be able to imaginatively explore design methods and to be able to articulate the way in which they have used these methods in context specific projects. This ability is a key factor in student employability and transition to workplace in the visual communication design industry. **Learning Outcomes** On successful completion of this subject, students should be able to: 1. Reflect with insight and clarity upon research processes 2. Develop relevant insights through the application of research methods 3. Utilise innovative and engaging strategies for the visualisation of research methods and insights 4. Effectively collaborate in group research and design contexts 5. Design a portfolio of design methods to a professional standard for visual communication 6. Develop clarity and insightfulness in the articulation and critique of research methods and insights 7. Effectively apply research methods to given design problem This subject also contributes to the following Course Intended **Learning Outcomes**: Practice cultural principals and protocols required to work in Indigenous contexts. (A.3) Communicate an informed well-researched viewpoint. (C.2) Create designs that respond to their context in formally or conceptually innovative ways. (I.1) An ability to critique your own work and the work of others with reference to standards drawn from contemporary design practice. (P.1) Independently engage in self-directed learning and select and apply appropriate methodologies specific to the project. (P.4) Source, evaluate and utilise appropriate academic and professional references. (R.1) Employ a range of qualitative research approaches including practice-led visual and material exploration and social and participatory methods. (R.2) **VC DESIGN STUDIO: SOCIALLY RESPONSIVE DESIGN** Socially Responsive Design has evolved over the past 2 years. Projects are larger and more fully refined than previous years and a higher percentage of final work used in the real-world. With a stronger emphasis on client collaboration and design leadership, students are taught how to run briefing workshops with their clients. Teamwork, professionalism and a human-centred approach to design form the basis of this subject. As members of design teams, students take part in live projects, responding to the needs of a community-based organisation as their client and developing outcomes inspired by research in a contemporary global context. This subject allows students to refine their design practice and learn to work collaboratively at a professional level. Typical project work includes team and project management, client briefings, empathy research, user testing and product sourcing and specification. Design projects are developed iteratively, regularly critiqued in peer groups and assessed through a series of formal presentations to the client and peer group. This subject is offered at a crucial time in the third year of the course where the general focus is on the design profession. It provides students with an authentic work experience in which they develop ethical values and socially responsible attitudes as part of becoming a professional designer. The subject involves working with a wide range of 'not-forprofit' community organisations, providing design assistance where limited funding would normally disallow it. **Learning Outcomes** On successful completion of this subject, students should be able to: 1. Engage with the social and cultural dimensions of design 2. Analyse and synthesise a client context 3. Critically reflect on practice 4. Communicate work through oral, visual and written presentation 5. Work collaboratively with peers to respond to a client brief 6. Apply sensitivity to craft in visual processing 7. Work collaboratively with other disciplines/stakeholders 8. Utilise appropriate research methods This subject also contributes to the following Course Intended **Learning Outcomes**: Establish and develop a sustainable, informed and ethical position towards social and cultural issues. (A.1) Engage critically in urgent ecological issues in practice-led projects. (A.2) Practice cultural principals and protocols required to work in Indigenous contexts. (A.3) Work cooperatively and professionally as part of a team, initiate partnerships with others, take a leadership role when required, and constructively contribute to peer learning. (C.1) An ability to critique your own work and the work of others with reference to standards drawn from contemporary design practice. (P.1) Awareness of and/or engagement with the local and global design community. (P.2) Employ a range of qualitative research approaches including practice-led visual and material exploration and social and participatory methods. (R.2)

UNIVERSITY OF WESTERN SYDNEY—BACHELOR OF DESIGN (VISUAL COMMUNICATION)

● ENVIRONMENT/SUSTAINABILITY ● SOCIAL/POLITICAL/CULTURAL ● ETHICAL/RESPONSIBLE ● PRODUCTS/CAREERS

COURSE OVERVIEW

Globalisation and new developments in information and media technology are reshaping visual communication design. This degree combines practice and theory to develop your creative, intellectual and technical skills. Work on real community and industry projects and build a body of work for your portfolio. The world of tomorrow is filled with exciting creative challenges and opportunities. Work on real community and industry projects. Learn how to interpret design briefs. Gain experience with an extensive range of digital technologies. Undertake a major design project in your 4th year. Get ready. At Western. As a visual communications graduate, you can look forward to career opportunities as a: **Illustrator** **Art director** **Information designer** **Interactive designer** **Web designer** **Design educator**

DESCRIPTIONS OF MANDATORY SUBJECTS

GRAPHIC DESIGN: UNDERSTANDING THE PRINCIPLES This unit introduces students to the fundamental principles of visual language and graphic design practice. Through a series of workshops, exercises and project briefs, students will learn how elements such as colour, composition, text, typography and image can be used to communicate meaning in a variety of contexts. Through the project briefs students will begin to develop their awareness of graphic design as a problem solving activity and apply their understanding of the design process in relation to research skills, idea generation, reflective practice, and both written and verbal communication skills. Students will learn the importance of prototyping, developing and refining their ideas through practice, and aspects of the digital print production process will also be introduced. Students will be introduced to design software packages and to support the ongoing development of their digital media skills they will be provided with access to resources for independent online learning. **Learning Outcomes** On successful completion of this subject, students should be able to: Develop, refine and present digital and non-digital outcomes to a professional standard. Generate compelling solutions to visual problems that demonstrate an applied understanding of type, image colour and composition using the principles of design. Implement a design process, including research, idea generation, prototyping and reflection, when answering a brief. Use relevant media and image-making processes in developing solutions to visual problems within a set brief. Use the major features of Adobe CC as an industry standard software application for production. Undertake methods of peer evaluation and critique, and apply an iterative process to their design work. **DESIGN HISTORIES AND FUTURES** This unit introduces students to historical accounts and theories of design from the dominant perspective of Modernism in the first half of the 20th century, through post-war consumerism and the ensuing movements of the 20th century, such as Postmodernism, Punk and New Wave; design reactions to corporate culture, design for change and activism; and the digital design enablers of the 21st century. Students learn a contextual history of 20th century design practice by studying the doctrines around which the modernist movement cohered, and the conditions under which these doctrines are challenged by later movements. The unit explores various roles of the visual designer through history-avant-garde, futurist, revolutionary, utopian design; client-service design; social activism, producer and digital enabler. These roles are expressed across a range of design outcomes such as photography, typography, illustration, print media, graphics, digital design, film and animation. Part of this exploration will examine the impacts of design histories on our past, present and future conditions, as well as changing the future for design. Students will complete visual and writing tasks that aim to build their understanding of design histories and futures, and scholarship in academic research and writing. **Learning Outcomes** On successful completion of this subject, students should be able to: Identify and analyse examples of design as part of historical contexts of visual practice/experimentation, ideas, social and/or cultural events. Explain influential cultural themes, theories and doctrines that inform the design histories considered with reference to primary and secondary literature about exemplary design approaches. Evaluate the contributions of select designers to these movements and periods of design practice by analysing examples, professional/cultural roles and relevant literature, and by making thinking visible through a design outcome. Demonstrate understanding of the impact of design on contemporary society and the sustainability of the future. Demonstrate research and English language literacy for critical thinking and writing about design history and scholarship. **IMAGE DESIGN** Image Design introduces students to the use of signification and metaphor in the visual communication of verbal and written concepts. The process of creating and evaluating images is explored through the principles of visual organisation, and the experience of image making through photographic and illustrative methods, techniques and mediums. **Learning Outcomes** On successful completion of this subject, students should be able to: Identify and utilize the elements of design and compositional strategies used in the design of an image. Create images that interpret verbal language and written concepts. Analyse and interpret signs and signifiers used in visual communication and apply these principles to the construction of images. Implement the use of visual metaphor and symbolism for image based practices. Employ a range of image production methods. Utilise appropriate methods of image organization and manipulation. **GRAPHIC DESIGN: PROCESS AND PRACTICE** This unit enables students to further develop their understanding of the design process within the context of project briefs that introduce areas of graphic design practice that include branding and identity and information design. Students' understanding of a design brief, the client, and a clearly defined audience will deepen. Students will be introduced to some design specific research skills, such as mood board and persona development, which will help them begin to build a toolkit of methods which they will use throughout their degree. Students will develop their design process and a greater awareness of the role of research in the generation of ideas. Students will be introduced to further lateral thinking techniques and encouraged to develop creative responses to the project briefs within appropriate constraints for both client and audience needs. Further key software will be introduced and supported by online resources, and students will continue to develop their visual design skills in the fundamental areas of type, image and composition. **Learning Outcomes** On successful completion of this subject, students should be able to: Interpret the requirements of a design brief, the client, and a clearly defined audience and apply these to their design work. Develop a range of design specific research skills and apply such methods as part of their design process. Apply lateral thinking and design thinking techniques to develop creative responses to project briefs. Utilise a range of appropriate visual approaches in the fundamental areas of type, image and composition. Utilise a wider range of features of Adobe CC as an industry standard software application for production. Create a brand identity in response to a client brief. Interpret and communicate complex information to a specific audience. **VISUAL STORYTELLING** Visual storytelling is increasingly being used in a variety of contexts including websites, magazines, advertising, business and public affairs, exhibitions and events and television, often working across a number of platforms at the same time as requiring responsive design approaches for a diversity of viewing experiences. With access to increasing amounts and types of data, professional communicators need to be able to extract meaning to connect with a variety of different audiences in creative, dynamic, and emotional ways. This Unit introduces students to story archetypes, structure and flow. It encourages metaphorical and analogical storytelling using appropriation making reference to genre and research. This practical unit explores a range of traditional hands-on techniques and digital software commonly used across the communications sector. Students are encouraged to explore and develop their own mark and image making skills aimed at specific target audiences and communication contexts. **Learning Outcomes** On successful completion of this subject, students should be able to: Articulate understanding of the role of visual storytelling for exploring the relationship between content and context. Evaluate visual communication contexts to identify principles and structures for visual storytelling. Apply visual storytelling approaches using a range of digital media applications. Apply visual approaches to generate relevant findings as storytelling outcomes for given briefs. **WEB AND TIME-BASED DESIGN** Students will develop fundamental computer software skills and design understandings appropriate to using major web and time-based design technologies such as HTML and CSS. They will develop a working understanding of production literacies for online design and time-based design. Students will engage in practical studies of web authoring. Emphasis will be placed on understanding the roles, functions and features of key screen based technologies, design production context for online delivery, current industry best practices, and a working understanding of the responsibilities inherent in the digital design and production process. **Learning Outcomes** On successful completion of this subject, students should be able to: Apply graphic design concepts appropriate to the specific concerns of a time-based and/or online environment. Apply methods and processes for planning web sites and time-based outcomes. Demonstrate an applied understanding of designing to a brief with regard to online contexts, audiences and genres. Use terminology and apply industry practices appropriate to preparing, generating and deploying web sites and time-based outcomes. Demonstrate an applied understanding of the major technologies such as HTML, CSS and JQUERY as the basis for authoring web sites. Demonstrate an applied understanding of the standard software applications for producing, optimising and manipulating images or artwork for web and/or time-based outcomes. **GRAPHIC DESIGN: INTERACTIVE DIGITAL MEDIA** Digital technology shapes the way we interact with our world. Design of these interactions is a crucial role for today's designers. This unit will develop students' critical interaction and visual design skills in the digital realm, including interface and experience design. Digital design specific research skills, methods and processes are covered. These include user research, persona development, storyboard development, lo-fi and hi-fi prototyping, wireframes and proof of concept methods. Students will engage with problem-based project briefs, and develop solutions that are appropriate for both client and audience needs across a range of devices. Outcomes include app, web and screen designs. **Learning Outcomes** On successful completion of this subject, students should be able to: Employ a user-centric view in the context of the digital design process. Implement a critical outlook and be able to identify key issues in designing for the digital realm. Utilise a range of methods of describing a designed experience. Define an experience design problem as well as resolve and present that resolution to design team colleagues. Apply interactive design processes and planning methods. Work effectively to produce a designed digital artefact. **RESEARCHING THE VISUAL** This unit will introduce students to various ways of seeing and reading images in the visual environment. Students will learn how to conduct visual research using a tool kit of methods including semiotic analysis, content and thematic analysis, and basic observational research across the digital and material environments of visual communications design, and to apply their findings in the development of visual concepts. Students will continue to engage as reflective practitioners and learn to position themselves as visual researchers within a particular cultural and personal context. **Learning Outcomes** On successful completion of this subject, students should be able to: Exhibit a critical understanding of visual languages at work in contemporary culture. Demonstrate a theoretical understanding of key concepts in visual research. Exhibit competency in designing, conducting and presenting visual research. Apply techniques of visual analysis to collected visual data. Effectively utilise visual research findings in the development of original design concepts. **GRAPHIC DESIGN: THE PROFESSIONAL CONTEXT** In this unit, students begin to situate their graphic design practice within a contemporary professional context. Designers today need to collaborate with colleagues or other professionals, and the majority of graphic design briefs require solutions that

converge across a variety of media platforms and two, three or four dimensions. Students will undertake projects that extend their design thinking in these areas. Part of the unit requires students to work as part of a team, to develop content and a solution that engages the audience through a range of different media. Throughout this unit, students continue to extend their visual language, and associated material and digital skills. **Learning Outcomes** On successful completion of this subject, students should be able to: Use a range of communication skills that facilitate working collaboratively in design teams. Devise and apply effective workflow strategies as an individual and as part of a team. Evaluate a range of digital and material methods in relation to the execution of ideas and differentiate between the appropriateness of such methods in the development of a designed solution. Use appropriate digital and material processes in response to the design brief, client and audience. Employ a conceptual approach to the development of design ideas and apply this thinking into three dimensional form and multi-platform scenarios. **AUSTRALIAN DESIGN** This unit continues the focus on academic and visual literacies for visual communication designers initiated in level one units. Students will investigate the Australian visual communication design profession, largely through the documentation of selected output and established methods across industry sectors producing graphic, photographic, illustrative, typographic, broadcast, interactive and online design. Lectures and selected case studies will outline professional scenarios and support the student in learning about the design industry's organisation and methods. Assessment tasks are designed to develop research and writing skills through the evaluation of professional resources and publications. **Learning Outcomes** On successful completion of this subject, students should be able to: Investigate the Australian visual communication design profession and methods of practice. Review professional and academic publications and resources about Australian design. Evaluate examples of professional profiles and case studies. Identify established approaches to design thinking and methods in industry practice. Develop investigative questions about professional practice and methods in response to existing documentation. **SOCIAL DESIGN: RESEARCH AND PRACTICE** This unit introduces students to the idea that graphic designers can be agents of change. Set project briefs will focus on social and political issues exploring the potential inherent in graphic design practice to make a real difference to society. The unit will encourage students to go beyond the definition of a problem solver, encouraging them to act as a problem seeker, who can use their design thinking skills to develop ideas that respond proactively to society's problems rather than reacting to a client's set brief. The unit will introduce further design-led, social and participatory research methods, that continue to build on the design process, and further expand the methods that underpin aspects of research and practice during the remainder of the degree. Students will refine and develop their visual language skills, in combination with material and digital skills, facilitating their development as an independent learner. **Learning Outcomes** On successful completion of this subject, students should be able to: Undertake independent research relevant to a brief, with particular emphasis on the effective critical review of research findings and the translation of these into design strategy and outcome in an iterative process. Exhibit a reflective and creative approach to project development and the design process. Employ a design process and practice in a context that requires sensitivity to, and an awareness of, social, cultural and environmental issues. Design an appropriately targeted communication strategy for a defined audience, group or stakeholder. Demonstrate ability to work collaboratively and respond effectively to feedback. Demonstrate ability to explain the process of design development and present soundly justified design concepts and ideas. **CONTEXTUAL DESIGN STUDIES** Contextual design studies is the study of what happens around design practice - before, during and after - to explain its meaning and effect. Successful communication design has always depended on the connection between form, content, audience and context, and the designer's abilities to analyse, understand and clarify the contexts of communication have become more important to creative practice. In this unit students will learn to apply the theoretical frameworks of semiotic, thematic and rhetorical analysis used by the interdisciplinary field of Design Studies to interpret design's potential as cultural expression and communication. Students will analyse visual signs and conventions as both targeted and tacit responses to a range of contexts revealing design's interests in marketplaces, society and identity. Students will analyse various graphic examples, and design literature, as they investigate the significance and agency of design interactions, media artefacts and systems. **Learning Outcomes** On successful completion of this subject, students should be able to: Apply terminology and theoretical frameworks used in design to analyse what design means and does. Research and investigate the social, economic and/or political contexts that inform visual design in explicit and tacit ways; Critically evaluate examples of contemporary design practice that respond to these contexts. Reconceptualise codes and conventions or redirect visual concepts to address an audience and construct a context for visual design including enriching social diversity and environmental sustainability. Demonstrate advanced visual and text-based literacy skills in effective written and visual communication. **GRAPHIC DESIGN: DEVELOPING A PERSONAL PORTFOLIO** This unit focuses on the development of your industry orientated practice and personal portfolio development. Throughout the previous core units and unit pairings you will have developed particular skills and interests that are beginning to define your design practice and your portfolio. The briefs set in this unit offer you the opportunity to specialise further and to develop your portfolio and will, where possible, include live briefs and competitions. You will continue to refine and develop your visual language, material and digital skills, and continue to develop as an independent learner. The unit will culminate in an industry event, where students will have the opportunity to get their portfolios critiqued by design industry representatives. On successful completion of this subject, students should be able to: Generate creative and appropriate solutions to design briefs that are executed to industry standards. Critique and evaluate your own work in order to develop a design portfolio and a body of work suitable for exhibition. Define your specific disciplinary interests within the broad field of contemporary visual communication. Employ an independent approach to learning and your design practice. **DESIGN RESEARCH PROJECT** This unit offers students the opportunity to develop a self-negotiated design project through exploring a variety of research methods, reflective practice, and concept prototyping. Students will develop a project that focuses on a particular area of interest in order to consolidate their portfolio, and for students enrolled in B Design (Vis Comm), lay the foundation for their fourth year major design project. On successful completion of this subject, students should be able to: Analyse and report on research outcomes, applying this to the design process. Devise appropriate strategies for creative experimentation. Iteratively develop ideas, and creative work. Present design prototypes at industry standard.

VICTORIA UNIVERSITY—DIGITAL MEDIA (DISCIPLINE MINOR)

● ENVIRONMENT/SUSTAINABILITY
 ● SOCIAL/POLITICAL/CULTURAL
 ● ETHICAL/RESPONSIBLE
 ● PRODUCTS/CAREERS

COURSE OVERVIEW

Digital media is a ubiquitous force transforming how we work, interrelate and communicate. Once a technology located within the area of work, digital media is moving into all areas of everyday life, and practitioners are required to develop new applications such as in the areas of entertainment, health and education. Concurrently, technology is now at a point where those with higher education level digital media can co-opt technology to create projects.

DESCRIPTIONS OF MANDATORY SUBJECTS

VISUAL AND INTERACTIVE DESIGN FOR DIGITAL MEDIA This unit (ACM2014) covers the requirements and principles of electronic design for the screen. It examines the visual and interactive design practices and processes of digital media, including static, temporal and interactive media. The platforms explored are web and mobile platforms. Topics explored include: processes to create a design concept, branding, trends in design, and the relationship between text and image. The visual literacy and technical skill sets of students will be developed, including the written and oral communication skills required by a digital designer. Industry practices within the domain of interactive design, such as user experience are explored. Students are given guidance to research, design and develop a folio. Assessment tasks combine creativity with theoretical and technical knowledge. Underlying this unit are the industry processes of SCRUM and agile production which give the opportunity to reflect on the advantages and disadvantages of production models. **Learning Outcomes** On successful completion of this unit, students will be able to: 1. Investigate and evaluate the role of design in a digital media production; 2. Devise and execute a visual and interactive prototype through application of creative and technical skills; 3. Critically review and analyse the processes required to undertake design research, including the consideration of cultural values; and 4. Analyse needs of audience/client groups in design process. **INTERNATIONAL DESIGN** This unit (ACM2009) of study addresses the development of interface design for international audiences. The unit reviews established theories of human/computer interface design. This theoretical understanding enables students to design effective interfaces for specific environments and purposes. The unit examines the challenges of designing for, and communicating with, audiences in a globalised world. Theoretical and case study explorations are used. The unit explores the means to critically understand different audiences and groups, and the techniques to apply these insights. Contemporary industry issues, such as working in cross-cultural virtual teams, are discussed. **Learning Outcomes** On successful completion of this unit, students will be able to: 1. Demonstrate the processes of research and design for diverse audiences through the production of a design portfolio; 2. Adapt and contextualise interface and user experience design principles to individual design practice; 3. Apply and recommend user-testing skills and methodologies; 4. Collaborate with interdisciplinary teams. **DIGITAL SERVICE DESIGN AND ANALYTICS** In this unit, students explore the emergent industry of digital service design as a practice that enables individuals to engage with services offered in digital environments. Services transformed by digital environments include those in the education, health and music industries. In this unit, students critically examine the elements of 'good' digital service design. We explore the digital analytics generated by digital services from a range of perspectives including ethical standpoints. Practical skills in the collection and analysis of data in order to design better services will be developed. **Learning Outcomes** On successful completion of this unit, students will be able to: 1. Apply human-centred methodologies to a range of problems in the area of digital media 2. Demonstrate their knowledge and application of digital service design artefacts, informed by human-centred analytic data 4. Articulate the ethical problems generated by digital services and analytics **DIGITAL USER EXPERIENCE** User experience (UX) is the design of interfaces individuals and groups use to access digital services. It could be for a chatbot, a game, a touchscreen in a shopping centre or a learning management system. In this unit, we design interfaces for a range of scenarios. We use code to implement our interfaces and explore ways of integrating technology. Students are given working projects which we configure in class. Students can choose the perspective they wish to adopt for project work and assessment (for instance, designer, marketer, technical developer, ethical hacker or educator). Underpinning our discussions are the issues of cybersecurity and trust in online environments. Industry methodologies, such as SCRUM and agile are used to create a series of prototypes. We undertake the user testing of our work and apply insights from testing to the iterative design of our projects. **Learning Outcomes** On successful completion of this unit, students will be able to: 1. Present an understanding of the requirements and nuances of user experience design 2. Contextualise a user's experience of a digital environment 3. Devise and execute a digital prototype 4. Adapt knowledge gained through a prototype to a new iteration

C. ‘The Problem with Garbage Information’ Investigation

The chain of citations given in the contemporary (17th Sept 2024) snapshots of these sites is as follows: *Wikipedia-Biodeg* cites its table content only to *SciLearnNZ-Biodeg*, *SciLearnNZ-Biodeg* cites its table only to *Stacker-Decomp*, and *Stacker-Decomp* cites amalgamated information from a variety of sources in the form of occasional in-text links. To a layperson looking for validation of their material choices, these sites might look like the end point of a reliable chain of citations. But what if they are scrutinised further?

This investigation was conducted mainly through the examination and comparison of these pages across multiple different iterations. Previous versions of the sites were accessed through the Internet Archive’s Wayback Machine and Wikipedia’s own extensive history, change, and public message logs. Wikiblame, an online tool, was used to help navigate Wikipedia’s changelogs.

Wikipedia-Biodeg Cites Only to SciLearnNZ-Biodeg

The current (as of 17 September 2024) *Wikipedia-Biodeg* table had 14 materials listed, but only 12 exactly matched the current SciLearnNZ site that it cited as its sole source.

Timeline:

- The first listing of any material lifetime on *Wikipedia-Biodeg* was uploaded by IP user 82.154.201.30 on 5 September 2004. It had no supporting citations. This 2004 *Wikipedia-Biodeg* table (hereafter *old Wikipedia-Biodeg*) was different from the 17 September 2024 table as it had only one piece of matching exact information: plastic bags purportedly lasting for 10–20 years. This table would be deleted, edited, and re-uploaded many times of the following years, I will discuss here only the major changes.
- On 3 May 2007, the *old Wikipedia-Biodeg* table was attributed to a website called Worldwise (n.d.), which predated the *Wikipedia-Biodeg* and matched the information listed. The earliest snapshot for Worldwise’s

table was 2 May 2001.

- The attribution to Worldwise was removed 13 June 2008 for linked to a non-functioning site. The table remained in some permutation over the next few years.
- The *old Wikipedia-Biodeg* table was attributed on 7 October 2008 to link to a post by the blog *BeHealthyAndRelax* (Fier, 2007). This blog post did not predate the information listed (earliest snapshot for *BeHealthyAndRelax* was 16 November 2007) and had zero exact matches for the table's content.
- The *old Wikipedia-Biodeg* table was removed permanently on 28 April 2009 for being attributed to *BeHealthyAndRelax*, an incorrect source.
- Wikipedia user LaureenBuckhe uploads the current (17 September 2024) version of the *Wikipedia-Biodeg* table on 8 March 2011 and attributes its content to a 2011 version of the *SciLearnNZ-Biodeg* (earliest online snapshot is 6 June 2011). The content between the tables of these two pages is a perfect match for 14 of 14 items. The 2011 *SciLearnNZ-Biodeg* site did not cite its information to any source other than an oblique reference to research written about in *Rubbish! The Archaeology of Garbage* (Rathje & Murphy, 1992).
- The current *Wikipedia-Biodeg* table is removed and reuploaded multiple times until 17 September 2018 when it is reuploaded with an attribution to a 2018 version of the *SciLearnNZ-Biodeg* page. The content still matches for 14 of 14 items, and *SciLearnNZ-Biodeg* still does not give any references of its own. *Wikipedia-Biodeg*'s content and attribution do not change significantly between then and the current version (17 September 2024). The content does not match anymore, however, as around 15 April 2022 *SciLearn-Biodeg* changed its table content (discussed further below).

SciLearnNZ-Biodeg Cites Only to Stacker-Decomp

The current (as of 17 September 2024) *SciLearnNZ-Biodeg* table had 14 materials listed, but only 10 were exactly matched/supported by *Stacker-Decomp*, which it cited as its sole source. The *SciLearnNZ-Biodeg* table predated the existence of *Stacker-Decomp* by more than a decade.

Timeline:

- The *SciLearnNZ-Biodeg* table content existed online and unchanged between 6 June 2011 and 15 April 2022, during which time it provided no specific source for the lifetime content given.
- When the citation to *Stacker-Decomp* was added (first seen 15 April 2022), only two materials were changed (information on tree leaves was swapped for tyres, while styrofoam cups was changed for cigarette butts).
- The earliest online record of the *Stacker-Decomp* article is 15 April 2023, 12 years *after* the earliest snapshot of the *SciLearnNZ-Biodeg* table.

Stacker-Decomp Cites to Other External Pages

The current (as of 17 September 2024) version of *Stacker-Decomp* listed information for 50 materials. Of those 50 materials, only 17 had links to external evidence for the lifetime figure quoted. Of those 17 external links:

- 2 were to *SciLearnNZ-Biodeg* which, in theory, was drawing its information from *Stacker-Decomp*, leading to a closed citation loop with no substantial external evidence.
- 8 either did not mention the information they nominally provided a source for, or they were misquoted.
- 8 linked to sources that did match the lifetime given but were not themselves well-evidenced.
- While many of the listed material information paragraphs linked to external sites, the reliability of these external sources varied. Sources given by *Stacker-Decomp* included USA state (South Carolina Department of Natural Resources, n.d.) and federal (Federal Highway

Administration, 2016) resources, a Daily Mail article (Allen, 2016), a sustainable energy themed blog post (Kukreja, n.d.) which cited no sources of its own, and *SciLearn-Biodeg* which cites *Stacker-Decomp* as its only source.

Timeline:

- The first online snapshot of *Stacker-Decomp* is 12 December 2022 with a given publication date of 15 April. At this time, as well as in later versions, it cites to *SciLearn-Biodeg* as one of its sources.
- Around 14 April 2023, the publication date given by *Stacker-Decomp* is changed to 14 April 2023. The given material lifetimes did not change between 12 December 2022 and 14 April 2023, but some small citations, images, and copy did.

D. Progressive Overview Maps

25 May 2021

I am exploring ways to engage the Australian VCD community in discussions about what considered sustainable change means for VCD practice

by doing a series of participatory worldbuilding workshops

so that:

- I develop a review of contemporary literature practice precedents, and expected vs desired changes within practice;
- practitioners (emergent and established) can contribute to a collaborative narrative for and about change in order to make sustainable practice more approachable and accessible;
- a workshop kit can be developed and disseminated for further use in the design field;
- the portfolio of artefacts developed through the workshops can focus further discourse;
- a critical project document can communicate the insights found past the bounds of immediate participants and scholarly communities.

Work with two groups of **practitioners**; self-described leaders in VCD sustainability, and emerging practitioners. The **workshop kit** will allow for the application of this research beyond the groups that participate in my running of it, or past the bounds of VCD. The workshop kit will include: workshop collateral, framework for analysis, and guide for dissemination of documentation following workshop. The work will be shown, in some part, as a **contextual portfolio**. Experiments through the course of the project will be kept through experiment logs (Sadokierski). Project methods and outcomes tie to various UTS 2027 plans for change.

Not many resources within Australia to help practitioners address **sustainable change** within their own practice. See the lack of resources on common communication platforms like AGDA, TDK.

Resources that address sustainability within practice do exist:

- Sustainable Communication Design Principles* (Cadarso, 2015)
- Consciously Creative; Where Sustainability Meets Design Education* (Scherer, 2014)
- IGA Center for Sustainable Design

But there is an opportunity to involve practitioners within these discussions, and to examine VCD as a community component within the larger design and production ecosystem; will aid us in discovering and detailing what is and isn't desired, and within the bounds of VCD.

Discussions of systemic shifts can be daunting, but focussing discussions of community practices will be easier to grapple with. Ideal change is not so impossible (Wood, and Kallipoliti). Involving people within the discussions of sustainability makes them more pro-active and involved (Huntley, 2020)

Worldbuilding is used because it encourages an understanding of community within place and time (Cooper), and develops a story world as a base to tell stories about change (Zaidi, and Candy). One major method of creation here will be Design Fiction (Coulton & Lindley); interacts well with skills present in VCD participants, strong aesthetic outcomes to then use as focal points for discussions, part of a larger process. Anne Burdick 'Trina'.

Participatory workshops build on the established co-creation community in VCD, particularly within zine communities (ref: Cutler). Workshops allow participants the guidance to develop and explore while within a designed experience, and it means researchers receive first-hand, primary information. Further participatory design experiments will draw from non-workshop sources like TTRPG and videogames; this will begin with Everest Pipkin and Jane McGonigal.

16 March 2022

aesthetic output which intends to convey a message with purposeful consideration of context, audience, form, and language. The purposefully developed visual output of print/publication, branding, interaction, and motion design.

I am exploring how Australian (Visual Communication) Designers engage with (ecological sustainability) discourse within their practice

by developing (aspirational) Worldbuilding workshops

in order to: develop a means by which individual designers can orient their practice within the complex, and often hidden, systems underlying ecological in-sustainability; engage with global discourse which positions VCD as crucial for sustainable change and education.

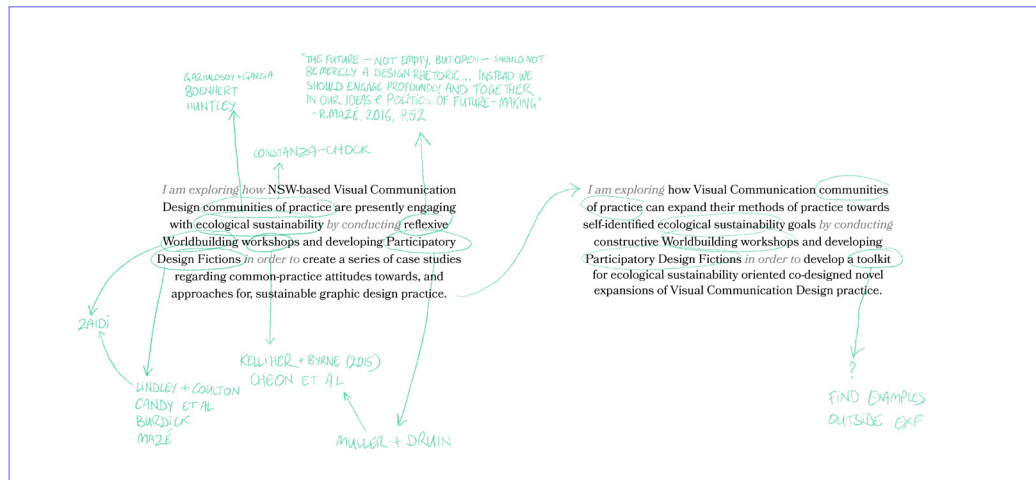
The desire for focusing this work on aspirational views of alternative/speculative worldviews is drawn from an understanding that climate doom is a barrier to sustainability communication, and that impossible aspirational stories provide ample source material for analysing the ideological underpinnings and practical skills of participants. [J. Wood; R. Huntley]

Ecological sustainability has to be acknowledged as both the improvement of ecological support (reducing waste, excess consumption, improving and supporting renewable resources) as well as the redesigning of underlying harmful social and economic structures. [J. D. Orr; S. Constanza-Chock; V. Smil; D. Abson, et al.]

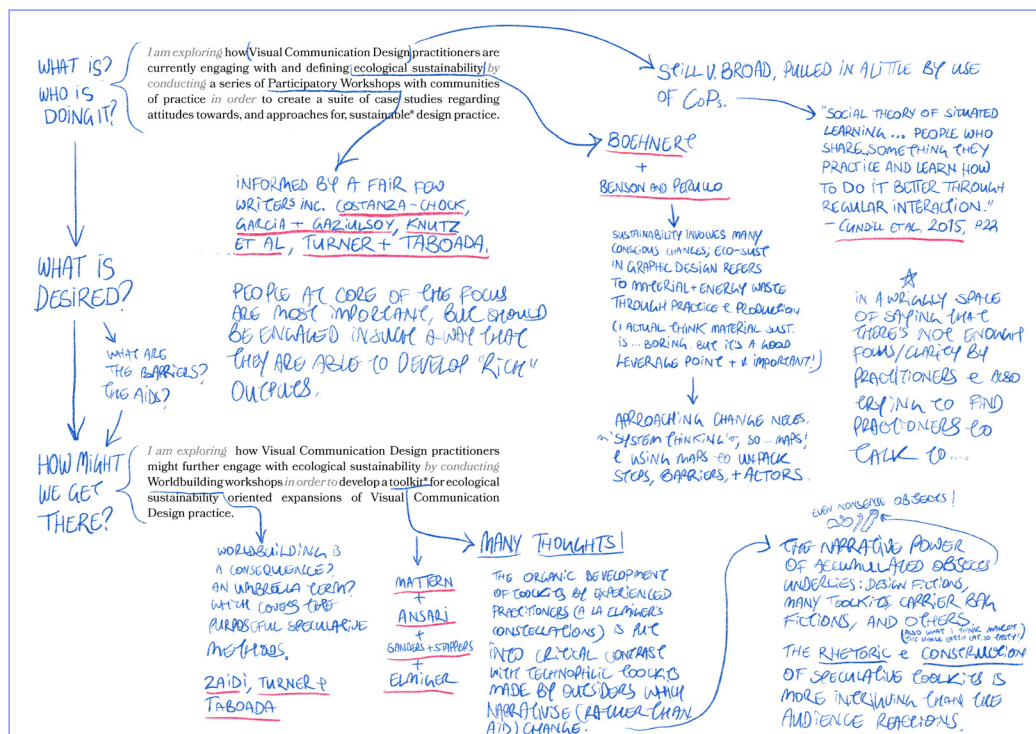
Developing speculative storyworlds allows for a discussion which positions participants outside themselves and their practice, but allows for reflection on current and future actions. In order to work towards "a world where many worlds fit" (Constanza-Chock, p.1), a diversity of perspectives need to be included, to develop and analyse a plurality of storyworlds. [S. Candy; C. Cooper; L. Zaidi; E. Cheon, et al; R. Tyszczyk; E. Manzini]

Designers, positioned as mediators of message, are poised to aid in moves towards sustainability. However, that requires that designers themselves are engaged in this discourse and feel capable/effective in engaging others in these discussions. [J. Boehmert; S. Constanza-Chock; S. Walker & X. Zhan; T. Milsten, et al.]

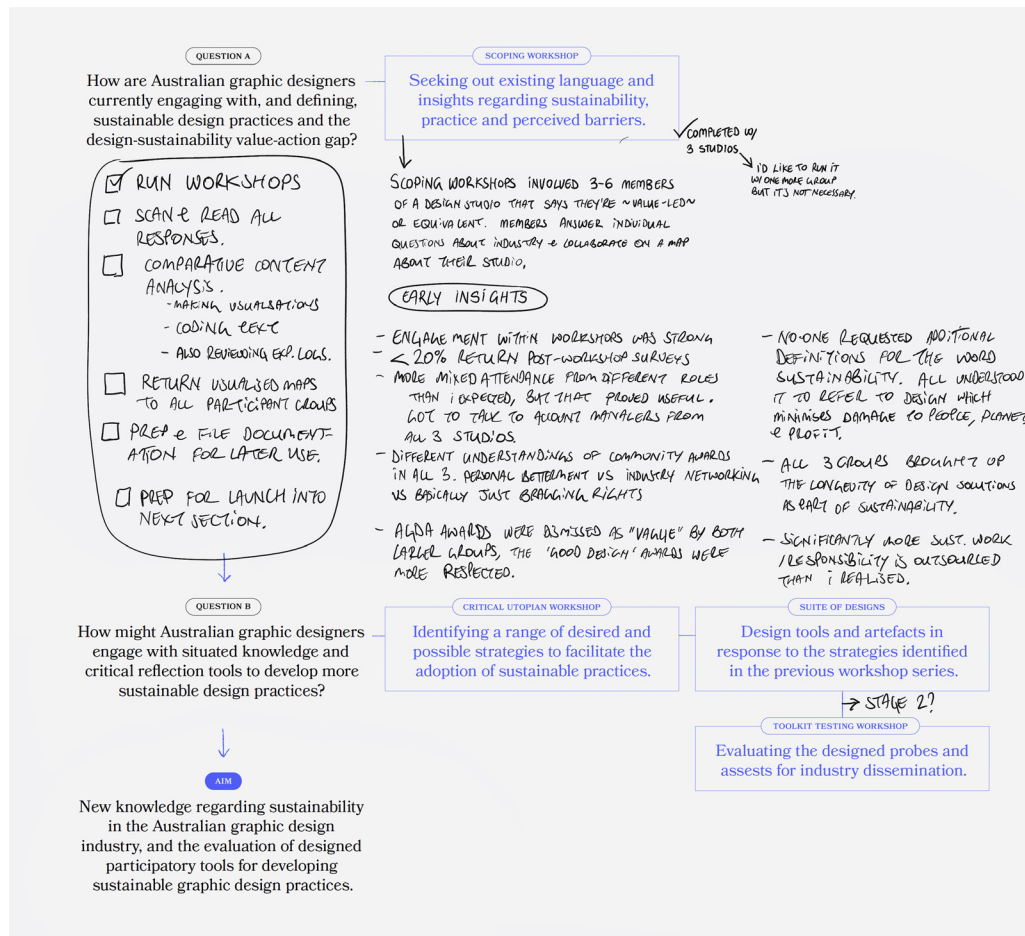
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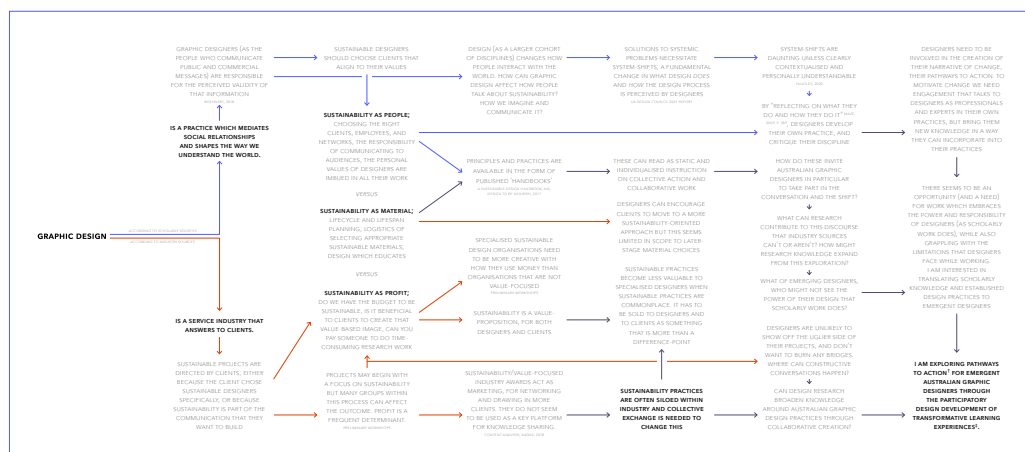
20 June 2022



15 February 2023



27 April 2024



E. Better Worlds Workshops Experiment Log Extracts

The Better Worlds Workshops were the product of months of development and each piece of the workshop script and material was carefully considered. As previously stated, the workshops were developed through an iterative creative critical process. The workshops included a mix of individual and collaborative activities. These were labelled as such in the page head but also indicated by the design of the module; collaborative activities asked participants to work on shared paper while individual activities included space to work inside the guidebooks.

The following are two example Experiment Log notes from developing and testing the Better Worlds Workshops Prototype. For each module, I wrote my notes *Precedent* to *Content* before beginning, then the afterwards completed the *Reflections On/For Action*. These examples have been extracted from my full catalogue of experiment logs for the Better Worlds Workshops Prototype, totalling over 50 pages of notes.

Workshop 1 - Object of Care (Individual)

Precedent:

This module explores the object of care as a means of grounding and contextualising the complex consideration of sustainability and climate change. By orienting conversations about sustainability through its potential or known impact on everyday things that participants love and care about, their objects of care, the impacts of climate change are rendered more personal and tangible, and may help bridge the value-action gap (Huntley, 2020; Wang et al., 2018). I was particularly inspired by this quote: “But the object of care is merely a starting point, a way to make climate change personally relevant to people struggling to understand what it means for them” (Huntley, 2020, p. 222).

I’m also referring here to work like The Urban Field Naturalist Project which focuses on reshaping how we look at the world around us; trying to get people to care more about the environment by paying attention to the ecologies at

work in the world (The Urban Field Naturalist Project, 2022). The use of collage was inspired by play design and design games precedents like those discussed in Vaajakallio's doctoral thesis (Vaajakallio, 2012), but also by my own experiences as a design student and educator where collage is often used in early parts of graphic design courses to get students used to working roughly with their hands.

Addressing the factors of:

Ecological literacy, Practice Critiques, and Hopeful Futures.

Design:


This spread contains a series of prompts and an area to create in the guidebooks. The illustrations included on this spread were of the drawing/making tools suggested rather than examples of objects of care, because I want to let them interpret the questions themselves.

OBJECT OF CARE, INDIVIDUAL, 30 MINUTES

Create an image of your object of care (refer back to your pre-workshop email if you have forgotten what you selected). This is a moment for reflection and play. Use the collage materials and markers supplied.

As you create, consider these questions:

- If the success of your object of care was a considered part of the design process, where would it go? Where does it fit in the map of practices you just created?
- How is your object of care affected by graphic design more broadly, or by the practices of those in your group?
- How is your object of care impacted by your design practice, now or in the future? If it isn't impacted, what does that mean for your object of care?



The illustration shows a collection of drawing tools: a pencil, a marker, and a pen, arranged in a cluster. The pencil is at the top left, the marker is below it, and the pen is at the bottom right. The pen is shown with a small squiggle, suggesting it has just finished drawing.

Content:

Using the collage and/or drawing materials provided, participants are asked to create an image of their ‘object of care’ and to reflect on its relation to the proceeding *Map of Practices*. This module is the second in the workshop because I wanted to quickly follow the criticality and concern of the *Map of Practices* with the kernel of what participants love and care about.

Reflections On/For Action:

This module required some extra explanation from me before they began, indicating that the participants did not necessarily fully complete or understand the pre-workshop instruction. I might need to reconsider the copy on this page for future versions to include a definition of an *object of care*. However, once an explanation was given which cited Huntley’s use of the object of care (Huntley, 2020), participants seemed to enjoy the exercise and engaged with it well.

The playfulness of the module was well received. The provision of collage materials was appreciated; of the seven completed images for this module, 5 included collage, 2 were purely drawn/written. The creation and discussion of these images led to insightful conversations.

The discussion of their personal objects of care also led to seemingly unrelated conversations about individual contexts of situated knowledge, and the discussions of how design can be used to instigate social change. This module seemed to have a larger impact than expected, both in the Workshop 3 proposed redesigns and in participant comments following the workshops. Melissa, in the first post-workshop survey, said, “Yes [I still refer to the] object of care. Helps me stay grounded and more aware of a bigger purpose behind my deliberate choices rather than simply ‘it’s a better way to work’.”

Workshop 2 - Storyworld Rules (Collaborative)

Precedent:

This module was originally developed with my colleague Alexandra Chalmers-Braithwaite for a pedagogical exercise we ran starting in 2023, introducing Honours students to ideas of Worldbuilding and design futuring. This exercise, which I have further developed for its use here, combined the idea of storyworld facts with the exquisite corpse collaborative drawing structure. What we created was an exercise which allowed students to start to play with Worldbuilding by reducing the pressure of individually creating complex, constructive storyworld rules. By having a class group collaborate on writing the facts together based on the values of each participant, they develop a storyworld for collaborative worldbuilding which is playful, creative, and draws from a wider view of preferred futures.

Addressing the factors of:

Ecological Literacy and Hopeful Futures.

STORYWORLD RULES, COLLABORATIVE, 25 MINUTES

We're starting off today by making a positive fictional world where all design practice is sustainable. This will be explored by building a storyworld; the wider context a narrative takes place in. The storyworld of a movie, for example, is not just the places that the protagonist visits but all the context that makes the world work that way (social, political, temporal). You often aren't told all of the details of a storyworld.

We'll start with making some sets of "facts" about your storyworld. Each fact should be something that you think would be good for the planet that you aren't already doing or experiencing with design. They can be as fantastical and silly as you'd like!

Each of you will finish this activity with a full set of storyworld facts.

- At the top of the next page, write one thing that would be true in a world where all design practice is sustainable. If you're stuck for somewhere to start, look at the actions and values from your logbook.
- Pass the paper to the left and take the paper from the person on your right. Read what the person before you wrote on their sheet.
- Write a fact in the next space on the page. It should make sense with the previous one (don't contradict it).
- Pass it along. Read what the person before you wrote on this new sheet and write a new fact in the next space.
- Repeat until all sheets have six facts.
- Read through the lists you've just created. As a group pick which list will be the basis of your shared storyworld for the next few exercises.

262

Design

This module has the instructions on the left page of the spread and spaces for writing on the right page. There are six facts and therefore six boxes. Each participant keeps the set of facts written into their guidebook, meaning that they keep the guidebook that they wrote the first fact for.

Content

This is the first step in the active imagination process that is developed through this workshop. In small groups, participants develop collaborative sets of storyworld facts. First, they write a “thing that would be true in a world where all design is sustainable” in the first box in their guidebook. They then pass their guidebooks around the group, writing facts in turns until all the guidebooks have six unique facts.

The necessity of collaborative storyworld facts is that the following sections of this workshop include collaborating on worldbuilding together with shared views of preferable futures. By having collaborative lists to pull from, no matter which storyworld is chosen, everyone will have contributed to it. The intention of collaboration here is that their facts build on each other's, often veering towards the preferable rather than the probable.

Reflections On/For Action:

The storyworld facts worked well as a module to begin the second workshop and as a continuation after the criticality of the first workshop. The facts and conversations around this module showed the impact of the first workshop on the participants' conceptions of ecological sustainability and the material impacts of design. Although the participants were prompted to be as silly or creative as they liked, they self-regulated towards possible and preferable futures. This may have been informed by the knowledge gained through Workshop 1.

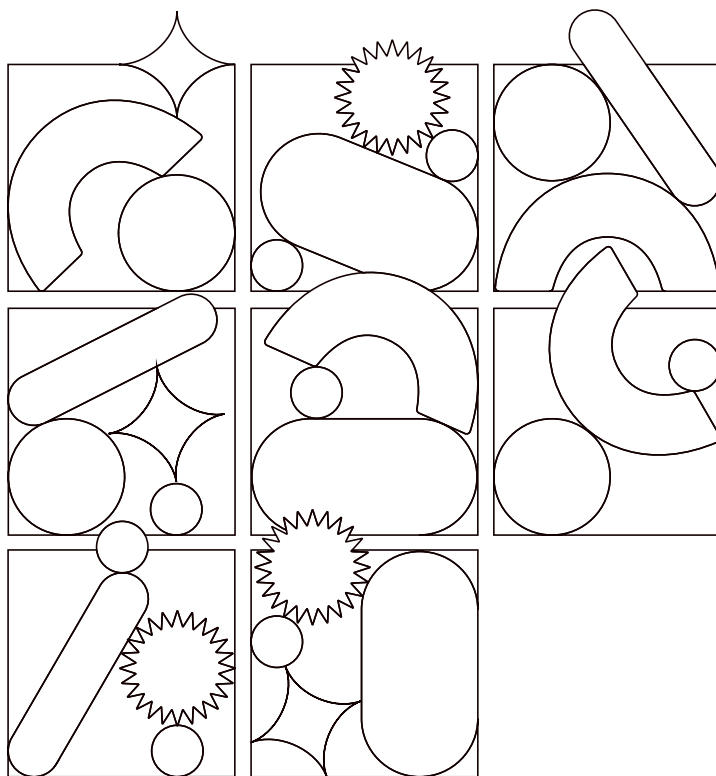
Writing in turns did pose some issues for timing. Most participants took between 1 and 3 minutes to write each fact, but their differences in writing time would lead to ‘traffic jams’ where delays would pass down the chain. As soon

as one person took longer than the others, there would be a delay. Overall, this module took longer than expected; around 40 minutes rather than 30. This could be mitigated by setting stricter time limits per fact but the traffic jam effect in a group this small was not significant enough for me to intervene.

When people were left waiting, it wasn't a significant disruption as those who finished more quickly tended to just add more details to their existing answer(s), or they would take a small break for drinks/snacks. Any possible friction from this delay was not commented on by participants.

This module ran well in a group of 5 and in two groups of two. Other than the traffic jam effect, which can be mitigated by setting a time limit, this module seems scalable to slightly larger groups with similar understandings of the core issue they are discussing. Additionally, this module is called *Storyworld Rules* but it should be called *Storyworld Facts*; I will change this in the next iteration.

F. Scoping Workshop Guidebook



INDIVIDUAL RESPONSE

Work title/role:

How long have you worked as a designer?

How long have you worked with this studio?

What are five key words/phrases that describe 'good design'?

GROUP MAP 1: PEOPLE AND PROCESSES

Across the next few steps you'll be making a diagram/map of how design is done within your organisation. No wrong answers, be as messy and scribbly as you like, and all able should write and contribute.

As a group pick a recent project that feels typical for your studio and start to draw out:

1. How did that project arrive in the studio?
2. What happened next?
3. Continue mapping the path of people and processes, until the project is completed. Make sure to add yourselves in along the way.
4. Once the design project is released into the world, what happens then?
5. Add in any extra people/processes that often appear but weren't covered in this map.

Added space for notes for WFH participants:

GROUP MAP 2: VALUES AND DECISIONS

Great! We have a map, now to add some labels.

1. This one's both simple and difficult: label where you think sustainability is considered in your map.
2. *How* is sustainability considered at those points? Be detailed in your descriptions.
3. How could sustainability be *better considered* in your collective process?
4. Discuss your earlier notes on what makes something 'good design'. Where do those elements fit in?
5. What are the common ideas showing up here? Discuss and write a list to the side of the map.

Added space for notes for WFH participants:

INDIVIDUAL RESPONSE

Before participating in this workshop, had you previously discussed sustainability as a value in design with your colleagues? Where, why, how?

List any events you attended in the past year that dealt with both sustainability and design.

Are there any resources you turn to for guidance regarding sustainable or 'good' design practices?

What kinds of resources would you like to have access to?

INDIVIDUAL RESPONSE

Rank the following roles from least to most influential on the **sustainability** of a design project: A) *Creative leads*, B) *Design team*, C) *Suppliers/developers*, D) *Producers/project managers*, E) *Clients*, F) *Other*

LEAST

MOST

Which, if any, design studios or agencies would you like to hear from re: sustainability and design?

Do you have any additional comments you'd like to provide about what you've done today?

Take a final five minutes as a group to write a definition for **sustainable design** on the shared map.

G. Participant Information Sheet

The Better Worlds Workshops are a product of my PhD research into sustainable design practices in Australian graphic design. When I was an emerging designer and starting my research, I found it difficult to understand how I could be more sustainable. It felt like when I was a student I could make work in the way I wanted, for the causes and values that I felt strongly about. It seemed like design could keep being an avenue for connecting my values to my actions after I graduated, but the design industry doesn't always work like that. Designers are rarely given the time or support in reflecting on (or changing) who we're making work for, what it is we're making, or how we're making it.

My doctoral research centres on the creation of workshops which help emerging designers cultivate more sustainable practices. These Better Worlds Workshops combine my research from the past few years on the Australian graphic design industry, ecologically sustainable design practices, and how designers learn by making things together.

What will you be doing in the Better Worlds Workshops?

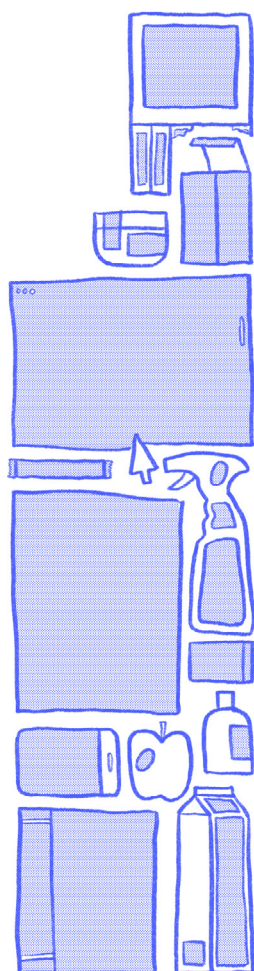
The workshops will involve working with small groups of other emerging designers in a variety of activities including sketching, mapping, telling stories, and making collaborative designs. The end-goal of the workshops is that participants who take part will:

- be able to position their practice within context, and understand how they are currently supported or constrained by the design industry.
- be able to articulate what sustainability means to them and why it is important in graphic design.
- learn about different existing sustainable design practices.
- have strategies to help them adopt and implement more sustainable design practices.

What do I (Thea Kable) gain from running these workshops?

I have made these workshops to help emerging designers develop more sustainable practices. By taking part, you're helping me test these workshops so that I can see if they're successful. After this testing is completed, I'll use some of my findings (my observations on how they run and what participants do/say about them) to edit and re-design them. Then I hope to release these workshops as an open-source tool online.

You will be helping me by being part of testing and redesigning these workshops. I am not collecting information to assess your practices, or the practices of your workplace(s). I'm just interested in how the workshops function and what impact they have. These workshops have been approved by the University of Technology Sydney Human Research Ethics Committee under the case number ETH23-8898. If you have queries or concerns, please feel free to contact me at theadora.kable@uts.edu.au or my supervisor Zoë Sadokierski at zoe.sadokierski@uts.edu.au.



What is the time commitment?

There will be two session times available for each workshop, and they will be hosted at the UTS Ultimo campus or (if necessary) via Zoom.



SURVEY AND CONSENT FORMS, BEFORE WORKSHOP 1, 30 MINUTES.

WORKSHOP 1, 2 1/2 HOURS.

Workshop 1 is about reflecting on and critiquing the way that design practices currently work. In small groups with other emerging designers you'll map, sketch, and collage your way through discussions about industry, practice, and impact.

LOGBOOK, BETWEEN WORKSHOPS 1 AND 2, 1 HOUR.

Between session 1 and 2 you'll be asked to track some of your key actions and values over two work days.

WORKSHOP 2, 2 1/2 HOURS.

Workshop 2 is about how we can imagine design practice differently, and work towards more sustainable futures. In small groups with other emerging designers you'll play with making fictional worlds and design objects, tell stories, and reflect on your ideas for the future. This session is all about play and the way that designers learn by making things.

WORKSHOP 3, 2 1/2 HOURS.

Workshop 3 is about the workshops so far; what did you like and what could have been different? This is a co-design session where, in a larger group of emerging designers, you can re-design the workshops and request future resources.

POST-WORKSHOP SURVEY 1, SENT OUT AFTER ONE WEEK, 30 MINUTES.

POST-WORKSHOP SURVEY 2, SENT OUT AFTER ONE MONTH, 30 MINUTES.

H. Informed Ethics Consent Form



PARTICIPANT INFORMATION SHEET

ETH23-8898 - Better Worlds Workshops: Exploring the Development of Ecological Sustainability Strategies for Emerging Graphic Designers

WHO IS CONDUCTING THIS RESEARCH?

My name is Thea Kable and I am a PhD student at UTS. My supervisor is Associate Professor Zoë Sadokierski, available for contact at zoe.sadokierski@uts.edu.au.

WHAT IS THE RESEARCH ABOUT?

This research explores how participatory design can help emerging designers develop strategies to implement ecological sustainability in their practice. Ecological sustainability in graphic design is the material and energy impacts of design practices and products on the environment. This project builds on current practices for sustainable design education, and seeks to assess and refine the activities and resources that I have created for use in these workshops. These will include collaborative mapping, design, and worldbuilding. Participants will leave the experience with greater knowledge of, and strategies for the implementation of, ecologically sustainable design practices.

WHY HAVE I BEEN INVITED?

This research is seeking out emerging designers (<5 years design work experience) who are interested in ecological sustainability but have limited experience with sustainable design practice. Your contact details were obtained from your response to the EOI call-out.

WHAT DOES MY PARTICIPATION INVOLVE?

If you decide to participate, you will be invited to take part in a set of three workshops alongside other emerging designers. There will be six participants in a session, split into two groups of three. You will be collaborating with your group of three throughout all three workshops. The total time involvement for this work will be 10 hours; this time includes pre-work (which includes this consent form), three workshops, two surveys, a logbook, and an email afterwards. Workshop material is focused on identifying participants' personal values, and developing reflective approaches that enable participants to critique their own practice. Participants will also be prompted to engage in discussions about current design practices in the industry, how you'd like your work to change, and extra resources needed to get there. In order to explore these topics. You will be asked to:

- collaborate on a 'map of practice' where you explore the different factors which affect your work
- use a given structure to write about your personal values for your work and, during the two-week break between sessions 1 and 2, see how those principles match up to actuality.
- be given information about existing sustainable design practices.
- collaborate on making a hypothetical setting where those principles are true, and use that to re-contextualise and reflect on your design practice.s
- propose new resources and activities that might benefit other emerging designers.

Participation will include the following sessions and surveys in 2024:

- Survey and Consent Form (Must be returned by 17 April, 30 minutes total)
- Workshop 1 - Engaging Criticality (17 or 20 April, 2 ½ hours total)
- Between Workshops 1 & 2 - Logbook (1 hour total)
- Workshop 2 - Engaging Hope (1 or 4 May, 2 ½ hours total)
- Workshop 3 - Paying it Forward (15 or 18 May, 2 ½ hours total)
- Post-Workshop Survey 1 (Sent out on 22 May, 30 minutes total)
- Post-Workshop Survey 2 (Sent out on 12 June, 30 minutes total)

ARE THERE ANY RISKS/INCONVENIENCE?

Discussions surrounding sustainability and the continually growing negative impacts of human action on the natural world have the potential to be upsetting. This is particularly true of participants who are reflecting on their practice and thus their capability to create change. As such, a recognised potential risk is emotional discomfort due to the subject matter of this research and its dual focus on sustainability and professional practice.

This research is not searching out failure within design practice, it is examining the structures and systems in place which currently enable or obstruct increased engagement with sustainability. Participants will not be pushed to discuss outside the bounds of the explicitly stated research aims. Though these participants will be asked to describe and assess the practice present in their workplaces or communities, there is no foreseen major risk of disturbing working relationships. There is a slight risk of reputational harm if participants are viewed by others as being disparaging or breaking privacy towards their colleagues, clients, or employers. This is not encouraged or endorsed by the research project. The workshop activities are focused on the development of participants' confidence and capabilities for change, and the evaluation of the provided activities in assisting this development. There is no particular physical risk apparent, as participants will be creating standard and low-risk workshop collateral in a UTS study area or if running online, their own chosen space.

If a participant does display distress, they can withdraw from the activity or, if they prefer, withdraw from the research overall. Participants can also request that their contributions be removed from the project.

DO I HAVE TO TAKE PART IN THIS RESEARCH PROJECT?

Participation in this study is voluntary. It is completely up to you whether you decide to take part. If you decide not to participate, or to withdraw from the study, it will not affect your relationship with the researchers or the University of Technology Sydney.

WHAT IF I WITHDRAW FROM THIS RESEARCH PROJECT?

If you wish to withdraw from the study once it has started, you can do so at any time without having to give a reason, by contacting Thea Kable or Zoe Sadokierski. If you withdraw from the study, your contributions to the project will be removed and discarded.



WHAT WILL HAPPEN TO INFORMATION ABOUT ME?

By signing the consent form you consent to the researcher collecting and using personal information about you for the research project. All this information will be treated confidentially. The research will be stored for future use in research projects that are an extension of this research project for 5 years. In all instances, your information will be treated as confidential and stored securely. Audio of the workshop will be recorded with permission, in order to review the efficacy of the workshop method. Completed workshop materials may be included in ongoing doctoral research, and participants can request to be de-identified in any future publications. Data collected from this research project may be accessed by Thea Kable during the completion of her PhD via her secure computer and back-up device. The data will be held securely on UTS eResearch Store until 01-03-2030, when it will be destroyed.

It is anticipated that the results of this research project will be published and/or presented in a variety of forums. In any publication and/or presentation, information will be provided in such a way that you and your organisation cannot be identified, except with your permission. Any identifying names of organisations or people will be digitally redacted within the workshop content. Raw materials filled out and developed within the workshop will be kept within the researcher's practice. By participating in these workshops you are helping develop the next iteration of the material. A revised set of workshop materials and resources will be published online as an open-source resource. Your participation is greatly appreciated, and you will be credited by name (if you wish) as a contributor to this work.

In accordance with relevant Australian and/or NSW Privacy laws, you have the right to request access to the information about you that is collected and stored by the researcher. You also have the right to request that any information with which you disagree be corrected. Please inform the researcher named at the end of this document if you would like to access your information.

WHAT IF I HAVE ANY QUERIES OR CONCERNS?

If you have queries or concerns about the research that you think myself or my supervisor can help you with, please feel free to contact me at theadora.kable@uts.edu.au or Zoë Sadokierski at zoe.sadokierski@uts.edu.au.

You will be given a copy of this form to keep.

NOTE:

This study has been approved in line with the University of Technology Sydney Human Research Ethics Committee [UTS HREC] guidelines. If you have any concerns or complaints about any aspect of the conduct of this research that you wish to raise independently of the research team, please contact the Ethics Secretariat on ph.: +61 2 9514 2478 or email: Research.Ethics@uts.edu.au, and quote the UTS HREC reference number. Any matter raised will be treated confidentially, investigated and you will be informed of the outcome.

I. Pre-Workshop Survey

Questionnaire

- What is your work title / role?
- How long have you worked as a designer?
- Do you work in a studio, in-house, as a freelancer, or otherwise?
- How would you describe sustainable design practice?
- How sustainable would you say your work is? (0-10 scale)
- Before signing up for these workshops, had you previously discussed sustainability with your design community? Where, why, how?
- Are there any resources you turn to for guidance regarding sustainable or 'good' design practices?
- What kinds of resources would you like to have access to?
- What are the different roles involved in your design process? (A list of suggested roles includes: Creative leads; Design team; Suppliers; Developers; Producers; Project managers; Clients)
- Rank the previous roles from least to most influential on the ecological sustainability of a design project.
- Which of those roles do you best identify with? Why did you rank that role at that level of influence?
- What are your expectations of these workshops?

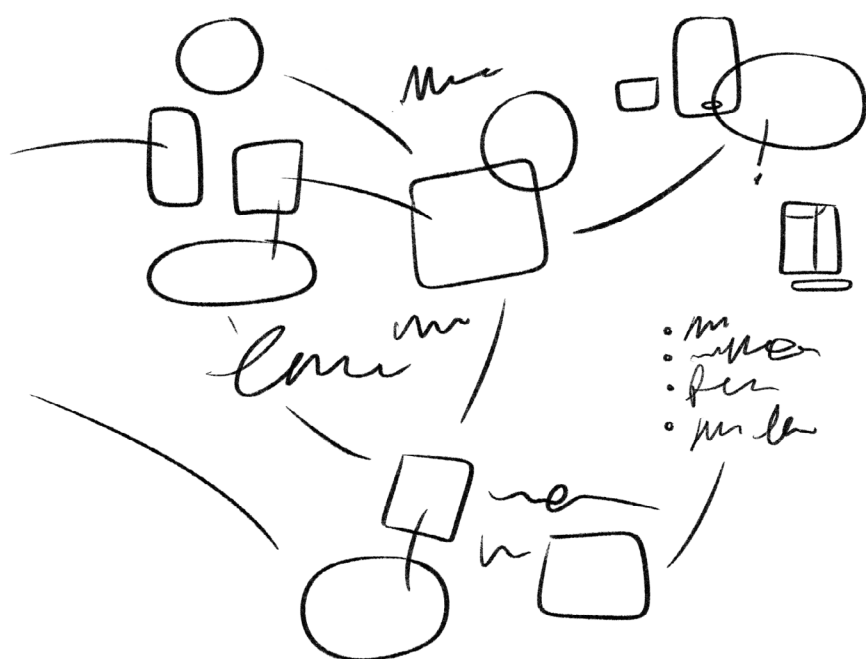
Object of Care:

In Workshop 1 you'll be asked to share and discuss something that you love, and want to see thrive. We'll call this an 'object of care', though it doesn't need to be an object. It could be a person, place, hobby, profession, flora, fauna, or an experience. It should be something important to you, that you want to see succeed. What is your 'object of care'?

MAP OF PRACTICES, COLLABORATIVE, 75 MINUTES

Individually, pick a recent project that you worked on and keep it in mind for this exercise. You'll be making a map as a group of how you practise design. All members of your group will be writing and mapping on the same piece of paper, and more paper is available if needed. You may find contradictory information or common threads between your answers.

1. In the middle of the paper, write/draw what the end 'product' of your selected project was.
2. To the left of step one write/draw who or what was involved between you and the end product?
3. To the left of step two, add in yourselves! How were you involved, what did you do?
4. Continuing to the left, how did this project reach you?
5. Continuing to the left, who and what do you think motivated the start of this project?
6. Can you explore the start of the project even further back? What was the start of the brief, of the client, of the market?
7. Now we're going to go to the right of step one: Once the design project is released into the world, what happens?
8. Push your answers to step seven even further. What about 100 years from now? Using the *Materials* information in the supplied booklets, track out how long different parts of the project last. Try to expand out not just the end 'thing', but anywhere along the process that these materials or processes occur.
9. Finally, if applicable, how does your project feed back into your design practice?



Take a break and then read over and discuss the map so far with your group. As a group, add in notes across the whole map about:

- how people are prioritised or affected.
- how profits are prioritised or affected.
- how material and energy use is prioritised or affected.

OBJECT OF CARE, INDIVIDUAL, 30 MINUTES

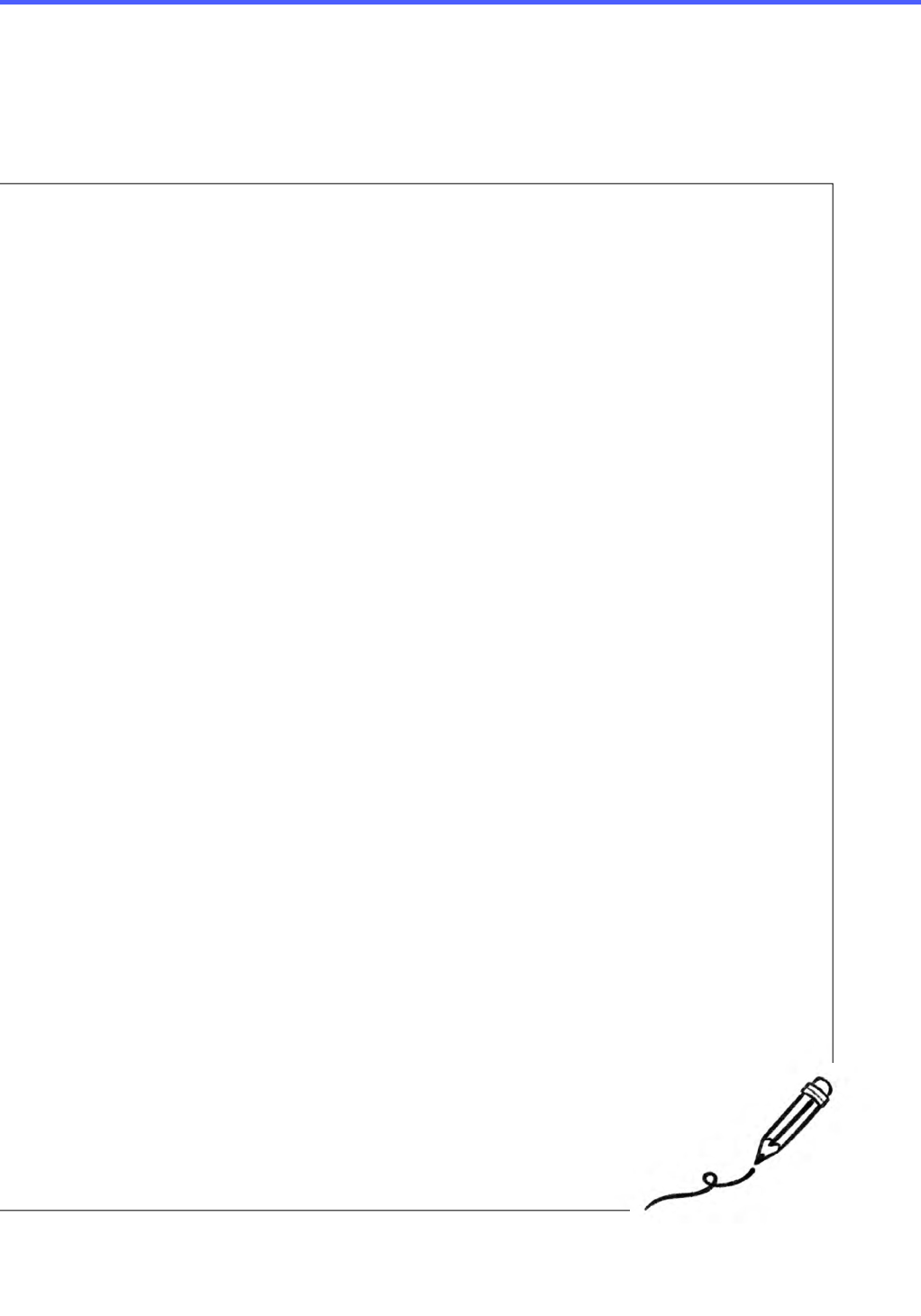
Create an image of your object of care (refer back to your pre-workshop email if you have forgotten what you selected). This is a moment for reflection and play. Use the collage materials and markers supplied.

As you create, consider these questions:

- If the success of your object of care was a considered part of the design process, where would it go? Where does it fit in the map of practices you just created?
- How is your object of care affected by graphic design more broadly, or by the practices of those in your group?
- How is your object of care impacted by your design practice, now or in the future? If it isn't impacted, what does that mean for your object of care?



A large empty rectangular box with a thin black border, intended for creating a collage image of the object of care.



VALUES AND ACTIONS, INDIVIDUAL, 10 MINUTES

Fill in the blanks below:

I want to be a sustainable,¹ _____², and
_____³ designer. My object of care would be best
benefited by design which _____⁴
*[i.e. educates others, affects human interactions, directs funds to
a certain area, or minimises material waste].* As a designer, my
main skills are _____⁵ and _____⁶.
My design process includes using a materials/energy
resources such as _____⁷.

Your next task is to track these parts of your practice over
two work days. Label the logbook columns to match the seven
answers you just wrote. Whenever a value, approach, skill, or
material occur during your day, put a check in its column.

LOGBOOK, INDIVIDUAL, 60 MINUTES

1. Sustainable	2.	3.	4.	5.	6.	7.

1. Sustainable	2.	3.	4.	5.	6.	7.

K. The *Small Handbook*

[Note: The unfolded poster side of the handbook follows the zine pages, as would be experienced by a reader. Please be aware that the content of this zine has been updated significantly in the refined Better Worlds Workshops.]

A small handbook about the big idea of ecological sustainability for emerging designers.

INTRO

Sustainable design practices work towards a healthier planet by considering *social interaction*, *economic impact*, and/or *material choice*. Sustainable design practices might affect:

- people, the information they share, the actions they take, and the ways they interact with each other.
- profits, by using design to amplify or minimise corporations, and by directing money towards regenerative materials/services/products.
- the planet, by considering product life-cycles, material and energy usage, and the material actions of practice.

This handbook offers some guidance around ecological sustainability, meaning minimising the material and energy waste of graphic design. It's a jumping off point for you to do further research on materials and practices you find interesting.

CORE STRATEGIES

- *Re-think* what you create; rejecting or altering briefs, changing your design process, designing for longevity, and life-cycle planning for products.
- *Reduce* the materials and energy used; minimising ink coverage and thickness of materials used, reducing the amount of collateral created, creating Product Packaging Combinations, and reducing file sizes and server usage.
- *Reuse/Re-purpose* designs and products; modular brand systems, packaging which can be disassembled and refilled or altered, and the re-purposing of assets or code within the design process.
- *Recycle* as much as possible; using recycled instead of virgin materials in products and the workplace, and designing for recycling by using easily recyclable materials, single-material products, and designing for disassembly.

ENERGY AND WASTE STREAMS

Many of the approaches for reducing material waste will also reduce energy waste. Specific tactics for reducing energy use range from the organisational level (installing solar panels, purchasing Renewable Energy Certificates, and supporting net-zero energy options) to the individual (completely shutting down electronics when work is complete, reducing file-size online, using green hosting services, and deleting unused files).

The recycling of materials mostly happens through manufacturing waste or post-consumer waste. Recycling is, broadly, much more efficient with low-dye single-material products. A computer is much more difficult to recycle, although it might be re-purposed, while a clear glass jar is fairly simple. One role that graphic design plays in this process is making sure that users clearly understand where or how to reuse and recycle.

LIFE-CYCLES

Ecological sustainability in graphic design is the reduction of material and energy waste in design. One way of doing this is to change the life-cycle of a design; altering where it begins and where it ends. Closed loop circular economies (where nothing ever goes to waste) are the goal for many designers and a hot topic in product design, but probably out of your reach right now. As an emerging designer you likely can't perform Life Cycle Assessments on all the projects you work on, but you can consider where materials and energy come from and where they go.

Sustainable graphic design does not necessarily mean designing for a short lifespan. Designing for longevity might mean that there isn't a need to re-design, re-code, or re-manufacture products. Think of a high quality book, a resourceful website, or packaging that can be refilled over and over.

OTHER RESOURCES

If you unfold this booklet, you'll find information about common materials used in design. It is very difficult to give exact numbers around the lifespan of different materials, because they're affected by so many factors. The numbers in popular press are unreliable, so please ask Thea for more references or do more research on your own.

More resources about different topics:

Sustainability overall

- Design, Ecology, Politics [book]
- Design to Re-Nourish [book and website]
- The Sustainable Design Handbook [website, meant more for product design]
- The BIMA Sustainability Council [website, collection of resources]
- DelftX: Sustainable Packaging in a Circular Economy [online course]
- The UK Design Council Resources [website, all forms of design]

Sustainable Websites

- The Green Web Directory by the Green Web Foundation
- Web Sustainability Guidelines: w3c.github.io/sustyweb/glance.html
- Sustainable.dev
- Lowwwwcarbon
- Mozilla Developer Network's 'Introduction to Web Sustainability': developer.mozilla.org/en-US/blog/introduction-to-web-sustainability
- Website Carbon testers such as websitescarbon.com, ecograder.com, and webpagetest.org/carbon-control

Novel/New Materials

- The Material District's database: materialdistrict.com/material
- Mossy's material database: mossy.co/materials

Paper

- Canopy EcoPaper Database:
epd.canopyplanet.org
- The Forest Stewardship Council certifications and policies

Ink

- EarthGreeting's Australian Green Printers Directory
- the 'Sustainable Purchasing Guide Printing Ink' by the University of Saskatchewan
- Cartridges 4 Planet Ark, a printer cartridge recycling program
- Choice's guide to sustainable printing at home: <https://www.choice.com.au/electronics-and-technology/computers/scanners-and-printers/articles/how-to-print-greener>

STORYWORLD RULES, COLLABORATIVE, 25 MINUTES

We're starting off today by making a positive fictional world where all design practice is sustainable. This will be explored by building a *storyworld*; the wider context a narrative takes place in. The storyworld of a movie, for example, is not just the places that the protagonist visits but all the context that makes the world work that way (social, political, temporal). You often aren't told all of the details of a storyworld.

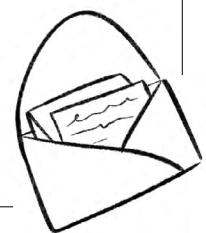
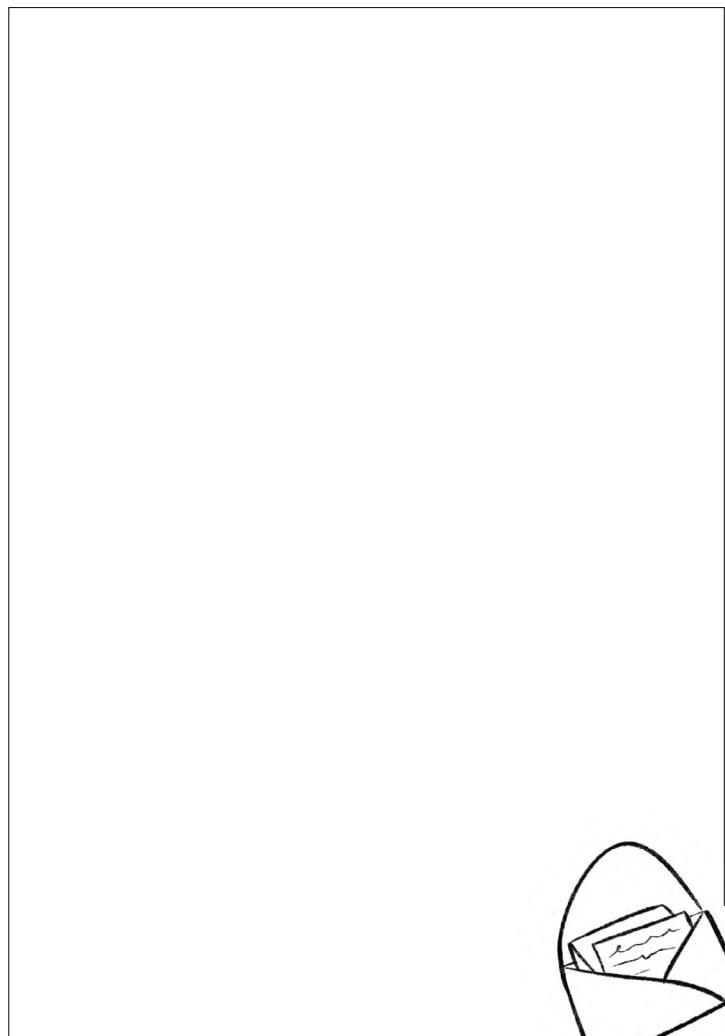
We'll start with making some sets of "facts" about your storyworld. Each fact should be something that you think would be good for the planet that you aren't already doing or experiencing with design. They can be as fantastical and silly as you'd like!

Each of you will finish this activity with a full set of storyworld facts.

- At the top of the next page, write one thing that would be true in a world where all design practice is sustainable. If you're stuck for somewhere to start, look at the actions and values from your logbook.
- Pass the paper to the left and take the paper from the person on your right. Read what the person before you wrote on their sheet.
- Write a fact in the next space on the page. It should make sense with the previous one (don't contradict it).
- Pass it along. Read what the person before you wrote on this new sheet and write a new fact in the next space.
- Repeat until all sheets have six facts.
- Read through the lists you've just created. As a group pick which list will be the basis of your shared storyworld for the next few exercises.

LETTERS FROM BETTER WORLDS, INDIVIDUAL, 15 MINUTES

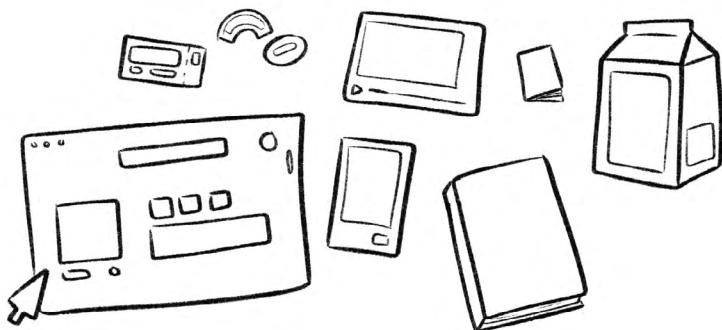
If you existed in this storyworld, what would you say to your current real world self? Write a message to yourself here.



DESIGN FICTIONS, COLLABORATIVE, 35 MINUTES

Next, you will develop a 'design fiction' which helps flesh out this positive fictional storyworld. A design fiction is a piece of graphic design that belongs inside an imaginary world. You can think of it like a film prop.

A chocolate wrapper in a film actually lets us know quite a bit about the setting, without sitting us down and telling us about the industrial development and social context of the setting. Is graphic design a hugely different field in your story world, similar work conducted in a changed way, or something in between?



Pretend that your chosen set of facts are true. As a group, thumbnail out a design project you'd work on in the fictional setting you just wrote about. The form is up to you; it could be a piece of branding, a motion infographic, a small zine, a publication series, or whatever else you desire. Be rough with your work, draft quickly and creatively, and work in whatever medium you'd prefer. Your creation can be as outlandish or realistic as you want. Do not do any extra research.

Draft up this fictional project on the provided paper, and write a two sentence 'project pitch'.

BACKCASTING, COLLABORATIVE, 20 MINUTES

Take a break. On a shared page, discuss and answer these questions as a group:

- How would your design fiction be made? How would each of you be involved in using your skills to make it happen?
- How far away is your storyworld from the present?
- How are your objects of care treated in the design practice of your storyworld?
- What would have changed between now and the storyworld? What cultural ideas, social relationships, material innovations, or economic shifts?
- What are the key obstacles stopping you from being in that storyworld right now?

STRATEGIES, INDIVIDUAL, 30 MINUTES

To start developing strategies for change, we first need to ask a few key questions.

- What aspects of your storyworld would you like be real?

- What are your obstacles?

- Which people/groups could you work with to get there?

- Which of your skills will help?

- What new knowledge do you need?

- What would others need to do differently?

- What would you need to do differently?

Create three pathways to action by putting your answers from the previous page into this structure three times:

I want *[storyworld aspect]* to be real. For that to happen, I need to *[overcome an obstacle]* by *[collaborating with this group]* / *[using this skill]* / *[gaining new knowledge about this area]* / *[changing how these people act]* / *[other]*.

I want:

I want:

I want:

M. Workshop 3 – *Paying it Forward*

REFLECTION, COLLABORATIVE, 30 MINUTES

As a group, write down five:

- Key new ideas or pieces of knowledge you discovered through the workshops.
- Sustainable practice strategies from the workshops.
- Topics/strategies you wanted to learn about, but that the workshops didn't cover.
- Things you think that other people need to know to start being more sustainable.

MODULES, INDIVIDUAL OR COLLABORATIVE, 70 MINUTES

Let's plan out some new activities or resources that would help others learn. What resources did you say you wanted? Are they still needed? What did you want to learn about that we didn't cover? Were there interesting things that you wanted more of?

Use the cards provided to sketch out some new activities or resources. You can make many or just a few, and make them individually or as a group.

CONSTRUCTION, COLLABORATIVE, 30 MINUTES

In your small groups, plan out a new workshop experience using your chosen combinations of your own activities and existing exercises. Arrange the cards like a timeline along the table; what should your participants learn first?

_____, INDIVIDUAL / COLLABORATIVE, ___ MINUTES

WHAT DO WE WANT TO LEARN?

WHAT DO NEED TO READ / DO TO LEARN THIS?

WHAT, IF ANYTHING, GETS MADE?

MAP OF PRACTICES, COLLABORATIVE, 75 MINUTES

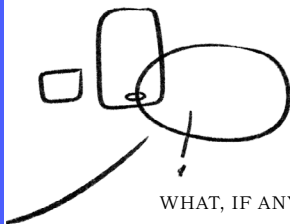
WHAT DO WE WANT TO LEARN?

Who and what is involved in our design processes? What impact might our design work have that we don't consider?

WHAT DO WE NEED TO READ / DO TO LEARN THIS?

Designers are the people who know the most about their own design practices. We need to answer questions that help us work through what we do and don't know. A resource about material impacts is useful for examining further impact.

Start from the project as the 'focus' of the page. Work backwards to the project origin, and forwards to project dissemination and impact. Use information about material lifetimes to extend the "timeline" further.



WHAT, IF ANYTHING, GETS MADE?

- A map which shows a practice processes over time. By having multiple on one page, we might identify similarities and differences more easily.
- Conversations about practice.



OBJECT OF CARE, INDIVIDUAL, 30 MINUTES

WHAT DO WE WANT TO LEARN?

How does design impact things we care about? It's easier to care for one thing deeply, than about the whole world.

WHAT DO NEED TO READ / DO TO LEARN THIS?

Create images of our object of care, and answer:

- If the success of your object of care was a considered part of the design process, where would it go? Where does it fit in the map of practices you just created?
- How is your object of care affected by graphic design more broadly, or by the practices of those in your group?
- How is your object of care impacted by your design practice, now or in the future? If it isn't impacted, what does that mean for your object of care?



WHAT, IF ANYTHING, GETS MADE?

- Images of the object of care. These can be used to discuss the activity with others.
- Personal reflections.

VALUES AND ACTIONS, INDIVIDUAL, 10 MINUTES

WHAT DO WE WANT TO LEARN?

What values, strategies, skills, and materials are most important to us?

WHAT DO NEED TO READ / DO TO LEARN THIS?

Fill in the blanks below:

I want to be a sustainable, _____², and _____³ designer. My object of care would be best benefited by design which _____⁴ [*i.e. educates others, affects human interactions, directs funds to a certain area, or minimises material waste*]. As a designer, my main skills are _____⁵ and _____⁶. My design process includes using a materials/energy resources such as _____⁷.

WHAT, IF ANYTHING, GETS MADE?

- Personal reflections.
- A list of values, strategies, skills, and materials.

LOGBOOK, INDIVIDUAL, 60 MINUTES

WHAT DO WE WANT TO LEARN?

How frequently our important values, strategies, skills, and materials appear during our work days.

WHAT DO WE NEED TO READ / DO TO LEARN THIS?

We need to track these parts of our practice over two work days. Label the logbook columns to match the seven answers we just wrote. Whenever a value, approach, skill, or material occur during our day, we put a check in its column.

WHAT, IF ANYTHING, GETS MADE?

- A (very informal, non-reliable) measure of the frequency that different elements occur in our practices.
- Reflections on practice because of heightened awareness.

STORYWORLD RULES, COLLABORATIVE, 25 MINUTES

WHAT DO WE WANT TO LEARN?

What are the things that we think are ideal for sustainable practice, even if they feel out of reach?

WHAT DO WE NEED TO READ / DO TO LEARN THIS?

Collaboratively make a set of storyworld facts as the basis for future worldbuilding. Each fact should be something that we think would be good for the planet that we aren't already doing or experiencing with design. They can be as fantastical and silly as we'd like.

We make the facts by passing the paper around and taking turns writing, so that each set gets a mixture of participant responses. Each set will have six facts,

WHAT, IF ANYTHING, GETS MADE?

- Several different lists of storyworld facts.
- Beginning thoughts on the ideas of ideal practice.

LETTERS FROM BETTER WORLDS, INDIVIDUAL, 15 MINUTES

WHAT DO WE WANT TO LEARN?

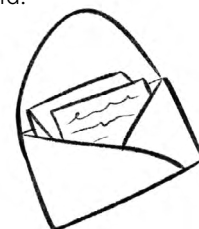
How do we conceptualise a world full of idealised sustainable design practice, outside of the facts of practice themselves.

WHAT DO WE NEED TO READ / DO TO LEARN THIS?

Write a letter to our real-world selves from the perspectives of someone in the storyworld.

WHAT, IF ANYTHING, GETS MADE?

- A letter which we can reflect back on later.
- Clearer ideas of our aspirations and of the differences between the storyworld and our real world.



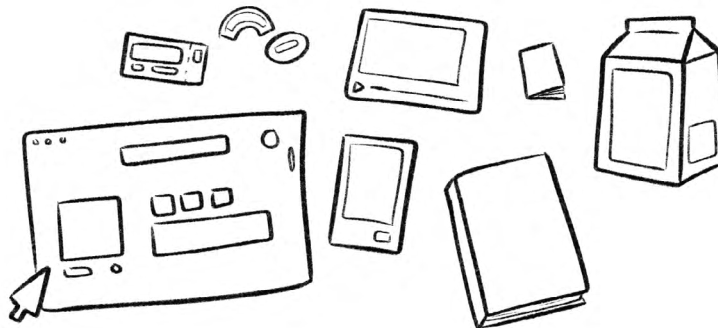
DESIGN FICTIONS, COLLABORATIVE, 35 MINUTES

WHAT DO WE WANT TO LEARN?

How do we imagine design differently in a world of ideal practices? How does that differ to today?

WHAT DO NEED TO READ / DO TO LEARN THIS?

Create a design fiction; a fictional design project that works in the setting of the storyworld. plan and sketch it collaboratively in a small group.



WHAT, IF ANYTHING, GETS MADE?

- Conversation.
- A sketched out design fiction.

BACKCASTING, COLLABORATIVE, 20 MINUTES

WHAT DO WE WANT TO LEARN?

How do we imagine design differently in a world of ideal practices? How does that differ to today?

WHAT DO WE NEED TO READ / DO TO LEARN THIS?

Discuss and answer these questions as a group:

- How would your design fiction be made? How would each of you be involved in using your skills to make it happen?
- How far away is your storyworld from the present?
- How are your objects of care treated in the design practice of your storyworld?
- What would have changed between now and the storyworld? What cultural ideas, social relationships, material innovations, or economic shifts?
- What are the key obstacles stopping you from being in that storyworld right now?

WHAT, IF ANYTHING, GETS MADE?

- Conversations about practice (real and unreal).
- Notes and rough maps.

STRATEGIES, INDIVIDUAL, 30 MINUTES

WHAT DO WE WANT TO LEARN?

How do we go from here and now to what we've articulated as more sustainable practice.

WHAT DO NEED TO READ / DO TO LEARN THIS?

Answer the following questions and then formulate them into a strategy structure:

- What aspects of your storyworld would you like be real?
- What are your obstacles?
- Which people/groups could you work with to get there?
- Which of your skills will help?
- What new knowledge do you need?
- What would you need to do differently?
- What would others need to do differently?

WHAT, IF ANYTHING, GETS MADE?

- Three pathways to action.
- Personal reflection.

N. First Post-Workshop Survey

Questionnaire:

- How would you describe sustainable design practice?
- How sustainable would you say your work is? (0-10 scale)
- What are the roles in the design process? Rank them from least to most influential on the sustainability of a design project. A list of suggested roles includes: Creative leads; Design team; Suppliers; Developers; Producers; Project managers; Clients;
- Which of those roles do you best identify with? Why did you rank that role at that level of influence?
- How much agency do you believe that you, specifically, have on your own design practice?
- What did you find useful within the workshops?
- Are you using any strategies developed in the workshops in your practice? If yes, which ones and why? If no, why not?
- How would you describe your design community?
- Have you discussed sustainability as a value in design with your design community more since participating in these workshops? If yes; why and how? If not, why not?
- What kinds of resources for sustainable practice would you like to have access to?
- Do you have any additional comments about the workshop experience?

O. Second Post-Workshop Survey

Questionnaire:

- In workshop 2, you wrote the attached letter. What is your response to it now?
- Are you currently using any strategies you developed in your design practice? If yes, which ones and why? If no, why not?
- How have the strategies that you're using changed since you developed them in the workshops?

- Have you discussed sustainability as a value in design with your design community more since the last survey? If yes; why and how? If not, why not?
- Do you have any additional comments about the workshop experience?

P. Participants' Proposed Better Worlds Workshops Redesigns

Modules proposed by participants will have titles in bold. See Appendix R for copies of those proposed modules.

Hanzagu and Melissa

Workshop 1

- Map of Practices
- **Untitled Module** [Hanzagu: Website for education on common life cycle of materials]
- **Coffee Chat** [Melissa]
- Design Fiction
- Backcasting
- Between Workshops
- Object of Care

Workshop 2

- **Community Building** [Melissa]
- **Untitled module** [Hanzagu: Online storage]
- **How Many Bowls** [Melissa]
- **Untitled module** [Hanzagu: Life cycle thinking book]

Between Workshops

- Values and Actions
- Logbook

Crystal, Rachel, and Eugenie

Workshop 1

- Map of Practices
- Values and Actions
- Logbook
- Object of Care
- ***Mapping Out Our Daily Lives*** [Crystal Rachel Eugenie]

Workshop 2

(Kept the same as actual Better Worlds Workshops Prototype)

- Storyworld Rules
- Letters from Better Worlds
- Design Fiction
- Backcasting
- Strategies

Workshop 3

- ***Desktop Audit*** [Melissa]
- ***How Many Bowls*** [Melissa]
- ***Untitled module*** [Hanzagu: Online storage]
- ***Sharing eco-circle*** [Crystal Rachel Eugenie]

Between Workshops

- ***Untitled module*** [Hanzagu: Life cycle thinking book]
- ***Hands-on Learning*** [Crystal Rachel Eugenie]

Workshop 4

- ***Community Building*** [Melissa]
- ***Local Resources*** [Crystal Rachel Eugenie]

After Workshops

- ***Seminar and Drinks*** [Crystal Rachel Eugenie]

Monica, Stephanie, Ashley, and Corey

Workshop 1

- ***My Design Life*** [Stephanie]
- Map of Practices
- Logbook
- Design Fiction
- Storyworld Rules

Workshop 2

- ***Untitled module*** [Corey: Personal finances]
- ***Event*** [Ashley]
- ***Maker's Space*** [Monica]
- ***Cradle to Grave*** [Monica]
- Object of Care
- Values and Actions
- Strategies

Outside of Workshops

- ***Untitled module*** [Corey: Digital network of resources]
- ***Predictor/Estimate Tool*** [Ashley]

Q. Workshop 3 Group C comments on Communities of Practice

One major aspect that was desired by participants, both for future iterations of the Better Worlds Workshops and generally in industry, was more intra-industry knowledge sharing. Participants were glad for the new knowledge they gained from others through the workshops, as seen in the exchange below from Workshop 3 Group C.

Corey: “I think the idea of actually having a focus with people within your sphere, actually engaging in conversations within your actual circle of industry to gain knowledge from each other is not something [done in industry] outside of the productivity of working on something. Actually having a sit down, conscious consideration of all the options with a resource is a very new way of considering sustainability because I feel like it’s something that only comes up when it’s relevant to a project.”

Stephanie: “Oh, that’s so true. It’s like carving out a space—the space that it deserves to actually consider these things, instead of just the ‘business as usual’ realm.”

Later in the same session, Monica commented that:

You have to know it’s not just you. It should be a community—when you’re in a community where everyone advocates for it ... you start to feel like you also want to suggest because now you know something that someone else doesn’t. What am I gonna do to change this big, giant thing? What’s one person gonna do? But it’s not just you. We’re with you, and therefore we can change.

The group also desired more opportunities for knowledge sharing, as seen in a stated wish for the Better Worlds Workshops to have participants with more varied experience levels:

Crystal: “If there were more people potentially you’d learn more because, for example, the injection molding stuff was something that’s brought up in discussion [in Workshop 1] based on someone else’s knowledge. It could be possible that having more people, or different people [would be better].”

Rachel: “I guess [we’re suggesting] more opportunities to learn new knowledge from others.”

In response to the kinds of restrictions perceived above, these participants have recognised that there needs to be a space carved out for sharing and learning with community, and that Communities of Practice need to be more clearly recognised and enabled to share their knowledge.

R. Participants’ Workshop 3 Proposed Modules

Proposed modules are transcribed verbatim and organised by the session groups. “Factor” labels added by the researcher as part of analysing participant feedback. Where participants added drawings or diagrams, these have been digitised and appended to their written answers.

Melissa and Hanzagu

Title: Community Building

Factor: Communities of Practice

Author: Melissa ^{Workshop 3 Group A}

Individual or Collaborative: Collaborative

Time estimate: Not Given

What do we want to learn? What sustainability-minded communities exist in the online and in-person space? Where are the gaps and can we fill them?

What do we need to read/do to learn this?

- Understand the existence of local communities of design practitioners and how they encourage/educate people on mindful practices.

- Read up on the events/resources created by said communities and do they have resource sharing initiatives?

What, if anything, gets made? Speculative brainstorm of a new community for your local council area that addresses a gap in the sustainable practice space.

Title: Coffee Chat

Factor: Communities of Practice

Author: Melissa Workshop 3 Group A

Individual or Collaborative: Collaborative

Time estimate: 50 Minutes

What do we want to learn? How designers can practically make small changes to their work methods to increase the sustainability of their practice whilst adhering to their agency's structures? Is this possible?

What do we need to read/do to learn this?

- In pairs, discuss your role at your job; who do you interact with, what is a day in the life, what's the pace like? Spend max 10 minutes each while the other takes notes.
- Spend 10 mins separately reading over the notes you have taken for the other person and consider what might be made more sustainable.
- Return to the pair setting and resume step 1 BUT talk about the other person's job as your own and any talk about how you are changing your practice to be more mindful.

What, if anything, gets made? Annotated notes of the coffee chat for reflection; how someone else outside of your role sees sustainability possibilities in your norm.

Title: Reflective Mapping

Factor: Sustainability Education

Author: Melissa Workshop 3 Group A

Individual or Collaborative: Individual

Time estimate: 30 minutes

What do we want to learn? What is involved in the upkeep of digital assets, and are they necessarily more sustainable than physical ones? What does their life and travel cycle look like in your own practice (consider unseen resources it takes to use them).

What do we need to read/do to learn this? Designers need to be aware of how

accessing and storing digital assets compounds over time, and how they can actively reduce this impact (by deleting files, reading up on alternative practices, sharing things over different hardware, etc.)

They need to feel as if storage and the web does not have unlimited storage without negative externalities

What, if anything, gets made? A systems map of things and people involved that interact with and add to the digital asset library the designer uses at work

Title: Desktop Audit

Factor: Sustainability Education

Author: Melissa ^{Workshop 3 Group A}

Individual or Collaborative: Individual and Collaborative

Time estimate: –

What do we want to learn? How different areas of design file away past work and how those methods of storage consume resources.

What do we need to read/do to learn this?

- Understand how much data a typical file takes up
- Review when the last accessed date of said file was
- Would this benefit you by staying on the desktop/cloud or should it be moved to a USB or SSD

What, if anything, gets made? At home:

- A recycle bin of digital files that have been collecting dust.
- It would be fun if you can do the math and figure out how much data has been cleared by each person

Together:

- Discuss your findings for 15 minutes at the next session with the group



Title: How Many Bowls

Factor: Sustainability Education

Author: Melissa ^{Workshop 3 Group A}

Individual or Collaborative: Collaborative

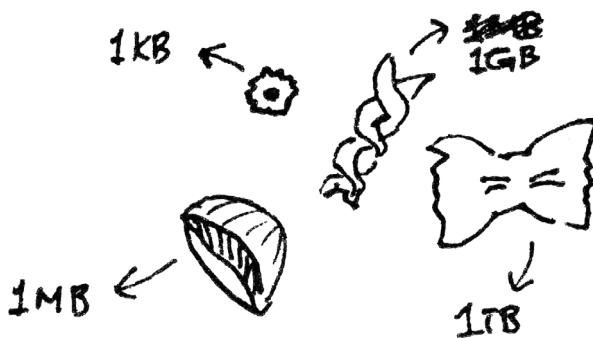
Time estimate: –

What do we want to learn? Understand the unseen impacts of e-waste

What do we need to read/do to learn this?

- Create a visual representation of a day's worth of data using pasta (uncooked) of one team member. Visual and tactile representation.
- Guesstimate how much pasta you would fill into the given bowl in one day.
- What does it actually look like?

What, if anything, gets made? Visual representation of e-waste as a bowl of pasta.



Title: –

Factor: Sustainability Education

Author: Hanzagu Workshop 3 Group A

Individual or Collaborative: –

Time estimate: –

What do we want to learn? How to store/archive work without consuming too much energy?

What do we need to read/do to learn this?

- The impact of e-waste from creative community to the world.
- Which methods/ways to store our work that is sustainable for each type of project.
- How to deal with draft version (that we sent to clients for reviewing) on cloud?
- A routine for companies and individuals to look at their online storage and clean up.

What, if anything, gets made? A online storage (like cloud) that only keeps files

within a week, this is for the preview files the creatives send to the client, then delete it completely.

Title: –

Factor: Sustainability Education

Author: Hanzagu Workshop 3 Group A

Individual or Collaborative: –

Time estimate: –

What do we want to learn? The common life cycle of materials in design practice.

What do we need to read/do to learn this?

- How the material are produced? What are the end point?
- How the creation can be recycled, upcycled or re-used?
- How can we use the material effectively without affecting its sustainability?
- Thinking about the creation's life cycle before, during and after creating things ...

What, if anything, gets made?

- Graphic design influencers on how to be sustainable while being professional.
- A website, a blog that recommends materials to design community and where to get them.

Title: –

Factor: Sustainability Education

Author: Hanzagu Workshop 3 Group A

Individual or Collaborative: –

Time estimate: –

What do we want to learn? The downside of sustainable material.

What do we need to read/do to learn this?

- How are those sustainable materials produced?
- What specific materials that make sustainable materials “more sustainable” than others?
- A website that informs the life cycle of these materials.

What, if anything, gets made? A website.

Title: –

Factor: Sustainability Education

Author: Hanzagu ^{Workshop 3 Group A}

Individual or Collaborative: Individual

Time estimate: –

What do we want to learn?

- Downside of sustainable material.
- What properties to look at when choosing materials.
- The common life cycle of materials in design.

What do we need to read/do to learn this?

- A website that contains informations of sustainability in graphic design.
- Some examples of how to involve sustainability in our design process.
- The process of manufacturing some common materials.
- Thinking about their creation's life cycle before and after actually doing it,
- The impact of design practices on living being.
- How to store/archive work.

What, if anything, gets made? –

Title: –

Author: Hanzagu ^{Workshop 3 Group A}

Factor: Sustainability Education

Individual or Collaborative: –

Time estimate: –

What do we want to learn? How to achieve life cycle thinking.

What do we need to read/do to learn this?

- The information of every material's life cycle.
- How would this way of thinking affect the quality of productivity of designers?
- What are there to consider in life cycle thinking?

What, if anything, gets made? A book to teach us how to.

Crystal, Rachel, and Eugenie

Title: Hands-on Learning

Factor: Sustainability Education and Situated Knowledge

Author: Crystal Rachel Eugenie Workshop 3 Group B

Individual or Collaborative: Individual

Time estimate: –

What do we want to learn?

- The process of recycling and the places we can go.
- What do we need to read/do to learn this?
- Experience sustainable practices first-hand through workshops/tours
e.g. Banish, DEFY Design

What, if anything, gets made? The thing you make from the hands-on experience (e.g. recycled plastic)

Title:

Mapping Out Our Daily Lives

Factor: Ethics of Care

Author: Crystal Rachel Eugenie Workshop 3 Group B

Individual or Collaborative: Individual and Collaborative

Time estimate: –

What do we want to learn? How to approach the topic of sustainability to the people around us.

What do we need to read/do to learn this?

- Running a design workshop with non-designers
- Mapping out their everyday actions
- Take home activity
- Visualise the workshop data

What, if anything, gets made? Visualisation of their data and its affect on sustainability that is delivered to the participants.

Title: Seminar and Drinks

Factor: Communities of Practice

Author: Crystal Rachel Eugenie Workshop 3 Group B

Individual or Collaborative: Collaborative (social)

Time estimate: –

What do we want to learn? Sharing personal experiences and existing sustainable practices and projects by experienced designers.

What do we need to read/do to learn this?

- Organise the event.
- Speakers.
- Space and catering (about 50 people).

What, if anything, gets made?

- Knowledge.
 - Friendship/communities/connections.
-

Title: Sharing Eco-circle

Factor: Communities of Practice

Author: Crystal Rachel Eugenie Workshop 3 Group B

Individual or Collaborative: Collaborative (educational)

Time estimate: –

What do we want to learn? Sharing personal experiences of sustainable resources and design practices.

What do we need to read/do to learn this?

- Having an open space to have these conversations (Workshops).
- More people/designers with different background. More variation in experience with design practice.

What, if anything, gets made?

- Knowledge.
 - Friendship/communities/connections.
-

Title: Local Resources

Factor: Communities of Practice

Author: Crystal Rachel Eugenie Workshop 3 Group B

Individual or Collaborative: Collaborative

Time estimate: –

What do we want to learn?

- The available local resources addressing sustainability in NSW designers can access.
- Supporting local businesses and communities.

What do we need to read/do to learn this?

- Crowdsourcing resources that are local:
- Design studios that engage with sustainability
- Workshops, organisations

What, if anything, gets made?

- List of local resources on sustainability in design
- Format: website, pamphlet

Ashley, Corey, Monica, and Stephanie

Title: Predictor/Estimate Tool

Factor: Communities of Practice

Author: Ashley Workshop 3 Group C

Individual or Collaborative: Individual

Time estimate: –

What do we want to learn? The biodegradability/production of toxins of material we choose to use in our designs. How do we make decision-making for design materials more convenient?

What do we need to read/do to learn this?

- Database of the materials that exist.
- Answer questions regarding the material to estimate time it'll decay.
- Help with decision-making of materials.
- Just help think about their future of how they design.

What, if anything, gets made? A website/digital resource that can visual the length of its decay / the output of it for people to learn more / consider in picking the materials for their design.



Title: Event

Factor: Communities of Practice

Author: Ashley Workshop 3 Group C

Individual or Collaborative: Collaborative

Time estimate: –

What do we want to learn? Who and where we can reach out to, to learn more about sustainable resources.

What do we need to read/do to learn this? Where to source them, to learn more about sustainable resources and being educated about them.

What, if anything, gets made? Community events with educators and practitioners.

Title: –

Factor: Situated Knowledge

Author: Corey Workshop 3 Group C

Individual or Collaborative: –

Time estimate: –

What do we want to learn? How to manage personal financing and sustainable practice.

What do we need to read/do to learn this? Get advice/resources from people successfully managing different elements of design work (freelancing, employment, personal work, etc.) with tips on how to do it and where to start etc.

What, if anything, gets made? Some kind of seminar classess could be successfully developed with/by successful professional with physical accessible tips/info for beginners in the field.

Title: –

Factor: Communities of Practice

Author: Corey Workshop 3 Group C

Individual or Collaborative: Kinda both ngl 'cause collaboratively made and contributed to and individually accessed.

Time estimate: –

What do we want to learn? Where to go to get sustainable resources and produce things sustainably.

What do we need to read/do to learn this? A developed network and understanding of the producers and businesses that can do the production sustainably that can be accessed efficiently and connect to/be contributed [to] by community that have connection to resources.

What, if anything, gets made? Some kind of maybe digital network/resource that

people could contribute to in order to organise and consolidate community resources that anyone can access as they need to find things.

Title: Maker's Space

Factor: Communities of Practice and Speculate Alternate Practices

Author: Monica ^{Workshop 3 Group C}

Individual or Collaborative: Individual

Time estimate: 10 minutes

What do we want to learn? Why or why not corporations or businesses have a dedicated / partnered business or space.

What do we need to read/do to learn this?

—

What, if anything, gets made?

- Maker's space. Quality and [indecipherable] balance between that.
 - Amenities fee.
 - System of funding and realistic ways of promoting/funding/upholding a sustainable maker's and provider's space.
 - Make a design fiction / world about a maker's hub for your choice of corporation.
 - E.g. Say you pick 'sushi hub', what sustainable materials do they need? How much is it? How can sushi hub afford it?
-

Title: Cradle to Grave

Factor: Sustainability Education

Author: Monica Workshop 3 Group C

Individual or Collaborative: Can do both?

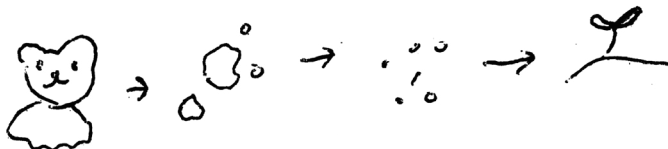
Time estimate: 10 minutes

What do we want to learn? Thinking about a product's lifetime. I was thinking about wills and objects we own being dispersed to people who don't particularly want it. E.g. photobooks, toys, child memorabilia, jewellery, items that are nice but don't/aren't useful to the next generation.

What do we need to read/do to learn this? Maybe taking it into a manufacturers perspective (?). You need to make a toy that is made up of recyclable or re-usable so that the child, who will grow older and 'ditch'. The toy can be repurposed? E.g.

a toy that will degrade into seeds? For a garden?

What, if anything, gets made? –



Title: My Design Life

Factor: Situated Knowledge and Sustainability Education

Author: Stephanie ^{Workshop 3 Group C}

Individual or Collaborative: –

Time estimate: –

What do we want to learn?

- What is my design practice impact?
- Mindmap
- Network

What do we need to read/do to learn this?

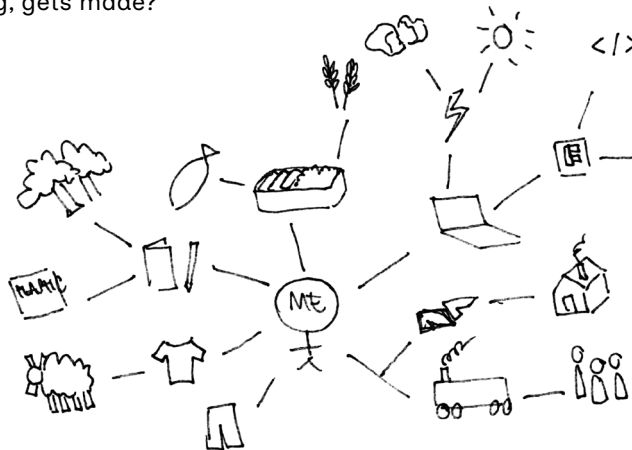
Beginner

- Have imgs of diff aspects of one's life.
- Sun, air, clouds.
- Cars, walking, trains.
- Computer, book, pen.
- Have predefined categories

Advanced

- Do a macro and micro map of your network i.e. your life vs your laptop.

What, if anything, gets made?



S. Workshop Survey Responses related to Communities of Practice

Crystal (Pre-Workshop Survey): “I would find it really helpful if designers who do include sustainability within their practice to also record their process too so designers like myself can see examples of how that can be applied in a working setting?”

Crystal (First Post-Workshop Survey): “I think it would be really interesting to have a blog that can act like a database for material sustainability information but also recording workshops or community events. That way I feel like the barrier of entry might be easier to integrate, allowing more organic conversations and discussions. This is because in those spaces there is an understanding of a community or individual that have the same interest towards listening other people’s perspective or experience in creating in sustainable design. ... Personally I think the workshops are a great resource and a really good way for people to become interested and learn about the potential of sustainable design practice outside of their own practice. While I feel these workshops were really effective in smaller groups, I realised that the topic of sustainable design practice is a little niche. I struggled a lot in trying to getting people interested for continuous conversation and is often overshadowed by other direct impacting topics. (Looking at AI) I think recording or posting these workshops could also be a good way to organically interest and help with continuous conversations and make it more casual outside of the academic sphere.”

Rachel (First Post-Workshop Survey): “[I want] some form of community where designers can openly chat and share with each other what they know about sustainable design practices such as a discord server.”

Monica (First Post-Workshop Survey): “[I want] a space and community that recommends and is constantly updating a site or archive of good manufacturers that use sustainable practices. If more people talk about it and promote it, I think we can come up with cool ways to make our designs interesting and degrade when their use is over.”

