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Making the invisible visible: creating spaces for reflexive artistic practices through digital autoethnography

Joanna Norie Neil

Submitted in fulfilment of the requirements of the Degree of Doctor of Philosophy (PhD)

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11/2021 deposition to the library

Abstract

Undergraduate arts and design students often struggle to express and evidence their decision making, thinking, ongoing development, creative processes and professional identities for themselves and other audiences. While digital technologies and social media have become more widely used to document and share visual work, there is limited research examining the potential of these platforms and tools for dialogic and critical reflection that is contextualised for creative arts pedagogy. This ethnographic study examines phenomenological experiences of using digital autoethnography for critical reflective practice in art and design education. This research brings insight into whether digital autoethnography has the potential to empower arts and design practitioners to reflect on their practice dialogically and critically. It also explores the reflective spaces that are made possible through digital autoethnography and discusses the limitations and challenges of using digital autoethnography for art and design-based pedagogy.

The first phase of the study created autoethnographies of the researcher's artistic and teaching practices. The findings from this informed the development of the second stage of the research, which engaged thirteen undergraduate students from art-based and design-based degree programmes, who undertook their own digital autoethnographic enquiries over periods of three to eight months. Data were gathered through unstructured phenomenological interviews and the examination of participants' paper-based and digital artefacts.

Participant portraits—brief accounts of each participant's context and engagement—were constructed from these data to provide individual profiles of students' experiences. This bricolage of approaches provided a wealth of data which, when thematically analysed, yielded a complex and nuanced account of how the digital autoethnographic methodology impacted on arts and design practitioners' reflective practices.

It was clear from the data that participants developed a new understanding of themselves and their practices over several months, particularly when recalling and talking about their experiences in the phenomenological interviews. Participants were able to independently develop strategies for dialogic reflection through recording and revisiting their visual and audio experiences, which, often led to surprising discoveries and opportunities to take their work in new directions. This was strongly evident in the experiences of participants with specific educational needs and/or disabilities. The spaces for reflection that emerged from participants' approaches and uses of digital technologies were powerful: participants gained insight into their own habits of working, reflective practice and their relationships with tutors and other audiences. This empowered participants to make changes to how they researched, made work, corrected, and accepted mistakes, and made their reflection visible, which enhanced the work they submitted for assessment. The study contributes to our understanding of reflective practice in arts and design-based disciplines and the future role that digital technologies, autoethnography and interviewing students could have in developing a more empowering pedagogy.

Dedication

For Bill, Lotte, Elsie (all my reasons right there), my mother Maureen (thank you for always being there) and my father Kelvin (I know you would be so proud).

Table of Contents

ABSTRACT	1
DEDICATION	3
TABLE OF CONTENTS	. 4
LIST OF TABLES	.8
LIST OF FIGURES	.8
ACKNOWLEDGEMENTS	13
AUTHOR'S DECLARATION AND PUBLICATIONS	14
LIST OF ABBREVIATIONS	17
1.0 INTRODUCTION	18
1.1 A personal rationale	18
1.2 Summary of the study	19
1.3 Research questions	21
1.4 Key literature	24
1.5 Research approach	25
1.6 Key findings and contributions	31
1.7 Structure of the thesis	32
2.0 RESEARCH QUESTIONS: DISCUSSION OF LITERATURE	34
2.1 Art practices and pedagogies: the potential to empower?	34
2.1.1 Empowered Assessment	37
2.2 Empowerment and digital spaces	39
2.2.1 Digital technology mediated spaces for reflection	40
2.2.2 Creating spaces for reflection	45
2.3 Practice: legacy	52
2.3.1 Distinctions: Arts, Art, Design, Art and Design	53

2.3.2 Conceptualisations of making: Process models versus Art and Design and Creativity	55
2.3.3 Art and design pedagogy	60
2.4 Reflection: Legacy	65
2.4.1 Reflective practice approaches for art and design	68
3.0 RESEARCH APPROACH	73
3.1 Messiness and Interdisciplinarity	73
3.1.1 Education Research	76
3.1.2 Education Research: Action Research	78
3.1.3 ABR (Arts Based Research) to ABER (Artist Based Education Research)	81
3.2 Narratives, stories and lived experiences	83
3.2.1 A/R/Tography – Artist Researcher Teacher	85
3.3 Ethnography	89
3.3.1 Autoethnography	90
3.3.2 Digital ethnography and Digital autoethnography	93
4.0 RESEARCH DESIGN	96
4.0.1 Context of the institution	102
4.0.2 Recruitment	104
4.1 Interviews: Phenomenological and ethnographic approaches	106
4.2 Thematic Analysis	108
4.2.1 Codes and Themes	109
4.3 Ethical considerations	115
4.4 Approach taken with Findings	119
5.0 CREATING SPACES FOR REFLEXIVITY: AN AUTOETHNOGRAPHY. DISCUSSION AND FINDINGS	121
5.1 Introduction	121
5.2 Creating spaces for reflexivity: An autoethnography as Researcher	121
5.3 Creating spaces for reflexivity: An autoethnography of Artistic Practice	133
5.3.1 Pre-Hunterian: Discussion and findings	134

5.3.2 The Hunterian Museum, University of Glasgow Artist Residency as Hunterian Associate: 'Drawn Together: A conversation with the collection'	40
5.3.3 Post Autoethnography	49
5.4 Creating spaces for reflexivity: An autoethnography of Teaching Practice	51
6.0 CREATING SPACES FOR REFLEXIVITY: PARTICIPANTS15	55
6.1 Introduction	55
6.2 Participant Portraits 01-131	56
7.0 THEMATIC ANALYSIS: INTERVIEW FINDINGS	51
7.1 TA Theme 1: Identifying with the creative process: A shifting relationship	61
7.2 TA Theme 2: Externalising the internal: making the invisible visible	78
7.3 TA Theme 3: Nature and Nurture of the creative process	92
8.0 DISCUSSION: AUTOETHNOGRAPHIES, PARTICIPANT PORTRAITS, THEMATIC ANALYSIS AND LITERATURE)9
9.0 CONCLUSION24	13
9.1 Research Questions	43
9.2 Reflections on the Methodology24	46
9.3 Significance to the field	49
9.4 Recommendations to practitioners	53
9.5 Afterword	54
10.0 REFERENCES	56
11.0 APPENDICES	€
Appendix 1: Stills from experimental digital autoethnography	92
Appendix 2: Hunterian work post-residency29	93
Appendix 3: Artwork post-research study	99
Appendix 4: Workshop: 'Verbal Drawing': We All Draw: International Interdisciplinary Symposium 2015 South Bank, London	
Appendix 5: Resource for Workshop: 'Verbal Drawing': We All Draw: International Interdisciplinary Symposium 2015 South Bank, London	12
Appendix 6: Workshop, Performance and Soundscape Nordic Summer University Conference (winter session), Riga Latvia	14

Appendix 7: Participant Portraits	315
Appendix 8: Pre-study Questionnaire	344
Appendix 9: Plain Language Statement Museum Visitors	346
Appendix 10: Plain Language Statement Student Participants	348
Appendix 11: Consent Form Museum Visitors	351
Appendix 12: Consent Form Student Participants	352

List of Tables

- Table 1: Scope and detail of Research Questions
- Table 2: Table of historic pedagogic approaches in art and design
- Table 3: Participants use of blog spaces and/or other similar digital spaces

List of Figures

- Figure 1: Observer Roles (Cohen et al. 2011)
- Figure 2: Diagram of the Research Approach
- Figure 3: Illustration of interconnected elements of the research project
- Figure 4: Bain's conceptual model of assessment for becoming (2010)
- Figure 5: Deng and Yuen's framework (2011: 450)
- Figure 6: The Nature of Undergraduate Research and Inquiry: Healey and Jenkins (2009)
- Figure 7: Partial lexicology of terms for arts-based research From Chilton and Leavy
- (2014: 4)
- Figure 8: Screenshot from "submerged" on project blog
- Figure 9: Seeing Practice: Blog to support students autoethnographies
- Figure 10: Excerpt of interview with initial coding
- Figure 11: Initial series of codes from transcripts
- Figure 12: Sense making of codes and initial themes
- Figure 13: Thematic Map
- Figure 14: Thematic Map with colour coding (excerpt from data set)
- Figure 15 & 46: Mapping of participants according to discipline area and approach taken
- Figure: 16: Recruitment poster for student participants
- Figure 17: Participants interview schedule
- Figure 18: First stage of coding 'emergent utterances'
- Figure 19: Themes
- Figure 20: mapping data to theme 1
- Figure 21: mapping data to theme 2
- Figure 22: mapping data to theme 3
- Figure 23: Map of research: An autoethnography as Researcher
- Figure 24: (Neil, 2013 excerpt from Blog, 'Submerged: The beginning')
- Figure 25: Public space for residency
- Figure 26: Still from 'Submerged' project (Neil, 2013)
- Figure 27: Still from Residency project (Neil, 2014)
- Figure 28: Still from Residency project (Neil, 2014)
- Figure 29: Still from Residency project (Neil, 2014)
- Figure 30: Neil, 2014a blog post 'Submerged: Extracting data'

- Figure 31: Map of research: An autoethnography of Artistic Practice
- Figure 32: Excerpt from personal statement highlighted to illustrate key definitions
- Figure 33: Image of 'the diver' source for starting point
- Figure 34: Still from Performance 'Breaking/Mending/Making' Riga (Neil, 2017)
- Figure 35: Written reflection on blog
- Figure 36: Screenshot of front page to navigate the Hunterian Museum residency blog
- Figure 37: Day 1 drawings
- Figure 38: Stills from left eye, right eye headcam drawing
- Figure 39: Still from composite film
- Figure 40: The fifty pence piece and examples of participant drawings
- Figure 41: Stills form slow motion video
- Figure 42: Map of research: An autoethnography of Teaching Practice
- Figure 43: Interview with self (Neil, 2017)
- Figure 44: Map of research: Participants
- Figure 45: Weaving together
- Figure 46 & 15: Mapping of participants according to discipline area and approach taken
- Figure 47: Still from 'Submerged'
- Figure 48: Still from 'Submerged'
- Figure 49: Still from 'Submerged'
- Figure 50: Still from 'Submerged'
- Figure 51: Screenshot of development work from post-residency blog post
- Figure 52: Screenshot of development work from post-residency blog post
- Figure 53: Screenshot of development work from post-residency blog post
- Figure 54: Screenshot of development work from post-residency blog post
- Figure 55: Screenshot of development work from post-residency blog post
- Figure 56: Screenshot of development work from post-residency blog post
- Figure 57: Screenshot of development work from post-residency blog post
- Figure 58: Screenshot of development work from post-residency blog post
- Figure 59: Hyperbolic paraboloid and gemstones. Silk, thread, net and glass
- Figure 60: Coral. Wool felt, thread and glass
- Figure 61: Gas discharge tube. Silk, thread, ink, glass etched drawing
- Figure 62: Left eye Right eye. Silk, ink, glass etched drawing
- Figure 63: Gemstones. Silk, net, thread, glass and retort stand
- Figure 64: Cells: Net. thread, glass etched drawing
- Figure 65: Coral Wing. Silk, thread, glass etched drawing
- Figure 66: Eye Eye. Silk, glass etched drawing
- Figure 67: Butterfly Wing 1. Silk, ink, glass etched drawing

- Figure 68: Butterfly Wing 2. Glass etched drawing
- Figure 69: Left eye, Right eye. Glass etched drawing
- Figure 70: Self as diver. UV thread, Laboratory equipment and crochet
- Figure 71: Water experiment. Miniature drawings, water, water toy
- Figure 72: Kaleidoscope experiment. Miniature drawings, kaleidoscope
- Figure 73: Collaborative work. Etchings and stitch
- Figure 74: Video still of recorded process. Etchings and stitch
- Figure 75: Video still of recorded process. Etchings and stitch
- Figure 76: Video still from collaborative performance
- Figure 77: Video still from collaborative performance
- Figure 78: Video still from collaborative performance
- Figure 79: Trapeze Artist 01. Photograph
- Figure 80: Trapeze Artist 02. Photograph
- Figure 81: Trapeze Artist. Still from animation
- Figure 82: Trapeze Artist. Still from animation
- Figure 83: Trapeze Artist. Still from animation
- Figure 84: Vanity Case: Work to reflect with. Vanity case, spyhole, video
- Figure 85: Still from Vanity Case: Work to reflect with
- Figure 86: Vanity Case. Fabric, stitch drawing, vanity case, light, and spyhole
- Figure 87: Vanity Case. Detail, fabric, stitch drawing, vanity case, light, spyhole
- Figure 88: Moving to the sound of my thoughts. Video, audio, monitors headphones
- Figure 89: Excerpt from a Prequel to Practice
- Figure 90: Excerpt from Interview with Self 12 Questions
- Figure 91: Excerpt from Interview with Self Part II
- Figure 92: Still from digital poster: 'Moving to the Sound of My Thoughts'
- Figure 93: Still from digital poster: 'Moving to the Sound of My Thoughts'
- Figure 94: Still from digital poster: 'Moving to the Sound of My Thoughts'
- Figure 95: Still from digital poster: 'Moving to the Sound of My Thoughts'
- Figure 96: Still from digital poster: 'Moving to the Sound of My Thoughts'
- Figure 97: Still from digital poster: 'Moving to the Sound of My Thoughts'
- Figure 98: Still from digital poster: 'Moving to the Sound of My Thoughts'
- Figure 99: Conversation with Selves: You and I are discontinuous beings. Silk, stitch, water
- Figure 100: Detail of Conversation with Selves: You and I are discontinuous beings. Silk, stitch, water
- Figure 101: Still from performance piece: Impression | Depression
- Figure 102: Still from performance piece: Impression | Depression

```
Figure 103: Still from performance piece: Impression | Depression
Figure 104: Still from performance piece: Impression | Depression
Figure 105: Still from performance piece: Impression | Depression
Figure 106: Still from performance piece: Impression | Depression
Figure 107: Participant A Verbal Drawing Workshop
Figure 108: Participant B Verbal Drawing Workshop
Figure 109: Participant C Verbal Drawing Workshop
Figure 110: Participant D Verbal Drawing Workshop
Figure 111: Drawing Workshop Riga (before)
Figure 112: Drawing Workshop Riga (after)
Figure 113: 01 Pinterest Board (section) example 1
Figure 114: 01 Pinterest Board example 2
Figure 115: 02 Pinterest page for course research
Figure 116. 02 excerpt from course blog
Figure 117. 02 excerpt from course blog
Figure 118: 03 Pinterest board example 1
Figure 119: 03 Pinterest board example 2
Figure 120: 04 Inspirations Pinterest board
Figure 121: 04 Design stage on blog 01
Figure 122: 04 Design stage on blog 02
Figure 123: 04 Design stage on blog 03
Figure 124: 04 Design stage on blog 04
Figure 125: 04 Design stage on blog 05
Figure 126: 05 excerpt from Level 4 Reflective Practitioner module file
Figure 127: 06 sample and annotation from sketchbook
Figure 128: 06 sample and annotation from sketchbook
Figure 129: 06 final photoshoot of the garments
Figure 130: 07 Instagram post
Figure 131: 07 Screenshot of Tumblr page showing stills and video
Figure 132: 07 Pinterest board for one theme
Figure 133: 07 Live draw event on Facebook
Figure 134: 07 Recorded process on Facebook
Figure 135: 08 Still from video of process as animation
Figure 136: 08 Facebook post asking for feedback
```

Figure 137: 08 iPad versus Traditional posted on Facebook

Figure 139: 08 Self-reflection posted on Facebook

Figure 138: 08 Sound file as illustration

Figure 140: 09 Excerpt from Facebook continuing the interview

Figure 141: 09 Sharing imagery on Facebook

Figure 142: 09 Sharing imagery and writing on *Facebook*

Figure 143: 09 Sharing imagery on Facebook

Figure 144: 09 Sharing writing on *Facebook*

Figure 145: 09 Sharing writing on Facebook

Figure 146: 09 Reflection of deconstructing of poems on Facebook

Figure 147: 09 Reflection of deconstructing of poems on Facebook

Figure 148: 10 Screenshot of blog post

Figure 149: 10 Post on Facebook

Figure 150: 12 Excerpt of refection from blog

Figure 151: 12 Example of using the blog

Figure 152: 12 Pinterest Board

Figure 153: 13 Documented art studio on blog

Figure 154: 13 Using the Go-Pro in the bath

Figure 155: 13 Go-Pro documentation

Figure 156: 13 Documenting marks on the floor

Figure 157: 13 Go-Pro to document different ways of experiencing work

Figure 158: 13 Image from broken camera

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Author's declaration and publications

I declare that, except where explicit reference is made to the contribution of others, this dissertation is the result of my own work and has not been submitted for any other degree at the University of Glasgow or any other institution. The researcher used some of the content from the following publications in this thesis.

Publications

Neil, J., (2017). Slow Drawing: Conversations with the Inanimate, Animated, Real and Virtual. In: J. Journeaux and H. Gorrill, eds. *Drawing Conversations: Collective and Collaborative Drawing in Contemporary Practice*. Newcastle Upon Tyne: Cambridge Scholars Publishing. pp. 282-300.

Neil, J., (2017). Digital Autoethnography: Interview with Self. *Prism: Casting New Light on Learning, Theory and Practice*. **1**(1), 46-72.

Neil, J., (2015). Drawn Together: A Conversation with the Collection. A digital autoethnographic study into the creative making process. In: H. Britt., L, Morgan. And K. Walton, eds. *Futurescan 3: Intersecting Identities Proceedings*. pp.99-101.

Published Resources

Neil, J., (2013). Experimental Digital Autoethnography Blog: https://feltlikeit.wordpress.com/category/submerged/page/2/

Neil, J., (2014). Residency blog: https://drawnconversation.wordpress.com/

Neil, J., (2015). Seeing Practice. A resource and research blog for Ph.D. research with undergraduate students: https://seeingpracticeblog.wordpress.com/

Neil, J., (2015). Verbal Drawing: Exploring experiences of looking, seeing and describing: How can we use words to create and help us understand, think about and prepare for drawing? Thinking Through Drawing 2015 Conference

proceedings: https://www.scribd.com/document/302908223/We-ALL-Draw-2015-Programme

Neil, J., (2015). Drawing Conversations: Digital resource for Drawing Conversations symposium at Coventry University: Drawing Conversations: reflecting upon collective and collaborative drawing experiences. https://vimeo.com/155703847

Selected Presentations/Exhibitions/Performances

Neil, J., (2019). Creating Spaces for Reflection and Bracketing Practice [Presentation/Performance]. Nordic Summer University Winter Symposium Artistic Research | Departures, Deviations and Elsewheres. European Humanities University, Vilnius, Lithuania. March 2019.

Neil, J., (2018). 'Conversation with Selves' You and I are discontinuous beings [Exhibition Artwork]. International Project Space, Birmingham. May 2018. Appendix 3.

Neil, J., (2018). *Trace: impression|depression* [Performance]. The Embodied Experience of Drawing Symposium, Ocean Studios, Plymouth. April 2018. [Appendix 3].

Neil, J., (2017). *Moving to the Sound of My Thoughts* [Exhibition Artwork]. Carbon Meets Silicon at Wrexham Glyndwr University, Oriel Sycharth Gallery. September 2017. [Appendix 3].

Neil, J., (2017). Moving to the Sound of My Thoughts [Digital Poster]. Drawing Conversations 2: Body, Space, Place, Coventry University. December 2017. [Appendix 3].

Neil, J., (2017). *Breaking/Mending/Making* [Presentation and Performance]. Nordic Summer University, Saulkrasti, Latvia. July 2017. [Appendix 3].

16

Neil, J., (2017). Tracing and Re-Tracing: Digital Auto-Ethnography as Practice

[Exhibition and Presentation]. Ethnoarts, Ethnographic Explorations of the Arts

and Education Conference, University of Porto, Portugal. June 2017. [Appendix

3].

Neil, J., (2017). Interview with Self Part II [Performance]. Feminist Readings 3:

Feminist Writings, University of Helsinki, Finland. May 2017. [Appendix 3].

Neil, J., (2016). Observation/Transformation/Translation [Workshop and

Performance]. Nordic Summer University Conference (winter session), Practicing

Communities: Transformative societal strategies of artistic research How does

artistic research transform society? Riga, Latvia. March 2016. [Appendix 3].

Neil, J., (2015). Verbal Drawing [Workshop]. We All Draw: International

Interdisciplinary Symposium, South Bank, London. November 2015. [Appendix 4].

Residency

2014 Residency as Hunterian Associate at The Hunterian Museum University of

Glasgow. 'Drawn Together: A conversation with the collection'. A digital

autoethnographic research project documenting the creative process from

drawing to final textile pieces: https://drawnconversation.wordpress.com/

Printed name: Joanna Norie Neil

Signature:

List of Abbreviations

HE/HEI	Higher Education/Higher Education Institution
FE	Further Education
AR	Action Research
NSEAD	National Society for Education in Art and Design
TA	Thematic Analysis
DFE	Department for Education
Vlogs	Video log
Blog	Web log
VLE	Virtual Learning Environment
FdA	Foundation degree Arts
Crit	Art Critique
BERA	British Educational Research Association
CUR	Council on Undergraduate Research (US.)
NCUR	National Conference on Undergraduate Research (US.)
ABR	Arts-Based Research
ABER	Arts-Based Education Research

1.0 Introduction

This chapter provides a personal rationale for the study (1.1) followed by a summary of the study (1.2) that provides an overview of the purpose and aims of the research, the main research questions (1.3), including key literature (1.4), research approach (1.5), key findings and contributions (1.6) and detail of the structure of the thesis (1.7).

1.1 A personal rationale

My interest in art and design pedagogy has emerged from my own learning experiences and teaching career. Teaching in the secondary sector for ten years and later at an HE in FE institution, has given me a breadth of experience in teaching across art and design disciplines while maintaining my own artistic practice in painting, drawing and textiles. However, I often struggled to balance my artistic practice with teaching. I felt I did not have time and space to work and develop my artistic practice and this led to occasional unease with my own identity as an artist and teacher. I 'fell into' teaching; embarking on training for the secondary sector seemed like a natural progression from my role as a parttime art technician in a school. This coincided with what felt like a floundering artistic practice after art school which I had left with few post-graduation strategies. The unease I felt was around the visibility of my artistic practice. I made work but I was not immersed in exhibiting or selling it, but my practice was more than a hobby to me - making work felt essential. There was an ebb and flow between my practice and teaching where one felt more successful, comfortable, or fulfilling than the other.

Moving from school where I taught to the National Curriculum to the more specialised and autonomous teaching in HE helped me align my practice with research activities and curriculum development. This and completing a master's degree in Online and Distance Education in 2013 (which studied the practical and theoretical benefits and challenges of using digital technologies for educational contexts) were transformative experiences. Investigating online and digital contexts introduced me to new ways of teaching and learning and challenged me to unravel and re-evaluate what I knew. The module 'E-Learning Professional'

(Open University, 2013), was assessed as an e-portfolio of reflective practice which focused on my experience and professional identity as an educator. This sparked an interest in digital environments as reflective spaces and a desire to critically engage with what had previously been a challenging and superficial understanding of reflective practice, self-reflection and my own identity as an artist and educator.

I was intrigued in how the digital technologies prompted and provoked the reflective responses that they did, particularly in the way that using a blog for my reflective accounts facilitated different approaches to writing, documenting, and making my thoughts more conversational and visible. These experiences led to a realisation that over the last twenty years I had become disconnected and not critically engaged with my artistic practice and identity as an educator. I was also frustrated with HE art and design students' difficulties and reluctance to make their reflection visible in their work. I became increasingly interested in introducing students to different ways to document their research, creative journeys, and reflection. Applying what I had learnt from the MA and my own experiences of using *Evernote* (a private repository for notes and digital sources) and blogging led me to integrate these approaches in my teaching. This relationship between learning, applying this learning to my own practice, and then to my teaching practice was powerful and unifying. Post-MA I was inspired to understand and potentially challenge the perceptions and engrained approaches to making, documenting, and reflecting, through making art and design-based work for my students. The PhD became a more formal opportunity to explore how students could benefit as participants in the research and explore their experiences with my own.

1.2 Summary of the study

The main purpose of the study was to gain insight into creative making processes and gauge the potential and impact of using digital autoethnography as a set of technical tools, spaces, and strategies in making reflection more visible for the artist/designer and other audiences. It was important to observe how students chose to use digital autoethnography, and whether specific aspects of it had the potential to enable them to work more independently and reflexively. Does

using digital autoethnography have the potential to empower or make a significant impact on reflective practices, personalised learning, and the development of professional identities?

The aim of the study was to critically examine the lived experiences of participants, and how and whether they used digital technologies and platforms for their reflective practice. Making previously undocumented and unseen elements of art making experiences visible enabled me to gain insight into the phenomenological experiences of undergraduate art and design students and through my own digital autoethnographies:

- Benchmark the study before involving student participants.
- Look closely at my making process
- Gain insight into formed habits
- Make my thoughts and feelings around the making experience more visible
- Experiment with approaches to observation and reflection and make these visible
- Experience what I ask others to do
- Develop empathy with students through repositioning myself as a learner
- Understand what creative processes look and feel like

As explained in more detail below in section 4.0 (Research Design), my own positioning and involvement in the research at different points could be described as crossing the entire spectrum of observer roles, as outlined below in Figure 1. (Cohen et al. 2011).

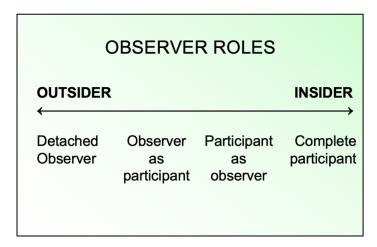


Figure 1: Observer Roles (Cohen et al. 2011)

1.3 Research questions

The Research Questions were as follows:

- In what ways does digital autoethnography empower practitioners to explore aspects of creative practice?
- What spaces for reflection might digital technologies mediate for art practitioners?
- What are the challenges of using digital autoethnography methodology as arts pedagogy?

These questions are expanded on below in Table 1. to provide detail around the scope of each question:

RQ	Scope	Detail
In what ways	Student led	Ownership of practice,
does digital	practices/transitions	autonomy, perceptions of
autoethnography	Heutagogy	autonomy and independent
potentially		reflection. students as
empower	Observations of the	researchers of their own
practitioners to	roles/identities and	practices
reflect on and	the impact these have	
explore creative	on how work is	Transitions from student to
practice?	reflected on and	practitioner and indications
	created	of student/researcher

How practices are situated: classroom and external contexts Participants relationship to digital technologies What spaces for reflection might digital technologies to document and archive technologies waking visible making and reflection spaces document reflection and initiate reflection, agency of digital technologies. What spaces for reflection and initiate reflection, agency of digital technologies. Finding identity/a reflective or inner voice across real, virtual and imagined spaces Role of audience: Does it matter in what form the social interaction whether this is in real, virtual or imagined wind interaction of take place indentities. Impact of intersecting identities, multiple roles Impact of intersecting identities. Impact of intersecting identities, multiple roles Impact of intersecting identities. Impact of intersecting identities, multiple roles Wheat space identities, multiple roles Impact of intersecting identities, multiple roles Where, when, and how does reflection take place. Visible making and reflection Slowing down/slow Practices. Formal/informal spaces Observation and recall, revisiting and memory, productivity of reflexivity, richness of reflexivity, richness of reflexivity. Digital as change agent Sharing practice Dialogic and critical reflection Emotional responses Addiences/forms of social interaction takes place and whether this is in real, virtual or imagined Where, when, and how does reflection take place. Observation and recall, revisiting and memory, productivity of reflexivity, richness of reflexivity. Digital as change agent Addiences/forms of social interaction of whether this is in real, virtual or imagined Whether this is in real, virtual or imagined of the production interaction of work and			identities and
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spaces, especially if practice		spaces, especially if	practice
'the mind evolves to		'the mind evolves to	

	reflect social reality'?	
	(Vygotsky, 1978).	
What are the	Experiences of arts	What the creative process
challenges of	practice	feels like
using digital		
autoethnography	Legacy Issues: Art and	Monetising the creative
methodology as	Design pedagogy and	process - models and systems
arts pedagogy?	reflective practice-	Practice and assessment
	implications for how	
	creative subjects and	Models that have shaped
	reflection are taught	reflective practices
		Reflective practice
	How frameworks of	approaches for art and
	arts pedagogy and	design. How students reflect
	reflective practices	on their practice before and
	align to a digital	after an intervention - legacy
	autoethnographic	approaches in art and design
	methodology	pedagogy
	Consumerist culture of	Changing methodologies,
	HE	multiple methodologies,
		methodologies as practice
	Inclusivity	The impact of being
		observed and observer
		What barriers or tensions are
		created?
		How ingrained are existing
		models for understanding
		artistic practices?
		'Not knowing' strategies
		Dual roles: to be inside and
		outside of the research

How observing practice
affects/effects practice. The
impact of tensions on the
creative process, what is
captured, what is revealed,
what is interfered with?

Student/teacher
relationships and identities
and heutagogy

The tensions between
technologies as a facilitator
versus a barrier for
supporting reflective
practices

Table 1: Scope and detail of Research Questions

1.4 Key literature

The study was an intersection of several discipline areas and an opportunity to explore and examine the existing literature, methodologies and theories across professional identity construction, reflective practice, pedagogies of digital technologies and autoethnography, and the culture and research practices surrounding art and design pedagogies.

Key research in digital autoethnography, although not specifically using this term included Kirk and Pitches (2013) *Digitalis* study, a research project with performing arts undergraduates. Their work examined the benefits of facilitating situations for students to 'look again' at their own creative processes. Kirk (2014), a painter, also engaged in sharing and reflecting on her own work with digital platforms.

Ryan, (2013; 2014); Ryan and Ryan, (2013) and Barton and Ryan (2014) provided rich discussion and insight into reflective practices for creative arts students. In their studies discipline specific and multimodal approaches to reflection that do not prioritise writing over other methods were deemed successful. A/r/tography studies from 2004 to 2012 greatly influenced the early stages of the research project providing me with engaging and refreshing approaches to art based educational research, autoethnography, artist, teacher and researcher identities. The growth of a/r/tography projects between 2012 and 2021 is significant and spans a breadth of visual and performing arts disciplines, geographic locations and teaching contexts, resulting in Journal articles, book chapters, dissertations, and theses. The extent of these projects has been documented by a/r/tographers across the globe in a project: *Mapping A/r/tography Transnational storytelling across historical and cultural routes of significance* (Lee, 2019).

1.5 Research approach

The diagram (Figure 2.) below maps the research approach. The 'Experimental Autoethnography' was a trial project where I experimented with different ways to digitally record making a piece of work, from deciding on an initial idea through to a resolved piece of work. These initial tests of using digital technologies and platforms to document, reflect on and share my experiences were a vital part of the research design process. They informed the design of a further digital autoethnographic residency project in the Huntarian Museum and the design of the research project with students as participant autoethnographic research. My autoethnographic experiments and projects helped me to challenge the perceptions and habits I had in my teaching and artistic practice. Law (2004: 45) states that methods do not discover and depict realities: 'instead, it is that they participate in the enactment of those realities ... method is not just a more or less complicated set of procedures or rules, but rather a bundled hinterland'. My 'hinterland' was the experiments that informed and helped me to refine iterations of the methodology for my ongoing artistic practice and for participants and their digital autoethnographies.

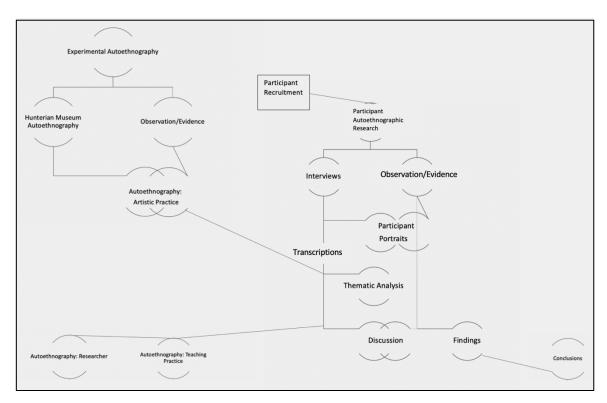


Figure 2. Diagram of the Research Approach

Rather than outlining a model of practice for digital autoethnography, I encouraged participants to approach their research into their practices and digital autoethnographies with autonomy. Orr and Shreeve (2018: 20) emphasise that students embarking on study in Art and design at HE begin a journey of transformation and from the outset are constructing 'dual identities as students and professionals'. Fielding (2004) describes transformation as rupturing the ordinary, and in doing so this makes demands of teachers and students: 'it requires a transformation of what it means to be a student; what it means to be a teacher. In effect, it requires the intermingling and interdependence of both' (2004: 296). Accepting the intermingling and interdependence as part of the research approach, while risky, embraces a Freirean position: 'education must begin with the solution of the teacher-student contradiction, by reconciling the poles of the contradiction so that both are simultaneously students and teachers' (Freire, 1996; 1970: 72). Introducing participants to digital autoethnography framed this part of the study as: students as researchers into their own practices and the opportunity to liberate themselves, as I had done for myself, from the 'patriarchal system of knowledge, scholarship, and pedagogical

relations' (Luke and Gore, 1992: 3). Making sense of my own experiences in parallel to participants own sensemaking I remade my "cognoscibility":

through the "cognoscibility" of the educates ... dialogue is the sealing together of the teacher and the students in the joint act of knowing and re-knowing the object of study ... instead of transferring the knowledge statically, as a fixed possession of the teacher, dialogue demands a dynamic approximation towards the object (Shor and Freire 1987:14).

The research approach enabled me to scrutinise my own artistic making process, students' understanding of their own practices, and analyse the strategies used to facilitate for this teaching and learning. Liberation or empowerment and ownership which Ryan (2013: 144) would describe as 'critical, transformative reflection' or reflexivity, emerged as a salient point both for my own identity as an artist and teacher and as a pedagogic ethos that would, in turn, potentially be transformative for students. Starr (2010: 4) stresses that the value of autoethnography in education is as a form of critical pedagogy that 'places emphasis on a transformative or emancipatory process for the individual and in the more widely constructed social relations in which the individual participates'.

The research approach developed into a layered, overlapping, and iterative inductive analysis. Theory and research design emerged and became refined over time, resulting in the methodology developing, responsive to and in dialogue with the contexts of artist, art/design student researcher and teacher. Therefore, the methodology and construction of it became increasingly central to the purpose of the research rather than just a tool to conduct the research.

After participants completed their own digital autoethnographies I conducted several phenomenological interviews with each participant. The dialogues and first-hand accounts from interviews and documentation enabled me to examine the impact of using digital technologies, and what thoughts and feelings around making and designing manifested. This ethnographic approach allowed me to examine the experiences of creating or designing as a 'phenomenon' or 'cultural context'. There was potential to support students at a distance and without directing to become more autonomous, dialogically reflective and confident in

their discussion around their practice. I make no claim to objectivity, I am part of the world that is being interpreted, a double hermeneutic, I am interpreting what has already been interpreted by participants (Cohen et al. 2011) and this is triangulated with my interpretations of my own experiences.

The research approach produced a vast amount of qualitative data including reflections, digital and audio recordings, conversations, documented artistic process, interviews and observations. Data analysis was conducted through narrative and interpretation as well as Thematic Analysis. Typical of qualitative data the results of analysis often produced data for further analysis. For example, the biographical Pen Portraits (Campbell et al. 2004) that became the participant portraits (Appendix 7.) discussed in section 6.2, were assembled from a combination of interview experiences, observation and participants documented reflections and work, forming constructed narratives. The participant portraits have been included in the thesis (Appendix 7.) because they say something of the nature of the research approach and the importance of allowing all voices of participants to have substance and clarity. Campbell et al. state that pen portraits are a useful way to 'illustrate and disseminate participants' perceptions, experiences and feelings in a lively, authentic, meaningful and accessible way' (2004: 142). The construction of the participant portraits helped me to make sense of the data and are included in the thesis to assist the reader in understanding the process as well as the cultural contexts of the participants.

The Portraits are an interpreted summary of each participant that explain and explore the context of each participant and their work to help find commonalities, differences, and similarities and how the issues that arose related to the contexts. The analysis in the form of the participant portraits enabled the distinct voices of individuals to be retained prior to the Thematic Analysis, which looked for similarities, identified frequency in terms of patterns as well as themes across all participants. The quantity of data produced throughout this approach required careful organisation whilst allowing myself to become immersed in it. Writing the Participant Portraits was an important part of this process, getting to know the participants through ongoing analysis and

interpretation as well as allowing the data to speak through the Thematic Analysis. This was important to do because it provides a more rounded presentation of each participant, their background and context which foregrounds their involvement in the study. The participant portraits and discussion of them (Section 6.2) are one example of data analysis and interpretation merging, a form of constructed narrative that brings more depth to the data and bring the information to life (Cohen et al. 2011).

Thematic analysis as defined by Braun and Clarke (2006), was used as a method to analyse and identify patterns of experience, interpretations and descriptions across the data set, enabling me to see and make sense of these collective and shared meanings (Braun and Clarke, 2012). Clarke and Braun (2013) suggest Thematic Analysis can be used for a wide range of research questions, from those about people's experiences or understandings to those about the representation and construction of specific phenomena in particular contexts. Examining the interviews and additional artefacts generated by the participants enabled themes to be identified: A theme according to Braun and Clarke (2006; 2012; Clarke and Braun 2013) is a coherent and meaningful pattern in the data relevant to the research question, they tell a convincing and compelling story about the data.

The methods used are a naturalistic, qualitative approach that examine the characteristics of the creative making process (as a phenomenon) and look at what happens in this phenomenon for different students and the impact the making process has on them and their work. Therefore, realities are multiple, constructed, holistic and there is a sense making that is continuous and evolving. As set out by Cohen et al. (2011) the methods used are naturalistic because history (legacies of reflective practice and art and design pedagogy) and biography (personal experiences) intersect. The research approach also examined situations through the eyes of the participants. Their situations were unique to them in natural, albeit with the intervention of digital technologies, real world settings. This post-positivist approach enabled multiple realities and meanings to be interpreted where facts and observations form a narrative for each participant. A key aspect of this approach is that fresh insights were sought

for these familiar situations and that the perspective of the participants, their 'definition of the situation' (Cohen et al. 2011), could be made visible.

The illustration below (Figure 3) maps the strands of the research with shaded sections identifying the research outputs. I look in more depth at the research design in section 4.0, but it is useful here to briefly give an overview of the interconnected elements of the research and its outputs. The initial experiments with digital autoethnography are central to the design and feed into the recruitment of student participants, focused digital autoethnography (The Hunterian residency) and contribute to the output: autoethnography as researcher, artist, and teacher. The student participants strand leads to Participant Portraits that emerged from participant qualitative interviews and a thematic analysis of the data collected from unstructured interviews.

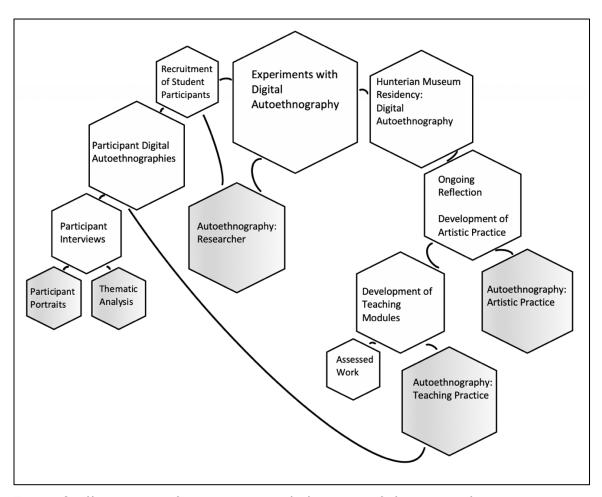


Figure 3: Illustration of interconnected elements of the research project

1.6 Key findings and contributions

The process of conducting a thematic analysis on the interviews and shared sources coded the findings of the interviews into three broad themes:

Identifying with the creative process: A shifting relationship, Externalising the internal: making the invisible visible and Nature and Nurture of the creative process.

Participants were empowered to independently try new ways of reflecting and exploring their practice through using digital autoethnography and/or the discussions around digital autoethnography in the interviews.

Digital autoethnography often led participants to critically engage with and expand on what they considered as documentation, reflection, and practice. This was partly from making their processes more visible, revisiting documentation and through developing a richer understanding and curiosity around their notions of audience and how they reflect and make their work.

Digital autoethnography is labour intensive and produces large quantities of data. These challenges as well as a reluctance to digital record voices and physically appear in documentation mean that it is not an approach suitable for every student or teacher. However, the interviews were a highly effective space for participants to reflect on experiences often leading to new insight in the moment. These conversations gave participants insight into their own reflective practices, approaches to making and professional identities.

Doing my own autoethnographies could be described as my own 'unlearning' or becoming the tabula rasa that is often expected of students (Orr and Shreeve, 2018: 87). I had not anticipated what impact this might have on the development of my own practice at this time. The autoethnographic process, outcomes, outputs and ongoing reflexivity has made a significant impact on my teaching, artistic practice, research activity and the way I understand these elements as increasingly blurred. The experimentation led me to experience my own transformative learning (Mezirow, 2009) as an artist and educator.

The study makes contributions to interdisciplinary practices, arts and design pedagogy, students as researchers into their own practices, heutagogy, critical pedagogy, reflective practices, special educational needs and disabilities, student and discipline specific professional identities and the use of digital technologies for reflective practice and in education contexts.

1.7 Structure of the thesis

The thesis chapters adhere to academic conventions but do not fully convey the reality of a bricolage approach, non-linear and messy research process. For Berry (2006), it is the richness of bricolage that is challenging to articulate: 'the most difficult aspect of doing research as bricolage is the writing; that is, how to shape and format a text that avoids the linear, reductionist structure of traditional research thesis or report' (2006: 95). The explorative, playful, and experimental approach to the research project was intentional with many similarities to the creative making process; I embraced 'living with and knowing confusion' (Law, 2003: 4) and it is important that this experience is not completely lost in the formality of the thesis. It has been important to the integrity of the research that the reader is allowed to have first-hand experience of the artifacts that have been produced throughout the research journey. These include aspects of the process: excerpts and images from documentation and reflection which provide insight into the methods employed and how these methods emerged, the decision making that occurred, the scope of the enquiry and scale of the data produced. These appear in Section 5.0 and appendices 1-4 in section 11.0.

The thesis sections are as follows: Acknowledgements provide detail of funding and collaboration that made the research project possible. The Introduction to the thesis (1.0) comprises of seven parts: a personal rationale for the study (1.1) followed by a summary of the study (1.2) that provides an overview of the purpose and aims of the research, the main research questions (1.3), including key literature (1.4), research approach (1.5), key findings and contributions (1.6) and detail of the structure of the thesis (1.7).

Section 2.0 examines the literature relevant to each research question covering four broad areas: arts pedagogy, 2.1-2.1.1 and empowerment, 2.2-2.2.2; digital spaces, 2.3-2.3.3; legacies of art and design practice, and legacies of reflective practice, 2.3-2.4.1. Section 3.0 examines the literature and underpinning ideas around the research approach.

Section 4.0 provides a detailed account of the research design, including the recruitment and interview approach of participants, 4.0.1-4.1; the approach taken with Thematic Analysis (TA) according to Braun and Clarke's (2012) model, 4.2, and an outline of the process of coding and themes for the study, 4.2.1-4.4.

Section 5.0 presents three autoethnographic accounts, discussion, and findings: 5.2 Creating spaces for reflexivity: An autoethnography as Researcher, 5.3 Creating spaces for reflexivity: An autoethnography of Artistic Practice and 5.4 Creating spaces for reflexivity: An autoethnography of Teaching Practice.

Section 6.0 discusses the findings from 13 student participant portraits (Appendix 7) and Section 7.0 is a Thematic Analysis of the participant interviews: 7.2 Theme 1: Identifying with the creative process: A shifting relationship; 7.3 Theme 2: Externalising the internal: making the invisible visible and 7.4 Theme 3: Nature and Nurture of the creative process.

Section 8.00 is a discussion of the key findings of the research project as a triangulation of the autoethnographies, participant portraits, thematic analysis, and underpinning literature. The conclusion (9.0) is structured around answering the research questions, 9.1, and presents a reflection on the methodology 9.2. Section 9.3 highlights the impact of the study and significance and contributions to the field. Section 9.4 makes recommendations to practitioners, and 9.5 details some examples of recent literature. The thesis concludes with references, 10.0, and appendices, 11.0, which are referred to throughout the document.

2.0 Research Questions: Discussion of Literature

The literature review is split into four sections each mainly contributing to a particular research question. The literature relating to RQ 1: In what ways does digital autoethnography potentially empower practitioners to reflect on and explore creative practice? is examined under sections 2.1 Art practices and pedagogies: The potential to empower? And 2.1.1 Empowered assessment. The literature relating to RQ 2: What spaces for reflection might digital technologies mediate for arts practitioners? Is examined under sections 2.2 Empowerment and digital spaces, 2.2.1 Digital technology mediated spaces for reflection, and 2.2.2 Creating spaces for reflection. The literature relating to RQ 3: What are the challenges of using digital autoethnography methodology as arts pedagogy? Is examined under sections 2.3 Practice: legacy, 2.3.1 Distinctions: Arts, Art, Design, Art and Design, 2.3.2 Conceptualisations of making: Process models versus Art and Design and Creativity, 2.3.3 Art and design pedagogy, 2.4 Reflection: legacy and 2.4.1 Reflective practice approaches for art and design.

2.1 Art practices and pedagogies: the potential to empower?

The literature on current HE provision suggests several factors which potentially disempower both students and teachers. One of the biggest threats to student empowerment according to Barnes and Jenkins (2014) is the increased marketisation of education and the impact this has on students' relationship to their learning experiences, 'while many lecturers continue to struggle to engage students via a critical pedagogy in order to secure their pedagogic rights, the changed relationship to students and institutional constraints makes it increasingly difficult' (2014: Paragraph. 2). Student fees and the pressure to teach to student satisfaction that is 'narrowly defined according to a consumer rationale, is antithetical to engaging students through a critical pedagogy' (Barnes and Jenkins, 2014: Paragraph. 12). Teaching critical skills and pursuing reflexive questioning is seen as a risk; the value of transformative learning is at odds with the short-term satisfaction of students (Barnes and Jenkins, 2014). Ultimately Barnes and Jenkins argue for the protection of students' pedagogic rights through 'unsettling students' common-sense understandings and decoupling them from knowledge, recognizing that identity is fragmentary, and

that learning is hard and often involves high levels of anxiety and effort' (2014: Paragraph. 19). This aligns with Orr and Shreeve's advocation of ambiguity in the art and design curriculum, encouraging risk taking and allowing failure: 'Students need to negotiate a curriculum which is not clearly set out with defined goals but offers up potential and requires exploration and commitment from the student to develop an individual path through the territory' (2018: 37). Luna Scott believes metacognition or 'thinking about thinking', can be taught through teachers permitting students to identify their confusion (2015), leading to autonomy and empowerment, (Luna Scott, 2015; Farmer et al. 2008). The gap and tension between what students might perceive as value from a learning experience and what is pedagogically ideal creates an imbalance and the erosion of these pedagogic rights has a significant impact on autonomy and creativity in arts education. Adams, (2013: 272) observes how neoliberal austerity threatens democratic rights and asks, 'what happens to creativity during such a diminution of democratic education, and how could it be utilised as a form of resistance to this hegemony of market values?'. This is also inked to spaces for working. In the context of schools, Wild (2013) responds to this issue by examining the ownership of and sense of belonging in the educational space. Wild suggests teachers' and students' lack of ownership of the classroom is particularly problematic because possession of the creative space is linked to prior experiences and ideals of the studio or the gallery. Responding to schools becoming increasingly privatised and monetised, where ownership of the creative space is reduced, Wild encourages engagement and questioning of these power structures, advocating a 'transformation of, or engagement with, the physical space of classrooms, corridors and the wider community' (Wild, 2013: 297). Alternative spaces within, virtually and outside the institution perhaps offer more autonomy depending on whether these are secured by teacher or student. However, they are not without their issues regarding ownership and control of collected data.

The power relationships in this neoliberal landscape are potentially troubling for creativity as raised by Adams (2013). One of the challenges is perhaps whether students want to be empowered, Richards and Richards (2013) see a lack of proactivity from undergraduate students regarding their learning as a tendency

to 'fall into ritual behaviour', passive learning that might lack critical selfreflection. Shor and Freire describe this ritual behaviour as a routine script 'between supervising authorities and alienated students' (1987: 28). Enculturated into school learning rather than the culture of their subject specialism (Brown et al. 1989) there is also a risk that the HE system continues to replicate student's already established learning behaviours and does not adequately prepare them or provide strategies for a high level of independent learning post-graduation. If we assume that the ritual behaviours are the consequence of a pedagogy of transmission (Nind et al. 2016) or products of institutional inscriptions (Luke and Gore, 1992) it is important to recognise students as knowledgeable or experienced in more informal ways at the start of their degree. A sociocultural or holistic view acknowledges wider contexts and values different constructions and interpretations of knowledge: valuing what the student has to offer. To increase activity and engagement, Richards and Richards suggest a more dialogic approach that goes beyond question posing where learning is co-constructed between student and tutor (2013). Shor and Freire, framing the teacher as an artist describe a process where the teacher 'recomposes' key themes into an 'unsettling critical investigation, orchestrating a prolonged study' (1987: 28) proposing that disruption or rupture in habits and patterns of thinking are therefore necessary in dialogue to transform and liberate learning.

The relationship between art and design, society, empowerment, and the individual has often been in flux. Eisner (2003) sets out three reasons the arts are important in our lives and have the potential to empower the individual and society; firstly, that the 'ineffable can be expressed', secondly, the arts provide opportunities for individuals to 'use and develop their minds in distinctive ways', and thirdly the arts 'secure experience that is valued intrinsically' (2003: 343). Hickman describes a rationale of arts education that fluctuates between liberatory individual expression which values the development of individuals self-esteem and sense of identity, and art as a social tool, 'a civilising instrument' where social cohesion is a priority over personal fulfilment (2005: 46). It is in this sense that he states that the idea of art 'does not reside in art objects but in the minds of people' (Hickman, 2005: 13). While these two

benefits are not unrelatable, Barrett (1982, in Hickman 2005: 171) suggests that art should enable students to realise their 'personal uniqueness in a community or in society as a whole' so that they can both learn from and contribute to society. But encouraging and facilitating creativity 'does not fit well within the structures and systems that typify schools' (Hickman, 2005: 120). In Hickman's own research, the aim: 'enhancing students' knowledge and understanding of their inner world, of feelings and imagination' was a priority to his PGCE students, but the vast majority (over 70%) scored this aim as a lowest priority for the future (2005: 175). This finding is supported by Zimmerman (2010) who found that 'creativity is being reconsidered with less emphasis on self-expression ... and more focused on development of cultural identity, technology, good citizenship, and economic entrepreneurship' (2010: 91).

2.1.1 Empowered Assessment

It is important to consider the relationship between how students learn and how they will be assessed, both formatively and summatively, particularly when students are constructing meaning for themselves (Biggs, 2003). Brown (2005) advocates reflective accounts, 'for students to review their experiences ... describe how they have developed over the period of study ... and indicate how they plan to develop their work and themselves into the future' (2005: 83). Boud discusses the importance in helping students develop sustainable assessment practices, 'assessment that meets the needs of the present without compromising the ability of students to meet their own future learning needs' (Boud, 2000: 151), indicating that students should graduate with the ability to self-assess throughout their professional lives (Boud, 1995). Boud stresses that students need to be able to make 'reliable judgements about what they do and do not know and what they can and cannot do' (1995: 38). If assessment is 'staff-driven', it creates dependency on the teacher or examiners to make decisions 'about what they know and they do not effectively learn to be able to do this for themselves' (Boud, 1995: 38).

Drawing on Freire's ideas, Bain (2010) stresses the importance of dialogic interactions between students and teachers to validate voices, particularly for assessment. Bain considers relationships between learning, the assessment of

learning and student autonomy as often poorly aligned. She calls for assessment to 'develop spaces and practices that nurture dialogue' (2010: 23) and allow for an emergent student voice, a pedagogy of possibility that does not prescribe the curriculum or assessment. Bain's proposed model of assessment for becoming (Figure 4) below, values the experiences that students bring to their learning, voice they can bring to assessment and how assessment could be negotiated in terms of what is assessed, how it is assessed and when it is assessed (Bain, 2010).

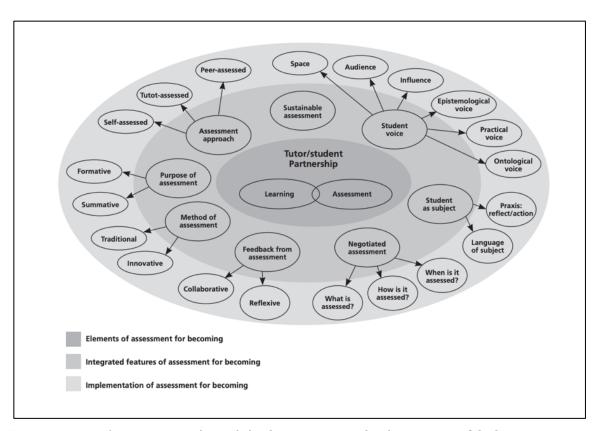


Figure 4: Bain's conceptual model of assessment for becoming (2010)

This model is focused on developing sustainable assessment as a form of negotiation. While this is posited as an important factor in students being able to evaluate their own performance post-graduation, it is also the 'student as subject', that encourages students to develop their own language around their development through reflection and actions (Bain, 2010).

2.2 Empowerment and digital spaces

Digital technologies are used to document and revisit arts and design practice, but do they have the potential to empower? The relationship students have with their own virtual spaces in the form of digital technologies and platforms could be a source of liberation as alternative working and thinking spaces: portable and nomadic. Sclater and Lally's (2013) research of the virtual *Inter-Life* platform examined how virtual worlds and creative practices could be used to help with life skills and transitions of 15-17-year-olds. While a different context to HE undergraduate art and design students, Sclater and Lally's research highlights the potentially emancipatory affordances of virtual spaces that are conceptually transferable; learners feel 'ownership and confidence in a learning space ... control over how the environment was constructed, how it was used and what was displayed and created, seemed to act as a catalyst for engagement in social and creative issues' (2013: 341).

Other potentially emancipatory aspects arise with the potential of the dialogic, writing and thinking experienced through using the internet as a virtual space. Hatton and Smith's hierarchical framework for reflection places an importance on the dialogic 'hearing one's own voice (alone or with another) exploring alternative ways to solve problems' (1995: 45). Wegerif's (2013) observations are in the context of shared communication, informal education, real audiences, and a desire for a theory of education, that is sympathetic to the internet, to be developed. He discusses how the internet can be understood as a dialogic space which makes us experience writing and thinking differently. He considers the dialogic self not as an 'isolated individual but a self with others acting as part of a global creative intelligence' (2013: 129). The affordances of the internet and digital to share, socially interact and co-construct knowledge is widely accepted, but there may be significance in whether the audience is perceived as real or imagined. Wegerif describes the Internet as without boundaries 'so to identify with it as if it was a 'community' is to identify beyond all possible limits ... characterised by openness rather than by the closure of a specific imagined self or imagined community' (2013: 141). Being able to find and hear one's own voice is at the root of Wegerif's 'exploratory talk': avoiding established conventions in language, using open questions, and stepping back (2005).

Vygotsky describes the internal voice as the result of 'external or communicative speech as well as egocentric speech turn[ed] "inward" to become the basis of inner speech' (Vygotsky,1930-1934;1978: 57). Often translated as 'the mind evolve[ing] to reflect social reality' (Ardichvili, 2001: 36) where internal conversation is socialised (Mead and Morris, 1934). The development of internalised conversation is perhaps key to developing the skills for critical reflection. However, Wegerif argues that dialogic has become conflated with dialectic 'within a single neo-Vygotskian, "socio-cultural" paradigm' (2008: 347) and suggests that Vygotsky is drawing from a dialectical logic that is monologic, a form of training, rather than dialogic or in dialogue with others (2008).

Digital spaces may offer ways to make the dialogic more visible. Ryan asserts that digital spaces are an effective way to help students take a step back, almost forcing a position of 'other' to their own work, 'making reflection visible in its multi-layered dimensions transforms it into a rigorous space for learning and action ... making their own reflection visible to themselves and others' (Ryan, 2014: 12) which may also support a life-long learning approach. The necessity of being able to step back is referred to by Dewey (1934) who describes the artist vicariously becoming the receiving audience when working in solitude 'there is the speaker, the thing said, and the one spoken to ... he observes and understands as a third person might note and interpret' (111: 1934).

2.2.1 Digital technology mediated spaces for reflection

Literature on reflective practice and digital technologies was predominantly on the use of blogs and social media tools. Literature on blogging for academic contexts is often focused on teacher training, nursing and other disciplines that heavily rely on the use of reflective diaries and journals (Williams and Jacobs, 2004), and are often focused on writing (Barton and Ryan, 2014). Blogs, microblogging and personal websites have become ubiquitous in academia and our personal lives. To put the literature accessed into context it is worth noting the rate of growth that these platforms have had over the last 15 years (Internet live stats). There is a wealth of literature from the early 2000s that provide accounts of early adopters of blogs, life documenters, (Nardi et al. 2004b),

where bloggers shared events, opinions and plans more like how the platform, *Facebook* is now used. In the context of education, Nardi et al. (2004a: 230) imagined blogs to be quite functional, 'sort posts by contributor and topic, and tools enhancing the ability to follow the thread of a particular argument, including its references, links and other "meta-data". In a short period of time there is a significant shift from blogging life stories (Nardi et al. 2004a; 2004b) to the potential of blogging for self-reflection in an educational context.

Using blogs specifically in educational environments has not gained the same traction or popularity in the same way that the use of them for non-educational contexts has (Yang and Chang, 2011). As an early example of using blogs in education, Oravec (2002) discusses how others' blogs are a useful resource for students, emphasising the student as consumer rather than a producer of content. Richardson (2006) acknowledges the constructivist possibilities of blogs but emphasises that it is the archiving of learning that leads to reflection and meta-cognitive activity. He distinguishes 'links with descriptive annotation' as not blogging, 'reflective, metacognitive writing on practice without links' as complex writing but simple blogging, 'links with analysis and synthesis that articulate a deeper understanding or relationship to the content being linked and written with potential audience response in mind' as real blogging and done over a long period of time as complex blogging (Richardson 2006: 31). Mair's participants (undergraduate psychology students) in her own research frequently referred to reflection as 'reviewing' and 'recapping', therefore reflecting on what had taken place rather than how it had taken place (Mair, 2012: 163). Mair (2010) under the premise that many HE students struggle with reflection based her research on how technology could be used to enhance reflective writing, metacognition, and learning. Mair (2012: 149) draws from several examples of students' using technology to support their reflective practice and suggests that the tutor as partner in learning, 'synchronous and asynchronous communication ... a 'safe space' for interactions and personal thoughts [and] anytime, anyplace learning' are benefits. While this describes some of the affordances of using digital technologies, the study does not explore how using the technology prompts more in-depth reflection especially when it may not be used to share with others. Mair argues that there is no consensus on what reflective practice is despite the amount of literature, and even less of an understanding in relation to students' perspectives of it.

In the context of using closed blogs on an online course Kerawalla et al's. (2008) study found that several students strongly felt that 'audience' was not important to them, and their blogs were primarily for their own benefit, however, some wanted comments and feedback from others. Kerwalla et al. state that when it did work, the descriptions of reflective activity were rich: 'this student said that her blog "has been my way of talking to myself". She found it useful as a means of "trying to catch up and get my head back into it" when she had fallen behind' (Kerawalla et al. 2009: 37) and provided evidence of dialogic reflection. Like Kerawalla et al. (2009), Robertson (2011) stresses that it is crucial that students receive guidance on how to use their blogs for any given task. A further challenge is that knowledge of reflection being read, assessed, and graded may lead students to construct less authentic accounts, 'the incentive is to demonstrate knowledge and hide ignorance or doubt' (Boud and Walker, 1998). In response to Boud (2001) who raises the issue of privacy in journal writing and what students might feel they can share, Robertson acknowledges that grade focused students 'may be reluctant to write about misconceptions or difficulties they have with the course material in case this results in a negative assessment of their abilities' (2011: 1631). Boud's advice is to make sure that students understand who their audience is, and how their work will be assessed. Boud and Walker describe this as, establishing a climate that is conducive to reflection, stating that 'it is common for reflection to be treated as if it were an intellectual exercise ... reflection is not solely a cognitive process: emotions are central to all learning' (1998: 194). Using reflective practice as a vehicle to explore attitudes, experiences, feelings, emotions, and ideas, being vulnerable and transparent about uncertainty and confusion, becomes undermined if they are being asked to demonstrate their understanding because 'students expect to write for assessment what they know, not reveal what they don't know' (Boud and Walker, 1998: 194).

Minocha's (2009a) review of literature on the collaborative and social aspects of blogs used in education brings together several platforms under the umbrella of

'Web 2.0' and 'social software' and later 'digital scholarship' (Heap and Minocha, 2012). Minocha defines them as tools that 'allow users to interact and share data with other users, primarily via the web' (2009a: 353). These include blogs but also wikis, *Facebook*, *Second Life*, *YouTube* and *Flickr* (2009a; 2009b), *Twitter* and *LinkedIn* (Heap and Minocha, 2012). Not cited but similar are *Instagram* and *Pinterest*. Like Robertson's (2009) example, the focus is on the platforms enabling a 'learner-centred' approach but with teachers initiating their use. It is perhaps not the affordances of blogs that is of note but how these affordances are implemented, supported, and engaged with. Minocha concludes that Web 2.00 'lends itself to collaboration, co-operation and the development of a learning community ... in contrast with the more traditional approach of individuals working in isolation and often in competition with each other' (2009a: 366).

Deng and Yuen's framework of the educational affordances of blogs below (Figure 5), highlights the opportunities for the development of skills along cognitive and social/psychological dimensions (Deng and Yuen, 2011). The framework, developed from their research into how students used blogs in educational contexts, is a useful visualisation of how blogs and other digital/social media tools are potentially able to straddle both cognitive and social dimensions, or internal and external processes. They align the use of blogging to constructivist learning and propose that it is this aspect, as well as the informal way that students use them which has given blogs their currency in educational settings (Deng and Yuen, 2011).

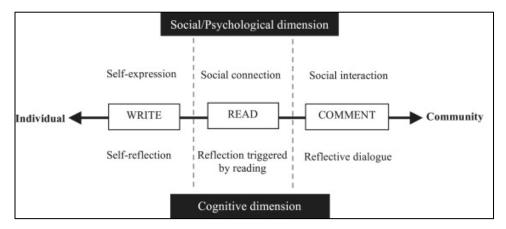


Figure 5. Deng and Yuen's framework (2011: 450)

Deng and Yuen's review of literature relating to the benefits of blogs as interactive devices showed the impact of discussion and collaboration on reflexivity as more limited. An interesting part of their discussion when reviewing the results of their research related to the affective dimension of reflection. Deng and Yuen's review of literature in 2011 concluded that there was a limited understanding of the pedagogic value of blogs in education at that time.

One of the challenges with the literature on educational blog use, is that blogs are used across various educational and non-educational contexts. Blogs have become more easily accessible and used for formal and informal learning, teaching and sharing, they have also become more institutionalised and the term blog covers the commercial global platforms, bespoke and institutional systems like Onenote and Mahara. Reeves (2011) felt that it was not particularly evident how to embed online technologies into art and design programmes. The flexibility and customisability (Reeves, 2011) of general web tools are often preferred by students to institutional ones. Reeves 2011 study examined the institutions VLE (Blackboard) as a way for undergraduate film students to create their own blog, to share, collaborate and comment on others work. The VLE offered safety within the walls of the institution, professionalism, a consistent experience and transparency to students' work, 'the blogging tool made it possible for tutors to clearly see the level of engagement of each member of the group' (Reeves, 2011: 72). Reeves identifies the potential for metacognitive activity, however the research mainly focused on how the VLE supported the logistics of collaborative working. Students were mostly positive at how the VLE supported their collaboration, made the process transparent and easier to organise their research, there was little evidence that any of these benefits were particular to that technology and there was a consensus from students that Facebook would be a better platform to use (Reeves, 2011).

There are potentially some issues in being overly prescriptive, (Farmer et al. 2008), or recipe following, (Boud and Walker, 1998), in providing students with guidance for their reflective practice. Both Robertson (2011) and Kerawalla

(2009) advocate prompting student with a structure for reflective activity: in detail, timed and at specific times Robertson (2011), and a more open structure Kerawalla et al. (2009). It is an area that still needs considerable investigation (Jimoyiannis and Angelaina, 2012). Getting the pedagogic approach right, regarding, where, when and how students reflect with technology, is challenging to navigate; to get the most out of their reflexivity they should have ownership of it. Farmer et al. (2008) found that it was the students who asked for detailed guidelines and models for blog posts that was problematic for teachers who wanted to scaffold learning but also encourage independence. The main issue for Farmer et al. was that although students had a good understanding of blogs, they were not familiar with the 'nature and possibilities of blogging as a self-reflexive practice ... guidance on the pedagogical aims of blogging would possibly have helped make the exercise more user friendly and critically transformative' (2008: 130), particularly as many students used the blog as a 'quick, informal, "non-academic" mode of discourse' (2008: 133).

2.2.2 Creating spaces for reflection

In an arts context the reflective diary/journal as blog, can become a form of sketchbook, depending on whether the sketchbook is used as a journal, a working artefact or hybrid of product and process (and an extension to the studio space: virtual and real or something in-between). Blogs can be used like sketchbooks: to document process and thinking, explain decisions, ask questions, and work things through, but with the additional capacity to be open, easily shared, and accessible to others. Blogs compared to traditional sketchbooks, like e-portfolios compared to linear paper-based files, enable different forms to coexist: images, text, moving image, the digital and paper based in origin, forming 'complex relations' (Tosun and Baris, 2011). Budge (2013) investigated using blogs, Twitter, and Instagram as an extension to her studio space. While the focus was on reflecting on these virtual spaces as extensions to the studio, these platforms brought a new lens for her to view her artistic practice. Budge discusses very little about the impact these platforms had on her personal reflection on her work or about herself as an artist. Her findings focus on quite functional aspects, a 'social dimension' to seek feedback on work 'or

clarification regarding aesthetic decisions, conceptual development, art materials and tool usage.

Maloney (2007) discusses his experiences of a group of undergraduate graphic design communication students using blogs for their practice, reflection and developing autonomy. He compares their usual use of sketchbooks to what they produce through blogs, although students could use both. Maloney asserts that it is the blogs capacity for collaboration and communities that facilitate reflective dialogue, also that students benefit from the editable and archived chronology of practice it produces and that it can be personalised. Maloney (2007) embedded the blog use into structured sessions; the blogs were projected, and students presented with them. Taking screenshots of progress, students transferred this evidence to their blogs, although this helped with presenting and organising their work, it is not clear if the quality of their reflexivity was impacted on. For some it was useful to 'reflect back', revisit the work they had done. The interaction that students had with others' blogs also led them to reflect on their own work. Maloney recognised that the high rate of dyslexia amongst art and design students can become a barrier for written work. One student used the blog to host a video of herself speaking into the camera: 'She was on the way to a performance for a project outcome and was using spoken dialogue into the camera to plan for the activity in advance' (Maloney, 2007: np). This example blurs reflecting on and for practice, with reflection as practice.

Gröppel-Wegener's (2012) study focused specifically on how using blogs alongside practice can support arts and design students' academic writing. Part of the intention was to embed 'their understanding of writing as a thinking process rather than just an outcome specific to the academic context' (2012: 86) to externalise their ideas using a blog. Gröppel-Wegener found that posts became more analytical rather than descriptive and that students were making insightful comments on peer's blogs, noting that these students were beginning to find their 'professional voice' (2012: 90) and the blogs prompted discussions about different styles of writing. Gröppel-Wegener suggests that it is the change in medium that is effective and using the term "off-loading" to describe

externalising thoughts advocates that blogging should be considered as an extension to the sketchbook or reflective journal:

Students also need to have it explained that the 'step away' from the immediacy of their work, through logging onto the computer or going to a dedicated software, if they are working digitally, is what is beneficial when it comes to getting into a reflective mode to reflect-on rather than in-action (2012: 93).

Like Gröppel-Wegener (2012), Barton and Ryan (2014) advocate the benefits of multi-modality in combination with written annotation and discipline specific teaching of reflective practices, 'we argue that unless reflection is taught and assessed via multi-modal approaches, using discipline-specific discourses, then reflective practice in the higher education context will remain superficial: tagged on rather than constituting a way of working and learning within the discipline' (Barton and Ryan, 2014: 410). Barton and Ryan discuss examples from undergraduate, dance, fashion, and music students, who use blogs, reference images, stills from video, and podcasting to reflect with. They found that students expressed their own feelings, related personal aspects to wider contexts, discussed their options and reasoned their decision making, and reconstructed how their work could be developed (Barton and Ryan, 2014).

Arts and design practitioners make work for an audience, whether it is performed, published, or displayed. To be able to reflect on this work Kirk and Pitches assert that practitioners need to experience this work as a 'stranger' explaining that digital technologies can 'provide a distancing mechanism, putting the maker into the shoes of the viewer' (2013: 3). Their exploration of 'creative forms of reflection' led to a research project: *Digitalis: Using Digital Technologies to Enhance and Embed Creative Reflection* which focused on identifying 'digitally enhanced methods of student reflection on learning' (2013: 6) with a view to embed and disseminate this practice. As well as VLE blogs and the Universities *YouTube* channel, students from: dance, theatre and performance, music, and museum studies, were provided with still and video cameras, audio recorders to record reflection and practice of development, experimentation, and rehearsal. Across these disciplines' students found that

there was a benefit to being able to revisit practice and that the technology became an excellent substitute for audience and audience perspective (Kirk and Pitches, 2013). The students reported findings as participants to the research. However, whether this reflection became documented for the student or for assessment, or that writing about the videos or audio led to more critical or dialogic reflection is not fully explained in their paper.

Kirk and Pitches (2013) found that the implementation of VLE platforms in HE to document, organise and share content had not made a significant impact on 'digital literacy driving pedagogy and there remain barriers to exploiting the VLE fully' (Kirk and Pitches, 2013: 8). If we take old pedagogy to new possibilities, we are not fully exploring the possibilities:

we are trying to understand the future in terms of ways of thinking that helped to guide us in the past ... the Internet is a disruptive technology for education. It cannot simply be incorporated into existing formal education systems without changing them (Wegerif, 2013: 1-3).

There is a sense that the practitioner becomes researcher: investigating through revisiting thoughts and actions through digitised text, photographs and video providing students with an opportunity to 'step back' from the intimacy of making. However, the artefacts that are produced from this documentation are not neutral, 'the camera is not an invisible recording device, and that visual data cannot be seen as a straightforward source of "evidence" ... between the content of the image itself and contexts in which it is distributed and interpreted' Buckingham (2009: 637-8). Linking to McLuhan (1964) ideas around media and their inherent 'messages', Buckingham maintains that the data produced from creative research cannot be taken at face value, 'these data need to be analysed, and we need to develop methods that can deal specifically with the visual dimensions of such material ... it should also address the social meanings that attach to these modes, and the social expectations that surround them' (2009: 648). In the context of students interpreting and gaining insight into their work, the documentation as research is more a continuum of making and a strategy to reflect.

Many of the examples of how blogs and other digital platforms are used in education for reflection, iterate the benefits of collaboration, sharing and archiving work. There is also the issue of how the documentation necessary for this process may disrupt, inform, or change the work being made or how the work is seen and reflected on. In this sense the digital tools and platforms potentially bring unique spaces to reflect with. An aspect of these spaces is the opportunity for conversational exchange, whether between two people or written and documented for 'other'. An intrinsic affordance of the internet is that it is participatory and has more than one voice, 'dialogic assumes that meaning is never singular but always emerges in the play of different voices in dialogue together (Wegerif, 2013: 3). It also supports dialogue over distance and time, living and unbounded (Wegerif, 2013). The dialogic of the internet challenges what Wegerif calls 'a powerful and dangerous delusion of monologism' (2013: 6), which he believes we are fixed to:

the monologic is built into many of the structures we inhabit, the education system in particular, and it is implicit in many of the tools that we use to help us think ... it is imposed by the way that writing and print are used within formal education systems to establish authority (2013: 7).

The internet not only provides a space to think and exchange but also can also potentially liberate both teachers and student alike from the authoritative power structures that currently bind us together. Drawing on Bakhtin, Wegerif explores the relationship between monologic or authoritative voice and dialogic as persuasive voice that is internalised and changed from within, 'meaning only exists in the context of a dialogue, specifically as an answer to a question that we have posed either explicitly or implicitly in dialogue together or in dialogue with ourselves' (2013: 22). Wegerif notes that Bakhtin's (1981) dialogues are not just between people, 'but always also between cultural voices ... embodied in texts and in ways of talking and ways of being' (2013: 23). The dialogue comes from accepting or rejecting these voices. The internet, blog and other platforms they network become spaces to process, make decisions and develop their own voices. Writing to publish or writing in a tool that has the potential to publish becomes a space where reflection has a voice, whether that voice is reaffirming authoritative voices (demonstrating what they know) or bringing their own

thoughts to it (critical reflection) and making sense of their work and experiences:

for dialogic, however, the past is always preserved as a voice that we should not ignore ... This does not mean that we should forget our local place and our local time but that, by bringing a larger dialogic awareness of multiple perspectives to bear, we should enrich our experience of our situation (Wegerif, 2013: 29).

Wegerif (2013) discusses how the internet can be understood as a dialogic space which enables us to experience writing and thinking differently. He considers the dialogic self not as an 'isolated individual but a self with others acting as part of a global creative intelligence' (2013: 129). The affordances of the internet and digital to share, socially interact and co-construct knowledge is widely accepted, but there may be significance in whether the audience is perceived as real or imagined. Wegerif asserts that dialogic thinking is never purely individual, 'the meaning is emergent between voices in relationship' (2013: 160). Dennis (2015) contributes:

whilst blogging, the physical process of writing, is a solitary activity, it is one that takes place with/in and through the public. As such it requires interaction with real or imagined others ... they provide an extensive mechanism for the facilitation of a dialogic self ... my suggestion is that the act of writing is performative ... the collaborative nature of blogging implies this presentation is an intersubjective, dialogic self (Dennis, 2015: 288-9).

The internet, many digital platforms and social media have the capacity for sharing, co-constructing and diverse audiences. However, the form of social interaction that takes place, whether this is in real, virtual or in imagined spaces may matter. Perhaps it is how the author considers and 'speaks' to their audience that is important. There is a question of whether reflection is a solitary activity at all particularly if there is any consideration of audience, which there is if that work is assessed, in a public space or published online. It becomes an interesting concept when the social reality, in the context of the virtual or imagined might be self-constructed. For Sclater, (2012: 162) it is the self and the social which creates shifts, 'when a breakthrough in creative thinking

occurs, a learner is able to develop further insight into a problem or issue that in turn leads to the formation of meaning for that person'.

Another way to conceptualise the construction of self in these spaces is through Goffman's (1956) Dramaturgical Perspective or framework which relates to the idea of presenting versions of the self, to others, as performative. This framework presents a useful metaphor with which to discuss some of the spaces that are created from using digital technologies and platforms, and how versions of the self are performed and presented in these. The ideas around roles in different situations and the idea of backstage and front stage self, particularly regarding digital technologies brings new ways to interpret and analyse how these spaces might be used for reflection and how learners make sense of their practices. Although in the context of simulation environments in virtual words, the ability to switch between 'two states' which Kuksa and Childs (2014) believe, provide additional opportunities for learning, could be applied to any real to digital transfer. Referring to de Freitas and Oliver (2006) they draw on their concept of "double identification", reflecting on the self from two positions. de Freitas and Oliver (2006) provide more detail: 'this "double" identification approach ... may in part explain why the use of 'other worlds' can indeed accelerate learning, allowing the learner to at once participate within the 'world' and to reflect upon their relationship when viewed from outside of it, reinforcing learning through empathy or "being there'", whilst allowing sufficient space for reflection' (2006: 255). In the context of blogging, the 'being there', could be interpreted as the imagined audience of the blog, if we think of blogging as a form of roleplay. Therefore, Kuksa and Childs (2014) explore the concept of leaving and entering these spaces as threshold crossing, particularly as 'limen', their own reference to this term uses the historical definition, 'the "limen" demarcates the edge of a stage, separating the imaginary world of the actors from the audience' (2014: 87). Implicating the liminal space as perhaps a rupturing space but at least one for reflective activity and creativity. This brings us back to Goffman's (1956) dramaturgical perspective which might represent the shift between offline and online selves and the reflective space and presentation space of online platforms. Elwell

(2013: 242) describes this as the 'uncanny valley between the digital and the real'.

Digital technologies offer different spaces in which we can experiment with identity, explore multiple selves and our relationships with others. The use of multiple platforms creates its own dialogue, what combination or 'mashup' (Wheeler, 2009) students and teachers bring to the teaching and learning context may encourage echoes or new dialogue across these platforms to form. Wheeler (2009) notes that there is not much insight into how combining different digital platforms and tools might combine to make dynamic learning spaces. Turkle (2015) takes a critical position of what we lose as well as gain from being able to play different roles through using and performing with digital technologies. Turkle claims these spaces enable us to 'present' ourselves rather than facilitate in-depth reflection, not to be anti-technology but pro conversation. Our online identity, profiles, avatars, are an opportunity to reinvent or test ideas out, 'our online identities are facets of ourselves that usually are harder for us to express in the physical realm. This is why the online world can be a place for personal growth' (Turkle, 2015: 201). But Turkle warns that social media can also inhibit internal conversation, 'shifting our focus from reflection to self-presentation' (2015: 81) and Turkle guestions how truthful we can be in our self-reflection knowing we are communicating in a public space. We can go online and be who we want to be, does this give students a playful space, to invent in test out a professional identity? Elwell argues that 'our online and offline selves are entwinned to such an extent now we no longer go online - it is always there' (Elwell, 2013: 235). Multiple media platforms provide a rich space, 'transmedia is a way of telling stories across multiple media platforms to create an overarching story-world where each narrative element makes a distinct contribution to the whole' (Elwell, 2013: 239).

2.3 Practice: legacy

This section examines what are considered as the accepted and defined art and design pedagogies and terminologies, both historically and in contemporary practices.

2.3.1 Distinctions: Arts, Art, Design, Art and Design

To understand approaches to arts pedagogy, it is necessary to understand the interdisciplinarity within the arts field; art, design, and art and design are umbrella terms for diverse practices. The clear divisions and more subtle nuances between arts and design-based disciplines become more defined as students' progress through the education system and progressively narrow their specialism at undergraduate level.

Firstly, there is the issue of how we define art and design; looking at literature and practice from art and design disciplines together may be problematic because of distinct differences between the processes and outcomes that artists and designers engage with. However, design and art making, as terms and disciplines, are often interchangeable through primary and secondary education and the boundaries between them are increasingly blurred at degree level. Bichard's (2008) examples of interdisciplinarity are the overlaps between graphic design and animation, between fine art and textiles and fashion. Some of these disciplines have also produced new variants of courses through divisions and sub-divisions (Blair et al. 2008), interbreeding and mutating (Haywood, 2008). Blair et al. (2008: 65) consider the term 'subject' as describing the 'overarching configuration of subject titles — art, design, media, communication; while the constituent specialisms — sculpture, graphic design, fashion and so on, should be described as 'disciplines'. So as not to generalise about developments in arts education, Fleming (2010) categorises: drama, dance, music and visual art/art and design separately, although concedes that there are 'common threads' between them. Fleming draws on opinions about the differences between art and design specifically, by defining design as concerned with planning, technique and utility and art 'more exclusively with expression' (2010: 52). Fleming concludes that finding closed definitions for art, design, craft is not that useful and 'not conducive to promoting a dynamic and creative approach to teaching (2010: 52). Hickman (2005) discusses at length the distinctions that can be made between art, craft and design, and cites Black (1973) who asserts that art and design share 'only creativity and some techniques in common'. As with the most recent National Curriculum for Art and Design England (Great Britain. Department for Education 2013), which uses art

and design and art, craft and design interchangeably throughout, Hickman favours a more fluid definition between these terms where 'the differences in epistemological terms are in degree rather than in kind' (Hickman, 2005: 12). Although focussing on the nuances of design rather than across art, craft and design this is sympathetic to Schön's approach, 'a generic process shared by the various design professions ... designing as a conversation with the materials of a situation' (1983: 78). It is the type of reflective activity and conversation with materials that has commonalities across all art, design and craft disciplines. The National Curriculum paper (Great Britain. Department for Education 2013) does not go into depth about undergraduate teaching of art, craft or design, which the National Society of Education in Art and Design (NSEAD) addresses by creating a 'Parallel Curriculum' (NSEAD, 2013), which 'offers primary and secondary schools a 'fit for purpose' 21st century art and design framework and curriculum' (NSEAD, 2019).

The identity we have and bring within a particular discipline is also significant, referred to as "tribes" (Becher and Trowler, 2001) and communities of practice (Lave, 1991; Lave and Wenger, 1991; Wenger, 1998) that teachers belong to. These support discipline identities within intuitions; they also enable teachers to construct their own discipline-based identities through adopting cultural rules and socialisation (Becher and Trowler, 2001) and through social communication (Beijaard et al. 2004; Mead and Morris, 1934). Becher and Trowler, (2001) discuss how discipline areas have developed and grown within institutions; fragmented sub-disciplines have merged to form new discipline areas. However, they point to examples where discipline areas once prominent have gone into decline. These territorial changes have impacted on academics, and they use the metaphor of landscape to consider the complexities of the contributing factors. Becher and Trowler (2001) provide a different perspective of interdisciplinarity that uses military or hunting metaphors: disciplinary territories are socially constructed with weak or impenetrable boarders; 'a considerable amount of poaching goes on across all disciplinary boarders' (Becher and Trowler, 2001: 59).

2.3.2 Conceptualisations of making: Process models versus Art and Design and Creativity

Although there may be different criteria and contexts for students working in fine arts and design domains, there are core similarities: how students develop a sense of what their own creative process is, how they engage with reflection to develop this and how they transition from student to practitioner are common to all creative arts and design students. Describing this engagement as a singular process or procedural, conceptually seems at odds with what students might experience through their making and learning in art and design contexts. Botella et al. (2011; 2013; 2017; Botella and Lubart, 2015) focus their research on the creative processes of art students, attempting to build on and describe stages, and the 'dynamics' of it. Using scientific approaches based on repeated measuring of mood, creative output etc. Botella et al. (2011) study hypothesized that the creative process was individual and not sequential, individuals were affected emotionally, and this impacted on creative outputs: 'artists with high creative performance do not experience each stage in the same way as artists with low creative performance' (2011: 22). They conclude that: 'the creative process is not a simple sequential phenomenon. General models of creative process do not seem to fit the reality of the artistic creation ... we found that artists can engage in many stages at the same time' (Botella et al. 2011: 33).

Students' experiences and how *they* relate these to conceptualisations of the creative process is often not present in their written and spoken reflection either. It is difficult to see how students gain insight into their own making process and the confidence to locate their practice if the pedagogy focuses on providing process scenarios rather than on what the individual is experiencing or giving them the opportunity to explore this.

Creative process is relevant to both design and arts disciplines however there are situations where the process is more heavily determined by factors imposed on the student (client briefs/commissions/thematic proposals) which may shift the focus and context for the artist or designer. The explored literature included music, dance and performing arts under these umbrella terms. The terms 'creative process', 'artistic process', 'design process' even 'design thinking' are

often conflated and impact on how making and thinking in art(s) and design disciplines is understood, learnt and taught.

Models of the creative process can be traced back to Wallas' outline as a four-stage model: Preparation, Incubation, Illumination and Verification (Wallas, 1926), not specific to creative subjects, his model drew from mathematician Poincare', physician and physicist Helmholz, and various poets (Sadler-Smith, 2015). In Sadler-Smith's (2015) detailed reading of Wallas' writing supporting this model, Wallas' descriptions of 'sensibilite' in the creative process are illuminated. Originally from Poincare's (1908-1952: 29) writing, 'sensibilite' is an ambiguous term that may be translated as feelings or sensibility its function is to act as a 'selective force' playing the role of a 'delicate sieve'' (Sadler-Smith, 2015: 349). Sadler-Smith concludes that the model is more fine-grained than it seems and in part is about 'becoming more aware phenomenologically of sensibilities and creative intuitions as they arise' and that there are 'subtleties and nuances the interplay of consciousness, fringe consciousness, and nonconsciousness in the creative process' (2015: 350).

To one extreme 'design thinking' defines the design process as an exportable methodology to businesses as discussed by Tschimmel (2012), 'any kind of business and organisation can benefit from the designers' way of thinking and working' (2012: 1). This situates the design process as a toolkit or a replicable model for contexts outside of art and design practices, 'research in design thinking is interested in identifying the essential mental strategies of designers while working on a project' (Tschimmel, 2012: 2). This approach would seem to remove phenomenological awareness 'of sensibilities and creative intuitions as they arise' (Sadler-Smith, 2015: 350) out of the equation. While it may be possible to extract from the design/creative process, exercises that can be applied to other contexts to help with creative thinking, this does not help give insight into the creative process itself, or more importantly, the teaching and learning of the creative process, if that is possible. While using 'design thinking' does not make designers out of those outside of the discipline it turns aspects of a designers' process into strategies. Differentiating 'design thinking' from design thus leaving 'the whole aesthetic and semantic dimension of product language to the professional designers ... transport[ing] merely the way of thinking in new business possibilities to innovation managers' (Tschimmel, 2012: 3) is more helpful. In contrast Learmonth and Huckdale's description of the creative process as a river emphasises the impossibility of extracting singular elements of it:

eroding and/or building up what contains it; growing and/or shrinking according to what goes in or is extracted from it; adaptive to objects in its path; sensitive to toxic and 'nutritional' inputs; and flowing faster or slower as it shapes and is shaped by its landscape, and it is going somewhere - irrepressibly. You cannot research a river by isolating a section and stopping its flow, because then it would not be a river (2012: 107)

Baaki and Tracey explain that the complexity of design and its ill-structured problems means that 'designers treat design cases as unique since they cannot deal with situations of uncertainty by applying standard theories and techniques' (2014: 6). Tschimmel (2011) also concedes that based on others research that the design process is 'too complex to reduce design thinking to mere "problemsolving" or "information-processing". The designer decides what to do and when, on the basis of the personally perceived and reconstructed design task.

For Taylor the act of creating is what makes us: 'I discover myself through my work as an artist, through what I create ... I become what I have it in me to be' (1991: 63). For Taylor there is a strong alignment between self-discovery or self-definition and artistic creation and that that self-discovery requires 'poiesis' which he defines as 'making' to bring forth, produce. Fortnum and Smith (2007), in their exploration of the challenges artists face when documenting their practices, conclude that although technology has made it easier to document practice, and that we are more used to being observed, this does not necessarily mean that the creative process has been 'demystified'. Wilkes used a website to document her practice and to explore her own subjectivity:

open up to a dialogical dimension, both expanding the dialogue between ... transient practices and the processes that contextualise their

production and facilitating a space where alternative narratives and critical exchanges might be articulated (2005: 6).

Like Wilks, Kirk created a space to reflect socially on her own making process. Through video, she shared the process of making a painting, wanting the audience to 'experience the materiality of the painting' as the layers of her painting, usually hidden from view, became achieved through this medium (2014: 118). Referring to this as a 'palimpsest', Kirk questions whether digital making in this way is akin to 'material thinking': where the medium used both mediates and records a trace (2014: 126).

Aided by social media and digital platforms such as *Vimeo*, *YouTube*, *Instagram*, *Facebook*, blogs and websites, many contemporary practitioners share work in progress giving insight into their processes and wider practical, theoretical, and personal contexts. Artist Lucy Lyons uses *Instagram* to share her sketchbook pages of drawings, 'visual notes', fragments of conversations and written notes to followers of her page. The comments provide descriptions of locations and sometimes further insight into the work:

I hadn't realised there was a pattern developing until after the first two were finished. Each has an element from nature, usually anatomical. They all have a figure in them and a segment from the Heironymus Bosch painting Garden of Earthly Delights. Other things appear including, statues, fabric, plants and insects or sea creatures. They are made with no preparation. There is no pencil under drawing or mapping out and they are drawn directly using sepia archival pen (Lyons, 2021).

While the accompanying text is mostly descriptive of the image shared there is evidence of in-the-moment note taking on the sketchbook pages and some insight into Lyons' own discoveries when looking back at the work. Similarly, artist Paul Dash uses *Instagram* to share recent work in progress, as well as pre-internet early work. His posts document both mundane and practice-related life events. There are short descriptions of the work and the use of hashtags to categorise and enable the work to appear through keyword searches. Some posts also have feedback and dialogue between followers. Dash also uses a *Squarespace* website which, in contrast to his *Instagram* site, curates a formal presentation of his past and current work. Dash provides an explanation of the

works in the first person, which includes analysis of the subject matter and aesthetic decision-making with a tone that is informal but informative of the making and thinking behind the work. Artist Rose Davies who blogs under the pen name of Rosie Scribblah uses multiple digital platforms and connected social media to document and share her artistic practice. Davies uses Wordpress, Facebook, Twitter, Instagram, YouTube, and several platforms for podcasts. The Wordpress blog is a lively environment where Davies posts work in progress as well as providing detailed technical information about the materials and processes she uses. The posts include video demonstrations of techniques as well as speed videos showing the entire process of starting and finishing a painting in a few minutes. The site performs as an archive and a space for educating, sharing individual and collaborative projects, connecting to other locations for the work, and also acts as a selling platform. These examples demonstrate the multimodal approaches that contemporary artists use to catalogue their individual journeys. While they vary in what is revealed of their intent to their intended audience, they offer idiosyncratic ways to blend the process of making with the final products of that making and present the process to wider audiences.

Zimmerman, (2010) advocates that 'A holistic art program should focus on creative processes as there is not one creative process, there are many processes and educational models that can influence students' creative development'. Sullivan (2010) argues that the idea that art is a "process" or "product" needs to be abandoned, 'art inquiry as a practice that is distributed throughout the various media, languages, situations, and cultural texts offers the possibility of a more convincing cognitive account' (2010: 104). The work of many researchers inside and outside the field of art education provided a variety of conceptual models for these educators' creativity praxis. As with a singular definition of creativity, the notion is quickly dispelled that creativity in art teaching and learning is based on one singular process or methodology. Although the authors often referred to a creative process, it became apparent as their creativity themes were explicated that there were a variety of strategies and methodologies used to aid students in their creative performances.

Arts education focuses on teaching the skills and contexts for art but not so much about the individual and personal approaches that make an individual practice. The creative process itself is not framed as a research methodology (with arts methods). This also emphasises the importance of using reflection to understand what they do, why they do it and understand why it is particular to them. This is at the heart of Fleming's description of creativity: 'creativity is in some sense an internal capacity; moreover, denying that view runs the risk of subscribing to a form of behaviourism. However, it is important not to take the contrasting view that the word 'creativity' refers to something mysterious and hidden' (Fleming, 2010: 56). Sullivan (2010) makes the distinction between a social science approach that expects to make change through the accumulation of knowledge and conversely the artists position where 'change leads to progress as imaginative leaps are made into what we don't know, and this challenges what we do know' (2010: 116). Creativity is 'within the cracks and erasures of the structures in place ... artists create within these unlikely liminal spaces and offer new ways to connect to existing and possible perspectives (Sullivan, 2010: 116). Significantly, Sullivan notes that it is now artists themselves, rather than others, who 'translate these insights into cultural capital ... giving rise to a new discourse of artistic research (Sullivan, 2010: 116). Orr and Shereeve's 'sticky curriculum' goes some way towards offering a theory of art and design curriculum: 'Sticky is a term which has multiple meanings, and we use it advisedly to convey the challenges, conflicts, dilemmas and ambiguity ... for one student the curriculum may be viewed as a wonderful set of opportunities, whilst for another it is experienced as a chaotic mess' (2018: 23-26).

2.3.3 Art and design pedagogy

This study focuses on HE undergraduate study, however, the legacies of art and design education from the Primary, Secondary and FE sectors play their part in the habits formed and assumptions that are made about making work and the creative 'process' experienced by students. It is therefore important to reflect on some of the issues and challenges inherited from students' introductions to making work and the impact this might have on transitions to becoming an HE student and professional. Art and design pedagogy cannot be examined in isolation from: the evolution of institutions, relationships between art and

design, art and design to other disciplines, its relationship to research or arts and design-based disciplines as potential methodologies for other disciplines. This heritage is also heavily defined by social contexts, issues relating to gender, class and race. Baldessari and Craig-Martin (2009) reflect on a time in the 70s and 80s when HE art education was mostly independent from the university system, discussing CalArts (California Arts, America) and Goldsmiths (UK): 'we just eliminated grades ... had no curriculum ... you're acting like cupid, trying to make relationships between the artists' (Baldessari and Craig-Martin 2009: 43-44). While they describe this as a liberating approach, they are of the view that art cannot be taught or assessed but that students become artists by some sort of assimilation: 'you're teaching by your presence. You're teaching because you're sitting at lunch with kids, and they're learning as much at lunch, if not more, than they are when you're talking to them in the studio' (2009: 44-5). This presents a contradiction: while this approach is open and ambiguous it is also similar to the idea of students modelling themselves on established practices like an apprenticeship and master approach or Academy style of teaching, see Table 2. below. While Orr and Shreeve value the necessary openness and uncertainty required of a 'sticky curriculum' and recognise the tension between this and the increased 'accountability and transparency' in the institution, they caution that ambiguity and uncertainty should not lead to 'mystery or elitism' (2018: 24).

While the institutions and social makeup of these structures have changed the inherited pedagogy, ways of teaching and learning art and design, may have not. Daichendt (2010), Hickman (2005) and Elkins (2001) provide historical accounts of art and design pedagogy; for Elkins the central question is whether art can be taught at all, Daichendt seeks to identify the first artist-teachers, and for Hickman, arts pedagogy is formed around our need to make art and its function in society. There is a view that it is not possible to teach art beyond techniques, use of tools and to facilitate a type of thinking: 'no one has a good account of how art should be taught, why it should be taught, whether it should be taught, or even if it should be taught' (Elkins, 2012: 2). The summary below (Table 2), although greatly simplified, offers an overview of dominant pedagogic approaches in art and design. Souleles (2013) notes that there is a persistence of

transmissive approaches to teaching and learning and a 'fluctuating focus on debates about content and structure as opposed to pedagogies' (2013: 253).

Institution	Pedagogic approach/ethos	Assessment context	Learning objective	Discipline	Reference
Families	Acquisition of technique, craft and skill were	Maintain tradition	Employment	manual work	(Daichendt,
	handed down			and trades	2010)
Art, craft	Copying style and skills from Master	Maintain standards	Attract Patronage, master and guild	Arts, craft	(Daichendt,
and design	Apprenticeship training				2010)
guilds		Labour	Become master		(Elkins 2001)
Workshops	Closed professional circles				(Souleles 2013)
			Certification from Guilds		
Early	Copying style and skills from Master	Maintain established	Replicating master	Drawing	(Daichendt,
Academies	Lectures	skills and hierarchies	Teaching		2010)
>19c	Debates				(Elkins 2001)
		Patronage	Draw from memory		
	'students were allowed only to draw from other				
	drawings, then they drew from plaster casts and	Competitions and prizes	Perfect proportions		
	antique sculptures; and finally, from live models'				
	(Elkins 2001 16)				
Later	Drawing from life		Fostering individuality	Drawing	(Elkins 2001)
Academies	Mentoring	Competitions and prizes	Technique development	Painting	
<19c	Artist as individual			Sculpture	
		Specialisation			
Bauhaus	Philosophy of art and design	Journeyman's certificate	'without a hierarchical system, students	Arts, Craft,	(Daichendt,
	Varied pedagogic approaches	commissions	could explore a number of correct answers of	Design	2010)
	Course based		processes to solve artistic issues' (Daichendt,	Architecture	(Elkins 2001)
			2010: 108)		
	Exercises		Interpretation		
	Training for the senses, the emotions and the mind				
	(Elkins 2001:32)				
Post	'students have a large say in what they will learn	Employment	Manufacturing/	Broad choice	(Elkins 2001)
Bauhaus	and when they will learn it' (Ellis 2001:38)	Qualifications	Self-awareness of practice	of courses	(Souleles 2013)
Art Schools	Critique	Quanications	Singular 'voice'	Art separate	(30010103 2013)
Universities	Dialogue		Present in galleries	from Design	
Studio	Tutorials		Art appreciation		
Space	Teaching techniques		Awareness of audience		

Table 2: Table of historic pedagogic approaches in art and design

The transmission that occurs in the one-to-one tutorial 'often results in the tutor demonstrating his/her own expertise to improve some aspects of the student's work - more or less a "sitting-by-Nellie" approach' (Swann, 1986: 18) and is uneconomically viable as well as unchallenging. Despite this, it is still a muchused pedagogic approach, 'the one-on-one crit in the studio, which every student "gets" from a design teacher two to three times a week throughout the study program, is (and has been for over a century) the predominant practical design-learning format employed in design education throughout the world' (Goldschmidt et al. 2009: 286). Swann (1986) acknowledges other pedagogic approaches: lectures, demonstrations and crits, but also points out that the crit is usually summative and advocates for more peer learning approaches and interim group crits. However, whether used for formative or summative purposes the crit format can be a source of anxiety for students (Healy, 2016) or imbalanced and threaten student autonomy (Goldschmidt et al. 2009; Percy, 2004). The crit can be seen as 'a public revealing of a private activity, conferring a hybrid status on the closed space and intimate production of the studio' (Moran, 2009: 37). While Percy (2004) found that the crit was a powerful

way to enculturate students into their design programme and discipline, it was 'a poor vehicle for students to demonstrate their understanding of the context of their practice' (Percy, 2004: 143) because 'students privileged description and explanation of process and technique over a demonstration of their command of critical exposition and an ability to conceptualize' (Percy, 2004: 147). Percy notes it also puts students in a 'subordinate position dependent on the critical direction and intervention of the academic members of staff' (Percy, 2004: 149). However, Percy noted that using online technology to conduct crits where students were in their own homes and typing their responses led to a more balanced power relationship between staff and students (Percy, 2004: 151).

Elkins (2014) provides an expansive account of different types of crit and the approaches that can be taken. Examples like 'silent teacher critique' have the potential to shift the power balance but for many of his examples the experience of both teachers and students, year of study, and when the crits occur, may impact greatly on their success. Goldschmidt et al. (2009) warn against Schön's (1987) "mystery-mastery" a situation where the student's 'lack of self-confidence and awe of the teacher ... does not assist in learning through what is supposed to be an open instructional conversation' (2009: 300). Orr and Shreeve (2018) describe the anxiety triggered by students navigating 'like detectives trying to deduce the values or aesthetics of the teachers they work with ... who is grading their work and how the teachers' creative practices align with or clash against [their] ways of making' (2018: 90).

From a critical pedagogy perspective, it is worth noting that 'the teachers task is not to mould students but to encourage human agency, to provide the conditions for students to be self-determining and to struggle for a society that is both autonomous and democratic' (Giroux, 2002: 49). Orr and Shreeve surmise that at its best the crit enables a democratic dialogue where agreement about the work is reached but that at their worst 'there is a clash between the powerful and the powerless that intersects with issues of privilege and disadvantage' (2018: 200). While the crit encourages a dialogic experience, 'students and their work are "languaged" into being' and is often a well-used and effective

method in developing critical and evaluative skills, it is not a method sustained outside of programmes apart from resembling a professional pitch (Orr and Shreeve, 2018: 83).

For Orr and Shreeve the studio space is pedagogy: a working environment where students have some autonomy: it is a well-established space that structures what and how learning takes place within the institution, 'students create a social learning environment discussing amongst peers and enabling the tutor to explore progress and work and to hold group or individual tutorials (2018: 138). This has evolved to include other locations for making work: workshops, the home, public spaces digital spaces (Orr and Shreeve, 2018; Marshalsey, 2015), perhaps for convenience or due to pressure on classroom use in institutions a necessity (Wild, 2013). Marshalsey notes that studio-based pedagogy has changed dramatically 'learning can often be dispersed between studio, home and non-owned spaces, and across physical, digital and hybridised forms of learning space ... each student perceives a sense of place differently' (2015: 340).

Knowing and sureness is often valued by students and in academia over uncertainty, but as Orr and Shreeve state: 'students are encouraged to see a mistake as an opportunity to travel down a different route, to view alternative solutions or ideas to develop the practice in their own direction, not simply to mimic or replicate existing practices' (2018: 52). Artist and educator, Cocker (2013: 126) affirms that not knowing can be both paralysing and prohibitive 'it can usher in the feelings of anxiety and embarrassment, the debilitating sense of being at a loss or lost [but also] an active space within practice, wherein an artist hopes for an encounter with something new or unfamiliar, unrecognizable or unknown'. Cocker focuses on the artistic process as a constantly changing entity. Here she discusses the emotional aspects of making and uncertainty:

Not knowing is a state of suspension, comprehension stalled. Stalling thought disturbs its habitual rhythm, creating the spacing of a missed beat within which to consider things differently to what they already are ... yet the eyes can only see what they have been conditioned to notice; recognition involves the re-seeing of what is already known ... an artist might develop tactics for attending to that which is habitually unnoticed,

for slowing down their process of observation, for cultivating second sight (Cocker, 2013: 128).

Similarly, Luna Scott believes metacognition or 'thinking about thinking', can be taught through teachers permitting students to identify their confusion (2015), leading to autonomy and empowerment, (Luna Scott, 2015; Farmer et al. 2008).

2.4 Reflection: Legacy

Critical, transformative reflection is described by Ryan (2013: 14) as an 'alternative reality' that can be 'recast' where the student is empowered through initiating the change. Reflective practice, argues Bolton, 'challenge assumptions, ideological illusions, damaging social and cultural biases, inequalities; and it questions personal behaviours that perhaps silence the voices of others or otherwise marginalise them' (2000; 2018: 2-3).

Returning to Dewey (1933) provides detail and clarity to what reflection as a form of sense making, making sense of a situation or experience is like; Dewey describes analysis as 'picking to pieces' and synthesis as 'piecing together' and that 'analysis leads to synthesis; while synthesis perfects analysis' (1933: 115). Reflection, therefore, 'presupposes some lack of understanding, a partial absence of meaning. We reflect in order that we may get hold of the full and adequate significance of what happens ... something must be already understood' (1933: 119). The models and theories around reflective practice examine the process of picking apart, piecing together and making sense, to form additional knowledge or new knowledge, 'new qualities emerge' (1933: 99). At the start of the reflective process, whether pre, in, on or after action is perplexity, confusion or doubt (Dewey, 1933), even curiosity. Reflective practice helps navigate uncertainty, 'it enables us to say "I don't know what's going on here, and I want to find out"' (Bolton, 2018: 7). Boud et al. distil Dewey's (1933) reflective activity into two experiential processes:

trial and error which led to 'rule of thumb' decisions ... limited by the specificity of the problem [and] reflective activity which involved the perception of relationships, and connections between the parts of an

experience ... he explained reflection on experience as if it were a kind of learning loop, continually feeding back (Boud et al. 1985: 11-12).

More familiar terms are Schön's much cited reflection-in-action and reflectionon-action (1983). Schön challenged what he called 'conventional wisdom' and claims that 'artistry' (intuitive knowing or tacit knowing and reflecting while doing) can be described through reflection-on-action and that it is possible to reflect-in-action on intuitive understandings and for this not to interfere or paralyze action (1983: 276). Schön (1983) is often the most referred to when considering stages of reflection particularly the in-action reflection associated with in the moment problem solving, described by Bolton (2018) as 'the hovering hawk in the mind, enabling us to bring remembered skills, experience and knowledge into play at the right time' (2018: 9). Schön's exemplars come from a variety of professions so can seemingly be applied both generally to professional situations and specifically to certain disciplines. While explanations form a good basis for understanding 'thinking in the moment' and after an event has occurred, they are also limited. Drawing on criticisms of Schön (1983), Ryan and Ryan (2013) summarise that his theories do not move beyond that situation and potentially perpetuate 'hegemonic or normalising forms of practice rather than enacting change at a broader level' (2013: 246). Polanyi would also argue that the tacit remains hidden and that 'we can never quite know what is implied in what we say' (1958; 1962; 2005: 99).

Mair refers to reflection supporting students in learning *about* learning or reflecting *on* reflection (Meta-reflection: Dewey, 1938) and relates this to Schön's (1983) reflecting 'in' and 'on' action, 'reflecting on and reevaluating uncertain or uncomfortable experiences in light of one's current position and knowledge leads to formulations of new insights that lead to changes in the situation' (Mair, 2012). The idea of reflecting *on* reflection is more concisely explained by Archer (2014), who defines this as meta-reflexivity: being reflexive about our own reflexivity as the basis for deeper reflection. She states that: 'all acts of self-monitoring are acts of meta-reflexivity' (2014: 256). Ryan emphasises that in 'treating "self" as a subject of critical study in relation to others and the contextual conditions of study or work, 'lifelong learning' can be fostered' (Ryan, 2013: 145). Ultimately reflexivity is about challenging what we

have come to believe, a dynamic process, 'finding strategies to question our own attitudes, theories-in-use, values, assumptions, prejudices, and habitual actions; to understand our complex roles in relation to others' (Bolton, 2018: 10).

One of the issues is that we often reflect without consciously thinking about it (Boud et al. 1985) and it is challenging to enable reflection as an active process for students. Ryan (2013: 145) advocates that it is both possible and advantageous to teach students how to reflect in 'deep, critical and transformative ways to engender sustainable learning practices' which she describes as a 'reflexive pedagogical balancing act' that attends to 'different levels of reflection as a way to stimulate focused, thoughtful and reasoned reflections that show evidence of new ways of thinking and doing by both students and teachers'. Ryan and Ryan (2013) highlight the many socio-cognitive factors that impact on student's ability and desire to engage with and improve their reflective practices in HE. These factors include the stage they are at on their programme of study, the discipline they are in, discipline knowledge and standards in their field, tutor expectations, diversity of learners including their prior experiences of 'reflective learning and practice, along with academic conventions' (2013: 251). One of the main issues Barton and Ryan (2014) recognise is that while reflection is frequently required in assessment there is often a lack of scaffolding to support students in doing this, and conceptualisations of reflective practice and assessment 'perfunctory and inconsistent' (Barton and Ryan, 2014: 409). Bolton (2018: 19) lists several other challenges or 'blocks and limitations to reflection', some relating to practical issues and some emotional challenges; not being able to imagine another's experience, lack of experience in creating a reflective narrative, fear of failure and ridicule, time factors and priorities, motivation, seeing it as for exams or assessment rather than own benefit and too painful and revealing to do (Bolton, 2018: 19).

There is also the legacy of the teachers' own experiences and how they understand and engage with their own reflective practice. The teacher, according to Hentschke and Del Ben (2006), 'operates from practices already constructed ... historically constructed from individual actions (2006: 48) and the

transmission of 'multiple experiences and interpretations lived by others' (Hentschke and Del Ben, 2006: 48). This in turn shapes the pedagogical practice. Bourdieu (1970; 1977; 1990) drawing on Durkheim (1938) refers to the teachers pedagogic construction as self-reproductive, where the teacher becomes a conduit for their teachers, 'it is not clear how any novelty can find its way into this unbroken chain of self-reproducing models' (Durkheim 1938 in Bourdieu and Passeron, 1990: 16).

Qualley (1997: 21) relates reflexivity to the iteration and self-awareness of postmodernism 'the spiralling turns of postmodernism might be criticised for being hyperreflexive'. Whereas reflexivity 'interrupts the flow of change long enough for us to examine it' too much 'turning back' or 'hyperreflexivity' prevents us from progressing. There is a danger that too much reflexivity may lead to inaction, however effective reflection should be a process of looking both ways (forward and back) to prompt change. Progress may be about 'standing still' depending on what is being processed and rejected. There is also perhaps an assumption that reflection or reflexivity results in better actions or change or that there is a fear of making mistakes or a reluctance to accept mistakes. The process may not be progressive and encourage procrastination and an avoidance of 'decisive action'. Gardiner (1993 in Qualley, 1997) states that with a focus on process there is an implied opposition to product and assumption that the former is 'progressive' and the latter is 'static' which may not be the case. Reflexivity is a multidirectional process rather than a linear and 'unidirectional' often depicted in models and explanations.

2.4.1 Reflective practice approaches for art and design

Being able to articulate what we know or know to have experienced (the ineffable) is challenging particularly if there is the expectation that it is in written form: 'words convey nothing except by a previously acquired meaning, which may be somewhat modified by their present use, but will not as a rule have been first discovered on this occasion' (Polanyi, 1958; 1962; 2005: 96).

Reflection is often described as an inherent aspect of making in art and design practices, integral and cumulative (Barton and Ryan, 2014) and continuous

(Burnard, 2006). Kirk and Pitches (2013) describe these as distinguishing features not seen in other discipline areas, the openness and often self-designed briefs means there is not a singular model to emulate (Kirk and Pitches, 2013). They assert that it is in documenting the process and uncertainty that they reflect, although they focus on the relationship between documenting and assessment, 'to be assessed, it needs to be documented' (Kirk and Pitches, 2013:214-15). de Freitas (2002) makes the distinction between documentation as a research method and the usual documentation of studio experiments and finished pieces:

when documentation is applied to practice in direct association with critical and reflective engagement, it becomes an exploratory tool that has the potential to influence work ... the process of moving intellectually or creatively from the known (present position) to the unknown (next position) is an inherent part of studio practice. (2002: Paragraph. 13)

Participants at post-graduate level found that their documentation was useful in helping them to understand what had been 'intuitive decisions' and further explain their decision making (de Freitas, 2002: Paragraph. 13). However, de Freitas (2002) states that at undergraduate level, documentation is mainly compiled 'as evidence that sufficient work has been done in an assignment' (2002: Paragraph. 13).

Fortnum and Smith (2007) explain reflection as a more dialogic process, 'visual artists make a number of decisions whilst making their work that aren't purely conceptual or only to do with material and technique but lie in the relationships between these aspects of making' (2007: 169). This suggests a more nuanced and continuous activity of reflecting throughout practice and on practice. Fortnum and Smith use the phrase 'narrative strategies of the self' a negotiation or conversation between the cultural; 'historical and contemporary figures, encountered both in person and through art works (2007: 171) and the personal. Mäkelä and Nimkulrat (2011), both practitioners, describe a more retrospective reflection, making sense of decisions made, their documentation of visuals and texts (diary writing, photographing and diagram drawing) as part of their practice-led research became 'data' which was later reflected on: 'without the documentation of the artistic process, artworks produced in the process may not be adequate to provide data for analysis and to generate reflection' (2007;

2011: 126) which they argue brings objectivity or 'critical subjectivity' to the entire project (2011: 121).

Although Burnard describes artists as continuously reflecting 'placing reflection at the heart of the creative process' (2006: 3) there are disconnects between practice and arts education, 'arts educators need to make a commitment to more systematic forms of reflective activity and to develop reciprocal relationships (and dialogue) between the arts, education providers and the communities they serve, together with a strong framework for evaluating the pedagogical effectiveness of reflective practices (2006: 10). The systematic instruction refers to adopting 'multiple perspectives: a mutual engagement in 'self-reflective workouts' (2006: 9). Burnard calls for innovation at pedagogical level 'to facilitate the active sharing of reflective practices ... and connect as arts communities working together to extend professional discourse with shared agendas (2006: 11-12). For Burnard it is making reflection more of a focus 'situating our practice in a paradigm based on reflection' (2006: 7).

The challenge is how to make the nuances of reflective activity visible to learners and those assessing work and whether as Barton and Ryan (2014) suggest is 'expressed in ways other than in the written form' rather than 'a written activity "tagged onto" assessment practices' (Barton and Ryan, 2014: 409). Barton and Ryan (2014: 420) refer to alternative forms of expression as 'multimodal triggers' that can bring depth and insight into their disciplines: 'triggers are essential components of reflective practice ... they enable the subconscious to become conscious, or the invisible to become visible - opening them up to informed disciplinary critique and enabling improvement with clear selfawareness'. Rousell et al. (2020) discuss the impact of new materialist theory which foregrounds environmental aspects over individual identity and aligns to multimodal triggers. Referring to Barad (2007), Rousell et al. (2020) discuss the rejection of reflection which they describe as: 'the core practice of teaching and learning through the arts', over diffraction: 'a creative practice that is orientated toward patterns of difference ... the work of art, in this sense, is produced not by the agency of the individual artist but through multiple agencies which disrupt and interfere with one another' (2020: 1819).

The use of the digital environment led to Kirk and Pitches (2013) finding that being able to take a second look at 'material which would otherwise have been lost in the usual messiness or intensiveness of creative practice' meant that participants from across a diverse set of arts disciplines could use the digital evidence as an 'easily retrievable "mirror" against which they could benchmark their own phenomenological impressions of the event' (2013: 224). They mapped their findings to differentiate between the relationship technologies had to practice and reflection. On one end of their spectrum, they identify capturing practice to create 'digital artefacts' that are not processed and remain on the device and therefore do not outwardly demonstrate reflective activity. Next, archive or documentation technologies, where these digital artefacts become stored or hosted on a secondary location but still not necessarily prompting outward reflection, to finally, 'digital reflection mechanisms' where something new becomes expressed. They refer to examples of layering image and text or sound, prompting explanation and making sense as reflection, that is visible through recording their thoughts, blogs were in this latter category (Kirk and Pitches, 2013).

A significant issue raised by Raein (2005) is that students feel alienated by writing and have often taken a design path to avoid writing as the core component to their programmes. Like Maloney (2007), Raein (2005) makes the link to a higher-than-average number of art and design students that have dyslexia (1990s), but also recognises that it is part of the ever-increasing role of the designer to be able to communicate their work to wider audiences and collaborators as they work in a more inter-disciplinary way. Raein (2005: 242), discusses this in the context of the separation of theory and practice evidenced in how the curriculum is taught but that research, 'as a common ground between theory and practice ... enable[s] students to integrate reflexive and reflective practice'. With reference to essay and dissertation writing, Kill argues against a misconception that art and design students are not interested in or able to write well and suggests this produces binaries: 'visual/textual, art/literature, words/images, studio/art history, making/writing' (2006: 309). Her research introduced students to more creative and multidisciplinary forms of

writing: 'poetic writing, dialogue, narrative ... writing as art objects: for example, artists books containing imagery, pop-up books or documentary video' (2006: 315). Kill found that students responded well to this autonomy and demonstrated innovative approaches to their writing: 'My tactical move towards multimodality requires a drive to overcome the current status quo. There is a strong institutional will to maintain the existing canon of practices, methodologies and theoretical frameworks' (2006: 316).

There is a direct relationship between pedagogic approaches and the potential for students to engage in critical and dialogic reflection, 'A critical pedagogical practice does not transfer knowledge but create the possibilities for its production' (Giroux, 2002: 49). Some of the well-established approaches to teaching and learning in the art and design studio setting: crits and one-to-one tutorials can negatively impact on students' autonomy, sense of empowerment and quality of reflection on their practice (Percy, 2004; Swann, 1986; Goldschmidt et al. 2009; Elkins, 2001; Healy, 2016; Souleles, 2013).

3.0 Research approach

This section is a review of literature that relates to the research approach used. It is a significant section because this study is examining the effectiveness of autoethnography as a research method and as a pedagogical approach. The cross disciplinary nature of the research and the role that the research methods have had on shaping the research questions have also required extensive engagement with relevant literature.

3.1 Messiness and Interdisciplinarity

My engagement with multiple methods, methodologies and theories has been a specific position, embracing the messy and with the constant companionship of the literature. The automatic application of method which Law (2004) discusses in relation to Applelbaum's (1995) phrasing of the 'mechanical', highlights the need for researchers to be reflective with methods, and not mechanically apply them to situations. Law, advocates rethinking our ideas of clarity and rigour: 'find ways of knowing the indistinct and the slippery without trying to grasp and hold them tight', using what he terms, 'techniques of deliberate imprecision' (Law, 2004: 3).

The intersection of discipline areas and contexts in this study requires consideration of how this interdisciplinarity has impacted on the research methods and methodology adopted. Tight (2013), in his examination of what defines or constitutes a discipline, questions if there are any distinctive modes of inquiry across disciplines within the social sciences and whether HE research could be considered a 'fully-fledged discipline' better, he suggests, to regard HE as a 'field of study, researched from a number of disciplinary perspectives'. (2013: 138). Tight's study examines the relationship between methodology and discipline in HE research. While his survey of peer reviewed research is limited to specialist HE journals, rather than discipline specific ones, his findings provide some insight into how discipline areas frequently draw on methods from the social sciences rather than their own. Often, he notes, the methods are used in a rudimentary way, although this does not reflect negatively on the studies and their findings.

Multiple theories and methods provide richness in interdisciplinary research or when approaching disciplines in interdisciplinary ways, a 'cosmopolitan grasp of 'other' knowledges' (Strang and McLeish, 2015: 5). McLeish and Strang (2014) state that interdisciplinarity provides more depth than each discipline can, 'the comparison of diverse worldviews can be extremely productive, enabling both criticism of accepted norms and the collaborative construction of more robust analyses' (McLeish and Strang, 2014: 6). In their research guide for interdisciplinary practice Strang and McLeish (2015) provide criteria for what can be considered as interdisciplinary research which includes considering disruption to 'inward disciplinary thinking' (2015: 8), 'interdisciplinary exchange and synthesis of knowledge' (2015: 12), and an awareness that new knowledge 'may generate new research questions or challenges' (2015: 8). They recommend that research designs should anticipate these possibilities.

Sclater (2012) refers to the complexity of educational settings that require contributions from several theoretical frameworks because one alone does not provide enough insight, 'there is no single theory of adequate power to generate consensus: human learning is one such domain' (2012: 169). Sclater conceptualises the use of Social Constructivism, Situated Learning and Sociocultural Theory as cognitive tools that form a bricolage (2012). It is within this bricolage and the focus of the research that these 'shared theories can be modified by the data that are gathered in their name, so a living theory will change as a result of the research' (Sclater, 2012: 174). This 'living theory' or what Adams et al. (2012: 5) describe as 'theories in action' became an opportunity for new insight rather than treading well established routes not hindered by the compatibility or dissonance between theories across discipline areas. Sclater, highlights some of the issues of these multi-theoretical approaches: while creative and diverse, the application of these perspectives is often 'partial and fragmented' (2012: 169). However, McMurtry (2011; Davis and Phelps, 2005) describes the complexity of these disciplinary perspectives as an 'interdiscourse' that negotiates these relationships without being reductionist or conflating.

Levi-Strauss (1966) describes the artist as part scientist and part bricoleur and Smith and Dean (2009) relate bricoleur to artists practice-led research and research-led practices. Concepts of bricolage are also useful in terms of interdisciplinarity, and mixed methods approaches: The anthropological bricoleur presented by Levi-Strauss (1966) uses what is readily available: existing tools and concepts that are most suited for the project as it develops. The bricoleur is analytical, non-hierarchical, resourceful, and creative in the way they use these, but limited to what they know of them and their related histories. Like an artist the bricoleur creates and constructs, knowing that 'there are several solutions to the same problem' (Levi-Strauss, 1966: 24). Kincheloe (2001) and Kincheloe and Berry (2004) develop the concept of bricolage as a diverse research methodology for working across discipline areas: a framework to discuss several research methods and to piece together different projects and sources of data. Kincheloe and McLaren (2005) introduce a new language to describe the bricoleur; moving from suggestions of 'tinkering', 'trickery' and 'handyman' (Kincheloe 2001; 2005) to someone who is engaged with criticality, complexity, rigour and interdisciplinarity. This shift in rhetoric gives the bricolage approach an authority and emphasises that its effectiveness comes from the reflexivity it affords the researcher. Wibberley (2012) writes about a personal exploration of bricolage from the perspective of how it can be of use for Ph.D students and sees it as particularly beneficial for part-time students: 'The emergent nature of bricolage allows for bite-size chunks of research to be carried out that have individual meaning for practice, which can then be pieced together to create a more meaningful whole' (2012: 2).

Denzin and Lincoln (2005), frame bricolage in more practical terms by drawing from several examples and definitions developed between the 1980s to late 1990s. In these illustrations, the qualities of Levi-Strauss's (1966) bricoleur and engineer become more conflated; their qualitative researcher is learning to borrow from other disciplines and invent and piece together new tools and techniques as necessary, without hierarchy. The methodology may have connections to several discipline areas and is distinct because 'the choices as to which interpretive practices to employ are not necessarily set in advance', (Denzin and Lincoln, 2000: 4), emphasising methodology as a process of

experimentation and at times improvisation. The bricoleur's skill is in their selection, editing, arranging, inventing, and applying appropriate tools, methods, and approaches, as part of their research process like how an artwork or musical composition is formed. Frequently used as a metaphor for other forms of piecing together and making, Denzin and Lincoln (2005) refer to the idea of a quiltmaker, cinematographer or artist, all who use both found and new material as well as techniques and tools to create something new from this process. They emphasise the interpretive weaving where the identity of the researcher, multiple voices and perspectives come together (2005: 5).

3.1.1 Education Research

Kincheloe and Tobin contribute to our understanding of bricolage as a viable methodology for education research; they advocate bricolage to explore multiple positions and realities and argue that:

educators have been "scammed" by a science that offers a monological process of making sense of the world. Critical researchers who appreciate the depth of this complexity maintain that we must possess and be able to deploy multiple methods of producing knowledge of the world (2006: 6).

Daniel and Harland outline the importance of education researchers setting out their research philosophy, ontological and epistemological positions: 'essential, in part to legitimize the path taken through the huge number of possibilities for creating knowledge in a world where purely quantitative research is seen as hierarchically superior' (2018: 20). As educational researchers we bring our own values to the research and these undoubtedly shape the research and choices we make from an array of qualitative and quantitative possibilities, 'interrogating one's own ontological position is an exercise in examining values that influence all subsequent research decisions. If we have some clarity around these values, in theory, this knowledge will help to improve the quality of research (Daniel and Harland, 2018: 23).

Nind et al. (2016) describe a sociocultural view of pedagogy as three interrelated dimensions: 'pedagogy as specified', what is valued or appropriate

to that learning context, 'pedagogy as enacted', how and who is teaching, appreciating that their own values and experiences influence this, and 'pedagogy as experienced', how the teaching and learning is subjectively experienced by all involved. This sociocultural view provides a framework for designing research and analysis which values the following contexts: 'social identities, power relations, interests, purposes, agendas of participants, availability of resources, and existing organizational and institutional practices [it also] takes account of the lived realities, experiences, conventions and perspectives' (Nind et al. 2016: 11).

An important aspect of teaching any subject is whether the student is positioned as learner or researcher/learner. Peters and Shephard (2018: 115) assert that research-based teaching removes barriers between education and research 'by creating space for students to explore the unexpected, to change their perspective as well as gain invaluable knowledge and experience of the research process'. Walkington (2015) refers to art and design practice as a form of research inquiry, presenting 'students as researchers' pedagogy as a spectrum where students undertake different roles in the negotiation, conduct, analysis and dissemination of the research. According to Healey and Jenkins' (2010) model, a 'research-oriented' project gives students opportunities to evidence and develop their ideas and a 'research-based' curriculum enables students to frame their own enquiries. Their illustration Figure 6. Below, places students as researchers across two axis; the extent to which they are audience or participants to the research and whether research content or processes are emphasised.

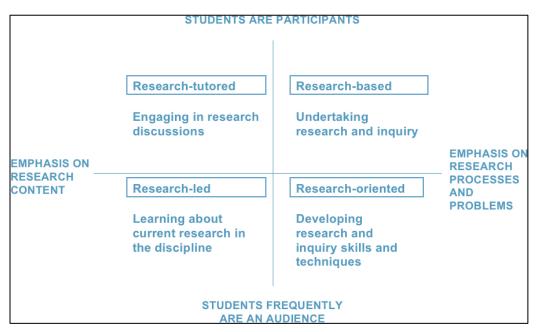


Figure 6: The Nature of Undergraduate Research and Inquiry: Healey and Jenkins (2009; Healey, 2005)

Walkington (2015) examines categories within 'students as researchers' pedagogy and refers to a 2005 statement made by the Council of Undergraduate Research (CUR) and governors of the National Conference of Undergraduate Research (NCUR) that 'undergraduate research is the pedagogy for the 21st century' (CUR and NCUR, 2005 in Walkington, 2015: 5). Students as partners and co-creators takes a Freirean position: 'the students - no longer docile listeners - are now critical co-investigators in dialogue with the teacher' (Freire 1996; 1970: 62). What is learnt must go beyond an instrumental approach to ensure that an identity as a practitioner transitioned from student emerges which Freire describes as 'unfinished, uncompleted beings in the process of becoming' (1996: 65), 'they become jointly responsible for a process in which they all grow' (1996: 61).

3.1.2 Education Research: Action Research

This research project intersects artistic practice and digital technologies under a context of emancipatory learning. It sits within a broad context of Action Research (AR) in higher education which Gibbs et al. (2017) see as a strategy for reflection because it is a 'method of revelation, instruction and improvement, and as the realisation of technical skill and facilitation of learning' (2017: 4).

Gibbs et al. (2017) assert that AR blurs the institutional boundary between teaching and research: their research finds strong connections between AR and reflective practices, curriculum development and ultimately professional development.

Kemmis (2006: 459) states that AR must tell unwanted truths to remain critical and reflects on how it has become more widespread and often used as a technical tool, becoming a 'vehicle for domesticating students and teachers to conventional forms of schooling'. Kemmis (2006) provides a checklist of bad practice he considers prolific in AR; common throughout his points are practices that use AR to focus on problem solving an issue in the classroom, where the research does not look at wider contexts and issues or transferability of findings. Kemmis identifies research that does not engage with others impacted by it and driven by requirements of the institution as: 'a tool of domestication of students and teachers to existing social orders' (Kemmis, 2006: 462). Conversely, Gibbs et al. find examples of good participant engagement where students can engage in praxis, where they 'create learning for themselves rather than it being something that is transmitted by the teacher' (2017: 11), with AR providing a space to do this.

This study shares commonalities with AR as it is explained in the literature: the roles of participant and researcher as artists became interchangeable for me and the students. Herr and Anderson (2005) note that in AR 'research participants themselves are either in control of the research or are participants in the design and methodology of the research' (2005: 1). However, ultimately AR is too loose a framework for the complexities, depth, and layers of this research project. While AR has identifiable cycles of reflection and action (Herr and Anderson, 2005) and formulaic qualities (Kur et al. 2008) providing some rigour, these systems, spirals, and cycles noted in AR (Kemmis, 1980) require critique and challenge. Elliot (1991) argues that as reflection and action become identified as research there is a 'danger of interpreting methodology as a set of mechanical procedures and standardised techniques rather than as a cluster of dynamic ideas and principles which structure, but do not determine, the search for understanding within the pedagogical process' (1991: 14). Schön's 'The

Reflective Practitioner' (1983) greatly influenced teachers' professional development and the relationship between professionalism, reflection, and AR. While Schön's reflection-in-action and reflection-on-action articulates the way teachers and other professionals might perform tasks and survive challenging situations it becomes a rather insular process unless wider contexts are considered. It is the un-critical Action Researcher who applies findings from one context to another, what Kincheloe (2001a) describes as 'recipe following' rather than subjecting findings to critical scrutiny. It is in the process of subjecting findings to 'assessment and some form of critical analysis' that is both unpredictable and transformative (Kincheloe, 2001a: 352).

Contextualising AR as artistic pedagogical research, Mason (2005), explores the rise in artistic action research at a time when there is not confidence or articulation of artistic research methodologies. Mason also states that the literature around this time is 'preoccupied, some say obsessed, with the issue of validation' (2005: 572). Gage's (1989) survey and predictions for educational research describes a challenging landscape with a focus on disagreement, difference, and incompatibility between research paradigms. Räsänen (2005: 11) describes AR as a spiral of 'plan, experiment, reflect, and act again' but stresses that artistic AR has to be based on theories to help ask questions or solve problems not just trial and error. Although Räsänen concedes that both art and teaching can be viewed as research, she is clear that because of the abundance of approaches to making and research an 'anything goes attitude must be rejected' (2005: 11) and that it is intention that determines whether something is research or not. Anderson and Herr (1999: 17) take on the discussion and explore the validity of practitioner research with concerns over rigour and whether researchers are insiders or outsiders to the research setting, they ask 'can practitioners' research accounts ever be taken as seriously as accounts by academic researchers?'. One of the issues seems to be what the significance of the research intends to be, whether it is localised change as professional development, or change with more impact that might challenge the status quo. Twenty years on it still seems important to consider this legacy of education research methodological issues, particularly as artistic research has found its own struggles in becoming accepted.

3.1.3 ABR (Arts Based Research) to ABER (Artist Based Education Research) Concerns over the validation for artistic research and a rise in artistic AR (Mason, 2005) are highlighted by Eisner: 'the tendency is to try to have the arts emulate the criteria and standards that populate academic subjects ... the arts often seek academic legitimacy by looking more like their academic peers' (Eisner, 2004: 97). He recommends that other disciplines should look to arts pedagogy for innovative practice. Eisner contributes to the consolidation of artistic research in what he originally describes as teachers from all disciplines 'thinking artistically' (2002; 2003); using the term arts-based educational research (ABER), the pedagogy of arts-based practices identifies strategies in the classroom and implications for wider research. The array of terminology around artistic research is partly summarised below (Figure 7) by Chilton and Leavy (2014).

A/r/tography	Arts in qualitative research		
Alternative forms of representation	Arts-based educational research (ABER)		
Aesthetically based research	Arts-based health research (ABHR)		
Aesthetic research practice	Arts-Based Research Practices		
Art as inquiry	Arts-Informed Inquiry		
Art practice as research	Arts-Informed Research		
Art-based enquiry	Critical Arts-Based Inquiry		
Art-Based Inquiry	Living Inquiry		
Art-Based Research	Performative Inquiry		
Artistic Inquiry	Practice-Based Research		
Arts-based research (ABR)	Research-Based Art (RBA)		
Arts based social research (ABSR)	Research-Based Practice		
Arts-based qualitative inquiry	Scholartistry		
• •	Transformative Inquiry through Art		

Figure 7: Partial lexicology of terms for arts-based research (Chilton and Leavy, 2014: 4)

The traditional idea of artist as craftsperson who contributes something new to praxis as well as an artefact, could also be a description of artistic research methodologies, that Smith and Dean (2009) term: practice-led research and research-led practices as two overlapping contexts:

creative work in itself is a form of research and generates detectable research outputs [and] that creative practice - the training and specialised knowledge that creative practitioners have and the processes

they engage in when they are making art - can lead to specialised research insights which can then be generalised and written up as research (2009: 5).

Similarly, what Levi-Strauss identifies as a duality: 'the artist is both something of a scientist and of a 'bricoleur'. By his craftsmanship he constructs a material object which is also an object of knowledge' (Levi-Strauss 1966: 22). Messer (2012) considers practice-led research to be inherently interdisciplinary because it is verbal, written and performed. She concludes that researchers in the arts field do not often frame what they do as interdisciplinary or situate themselves within interdisciplinary studies and her main question is whether practice-led research can offer something that other interdisciplinary methods cannot. McNiff argues that arts practice is its own primary method of enquiry but recommends a social context for artist research and asks: 'how do researchers minimise one-sided self-absorption when personal, often intimate, art making is a core element of research? Might standards of usefulness to others assure practical outcomes and complement the subjective aspects of artistic knowing?' (McNiff, 2013: 4).

It is worth noting that the dialogue around the distinctions of practice-led research and research-led practices is mainly for post-graduate teaching and learning contexts. Consequently, for under-graduates, research is often considered as something outside of making or part of the process of making rather than practice/making itself. Systematically examining my making process and related reflective practice using digital autoethnography seemed an effective way to experiment with and test research methods from both the arts and social sciences. Richardson advocates: 'creative arts is one lens through which to view the world; analytical/science is another. We see better with two lenses. We see best with both lenses focused and magnified' (Richardson, 2000: 254). Leavy (2009; 2015; 2019) challenges the view that artistic practices and qualitative research are disparate and suggests that both can be viewed as crafts: 'both practices are holistic and dynamic, involving reflection, description, problem formulation and problem solving, and the ability to tap into, identify, and explain the role of intuition and creativity in the research process' (2019: 8-9). Leavy (2019) advocates that combining arts, humanities

and social science approaches is powerful for arts-based research and that both multi-disciplinary and interdisciplinary approaches have significantly increased over the last twenty years. Leavy comments: 'Changes that have occurred, and that are likely to continue occurring, coupled with the cross-pollination in which arts-based practitioners are engaged, make the academic landscape as fertile as we have ever seen for ABR to grow' (2019: 707). Arts based research is often multimethod and multimodal in approach. Finley (2019: 481) states that arts-based research designs can be 'cross-, trans-, and multidisciplinary' showing a wide variation and including 'music, drama and dance performances, visual arts—collage, paintings, photographs, sculptures and installations, as well as visual and written narratives'. Finley also notes that the narratives themselves can be varied: 'factumentaries, metaphorical fiction, or even creative nonfiction, short stories, or novels' (Finley, 2019: 481).

3.2 Narratives, stories and lived experiences

Identity is formed not given and has pluralities and is an ongoing process that requires critical reflection: a dialogue between theory and practice (Hughes, 2013). This aligns with the idea of identity as a changeable phenomenon that responds to the situations we are in and communities we are part of (Wenger, 1998). Integral to researching the process of making artwork was self-reflection: making sense of my own arts education, the work I make, how I work, what this process looks like and feels like. Starting with the self not only provided me with a rich source of information but also clearly situated me in the research enabling me to seek out my subjectivity and challenge it. In the context of life histories and autobiographies, Sandino (2007: 191) describes this type of documentation as 'deeply mediated texts that do not transparently reflect their authors' intentions, nor present any immanent 'truths', nor construct a unified subject'. However, the 'thoughts-in-process' are an opportunity to capture a dialogic moment:

rather than seeing these stories as providing access to truths, the recordings ... hear the self in the process of becoming through reflective narration. By listening and responding to these narratives, we can unravel the singular and complex ways in which artists' identities are created and

re-created, and understand how artists' stories of process are imbricated in the larger project of identity formation (Sandino, 2007: 198).

Sandino used this approach to study established artists. However, this is relevant as an artist/teacher/researcher and also undergraduate students making their own transitions through their practices from student to professional.

Fanghanel (2009) examined the relationship between teachers' conceptions of their disciplines and their personal ideologies. Although many of the participant responses were predictable in the way their discipline determined the pedagogy in the classroom, some personalised ideologies were complex, competing and not consistent, across participants from the same discipline areas. Fanghanel concludes that disciplines are partially constructed 'and subject to individual (sometimes idiosyncratic) characterisations' (2009: 575). Wackerhausen (2009) states that identities are possessed through unreflective, habitual following of established practices, and acquired through the communities and learnt through practice. He describes two types of professional reflection a 'first order' reflection; it reinforces habit and stays loyal to established practices, and 'second order' reflection that may 'elucidate and challenge the trails of everyday practice' (2009: 464) which can be identity transforming. Second order reflection can be achieved by 'becoming a stranger to oneself ... our communities of practitioners make us so "familiar" to ourselves that we gradually become "invisible" and consequently unknowable to ourselves' (2009: 466-7). The unfamiliarity according to Wackerhausen can be achieved by visiting foreign territories and learning alien concepts (2009), both challenging to long held ideas of personal identities and divergent from the 'constitutive elements of the professional identity in question' (2009: 468). This flexibility, ability to collaborate inter-professionally and adapt professional identities according to a changing landscape (Wackerhausen, 2009).

Research examining the complexities of teacher identities, education researchers and teachers as researchers often draws from anthropologic methodologies. Self-narratives are described as a 'glue' by Sachs (2001), that binds a collective professional identity and confidence in the teaching profession and is an example of emancipatory objectives and an activist position; sharing

these narratives publicly is a source of 'lively professional development' (Sachs 2001: 158). Goodson and Numan (2010) argue that unless individuals link their biographical and personal perspectives through being a reflective practitioner, or as researchers into their own practices, and to wider narratives, change is limited. Quicke (2010) makes comparisons between personal narrative writing, autoethnography, critical reflection and action research where participation in the stories brings an authenticity as phenomenological encounters, which he describes as 'factional' rather than historical or fictional accounts. Freeman (2007) discusses narrative inquiry as autobiographical from the 'narrative imagination', far from fictitious, he describes these constructions as a form of poiesis, 'the act of making meaning' which he stresses do not get constructed out of nothing (2007: 141).

How the narratives are told is problematic; McNiff (2007) highlights the distinct difference between re-telling a narrative as a 'straight' or 'research' narrative. For McNiff, narrative inquiry and action research are linked because practitioner researchers can 'tell their stories of how they have taken action to improve their situations [and] how reflecting on their action can lead to new learning, which can inform future learning and action' (2007: 308).

3.2.1 A/R/Tography - Artist Researcher Teacher

A/r/tography, a form of arts based educational research as 'enacted living enquiry' (Springgay et al. 2005) stemmed from an Artist, Researcher, Teacher group and post-graduate research in the early 2000s from the Department of Curriculum Studies at the University of British Columbia. Between 2004 and 2012 a/r/tography as a specific term represented a narrow field. The first book on a/r/tography, was authored by twelve of faculty members and graduate students. (LeBlanc and Irwin, 2019). At this time a/r/tography had an emphasis on artist, researcher, and teacher identities as a self-reflective enquiry process where practice (artistic and education) is observed, analysed and then formative to these practices. It is anthropological and ethnographic and/or autoethnographic. It is generally considered to be part of arts-based research and artistic research practices (Practice based and practice led) but with a pedagogic focus. It encourages reflexivity because it focuses on the intersection

of different roles and identities of artist, researcher, and teacher. For Hannigan (2012), this methodology helped to make sense of the interrelating aspects of her own arts education and subsequent professional practice. It provides a useful way to consider identity and frame autoethnography as a method to examine a personal arts practice. However, for my research the identity of, or using a/r/tography as the framework is potentially limiting because my study includes students conducting their own autoethnographies. However, the research projects a/r/tographers have engaged with are useful to examine in the context of my own research, for example: Leggo et al. (2011) frame a/r/tography as a form of living enquiry where participants and researchers are able to construct new knowledge together.

A/r/tography like ethnographic studies present issues around being inside and outside the research. Both Leavy (2014) and Detlefsen (2012) describe a/r/tography as occupying the in-between of spaces and the blurred space between borders. Similarly, Springgay et al. (2005: 902) as an 'inquiring process that lingers in the liminal spaces between a(artist) and r(researcher) and t(teacher)', a lived inquiry process through 'art forms, writing practices, and roles as artist, researcher, and teacher' (Springgay et al. 2005: 904). The liminal spaces described by Irwin (2004: 31-2) are rich and where identities intersect: 'there are spaces between and spaces between the in-between. There are multiple borders diffused again and again. And yet all the while, we do not dismiss the lands that create the blurred perimeter of the borderlands'.

Leggo et al. (2011: 248) suggest that in our unpacking of 'field experiences as an artistic process of creating rather than discovering information, our field notes become a source of inspiration'. Self-observation is formative: the researcher self informs the artist self in A/R/Tography and the artist self informs the researcher self in A/R/Tography. Leggo et al. (2011: 240) outline the methods for ethnographic research approaches in an educational setting as; 'participant-observation, interviews, document analysis, photographic analysis, and intense periods of time within a culture'. However, these roles can become challenged by what is emergent as a process; 'what soon became evident was the desire of

the participant, and the researchers, to engage in interventions that potentially interrupted the context' (Leggo et al. 2011: 240).

More recent a/r/tographic research has become more embedded in arts-based research (ABR) and arts based educational research (ABER) practices for a wide range of contexts. In many studies there is a shift in focus from artist, researcher, teacher identities to 'new materialism's emphasis on movement, art-making, learning, and teaching through individual and shared inquiry. In these projects researcher identities are less important, while the movement of ideas is emphasized' (LeBlanc and Irwin, 2019: Paragraph. 24). LeBlanc and Irwin (2019: Paragraph. 45) suggest that this process is inclusive of learners:

an invitation for artists, researchers, teachers, and learners to continue exploring the contextual, cultural, social, and political dimensions of making art, researching, and teaching, especially if this requires breaking away from more conventional ways of conducting research.

Other developments in a/r/tographic research include Sinner (2008, 2018, 2021), who adopts dashes to 'denote betweenness as a conjunctive ... instead of the inbetweenness of the slash/' because this 'attends to how we are continually composing our a-r-tographic selves' (2021: 5). Sinner describes this approach as 'sensual a-r-tography ... a form of living inquiry with, in and through situated events' (2021: 7-8) and 'an interplay of object-body-space that opens up encounters' (2021: 5). These encounters with material things connect to the senses and provoke more questions than answers: 'we learn to be more attuned to proximities and movements with the energies of spaces, places and objects in ways that offer different propositions, of thinking-making-doing with, in relation to landscapes of meaning' (Sinner, 2021: 8).

Bourgault et al. (2020) explore the value of using a/r/tography and phenomenological methodologies with student art teachers and their creative projects. While they used online methods to document, and share, their work and reflection, these digital spaces were incidental to the methods used and were not the focus of the study. Most participants were new to the idea of

artistic practice as research and came from diverse backgrounds. Examples from their students' reflections illuminate how they moved between their own experiences as artists and learners, and how this might inform their teaching of others. Bougault et al. found that their students experiences 'broadened their self-perception as artists and teachers and deepened their appreciation of the potentiality of artistic investigations, and its pedagogies' but also revealed challenges of feeling lost, resisting trying new approaches, deciding on outcomes at the start, and reluctant to 'let go of their teachers' identity or to integrate it to that of the artist and the scholar' (Bourgault et al. 2020: 18).

Similarly, Barney (2019) uses a/r/tography as a pedagogical strategy to examine becoming an artist. He considers a/r/tography to be an: 'idiosyncratic and a developing methodology for finding and losing one's way' (2019: 619) that could be used by university students in a similar way. Barney situates his work as part of a new generation of a/r/tography:

These early introductions to a/r/tography offered some concepts presented as 'renderings', that helped new a/r/tographers learn the value of concepts in being and doing. They were never there to be permanent fixtures as a structured methodology but to be reworked, extended, eliminated and redescribed as the contributions of a/r/tographers wildly emerge (2019: 620-21).

Using walking as a 'mobile pedagogical site' (2019: 625) Barney and his students create their practice 'inside a research event' (2019: 623) resulting in workshops where plants collected on these walks were used to dye materials and create drawings. Barney describes his approaches with a/r/tography as an emergent and negotiated curriculum: 'a pedagogical strategy [that] positions learners as inquirers, as investigators who, to some degree, co-create a curriculum where they give the course they are investigating, not solely reciting dead or moribund knowledge' (2019: 625). The emergent, idiosyncratic, and co-created aspect of a/r/tography as a pedagogical approach lends itself to continual development. Sinner (2017) states that it is this adaptability and divergence from arts-based educational research (ABER) that gives it a transdisciplinary appeal: 'a/r/tographic conversations take on more international perspectives and

become less constrained within a particular social and cultural perspectives in art education' (2017: 46-7).

Sinner et al. (2019) make an appraisal of visual arts education internationally and examine how it manifests in doctoral research. They discovered innovative and hybrid practices including a/r/tography that Sinner et al. state makes the arts as research: 'an adaptive process, with multiplicity, subjectivity and relationality in the act and action of inquiry, unbound by the restrictions of conventional qualitative applications' (Sinner et al. 2019: 4). This was apparent with Adams and Arya-Manesh's (2019) accounts of non-arts students using creative methodologies which often led to liberatory experiences. They comment on one student's experience: 'the exposure to these practices did not turn her into an artist as such, but gave further confidence to apply artistic means to investigate topics she might hitherto have thought were beyond the scope of such practices' (Adams and Arya-Manesh, 2019: 41). The reach of artsbased research approaches is wide, not only in its idiosyncratic, hybrid, evolving forms, but as an unfamiliar lens for researchers outside of arts-based practices to gain new perspectives on their research enquiries and themselves as researchers (Adams and Arya-Manesh, 2019).

3.3 Ethnography

A traditional or anthropological view of ethnography (writing the people) describes the researcher embedding in community settings over extended periods of time, observing and describing what is seen with 'thick description' (Geertz, 1973). It uses observation traditionally focused on others' social behaviours and concludes with written accounts (Ritchie et al. 2014).

Significantly the ethnographic process requires time, partly 'in order that the strange may become familiar and the familiar strange' (O'Reilly, 2009: 210). It is perhaps obvious how over time new situations become more familiar but less clear how the familiar might become strange, however, O'Reilly states (2009: 211): 'those things that you at first took for granted and ignored come to take on new significance or seem to have a relevance you had overlooked when linked to other events and emotions'. The observer/researcher is visible in the process and interprets and illuminates what is significant: The 'data they gather are a

product of the intersubjective process between themselves as researchers and what they are observing' (Ritchie et al. 2014: 245). Rather than be excluded from texts, 'ethnographers find ways to remind the reader that they too are participating in the creation of knowledge' (Mills and Morton, 2013b: 33)

3.3.1 Autoethnography

Ethnography examines communities and 'makes visible the many ways in which individuals do not exist alone and how their positions and agency in communities of practice influence their experience in these communities' (Nind et al. 2016: 140). It also acknowledges that the researcher has their own socio-cultural context that they bring (Davies, 1999) and that their own presence may shape the data (Hammersley and Atkinson, 1995). A reflexive account or autobiography used in ethnographic research acknowledges a position, interest or emotional effects of the fieldwork (Davies, 1999). In autoethnography the researcher is recognised as a critically reflexive participant, where the researcher takes an: 'active, scientific, and systematic view of personal experience in relation to cultural groups identified by the researcher as similar to the self (i.e., us) or as others who differ from the self (i.e., them)' (Hughes et al. 2012: 209). It is writing and research that 'displays multiple layers of consciousness, connecting the personal to the cultural' (Ellis and Bochner, 2000: 739). Ellis et al. describe autoethnography as an approach that uses personal experience to 'illustrate facets of cultural experience [making] characteristics of a culture familiar for insiders and outsiders' (Ellis et al. 2010: Paragraph. 9). The 'auto' therefore directly and consciously includes the 'self' in the research and the culture being studied, although according to Ellis and Bochner (2000: 740):

Autoethnographers vary in their emphasis on the research process (graphy), on culture (ethnos) and on self (auto)' to explore the inbetween or liminal spaces, which in turn encouraged more in-depth reflection and reflexivity: 'our accounts seek to express the complexities and difficulties of coping and feeling resolved, showing how we changed over time as we struggled to make sense of our experience (Ellis and Bochner, 2000: 748).

Autoethnographic fieldwork is anywhere autoethnographic material is found (Chang, 2013: 108) and is the process of self-reflection. Often described as

boundary-crossing, it is useful when questioning the binary split of self and society conventions and situates the self in specific contexts. As 'boundary-crosser' the autoethnographers' role has a dual identity or multiple and shifting identities that allows for alternative ways to write about social contexts (Reed-Danahay, 1997). Characterised as researcher and researched by Meerwald, who values being both and using autoethnographic narrative to 'collapse the divide [and] knit the researcher|researched together' (Meerwald, 2013: 45).

Reed-Danahay (1997) provides a useful breakdown of how to conceptualise autoethnography while examining some of its strong links to ethnography and biography: 'the term has a double sense-referring either to the ethnography of one's own group or to autobiographical writing that has ethnographic interest' (1997: 2). Autoethnography is both method and text or process and product 'a form of self-narrative that places the self within a social context' (Reed-Danahay, 1997: 9).

Holt (2003) examines the challenges of presenting autoethnographic research as the dominant research perspective legitimately: 'such accounts do not sit comfortably with traditional criteria' (2003: 19) and suggests a rethinking of what validity, reliability and objectivity really means in research terms. Holt finds one of the main challenges in legitimising autoethnography is for the author to demonstrate rigor with this method(ology) when it is presented within scientific research; his argument is that knowledge of how to evaluate autoethnographies require further critique and development. Lincoln and Guba's alternative criteria of credibility, transferability, dependability and confirmability (1985; 1982) emphasises the need for triangulation. Triangulation across sources, methods and theoretical perspectives creates a flow back and forth that provide additional rigor to research practices (Denzin, 1971). Denzin's term 'naturalistic behaviorism' also situates the researcher at the centre of the research and argues that all sociological work 'reflects the unique stance of the investigator ... the sociologist becomes both object and subject in his studies' (1971: 167). In their description of naturalistic inquiry against rationalism, Lincoln and Guba (1982) define reality as: multiple, intangible, divergent and holistic; researcher and participant relationship as 'interrelated', the nature of

truth as context bound where differences are focused on, explanations as interactive and relation to values as 'value-bound' (1982: 237).

Ellis and Bochner (2000: 745-6) state that stories potentially distort the past because they 'rearrange, redescribe, invent, omit and revise' but they say autoethnography is not about accuracy and that the questions to ask are: 'what are the consequences my story produces? What kind of a person does it shape me into?'. Rather than consider autoethnography as a conflicting dualism Reed-Danahay (2017) explains:

it is more productive to see autoethnography as lying at the intersection of insider and outsider perspective [it] reflects a view of ethnography as both a reflexive and a collaborative enterprise, in which the life experiences of the anthropologist and their relationships with others "in the field" should be interrogated and explored (Reed-Danahay, 2017: 145).

Reed-Danahay summerises that reflexivity according to Bourdieu (2003) is a 'methodological approach in which one critically examines one's own position ... not in order to be more objective and less subjective, but rather to understand the false distinction between these two categories' (2017: 147).

Reed-Danahay makes a distinction between critical autoethnography and autoethnography. Critical autoethnography links to Bourdieu's 'reflexive sociology'; it has a blend of 'distance and familiarity, analysis and testimony' (2017: 148) which Reed-Danahay argues is evident in his work. Bourdieu's interpretation of the habitus separates the underlying structures and principles we inhabit/that inhabit us/are habitual, and how we construct meaning in current situations which reflects the distance and familiarity. Bourdieu asks how 'social structure and individual agency can be reconciled' (Maton, 2012: 49), which Reed-Danahay (2005) describes as what is in the mind and what is exterior to it. Maton considers Habitus as: 'the link between past, present and future, but also between the social and the individual, the objective and subjective, and structure and agency' (2012: 52). Starr (2010) makes connections between autoethnography and the Freirean concept of 'conscientization', (Freire, 1996; 1970); the individual becomes aware of their position and makes a space to

'change the perception of the resultant reality' (Starr, 2010: 2). Starr (2010) suggests that the transformative value of autoethnography is a result of 'indepth analysis of the complexity of the lived experiences of the self, the nature of the ebbs and flows' (2010: 4) that as it becomes understood is examined in the context of the culture one is situated.

Chang draws on experience of other researchers working with students in this way and discusses the benefits of students becoming more aware of 'their past, present, and future selves' and although in the context of student teachers their 'self-awareness and cultural understanding were broadened, and their teaching philosophies and practices became more inclusive and sensitive to others' needs.' This could be relevant to students learning from other experience of the creative process and also becoming more sensitive or reflexive about their own practices. The process of researching could be a powerful teaching mechanism in itself:

Doing, sharing, and reading auto-ethnography also help transform researchers and readers (listeners) in the process. The transformation of self and others is not necessarily a primary goal of autoethnography but a frequently occurring, powerful by-product of this research inquiry (Chang, 2008: 13).

3.3.2 Digital ethnography and Digital autoethnography

Ethnographies are now mostly practiced part-time or over shorter periods and focus on small scale operations which Hammersley (2006) attributes to the use of audio and visual recording for observation because they produce large amounts of data quickly. The use of digital tools to conduct ethnographies is an expected development, however, the use of digital tools for anthropology and ethnography as an emerging field is also linked to visual anthropology/ ethnography. With reference to the emergence in the 1990s of video and photography being used with participants autoethnographically, O'Reilly states that: 'for some ethnographers, the use of the visual is more emancipatory and powerful than the use of text' (2009: 26). The visual elements support findings explored through text and O'Reilly (2009) suggests that the technological advances leading to the development of visual ethnography 'opens up whole new ways of seeing the worlds we study' (2009: 222) because digital media provides new ways to reproduce, analyse and represent. Pink (2014: 03) believes that applied visual anthropology impacts on: 'the ways in which participants in their

projects gain new forms of self-awareness and understandings of their situations', particularly the process of making the audiovisual rather than just the product. For Hine it is important to consider the ways in which the use of the digital become embedded: 'rather than studying how the affordances of a particular technology shape what people can do, we are also, to a large extent, studying how people, through their social practices shape what the technology can do' (Hine, 2017: 23). Pink (2014) defines digital ethnography as a method that is: 'part of and participates in a digital-material-sensory environment rather than simply ethnography about the digital' (2014: 7) and a means to probe participants and enable them to express how they experience their environments and what they mean.

Although ethnographic practice is a highly reflexive methodology, using the digital to support this reflexivity, 'does not necessarily take a different form to that which it would take in any other ethnographic process' (Pink et al. 2016: 12). However, the experience and impact of using digital tools and platforms to self-observe and re-observe is potentially significant. For participants and my own autoethnographic research, different virtual spaces and digital tools were used for documenting and stimulating reflection with an aim to explore the affordances of these spaces and tools. The sociality was virtual, in physical spaces, real and imagined. Boellstorff (2012) emphasises that the real and virtual are not blurring or at odds, but that digital anthropology can examine similarity and difference through participant observation. The digital is more than just electronic it is about relationships between offline and online and Boellstorff (2012) questions whether all anthropology is now digital if we only interpret 'internet-mediated' to be digital (2012: 39). Although the ubiquitous nature of technologies in our lives sometimes makes the distinction between the physical and virtual difficult, it is important not to polarise these into the real and unreal respectively (Boellstorff, 2012). Digital technologies, especially those facilitated by the internet, allow ethnographers to 'explore the rich and complex connections between cyberspace and face-to-face contexts and situations' (Mills and Morton, 2013a: 106). For autoethnographers the internet is a virtual space that enables identities to be explored, examined and created which may replicate, simulate or be completely different to our face-to-face

encounters. Massumi's (2002) term: 'perspectival', where you do not recognise the self because the self is being experienced from multiple view-points is relevant here. For example, compared to the more familiar 'mirror-vision', the 'movement-vision' seeing recordings of the self, are discontinuous and 'self-distancing'. The richness of these interactions comes from setting out to 'understand the juxtaposition and simultaneity of different modes of [this] sociality' (Mills and Morton, 2013a: 106). The creation and projection of ourselves in virtual spaces also enables us to explore many aspects or identities of the self (Turkle, 1999). However, it is important that the ubiquity of social and digital media and tools is not assumed. Participants may not have access to the internet, digital tools, want to engage with them or use them to their full potential.

4.0 Research Design

The first exploration of digital technologies and autoethnography was from developing a new body of work that came to be titled "submerged" (Appendix 1). This project was designed as an immersion into autoethnography to help me form the overall research design through a grounded experience. This experience was an introduction to autoethnography as a process and the digital artifacts that it produced: audio recordings, photographs, video and blog, became a product of it, example below (Figure 8).

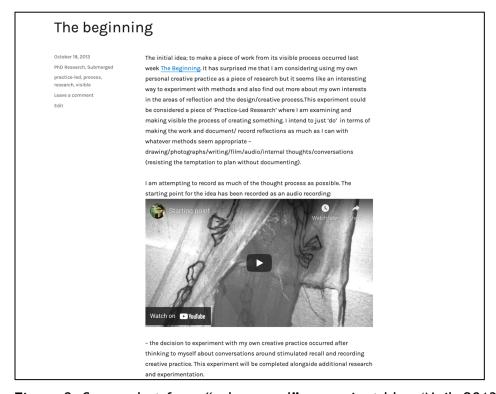


Figure 8. Screenshot from "submerged" on project blog (Neil, 2013)

This body of work was a pilot study, testing what it would be like to use digital tools to document my making, experimenting and testing. It gave me the confidence to use it both as a research approach for a more focused body of work and consider how it could be implemented as a pedagogy for undergraduate art and design students. The purpose of this was to develop empathy and observe and make the process more visible. My own experiences provided examples but were not to be considered a model of how to do digital autoethnography. It was important that participants chose how to interpret and use digital autoethnography for themselves so they could potentially discover what would help them. Digital autoethnography was a possible strategy not a

model. The process of moving back and forth between this data and experiences became a strategy for developing the research questions and the research design.

Both a second digital autoethnographic project and a research project with undergraduate art and design students was designed. Making use of an opportunity to work with The Hunterian Museum (University of Glasgow) the second autoethnography project was designed around being an artist in residence at the museum. This was an extension to the first autoethnographic project as similar digital technologies, tools and platforms were used, however this followed a controlled and specified timeline and environment, and involved visitors to the museum, as part of the context, as participants.

The residency part of the autoethnography was based on a proposal to the Hunterian Museum, as part of their Hunterian Associates programme. The proposal focused on making the creative process that responds to the collections and visitor engagement with the collection visible. I did the residency as an artist, but it was also ethnographic fieldwork; I was observing myself in the culture of the creative making process in the setting of the museum. The museum in this culture represented a repository of source material as well as an environment for human interaction. I embraced the idea of dialogue with audience as an additional way to reflect on my work in progress and seeing the audience as part of the cultural environment of the museum. Visitors were part of this this culture: making their own creative responses to the artefacts or to take part with me observing myself in this culture. The drawing activity for visitors was there for anyone who wanted to do it and the feedback to me afterwards was entirely optional. It was important that visitors encountered me as an artist, rather than as a researcher waiting to interview them.

The museum artefacts as subject matter was a starting point for the creative process, but I was also interested in how face-to-face conversations with visitors and virtual conversations through the blog (documenting each day of the residency) might inform and form the work/creative process throughout the week and beyond. The work post residency continued for twelve weeks with

little structure to it as the process fitted around other work commitments but as much of the thinking behind the decisions and process was documented as possible.

Both digital autoethnographies are discussed in the thesis in Section 5.0 under the umbrella of 'Creating Spaces for Reflexivity'. There are several layers to the autoethnographic approach. The initial responses and documentation are located in several live and public spaces as well as private repositories but also reflections added to these recordings through unpublished and occasionally published material. In my post-residency write up (Neil, 2015 [unpublished]) I make the distinction that when I am making and thinking about the work, I am the artist and when I am writing about this experience, I am the researcher (autoethnographer). The autoethnography, Creating Spaces for Reflexivity, as process is formed in several locations: project blogs, published and unpublished writing, private notes, digital and paper-based, and includes reflective writing, fieldnotes and visual documentation from my experiments using digital autoethnography. It is an autoethnography of being an artist, researcher and educator with varying emphasis on these different roles and identities.

In parallel to the second digital autoethnography student participants were recruited through a process of sharing and talking about my own autoethnographic research. Participants were invited to try their own digital autoethnographic research to support their art/design and reflective practices. Once recruited participants were invited to complete an online questionnaire (Appendix 8.) at the start of the study to gauge interest and experience in using digital technologies, social media and talking about and reflecting on their art/design practice. The questions were a blend of qualitative and quantitative questions and used to inform the resources created to support the study and the writing of the Participant Portraits (Appendix 7.). Initial one-to-one meetings enabled discussion about how participants wanted to approach the research project. Supporting materials, and digital tools were made available to them. The *Wordpress* blog 'Seeing Practice' below (Figure 9.) was created to provide technical support for the use of digital technology tools and platforms. Equipment was purchased (Go-Pro Headcam, video cameras, tripods, voice

recorders, fitness tracking watch) and the technical support for these was hosted on the site. The blogsite also provided some visibility and context to the project with examples of digital autoethnography, links to my autoethnography blogs and others who used similar tools to record their lives and arts practices. The site was created in part to remove my role from being technical support, partly so that participants could find and interpret their own approaches to observing and recording their own practices, but also so that I did not become too embedded in the teacher role.

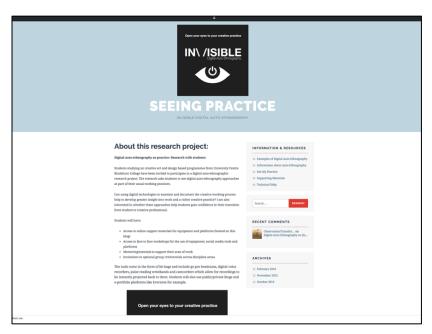


Figure. 9: Seeing Practice: Blog to support students autoethnographies

The first formal interviews were made between three to six months after students had signed their consent forms and a second interview scheduled for three to six months after the first. As there were two recruitment points (Group 1 and 2) interviews were spread over a twelve-month period. Interviews were unstructured and invited participants to share their own experiences of using digital autoethnography. The duration of the interviews varied and was determined by the participants. Interviews were recorded and transcribed word for word but with non-words, sounds and pauses omitted. Because I transcribed the interviews, I was able to re-familiarise myself with the content. These transcripts along with observations from available documentation and reflection in their sketchbooks, blogs and social media platforms were used to inform the

Participant Portraits which serve to provide a summary of each participants particular context.

The transcripts were also analysed following a Thematic Analysis approach as set out by Braun and Clarke (2006). This began with a process of manually coding, see Figure 10 below, a systematic reading of the transcripts and ascribing a descriptive code to the text.

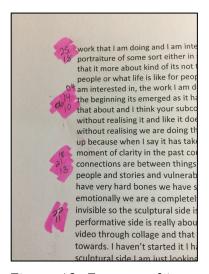


Figure 10: Excerpt of interview with initial coding

Some pieces of text had several codes assigned to them. This was a process of getting to know and understand the data diversely (Braun and Clarke, 2006) through analytic coding (Cohen et al. 2011). Coding is part of the analysis and from many individual codes (thirty-eight) see Figure 11 below, initial themes were constructed from making sense of the codes, some being grouped or combined see Figure 12 below and further analysis and interpretation across the data set was conducted through these themes that emerged.

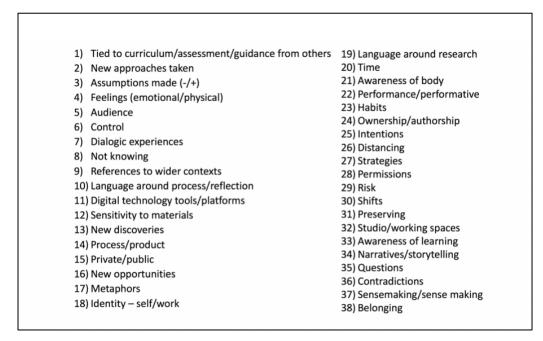


Figure 11: Initial series of codes from transcripts

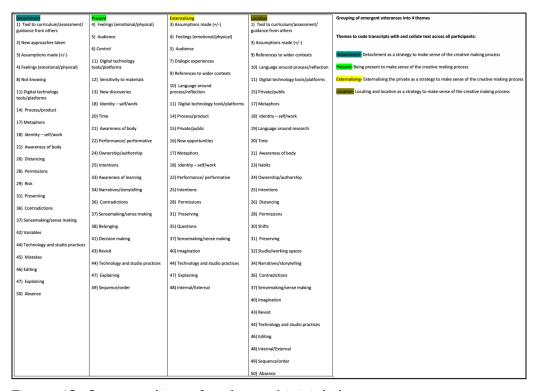


Figure 12: Sense making of codes and initial themes

After reviewing the four initial themes the codes and data were organised into three overarching themes, see Figure 13 below, which formed a 'thematic map' (Braun and Clarke, 2006). Codes within these overarching themes were colour coded and a second thorough pass was made across the data set according to this coding, see Figure 14 below. These themes became fixed and have been

used to organise the discussion and findings from the Thematic Analysis. The concluding discussion brings the key findings from the Digital Autoethography: Creating Spaces for Reflexivity as a methodology and the impact this had on my own artistic and teaching practice and the participant research. The Thematic Analysis themes are discussed in response to each of the Research Questions.

Identifying with the creative process:	Externalising the internal: making the	Nature and Nurture of the creative
A shifting relationship	invisible visible	process
Emotions	Dialogic experiences	Reflection
Ownership/Authorship	Digital technology/tools/platforms	speed not thinking
Identity	Performance	Decision-making
Knowing/not knowing	New Opportunities	Craft/artistry
Awareness		Assumptions
Control		Influence
Intentionality		Time
In the moment		Risk
Feelings and physicality		Discovery
Sensitivity to materials		Repetition
		Research

Figure 13: Thematic Map

motions	Ownership/Authorship	nship Identity	Veguing feet beguing	Awareness	Control	Intentionality	In the moment	Considerity to material:
notions	Ownersnip/Autnorsnip	identity	Knowing/not knowing	Awareness	Control	intentionality	in the moment	Sensitivity to materials
am really camera shy and when	The most challenging thing for me	Well I was surprised at how	JN: 'who do you feel it is for?	Well I was surprised at how	'sometimes I am really anal about	1 came on the course thinking I	'the amount of times I've been sat	
comes to talking I have to script	was making decisions about what I	steady the camera was but when		steady the camera was but when	things and I have to get it right	would discover something new	there with a camera going wow,	seems to be different, the actual
out first and write down what I	wanted to create - as it was for my	you actually looked through it you	03: I feel it is for my own self	you actually looked through it you	first time but it's not and I have to	completely but I think what I'm	this is a great sunset, and you	
as going to say and even when I	FMP I think I gave myself a lot of	think to yourself is that how I see		think to yourself is that how I see	rub it out and forget it has never	finding is that one or two of the	don't feel like you've sat and	seems very vague and flowery a
that I just fumble everything up	grief about my ideas, and	things? I am always looking at the	JN: Is that how you always felt	things? I am always looking at the	happened and just do it again but I	things that I have enjoyed doing in	enjoyed the sunset and especially	all over the place but when I
d then it just doesn't sound	execution that I needn't have	floor always looking over there,	about it or?	floor always looking over there,	think that if I record things like	the past and then got bored with	if you go out for the day	actually type something it seem
tht I just think oh I have messed	done, I feel like I should have been	but I had to look ahead I couldn't		but I had to look ahead I couldn't	making mistakes it will bulk up my	and then come back to, have	somewhere to an event, you know	
up I have got to do it again and,	more confident in my original	look at the person talking to me	03: No, at first I thought the	look at the person talking to me	work because then it will show it	actually come back to more than	we went to Morecambe Kite	getting my thoughts down in a
t I have been thinking about	ideas. I was reasonably happy with	here, I was like yes, yes, yes	annotations were more about the	here, I was like yes, yes, yes	wasn't that at first it was	other things, it is like perhaps this	Festival in the summer and I spent	way that when I read it back,
ing that though like record how	the end results but not so much so	(laughs)' (01_01_46-49)	tutor (laughs) but now it's not, it's	(laughs)' (01_01_46-49)	something else' (01_01_146-149)	is a sign that this is where you	my entire time like this trying to	makes a lot more sense than wi
raw something and then say a	that I wanted to keep going back		more about my own development			should be going, if you keep	capture pictures of kites you	I read back, I don't tend to wan
essage about it well I was	and looking at them (which is how	'sometimes I am really anal about	and how I'm going to use it and	'I tried recording myself playing a	'is going out and taking	repeating something, you're	know, and trying to get them at	read back something I've hand
nking about doing this but it	I can tell if I am really pleased with	things and I have to get it right	what direction is it going to help	game and I jump scared at that so	photographs and then having a	obviously getting something out of	the right angle and the sun and	written as well, I don't know wh
in't work out very well'	a piece of work)' (02_00_Q15)	first time but it's not and I have to	me take' (03_01_172-177)	it was interesting because I	notepad with me just so I can	it even though in between you	everything instead of just, I mean	
1_01_228-233)		rub it out and forget it has never		watched it through again and it	actually, and I'm finding from	might get a bit fed up but I think	we'd taken kites with us and if I	
	'I feel like I'm almost there, yeah,	happened and just do it again but I	'I will probably carry on taking	only took a minute and half before	actually handwriting it, I'm writing	now, rather than just getting fed	flew mine for five minutes I was	"I kind of had been running
ney have been on display at a	and with the specially the business	think that if I record things like	images and stuff and yeah	I jumped so it was things like that	a lot more so I'm sitting there	up I'm thinking no, I should have	lucky so I kind of missed	through loads of ideas to do wit
uple of exhibitions and have a	module I'm doing at the moment,	making mistakes it will bulk up my	because after I leave here, if I'm	as well, timing and you realise	writing down every detail where I	been, if I'm getting bored with it, I	everything that was going on	the photographs and I think one
of positive feedback, however I	I've kind of thought I'm not going	work because then it will show it	doing some practical work, I think	when things happen and when	am and what's going on and then	should have been developing it in	around me because I was	I've been looking through unde
I don't feel comfortable with	to focus on any one particular	wasn't that at first it was	that would be really beneficial and	things don't I shared the reaction	I'm transcribing that and doing it	a different way perhaps or looking	obsessed with taking photographs	the bed I've got a drawer that's
em personally' (02_00_Q15)	area, I kind of know the area I	something else' (01_01_146-149)	even taking videos would think the	and a few people jumped at it as	very concisely almost condensing	at it differently rather than just	and its funny because my	just filled to the top with
	want to work in, but it is doing the		next step forward would be, would help' (03_01_361-363)	well, so it was more to see what	it into seven or eight lines and I	abandoning it and doing	daughter was with me at the time	photographs I've taken over the
kind of shied away from	research all around it so, like today	'I really want to create something	would help (03_01_301-303)	they thought of how I was scared	quite enjoy that whole process of	something else, you know, do	and she was doing exactly the	last thirty odd years and the
cording anything at the	I've been working with C on	that pleases me, that is closer to	'when I got my feedback from that	of it more than anything'	actually recording stuff in a really	other things in your spare time but	same thing. We went to Blackpool	amount in it that weren't of
oment, I think it goes back to	actually doing the technical	the vision I have, then I can feel	module, what, I could see that	(01_01_121-134)	short way' (02_01_38-43)	find the thing it is that you keep	for the day and the pair of us took	anything (laughs) they weren't
at whole thing of you hearing	pattern side of things and I	more confident that I will be able	that's what they wanted because			going back to and focus on that	our cameras and just took	people or anything, they were j
ur own voice so, seeing yourself	thought oh yeah, I can actually do	to replicate that experience in my	they said what I got was positive,	Dahlah bassa of descendants	'I don't like spoiling a book,	because that is obviously where	photographs all day of strange	a close up or a weird pattern or
anything' (02_01_21-23)	that, and I know that if this idea, if	future practice' (02_00_Q16)	that you'd really annotated and	'I think it sort of depends what I am writing it for, but I am always	whereas the internet, it's all like,	you're getting your enjoyment from, and you know, at the end of	things which was great, we got some really good shots of really	whatever that I'd seen and it's I
	it comes to fruition, I can do that		reflected as you were going along		whatever, digitally you can delete			wow but all I can say is they mu
few years ago I was doing a lot blogging and it was more kind	part of it, it's getting all the little	"I am concerned that if I come up against technical challenges I will	so yeah, so I think that's kind of a	conscious as well if someone else has to read it, that I don't want to	it can't you if it's not right erm but	the day, I want to be doing something that I enjoy rather than	interesting paintwork that (laughs) could have been anywhere, you	have been taken pre-1995, you
lifestyle blogging so when I've	parts of it into line and then when	give up too easily (a room full of	positivebefore I handed it I	be going on and on and on you	yeah, it used to drive me insane when my daughter got new	because it makes you know	know and observing people and	know when I didn't have a digit
irestyle biogging so when I've iked back at certain things on	I'm quite confident that what I do	abandoned projects from the past	thought oh it might just sound a	know, because I know what my		money, money's kind of nice at	everything and trying to get	camera, so and that was about
it, I suppose it is similar, I've	produce will be of a good enough	proves to me that I become bored	bit gibberish I thought it might	concentration limits are and what	sketchbook and she'd scribble on every page and it's like you can't	the end of the day but I don't	photographs of them without	that's all, even looking at the
ken some photographs and I've	standard then its thinking, like	when come up against a	not show that, where's the	I want to read in other people's	do that (laughs) so consequently. I	want to be making it at the	them noticing you're taking a	context of the other photograp
itten about what I was doing	developing that idea' (02_01_359- 366)	challenge) and although I am	direction, it might not lead into	work so I try to not go over the	have a lot of empty sketchbooks at		picture of them but at the end of	next to it you couldn't tell when
at day and it's gosh you know,	300)	feeling determined to get all my	the next thing, you know, that's	top, I think if it was something that	home, like really nice ones, when I	doing' (02_01_342-355)	the day, we hadn't really done	was or anything so this while id started coming to me of record
forgotten, you know but it is	'a lot of that was it was the having	work finished early due to having	what I thought, but then I thought	was purely personal like a diary or	know exactly what I want to put in		anything, except wander around	as I was taking the photographs
ing to create that image in your	this time constraint I am never	to leave the course a month or	this is how I'm feeling, this is what	something, then it would be	it, and how I want to put it in. I'll	1 always grew up buying	taking photographs and you are	having as big a picture kind of
ad again of where you actually	going to get these images they are	two early that I might not	I want to use form it so that's	different but I've never ever	do it because it is that	stationary and never using it	separated from, you do feel like	
ere and what was going on at	not working at all and I must admit	physically or mentally be able to	what I'm going to put, so there's	written or kept diaries'	permanence, I think of it whereas I		your there just observing rather	the fields nearby and thinking
time. It's all well and good	yes part of me is a bit of a last	get that done even though I know	no point making something up	(02 01 100-105)	think that digitally it isn't is it	now have hundreds of empty	than there taking part in whatever	they're exactly the same flower
ding it and saying yes, I was	minute deadline and I do tend to	I will be able to get an extension'	where I'm not feeling that and I'm		because I know now, I've gone	sketchbooks that I bought over the	it is that you're doing'	that could have been taken
re, and these are people I was	work miles better to deadlines	(02 00 Q17)	not going to use it so at first when	'whenever I'm writing anything or	through loads of computers over	course and I just kept thinking just		
	than otherwise I would never get		I handed it in I thought oh it	recorded anything, it's always with	the years and there must be so	get one out it doesn't matter even		time, you know, so it was that
ink a lot of it is trying to	anything finished I have still got	'a few years ago I was doing a lot	doesn't make sense it might not	the, you've got it in your mind that	much work that I've lost because	if it is not just for one particular	Tused to teach African drumming	whole having that record, it is h
reate that old feel of what it	quilts I have been making for	of blogging and it was more kind	make sense, it might make sense	somebody else is reading it or	the, and I think back now it can't	project if it is just a place to start	and do drum circles and stuff,	on us sometimes with people in
s actually like to be there in	twenty years you know so if	of lifestyle blogging so when I've	to me but then when I got the	watching it or listening to it or	have been that important or I	to actually start putting source	that, you had to be so much there	
at situation' (02_01_76-84)	someone told me I had to get it	looked back at certain things on	feedback it was quite clear yeah	whatever' (02 01 109-111)			in it, taking part so if anyone else	

Figure 14: Thematic Map with colour coding (excerpt from data set)

4.0.1 Context of the institution

The participant research took place at an FE College which has externally validated HE provision in the Northwest of England. Recruitment onto the

programmes is mostly from the local area and Northwest region from local level three programmes including those taught at the FE College. There is also a high proportion of adult returners and students requiring additional support.

The HE provisions within the School of Art and Society at the college offers several art and design focused FdA, BA (Hons) Top Up and BA (Hons) programmes which generally fall into either art: fine art or design: graphic design, animation and illustration, photography, fashion, textiles, and interior design. However, within each discipline students can take a more design-led or arts-led focus depending on their own interests and skills. The FdA programmes have more of an emphasis on employability and training aspects, however that aspect is present across all programmes. Students also find themselves in between disciplines, for example, on the fine art course several students specialise in photography but would not consider themselves studio photographers. Recruiting participants from across discipline areas brought some of these issues to light and insight from the students' perspective. Based on my own knowledge of the programmes, participants working practices and consideration of Hickman's (2005) 'epistemological terms by degree' I have placed participants on an arts-based/design-based four quadrant framework below (Figure 15 & 46):

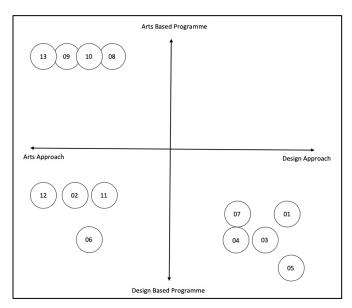


Figure 15 & 46: Mapping of participants according to discipline area and approach taken

4.0.2 Recruitment

Undergraduate students from across both art and design discipline areas were potential recruits. The decision to include participants from art (fine art) and design (fashion, textiles, interior design, graphic design, illustration, animation and photography) was made partly to ensure feasible numbers, but also because within the design discipline areas some students practices crossed art and design boundaries. In a different size or type of institution these decisions would have likely been different. Reflection and reflective practice, annotating work and concepts of process are common factors across art and design and anecdotally where staff felt students were often weakest. Before speaking to students, I engaged academic staff in the research methodology to gain trust in working with their students but to also gain support for what I was doing.

The recruitment posters (Figure 16, below), lectures and group talks framed me as a researcher rather than teacher. I set out to recruit ten to twelve students expecting that I might have some withdraw from the process. I wanted the number of participants to be significant enough to find different strands or themes for comparison but small enough to manage the project and enable students were able to use the available technology effectively.



Figure. 16: Recruitment poster for student participants

I gave a brief description of my own digital autoethnography experiences and students were shown the research blogs, given some detail of the technology I

used, how I used it and what I had experienced so far. I explained that I was interested in what they might do as digital autoethnography, what they might find out and how it might be useful for their own reflective practices for modules on their programmes. This recruitment process took place over a series of weeks and all year groups from all discipline areas were given the opportunity to participate. All students interested in taking part were met with individually and their initial ideas about what technology they would want to borrow and how they intended to start their own observation process was discussed. The borrowable equipment as kits were organised with other resources and students could book out what they wanted to use with technician staff. The two kits included a Go-Pro camera, tripod, video camera that could project recordings, voice recorder and fitness tracking watch.

From twenty students who initially stated an interest in the project thirteen committed to being participants and completed the ethics process consenting to interviews. Participants were recruited over two cycles and after three months of working independently with the equipment the first interviews took place. Figure 17 below shows the timescale and contribution of each participant.

Research Participant Group 1	Course/Year	Consent Form	First Interview	Second Interview	Initial Questionnaire
01	Illustration yr3	1	07/03/16	No 2 nd interview	x
02	Textiles Yr3	✓	25/02/16	14/09/16	✓
03	Fashion Yr3	✓	29/02/16	12/07/16	✓
04	Fashion Yr2	✓	03/03/16	18/07/16	х
05	Interiors Yr1	✓	07/03/16	20/07/16	1
06	Fashion Yr2	✓	10/03/16	25/07/16	1
07	Animation/ Illustration Yr3	✓	14/03/16	04/08/16	х
Research Participant Group 2					
08	Fine Art Yr1-2	√	13/07/16	09/12/16	x
09	Fine Art Yr1-2	1	08/08/16	09/12/16	x
10	Fine Art Yr2	√	15/09/16	09/12/16 & 12/06/17	x
11	Textiles Yr1	✓	13/07/16	No 2 nd interview	х
12	Textiles Yr-3	✓	03/03/16	26/06/17	√
13	Fine Art Yr2-3	√	07/03/16	15/09/16	х

Figure. 17: Participants interview schedule

After recruiting participants an initial meeting enabled discussion around what they intended to do and how they might approach it including making sure that they understood the ethical issues around using recording equipment when others could be inadvertently filmed or have conversations recorded. Participants took the lead by deciding what module or project they would use the autoethnography for, when and how this would happen. I made myself available for technical support and all participants were given links to the project blog which was a repository for guides and help using the equipment. The equipment was held in a secure store and participants used the college system for borrowing equipment.

Participants were given a link to an online questionnaire which was designed to provide some baseline information about their use of digital technologies and thoughts around reflective practice. The mixed questionnaire (Appendix 8) used a five-point Likert scale for frequency of using social media tools and technologies for documentation and reflection and open-ended questions about their experiences of reflecting, talking about and documenting their work. Participants were also asked to gauge their confidence in trying new technologies and state their preferences for learning new tools and platforms. Five participants (02, 03, 05, 06 and 12) completed the questionnaire and their responses were used as part of their participant portraits (Appendix 7).

4.1 Interviews: Phenomenological and ethnographic approaches
The interviews were semi-structured and both ethnographic and
phenomenological: While participants were asked to give accounts of their own
private lived experiences of using digital autoethnography and making work,
they were also responding to their experiences of the shared cultural context of
being an art/design student. The interviews were digitally recorded, and
participants had the opportunity to receive copies of the recordings to support
their own research. Each interview lasted between 30 minutes to one hour and
were conducted on the College site. Participants also shared sketchbooks, audio
and video files as well as blog links, selected excerpts of which have been
incorporated into the Participant Portraits (Appendix 7).

The interviews were transcribed verbatim with a naturalised approach. The analysis of the participant research has taken two strands, firstly individual 'participant portraits' (Appendix 7) which give some insight into the context of each participants background and experience. Where possible these accounts drew from the interview data, questionnaire responses and visual material from sketchbooks and accessed online. These brief studies bring a distinct voice to each participant. The interview data was collectively analysed using thematic analysis to create codes, develop themes and illuminate the discovered patterns of meaning.

While Holloway and Todres (2003) emphasise the distinctiveness between both phenomenology and ethnography as qualitative approaches, there is an opportunity to use both as different lenses to emphasise the experiences as felt and perceived by participants (Phenomenology) and how these participants are located within a particular social context and culture (Ethnography). Participants share their experiences for interpretation at 'both a general and unique level' and the opportunity to observe that 'particular social setting with all its cultural diversity and multiplicity of voices' (Holloway and Todres, 2003: 348). Massumi describes phenomenology as a 'closed loop', the personal is prefigured or "prereflected" in the world, in a closed loop of "intentionality." The act of perception or cognition is a reflection of what is already "pre-" embedded in the world. It repeats the same structures, expressing where you already were: every phenomenological event is like returning home (2002: 191).

The hermeneutic tradition pushes beyond a descriptive understanding and hermeneutic phenomenology is rooted in interpreting experiences and phenomena via the individual's lifeworld. It is the study of the 'primal, lived, prereflective, prepredicative meaning of an experience' (Van Manen, 2017: 776). Both phenomenology and ethnography can be analysed with Thematic Analysis as an approach. Outlined by Holloway and Todres (2003) it can be used to move back and forth between the meanings that are clarified from participants experiences and narratives (Phenomenology) and used to code and build patterns to illuminate the culture and its themes.

4.2 Thematic Analysis

Thematic Analysis as defined by Braun and Clarke (2006; Clarke and Braun, 2013; 2017) is a method rather than a methodology that has the flexibility to be used by researchers from a range of 'research paradigms'. This 'straddling' of research approaches requires the researcher to make decisions about which 'form' they are using. Taking an inductive approach allows the data to speak, 'the codes and themes derive from the content of the data' (Braun and Clarke, 2012: 58). Enabling the student participants own lived experiences to be seen clearly supports an empowerment approach, it is what they say, that shapes the narrative. Braun and Clarke believe that while one approach might be more dominant it is not possible to be purely inductive, 'we always bring something to the data when we analyse it' (2012: 58). This is particularly important as I was aware of my own experiences as a participant through my autoethnographies while conducting the thematic analysis. Ascribing codes is a way to help break down and make large quantities of data more manageable, however I found that this process of making sense of the data led to pieces of text sometimes having several codes relating to it. While this suggests complexity and richness to the contents of these texts, it also illustrates how the data expanded through this process over time and how this was in itself a reflexive process. It is however a useful way to compare individual participant experiences and allow the data to speak for itself. Other choices relate to the orientation of the research and theoretical framework, which for an inductive approach prioritises the participant (2012). Braun and Clarke stress that it is not the choices that make a successful TA but the 'consistency and coherence' with which it is applied (59: 2012). The main issue with TA according to Holloway and Todres (2003) is the tension between TA providing flexibility and consistency and coherence. They suggest that this does provide an opportunity for the researcher to be more indepth and rigorous with their 'intentions and philosophical underpinnings of the different approaches in greater depth to arrive at an epistemological position that can coherently underpin its empirical claims' (2003: 345).

Clarke and Braun (2013) suggest TA can be used for a wide range of research questions, from those about people's experiences or understandings to those about the representation and construction of particular phenomena in particular

contexts. TA is good identifying patterns of experience, 'lived experience, views and perspectives, and behavior and practices' (Clarke and Braun, 2017: 297). The method, as used by Braun and Clarke recognises the active role of the researcher; themes are constructed not found (Braun and Clarke, 2012) However, the coding and development of themes, while approached organically, are supported by 'accessible and systematic procedures' (2017: 297). TA offers a sympathetic approach to organizing and analysing phenomenological and ethnographic interviews.

The TA approach as presented by Braun and Clarke creates a weaving of data, codes, themes, and research questions, what they refer to as 'interconnections' (2012). Braun and Clarke illuminate TA through their examples of applying this method, their interview-based study of LGBT university students, (2012) and their appraisal of Frith and Gleeson's (2004) study in their own paper on teaching TA (2013) provide a detailed breakdown of the process. They provide a framework for TA and the flexibility for researchers to apply it to their own contexts.

4.2.1 Codes and Themes

The initial coding generated fifty separate codes which I refer to as 'emergent utterances' that were data driven. These were then loosly grouped into very general themes with some codes appearing in several themes, see Figure 18 below.

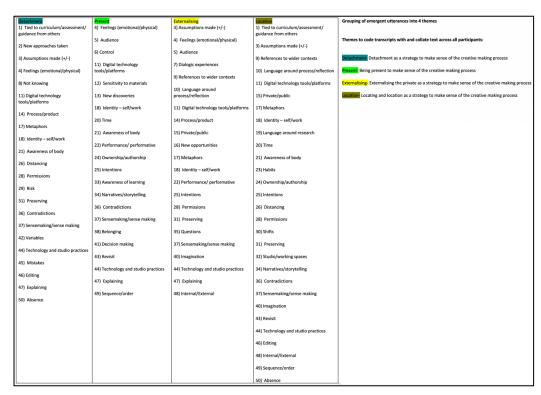


Figure 18: First stage of coding 'emergent utterances'

The next stage looked at how some codes could be combined and became twenty five separate codes (Figure 19, below) organised under three defined themes. According to Braun and Clarke (2006) it is important that the themes tell a compelling narrative and the resulting three themes are a refinement of this process and provide a framework to dicuss the essence of the research findings. It is important to note that a significant amount of analysise of the raw data has taken place to get to theis stage. The codes and themes are findings in themselves which also provide a framework for further analysis and discussion here.

Identifying with the creative process:	Externalising the internal: making the	Nature and Nurture of the creative		
A shifting relationship	invisible visible	process		
Emotions	Dialogic experiences	Reflection		
Ownership/Authorship	Digital technology/tools/platforms	speed not thinking		
Identity	Performance	Decision-making		
Knowing/not knowing	New Opportunities	Craft/artistry		
Awareness		Assumptions		
Control		Influence		
Intentionality		Time		
In the moment		Risk		
Feelings and physicality		Discovery		
Sensitivity to materials		Repetition		
		Research		

Figure 19: Themes

Theme 1: Identifying with the creative process: A shifting relationship Rather than catergorise identity and participants relationship with making/designing as static, a location on a spectrum of possibilities or procedural led, 'design thinking' (Tschimmel, 2012), this theme maps participants understanding of their identity and making processes as a complex and shifting relationship. The way in which participants identified with their practice was dependent on what contexts and experience (art and design related, personal and other professional experiences) they brought to the process, which included feelings, (stress related, unstimulated, confused) difficulty in feeling like they belonged on the course, not belonging (feeling fraudulent) or what they should label themselves (discipline identities) and how this did or didn't change through the research process. Figure 20 below, illustrates the process of organizing the data according to the codes for this theme with excerpts mapped and colour coded.

with making decisions about what I are first making it more to care at a war for our war and making and have to get it right of the mak		process: A shifting relatio				4			According to the control of the
was easing decisions allow what the configuration of the configuration o	Emotions	Ownership/Authorship	Identity	Knowing/not knowing	Awareness	Control	Intentionality	In the moment	Sensitivity to materials
seems to be other part of more and the part of the par	am really camera shy and when	The most challenging thing for me	'Well I was surprised at how	JN: 'who do you feel it is for?	Well I was summised at how	'sometimes I am really anal about	Trame on the course thinking I	The amount of times I've been sat	"it's funny, it seems to, everyone
and entire confidence in what call and the control con	comes to talking I have to script	was making decisions about what I	steady the camera was but when		steady the camera was but when	things and I have to get it right	would discover something new	there with a camera going wow.	seems to be different, the actual
as pring to say and were wheat of the post of the same provides and the post of the post o				03: I feel it is for my own self					handwritten stuff that I have do
of the dot make describing to the sign describing of the sign described in the part of the sign described in t									seems very vague and flowery a
with the first part which the place of the p				JN: Is that how you always felt					all over the place but when I
that had not always at the company of the part through the recording with the recording w				about it or?					actually type something it seem
All have been thinking aboved may be implicated the property of the property o	tht I just think oh I have messed	done. I feel like I should have been	but I had to look ahead I couldn't		but I had to look ahead I couldn't	making mistakes it will bulk up my	and then come back to, have	somewhere to an event, you know	to be a lot more concise and I'm
sing that thought like a room from death to the room from the part of	up I have got to do it again and,	more confident in my original	look at the person talking to me		look at the person talking to me	work because then it will show it	actually come back to more than	we went to Morecambe Kite	getting my thoughts down in a
ange that though like record low growth cross control to good the common co	at I have been thinking about	ideas. I was reasonably happy with	here, I was like ves, ves, ves	annotations were more about the	here, I was like yes, yes, yes	wasn't that at first it was	other things, it is like perhaps this	Festival in the summer and I spent	way that when I read it back,
and placed and the period by the bit is a contract the period by the per					(laughs)' (01_01_46-49)	something else' (01_01_146-149)	is a sign that this is where you	my entire time like this trying to	makes a lot more sense than wh
and the first an early pleased with the part of the pa	fraw something and then say a	that I wanted to keep going back		more about my own development			should be going, if you keep	capture pictures of kites you	I read back, I don't tend to want
Lange and fill fair restally placed with a part of the control only weight of the control only weight of the control of the co	essage about it well I was	and looking at them (which is how	'sometimes I am really anal about		'I tried recording myself playing a	'is going out and taking	repeating something, you're	know, and trying to get them at	read back something I've hand
and the process of th	inking about doing this but it	I can tell if I am really pleased with					obviously getting something out of	the right angle and the sun and	written as well, I don't know wh
1. The file is if m almost there, year, where the mining is any and with the greatily the control freely the proposal or support of mining the	dn't work out very well'	a piece of work)' (02_00_Q15)	first time but it's not and I have to	me take' (03_01_172-177)	it was interesting because I			everything instead of just, I mean	(02_01_27-32)
why have been mediately at at a good with the special back that of the property of an abilities and with the property of the thirties and with the property of the thirties and the thirty of the property of the thirties and the thirty of the property of the thirties and the thirty of the property of the thirties and the thirty of the property of the thirties and the thirty of the property of the property of the thirty of the property of	1_01_228-233)		rub it out and forget it has never		watched it through again and it	actually, and I'm finding from	might get a bit fed up but I think	we'd taken kites with us and if I	
and daily regular properties where the properties was to be designed and the properties was to be designed a		I feel like I'm almost there, yeah,	happened and just do it again but I		only took a minute and half before	actually handwriting it, I'm writing	now, rather than just getting fed	flew mine for five minutes I was	"I kind of had been running
the foundation of the companied of the c	hey have been on display at a	and with the specially the business	think that if I record things like		I jumped so it was things like that	a lot more so I'm sitting there	up I'm thinking no, I should have	lucky so I kind of missed	through loads of ideas to do wit
How The confortable with the personal (Fig. 20, 20, 23.23) area, kinded from the area is worth that in first two. would be not him personal (Fig. 20, 20, 23.23) area, kinded from the area is worth that in first two. worth to be a first two. worth two three first two. worth the first two. worth two three first two. worth the first two. worth two three first two. worth t	uple of exhibitions and have a	module I'm doing at the moment,	making mistakes it will bulk up my		as well, timing and you realise	writing down every detail where I	been, if I'm getting bored with it, I	everything that was going on	the photographs and I think one
was premarily (20, 00, 203) as was all used of blow that was 21 word to those that a was 1 word to flow that was 21 word to work that of side gave from control was 21 word to work that was 21 word to word that was 22 word to word to word to word to word that was 22 word to word to word to word to word that was 22 word to word that was 22 word to word to word to word to word to word that was 22 word to word to word to word to word to word to word that was 22 word to word	of positive feedback, however I	I've kind of thought I'm not going	work because then it will show it		when things happen and when	am and what's going on and then	should have been developing it in		I've been looking through under
with the wide war from coming anything at the coming with Company of the war for the war f	ill don't feel comfortable with	to focus on any one particular	wasn't that at first it was		things don't I shared the reaction	I'm transcribing that and doing it	a different way perhaps or looking	obsessed with taking photographs	the bed I've got a drawer that's
selected of the extract of all amound it is no, like or day. The extract of all amound it is not all the extract of all amound it is not all the extract of all amound it is not all the extract of all amound it is not all amound it is not all the extract of all amound it is not all the extract of all amound it is not all the extract of all amound it is not all the extract of all amound it is not all the extract of all amound it is not all the extract of all amound it is not all the extract of all amound it is not all the extract of all amound it is not all the extract of all amound it is not all the extract of all amound it is not all the extract of all amound it is not all the extract of all amound it is not all the extract of all amound it is not all the extract of all amound it is n	em personally' (02_00_Q15)	area, I kind of know the area I	something else' (01_01_146-149)		and a few people jumped at it as	very concisely almost condensing			just filled to the top with
conting springly at the consent, think it gas the behavior and the proposal of the consent of the part of the part of the consent of the part of		want to work in, but it is doing the				it into seven or eight lines and I			photographs I've taken over the
some, finish gere back to active filter give my being the schwing and give my being the schwing		research all around it so, like today		would help' (03_01_361-363)	they thought of how I was scared	quite enjoy that whole process of			last thirty odd years and the
the models with the same and purpose and of the same and purpose and sam									amount in it that weren't of
sequence of the control of the contr		actually doing the technical			(01_01_121-134)	short way' (02_01_38-43)			anything (laughs) they weren't o
Langes again of all every active and water againg on act of a complex of the same and a complex									people or anything, they were ju
for year ago I was drived. See a comment of the I was not be found a service of the I was not be found as the I was not been as the I was not been as the I was not been as the I was not the I was not been as the I was not been a		thought oh yeah, I can actually do							a close up or a weird pattern or
for year not put has doing a left a sought grant of the son year of the doing from the doing fro			future practice' (02_00_Q16)						whatever that I'd seen and it's li
Stagging and it was not low. It does not be anything to great personal transport for the least personal transport for the part personal transport for the least perso		it comes to fruition, I can do that							wow but all I can say is they mus
Manyth longing to when the color backed act art maintain which and the color backed act art maintain which are the final part to more all all particular programs and the color backed act art maintain which are the final part to more all all particular programs and the color backed act are the maintain and the particular programs and the color backed act are the maintain and the programs and the color backed act are the maintain and the particular programs and the color backed act are the maintain and the particular programs and the color backed act are the maintain and the particular programs and the color backed act are the maintain and the particular programs and the color backed act are the maintain and the particular programs and the color backed act are the maintain and the particular programs and the color backed act are the maintain and the particular programs and the color backed act are the maintain and the particular programs and the color backed act are the maintain and the particular programs and the particular									have been taken pre-1995, you
and do set of the or 4 point of months of the company for the									know when I didn't have a digita
As suppose its smiles, five team and the standing its amine and the standin									camera, so and that was about i
was come prolographs and free literate about what it was developing that fider ([0], 0], 2), 343-355 ([1], 343-355) ([2], 343-355) ([3], 343-									that's all, even looking at the
When a lated or design quity because the search of the synchron of the synchro									context of the other photograph
and say and fire goal you know. If register, we give now by the fire goal you know, it is goal for goal you know, it is goal you know, it is goal for goal you know, it is goal									next to it you couldn't tell when
If fogetine, you know but it is up the presentation of the present		366)							was or anything so this while ide
In the constraint and approximate the region of t		for the self-above consists of the forest con-					doing (02_01_342-355)		started coming to me of recordi
ad again of whelve you actually accept the performance of the surpasses they were and whelve was graded and must adain all was trace to even through taken or a long trace of the performance of the perfor									
were and what was going on all colors. It is a dirt is syning to all and immunal about all producting or mentally has able to washing at all and immunal about all producting or mentally has able to washing at all and immunal about all producting or mentally has able to washing at all and immunal about all producting or mentally has able to washing at all and immunal about all producting or mentally has able to washing at all and immunal about all producting and the source and the s									
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anding it and varying vis, leve , we wanted deadline and did a treat of the most feeling that and of the colds have been in most feeling that and of the colds have been in most feeling that and of the colds have been in the protection of the colds have been that the position of the									
re, and these are people is sea to me this sheart was down finely better to desiding and the me this sheart was down finely better to desiding and the me this sheart was down finely better to desiding and the me this sheart was down finely better to deside anything, if a simply might than of plant in the original plant and the sheart					(05_01_100-103)				
the or this is what it was dising but his and relevanter leval the every get an even to deserve that the valid series of the event again less coning a lor address from the series and the event the valid series of the event to even the event the e					(-b				
nick also of it is typing to application of the second making to the sec			(02_00_017)					(UZ_U1_047-003)	
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as actually like to be there in the the system so when the logging so when the watching it or listening to it or watching it or listening to it or watching it or listening to it or									
									on us sometimes with people in
at situation" (02_01_76-84) someone told me I had to get it looked back at certain things on feedback it was quite clear yearh whatever" (02_01_109-111) would have done something to material in for every kind of in it, taking part so if anyone else shotographs and thin				feedback it was quite clear yeah	watching it or listening to it or whatever' (02 01 109-111)				photographs, finding old school photographs and thinking, I dor

Figure 20: mapping data to theme 1

Theme 2: Externalising the internal: making the invisible visible

Merleau-Ponty positions visibility and invisibility not as opposites but as entwinned, 'the visible is pregnant with the invisible' (Merleau-Ponty, 1968: 216). This theme outlines the experiences participants had making aspects of their thinking, making, decision making and emotions visible to themselves and to others. Participants had different approaches to making these aspects visible: using new digital technologies (headcams, audio recorders, video equipment) and approaches (video blogging, blogging, recording their personal reflections and conversations with others, including the participant interviews) to record from different viewpoints (from the bodies perspective, away and facing the body/parts of the body while making). Also using familiar digital technologies and platforms (mobile phone, cameras, iPad, blogs, Facebook, Pinterest, Evernote/Onenote), as well as paper-based approaches (sketchbooks, post-itnotes). It is what participants were able to see or understand by going back to the data they had created. In some cases, the process of making their thinking and making more visible led to performative experiences (awareness of the body, materials, audience/other). There were also examples of the documentation becoming work; making more of the work visible rather than hidden process led to new opportunities and ways to interpret their practices. Discovering more could be made visible, in some cases led to more curiosity about what was hidden and what participants did know and didn't know. Revising information was about reminding and remembering, how it was

experienced at the time, and how it could be remembered differently with new information. Using the digital technologies and tools became a new lens to look through, in some aspects a new material to use in making and reflecting. Figure 21 below, illustrates the process of organizing the data according to the codes for this theme, with excerpts mapped and colour coded.

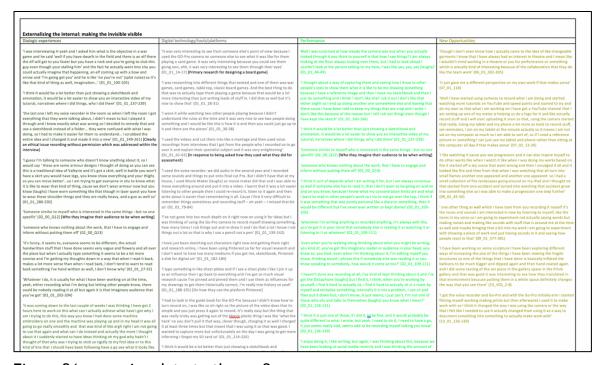


Figure 21: mapping data to theme 2

Theme 3: Nature and Nurture of the creative process

This final theme considers what is brought to the making process and what is taught or teachable. The underpinning structure but unpredictability of the creative/design process described as a river by Learmonth and Huckdale (2012) is a useful analogy:

eroding and/or building up what contains it; growing and/or shrinking according to what goes in or is extracted from it; adaptive to objects in its path; sensitive to toxic and 'nutritional' inputs; and flowing faster or slower as it shapes and is shaped by its landscape (2012: 107)

If participants shifting relationship (Theme 1) is about the changes or evolution of their enculturation and making visible their experiences (Theme 2) is about recognising and making visible what they have learnt from these experiences, then the nature and nurture explores the very essence of that culture, how it

shaped participants and how participants and other influences shaped it. This theme outlines the experiences participants had of making and reflecting on themselves and their work. Participants sometimes brought assumptions to the process which either prevented them from questioning or were challenged and became moments of revelation and deep learning. Reflection before, during and after making sometimes hindered or supported by other influences, time, research, taking risks, discoveries and their own decision making illuminated the complexity of the making process. The notion of it being nature or nurture relates to what appeared to be involuntary responses, embedded in their practices and voluntary ones.

How participants became comfortable with the making process (repetition and habit), how it became disrupted (by others input, discovery and research) and occasionally intentionally ruptured (through reflection and taking risks). Becoming artists/designers was a sort of dance between making the work and understanding the nature of the making process, how reflection and research informs practice and is practice. Figure 22 below, illustrates the process of organizing the data according to the codes for this theme, with excerpts mapped and colour coded.

Nature and Nurture of the creative process										
Reflection	speed not thinking	Decision-making	craft/artistry	Assumptions	Influence	Time	Risk	Discovery	Repetition	Research
used the voice recorder I	Yes, the thing is with the	The most challenging thing	'when it is bespoke, with	'it was different to how I	'I think that if I record things	'so I have two blogs but I've	'a lot of it is just trying it now	1 usually note things down	"I don't know if I've done stuff	It was very interesting to s
earnt that it was a lot easier	business and the IFA that	for me was making decisions	larger seam allowances, so	imagined it to be, when I was	like making mistakes it will	kind of abandoned the other	and just seeing having a bit	but I never look at them again	that different to what I would	from someone else's point
stening to other people then	we're doing, I haven't got	about what I wanted to	that the tailor can amend it	actually planning doing	bulk up my work because	one a bit and I did go back	more confidence to just try	so it's a lot easier to listen to	normally do because I've	view because I used the 0
could re-record it, listen to it	time to think about the actual	create - as it was for my FMP	according to the body size, so	thisbecause you're there	then it will show it wasn't	and write one, kind of a catch	stuff because I am never	them but it's surprising what	always liked doing something	Pro camera on someone
gain and then write about it	products that I want to	I think I gave myself a lot of	when you unpick that	taking the photograph,	that at first it was something	up blog but I haven't, with	going to know unless I try it	you write down what you	different all the time, you	to see what it was like fo
asier than remembering it	produce at the end, but I	grief about my ideas, and	garment and you're trying to	there's all these things going	else' (01_01_147-149)	every intention of going and I	and I will never know if it fits	listen to cause you miss a lot	know, I'm not very repetitive	them playing a card gam
II. Cause I find it very	keep thinking that if I have	execution that I needn't have	put that together itdoes take a long time to put it	on around youI'm sat there		think a lot of it though is my	with what I want to do so all	of things if you note it down'	with anything' (02_01_336- 338)	was very interesting bed
ifficult to remember things ometimes and recording	got everything else in play,	done, I feel like I should have been more confident in my	back, even the way that the,	thinking, okay, erm, I don't	District and Hole and Hole	own organising my own time, I am one of those people who	just a learning curve really' (09_01_277-279)	(01_01_93-95)	338)	you could see them goin
ometimes and recording tuff – oh yeah – I missed that	everything else in line ready for it, then once everything is	original ideas. I was	the sleeves are constructed,	know what to put, shall I put something about the weather	'the last one I left my voice recorder in the room so when	needs a timetable to put	(09_01_277-279)	"it's funny, it seems to,	1 came on the course	ooo, ahh, it was very interesting to see them
it so' (01_01_79-84)	finished, that's what I can	reasonably happy with the	there, what's not seen, visible	or shall I put something	I left the room I got	these, you know, like okay,	'Just a thought for now but I	everyone seems to be	thinking I would discover	through their eyes'
11 30 (01_01_77 04)	actually start to focus on and	end results but not so much	outside but everything inside	aboutI tend to start	everything that they were	Thursday afternoon at this	think with the pieces of work	different, the actual	something new completely	(01_01_14-17) [Primary
usually note things down	work on' (02_01_371-375)	so that I wanted to keep	is a lot more in-depth, there's	rambling, going off at	talking about, I didn't mean	time you're going to sit and	that I am going to be doing	handwritten stuff that I have	but I think what I'm finding is	research for designing a
ut I never look at them again		going back and looking at	all these little trims and little	tangents and I was	to but I played it through and	write it and if I don't then it	this year because we are	done seems very vague and	that one or two of the things	board game
o it's a lot easier to listen to	''d be like, oh I fancy making	them (which is how I can tell	canvases and everything, so I	overhearing somebody else's	I knew exactly what was	just doesn't get done at all	more self-led on the second	flowery and all over the place	that I have enjoyed doing in	
hem but it's surprising what	these, these will sell really	if I am really pleased with a	started taking picture of it so	conversation where we were	wrong so I decided to remedy	and I also, I go through	year I am going to experiment	but when I actually type	the past and then got bored	1 was researching into
ou write down what you	well and I'd make five or six	piece of work)' (02_00_Q15)	that when I come to make	sat so I had to write a bit	that and use a sketchbook	phases with everything, I get	as much as I can and to see	something it seems to be a	with and then come back to,	different things that exis
sten to cause you miss a lot	of them and get some good		the jacket, I've got some	about that and at the end of	instead of a folder they	bored with stuff very quickly	where I can go with that'	lot more concise and I'm	have actually come back to	and one of them was wa
f things if you note it down'	feedback some bad feedback	'actually instead of just going	visuals which can help'	the day I'm thinking well, it	were confused with what I	and then I'll pick it up again,	(09_01_385-387)	getting my thoughts down in	more than other things, it is	games, card games, tabl
01_01_93-95)	and then I'd think oh I've not	out and thinking on that's a	(03_01_194-201)	doesn't matter how much I	was doing, so I had to make it	weeks, months, years later		a way that when I read it	like perhaps this is a sign that	classic board games. An
	sold them all instantly, I'll do	nice picture you actually		write, I'm actually not going	easier for them to	and then run with it again for	"I think it's, it's important I	back, makes a lot more sense	this is where you should be	best thing to do that wa
was interviewing H yeah	something else and I'm off	thinking about oo is it right	'Sometimes you don't know	to be using this but it is all	understand I scrubbed the	a while so it's not just that its	think as a process that I didn't	than when I read back, I don't	going, if you keep repeating	actually tape them plays
nd I asked him what is the	down the next, and not really	for what I am doing I tried not	what is hidden with tailoring	there for me to pick out what	entire idea and I changed it	everything, this is why you	think would be I think in	tend to want to read back	something, you're obviously	game because that wou
ojective in a war game and	kind of focused on anything	to do that too much and take	you don't know what is hidden within the garment	I want from it' (02_01_54-63)	and made it into a new	know, the course I'm doing,	terms of seeing the journey	something I've hand written	getting something out of it	a lot more interesting the
e said 'well if you have	but thinking no you actually	quite a lot of photographs in each situation so rather than	within the lining and the		(01_01_249-261) [Clearly an	it's like oh you know loads	and the progress that you have made or even through	as well, I don't know why'	even though in between you might get a bit fed up but I	just writing loads of stu
warfs in the field and there an elf there the elf will get	quite enjoyed doing this, one particular, not one particular	going and thinking about I	outer fabric, what is wedged	'don't know the images ended up being completely	ethical issue recording without permission which	about everything, it's like	the ideas because as you are	(02_01_27-32)	think now, rather than just	did that as well but it's a show that' (01, 01, 28-3
o you faster but you have a	item but you know say it is	have got to the image'	in the middle so that was a	different to how in my head I	was addressed within the	yeah because I get, you know, if I see something I have to do	making your ideas change or	T've kind of photographed	getting fed up I'm thinking	stion mar for or se-a
ock and you're going to club	like a doll or something, I love	(02_02_147-150)	bit of a learning curve'	was kind of doing an almost	interview)	it and I'll do it until I'm bored	you might take it in a	what I am doing as I go along	no, I should have been, if I'm	1 was also thinking of g
his guy even though your	the whole construction of it, I	(02_02_147-130)	(03 02 225-227)	replica of the photographs	microcus,	with it and then but I know I	different direction so I think	and recorded it and almost	getting bored with it, I should	to see re-enactments be
talling him' and the fact he	love the design of it but I've	1 started working through		and they ended up being	I think it would be a lot	can come back to it when it	for me it just shows a	like, instructions or the whole	have been developing it in a	they are on the ball of ti
ctually went into situ you	never really focused that	and thinking which one	'before when I started it was		better than just showing a	fits in the right time and	different angle and a	technique, sometimes it's	different way perhaps or	historical battles, there
ould actually imagine that	much on, on doing something	actually do I like you know	like I thought a jacket is just a	which I was much happier	sketchbook and annotation, it	space' (02 01 149-160)	different perspective on what	just, I think well you know, it	looking at it differently rather	on every Sunday I think
appening, an elf coming up	that's a bit more unique, a	which one represents what I	jacket but now when I look at	about in the end after trying	would be a lot easier to show	4	you are doing so you know I	is something I've never seen	than just abandoning it and	maybe possibly use the
ith a bow and arrow and	bit, but you know, I'm looking	was doing or and I did it	a jacket its like collar mount	painting and all kinds of stuff	you an interactive video of	'with the internet you've still	was stitching something one	before or a new way of doing	doing something else, you	Pro for that' (01_01_29)
'm going get you' and he is	at everything, the materials,	wasn't just kind of I knew I	and collar facing and all these	and then thinking why I may	my tutorial, narratives where	got that, coming back to that	day and I was thinking well	something, I think oh well I'll	know, do other things in your	
ke 'no you're not' (splat	it's been a case of what have I	wanted 4 images from 4	different terms you use in	as well have just printed the	I did things, why I did them'	permanence which is why I	actually I could add	put it out there' (02_01_232-	spare time but find the thing	I found out that most o
oise) so it's like that kind of	got to hand and so it is the	different places and I would	tailoring so I have kind of	big photograph onto some	(01_01_237-239)	think I do think so much	something to that but I didn't	235)	it is that you keep going back	them are interested thro
hing as well, imagination	whole, yeah it has made me	have liked to have spread	learnt a skill along the way as	fabric and had done with it,		about what I actually put on	want to do that next step		to and focus on that because	gaming in networking so
	think a lot more about the	them out more but they	I was doing it' (03_02_289-	kind of thing but so yeah, I		there because it is going to be	until I had taken a	'even if I don't go back to	that is obviously where	is in the family they get
N: So, listening back were	entire process of it and the	ended up being more closer	292)	think the images probably	'I do tend to keep moving on	out there for however long'	photograph to say this is	them as often as I should do,	you're getting your	introduced that way and
ou able to	whole right from the start, right from year one when we	together – they were all taken in February/March but	Market and Artistance and Artistance	had weighted a bit more than the words the words are just	with stuff all the time, I've never been very reflective on	(02_01_253-255)	where I am because also we were encouraged to take the	the actual point of making them in the first place has	enjoyment from, and you know, at the end of the day, I	many of them know abo outside that circle so it's
1: Visualise	did the 3D design and	because you know it would	I thought it is only a jacket but then later on I came to	more of a background	stuff and I think this last	No. 10-11-12-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1	photographs and push the	guite often, as I have been	want to be doing something	
1: Visualise	realising that actually it's not	have been nice to have	realise that no it's not just	explanation of because they	couple, few years is making	'the blog I did a few years ago was, it had all sorts on it, not	boundaries of some of the	writing something down or	that I enjoy rather than	very <u>niche</u> thing that you only find if someone else
N: Right ok, and is that	that difficult to come up with	actually with forethought	that it's a lot more than	are quite abstract images I	me more so because I've had	personal stuff but more kind	materials as well so obviously	reflecting on my reasoning	because it makes you know	it' (01_01_67-69)
omething that has helped	an idea and then turn it into	done it over 12 months and	meets the eye like hidden	think that the words are	to do it' (02 01 279-281)	of nostalgic homey kind of	it could go wrong or kind of	behind something, something	money, money's kind of nice	101_01_07-03)
ou think about your work	something practical rather	got a bit more, more	craftsmanship which was	more of just a background	to do it (big_os_cro dos)	stuff and a lot of grandma,	not do what you expect by	new has come up, or a	at the end of the day but I	1 type something in like
	than finding somebody else's	photographs , more places,	something I was going to use	explanation to that'	1 suppose, was worrying too	she was into poetry, it was a	the end of that so it's kind of	different possibility or a	don't want to be making it at	plates and if I see a che
1: Yes, it really has, its	and trying to modify it to but	more to choose from and	as a branding that was a	(02_02_85-93)	much last year that making	real mix of all sorts, and every	saying well how far can you	different way of doing	the expense of doing stuff	plate I like pin it up as a
elped me interpret	it is, it's having that whole, I	different times of year and	reflection of that when you		sure I'd ticked all the boxes	now and again, I've been	take something and I suppose	something so its making me,	that I enjoy doing'	influence then I go back
aracters, how they move,	am just thinking well I want	everything but yes I think I	look at a tailored jacket it is a	I thought it was successful in	and then right at the end I	looking for an image of	It is the same with what you	as I'm reflecting, I'm also kind	(02_01_342-355)	everything and I've got
ow they might move in the	the degree out of the way	still took loads of	lot more than meets the eye	what it was but it wasn't	thought sod it, this is, I need	something and I know I have	are thinking about as well as	of projecting forward on to		much visual research ca
attlefield and what could be	now and I can sit and focus	photographs so it wasn't - I	and even a jacket when you	what I wanted it to be in my	to be doing this one basically,	put that image on my blog so	you are doing it if that makes	you know, how it could work		I've pinned and pinned
heir weakness or strengths	on actually doing this and if it	thought I will do one at home	go into a shop so now when I	head at the beginning it was	so I just sat down and wrote	I will end up sitting there and	sense' (11_01_321-331)	and then it leads me off on	'when I went to the museum,	and I use them as influe
o it helps when you go into	takes six months, twelve	and I literally went round and	go in say like some people say	something completely	ok, if I had my perfect	going back through my stuff		tangents that I can look at or	in Leeds and I took images of	for my drawings to get t
oleplay situation and you	months, whatever, and go	took photographs all over the	you can get a jacket from a	different and I think I gave up	business, this is what it would	and think oh God, I'd		go back to the original, so it is	things were kind of related to	historically correct, I'm
ust think right I'm a dwarf I	about it in the right way, do	place and then wrote up	supermarket or there is not	a little bit too quickly on that	be, and kind of started	forgotten I'd done this or		making me thing a lot more	my project, when I went	into history so yeah'
an't move very much but I	the research, to get people to	about the actual place the	much of a difference how do	idea because it just wasn't	working backwards then from	done that or should do more		about what I am doing and	home and I looked at it, it	(01_01_188-191) [On h
m very strong so, I know	give me feedback and	date the time how I was	you compete with it, it's like the fabric, the fabric is one of	working it was taking me too	that point, I think I'd gone	of this. The college stuff, the		why I'm doing it' (02_01_304-	was like, they all look the	they use the platform
hat was really random but'	develop it, I know as well that	feeling and everything so	the rabric, the rabric is one of the visible elements of it but	long to get there and then it evolved into this whole	about it the whole wrong way	stuff I've done for up, that's		311)	same, then when I started	Pinterest)

Figure 22: mapping data to theme 3

4.3 Ethical considerations

Student participants

The British Education Research Association (BERA) (2011) states that the 'securing of participants' voluntary informed consent, before research gets underway, is considered the norm for the conduct of research'. Permission to work with and collect data from participants was sought from the College of Social Sciences Research Ethics Committee at the University of Glasgow to obtain their approval to start conducting the research and collecting the research data. Formal ethical approval was given by the College for working with participants in The Hunterian Museum and FE in HE institution, approval was also given by the sponsor/host institution where the research took place. BERA guidelines state:

Where the sponsor acts essentially as a host or facilitator for research, researchers must, out of courtesy, inform them of the work they propose to undertake ... sponsors should be offered a full, honest and amenable justification on the final choice of methods (BERA, 2011).

In their ethical guidelines for educational research BERA stipulate that those engaged in action research 'must consider the extent to which their own reflective research impinges on others, for example in the case of the dual role of teacher and researcher and the impact on students and colleagues' (BERA, 2011). Ferguson et al. (2004) emphasise the importance of ethical approaches regarding the involvement of students as participants in faculty research: 'an essential component of the fiduciary relationship is the trust on which it is based' (2005: 58) particularly when participants are the researchers own students. student participants were recruited through a process of sharing and talking about my own autoethnographic research. The opportunity to participate in the study was open to all students on arts based and design based HE degree programmes so as to recruit from a diverse range of interests, ages, gender and discipline background.

Although these methodological and ethical issues are significant, the need to advance the knowledge of the disciplines or the pedagogy of the disciplines is also a worthy goal. This tension between the goals of the

researcher and the goals of the teacher will be constants when studying in this area and must be addressed through design (Ferguson et al. 2004: 62)

The research design for this study enabled participants to decide how to use the tools and methods for digital autoethnography and for which aspects of their practice and work. Therefore, participants made their own decisions about whether to use it for specific modules/units on their programmes, across their practice, for assessed work or for work that was not submitted. Several participants (six) had been students on modules I had previously taught, however, in all cases the work that participants shared with me for this study, was for other tutors' modules or modules/practice I had limited engagement with at that time. Participants for both studies were provided with full information of the study with Plain Language Statements (Appendices 9. and 10.), had the right to refuse to take part and were able to withdraw at any time during the study without any consequence. As stated in the Plain Language Statement for student participants:

Taking part is voluntary. You may wish to take part in all of the activities, some of the activities or not take part at all. Any decision to not take part or at any stage withdraw from the process will not affect any assessment grades, feedback or any relationships with staff (Appendix 10).

Digital Tools

Hewson (2016) observes that ethical guidelines for digital methods are relatively new, and that internet mediated research will 'evolve, and new procedures and ways of thinking about ethics will emerge, potentially impacting upon the way researchers think about research ethics in offline contexts' (2016: 219). An example of ethical issues relevant to offline and online spaces is the blurring of public and private spaces (Hewson, 2016). There is controversy around whether the traces that individuals leave behind online can be considered as public and therefore available as research data, however many social media sites such as *Twitter* and *Facebook* are considered as protected by copyright law and not in the public domain (Hewson, 2016). In the Plain Language Statements (Appendices 9. and 10.) it is made clear that I may take photographs of work and make audio recordings of conversations and I also state that participants may choose to share written notes or information that is published on their own

blogs. When participants referred to examples of using social media or their own private reflections they decided if I could access and use these in the research. This included directing me to their *Facebook* posts, *Pinterest* pages, sketchbooks, public and private blogs. One participant had password protected several posts containing video logs (Vlogs) which I was given access to for the research. I did not have access to private audio recordings or footage but descriptions of their content and accounts of the experiences of making them were shared in the interviews.

The choice of which digital tools and platforms could be used was purposefully left as optional and open to participants to make their own decisions. They decided what and how to use the technologies that were available to them and what to share publicly and with me. Equipment held on the College site was made available to participants: the two kits included a Go-Pro camera, tripod, video camera that could project recordings, voice recorder and fitness tracking watch. The *Wordpress* blog 'Seeing Practice' (seeingpracticeblog.wordpress.com) provided technical support for these digital technology tools. It was important that participants could use their own devices and were also provided with information about no-cost options for digital applications as well as the user agreements and privacy issues that can occur with platforms hosted outside of the educational institution. The guidance was based on the examples used for my own digital autoethnography, however participants used what they already had in place for personal and education

The equipment that was available to participants would remain accessible to them as students after the study as it was purchased by the participants institution as part of the research application. Some investigation prior to the purchase of this equipment had been made into the very new wearable technology: Google Glass. This technology would have given the research a different focus of testing the possibilities of this technology for autoethnography. My rejection of this technology, still very much in its developmental stage, was for several reasons. Although I felt that using Google Glass might be an incentive in recruiting participants, it would make the focus

purposes.

too narrow, was largely untested in any long-term issues regarding usability and health and safety impacts. I was also concerned with integration and compatibility issues Google Glass may have with other tools and platforms and whether they would be robust enough in the hands of arts and design students and their studios. I realised that it made more sense for participants to use technologies that were familiar to them as well as providing some additional equipment and support resources that they could access.

Autoethnography

Because autoethnographers are the source for data collection, authors of the texts and the data there is significant pressure to 'explain the sources of their data as well as the way they address ethical issues' (Tullis, 2013: 256). Individuals and communities along with the authors are visible in the research and it is important to consider whether this will cause harm and to what extent participants can be protected and anonymised (Tullis, 2013), 'The word auto is a misnomer. The self might be the focus of research, but the self is porous, leaking to the other without due ethical consideration' (Tolich 2010: 1608). Ellis et al. (2010) remind authors that as with traditional ethnographers, autoethnographers may have to guard: 'privacy and safety of others by altering identifying characteristics such as circumstance, topics discussed, or characteristics like race, gender, name, place, or appearance (Ellis et al. 2010: Paragraph. 31). For this study participants signed a consent form which stated 'I agree to only record myself and other consenting participants who are taking part in the research. It is very important that non-participants do not get captured on audio or visual recordings' (Appendix 12).

Tolich (2010: 1605) is highly critical of the advice given by key proponents of autoethnography as guidance stating that they 'provided ambiguous instructions, embodying both process consent and unspecified ethical reflexivity'. Tolich (2010: 1605) suggests that asking "Who would be offended by what is written?" 'sensitises and focuses writers both to potential harm and to their responsibility to minimize harm', as well as thinking about those mentioned as vulnerable. It is also often the case that the 'other' in autoethnographies are friends, family and in this study: colleagues, peers and tutors.

The examples of autoethnography referred to in the literature are mostly situated in the social sciences and health care, therefore the issues referred to often relate to sensitive, potentially embarrassing, criminal or health related accounts. However, for Arts and design work, which may reflect challenging topics, personal circumstances and experiences, there is a large grey area of ethical guidance. Gray and Malins (2004) refer to some aspects of ethical practice for artists and designers relating to permissions for use of data, misrepresentation, and misleading of the public, and using data with integrity and care. However, the remit of this study was clear in that participants were asked to discuss their experiences of using digital autoethnography rather than provide detail and insight into the subject matter of their work. If participants mentioned specific tutors by name these were anonymised in the transcripts and removed from screenshots of participants sketchbooks and social media. Because participants agreed to me using imagery of work it is possible that they could be identified through their own publication of work and reflection on their own social media and through public exhibition.

It is a significant challenge of autoethnography and digital autoethnography that large quantities of material is amassed which when re-examined creates more detail and data. This is an aspect that needs to be carefully managed particularly relating to the focus and timescale of projects, modules, and courses.

4.4 Approach taken with Findings

My positioning as researcher, artist, and teacher and how these shifted throughout the study is well documented autoethnographically on the project blogs, private repository spaces, write ups and reflections from fieldnotes notebooks and audio recordings. These autoethnographies therefore exist elsewhere, in multiple locations outside of the thesis. My experiences and thoughts were not necessarily compartmentalised into 'researcher', 'teacher' and 'artist' but a dialogue between all perspectives. The discussions and findings of my autoethnography brings together excerpts from the public blogs, private repositories, writing up, reflections from fieldnotes, notebooks and

audio recordings. These artefacts are the process of doing autoethnography and products of it.

5.0 Creating Spaces for Reflexivity: An autoethnography. Discussion and findings

5.1 Introduction

Creating Spaces for Reflexivity is an autoethnography of three interconnected parts. The strands of the autoethnographic research are:

- An autoethnography of Researcher (Figure 23)
- An autoethnography of Artistic Practice (Figure 31)
- An autoethnography of Teaching Practice (Figure 42)

In a/r/tography terms these strands are an 'embodied query into the interstitial spaces between art making, researching, and teaching [where] research engages in pedagogical inquiry where the distinctions between researcher and researched become complicated, responsive, and undone' (Jevic and Springgay, 2007: 67).

5.2 Creating spaces for reflexivity: An autoethnography as Researcher

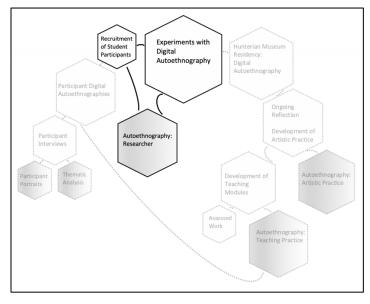


Figure 23: Map of research: An autoethnography as Researcher

There was a physical experience of not knowing or being certain at the start of the process of making work. Reading back from the documentation became a reminder of how it felt to not know what was going to happen at the start of researching and making new work. After listening back to an audio recording linked to the blog below (Figure 24), I wrote a short piece (Neil, 2018) in response to this initial experience.

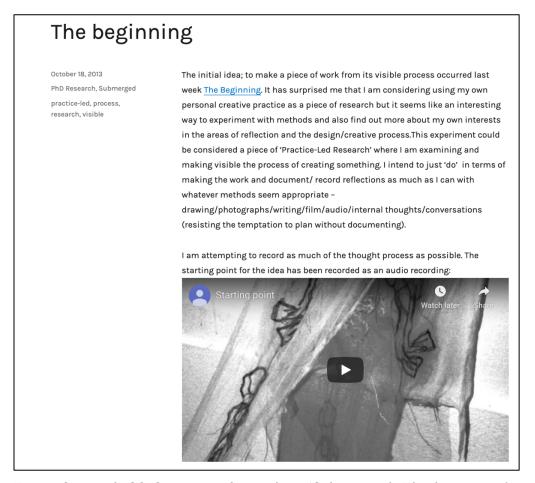


Figure 24: Neil, 2013 excerpt from Blog, 'Submerged: The beginning'

It was comforting to read through this account, like encountering a story that has happened to someone else, and although it reads as though someone else has formed the sentences, it is a narrative that I instantly connect to. I describe what it sounds like to listen back to it: 'quietly, slowly and awkwardly I describe my idea ... I talk for about two minutes, there is no emotion in my voice just a stilted, monotone, but clear expression of an idea' (Neil, 2018). However, I do not express what it feels like to listen to it. Listening back to the actual recording is far more uncomfortable. I feel tense and awkward again listening to the uncertainty in my voice. The comfort from reading about this episode may come from knowing there is a positive ending (I do make some work) not known

to me at the time. The uncertainty and what it feels like to be 'in the moment' is made visible.

There were aspects of being both researched and researcher that I found myself wrestling with: I was self-conscious of recording myself and describe this as feeling 'tethered', 'being bound to my role of observer of this process I cannot lose myself in the process as creative practitioner' (Neil, 2015) and my feelings and emotions 'stifled', ' it is hard to let yourself be vulnerable and respond in the moment' (Neil, 2015). However, I also note that being able to revisit the recordings later distanced me from being in that moment and 'able to reflect on my experiences in a different way' (Neil, 2015). It is important to stress that these were not just decisions about work I was making 'in the moment', but how I felt at that time as well. The recordings made the 'in-action' (Schön, 1983) moments and inner dialogue visible: the split-second decision making as well as my emotional responses to the situation.

The autoethnographic process and artefacts it produces are a living body of knowledge and experience, and for the duration of the residency it became a live discussion with visitors and potentially a wider audience on the blog. Experiences of making the work and observing it were relayed to visitors and often remained descriptive. These conversations focused on the work produced because of the process, rather than what the research told me about reflection, the use of technology or changes I would make to my teaching practice. However, post-residency the experiences continued to evolve with further write ups, revisiting the blogs and conversations. These new experiences, while in the shadow of the residency, cast new light back on these experiences.

In the physical space of the museum I was the artist, and the technology I used to record audio and visual events enabled me to make the work without needing to pause to take notes, although initially there was an awareness of being recorded, and I had to consciously start the process of recording. The collected data was both the physical outcomes of the making and the recordings of this making, for example a series of drawings on paper and digital footage of making the drawings were both data from the research. The documentation as a method

of data collection became interesting to me as an artist and the digital technologies soon became additional tools for making work. Being researcher and artist was a rich context, I developed a heightened awareness of both. There was also a shift in my relationship with the tools, evident in the verbal descriptions of objects which, I later considered to be 'verbal drawings' with the potential to be 'pre-reflective activity for drawing' (Neil, 2015: 40). There was a synergy between the method or process of the research and the work being made.

I found the language of ethnography useful for locating myself in the research and my role as a researcher in the museum environment was more easily defined to visitors. It was also a new context for making and a different way to contextualise being an artist. I describe the residency as fieldwork, observing myself in the culture of the creative making process:

The museum in this culture represented a repository of source material as an established and well-understood convention ... the visitors were invited to take part in this culture: making their own creative responses to the artefacts or to take part with me observing myself in this culture. The visitors were part of an established system: visitors to a museum that I interacted with while being in my own system: artist/researcher making an artwork (Neil, 2015: 1).

Although there were postcards and posters in place to engage the audience, I hadn't considered how I would feel in the space trying to engage with the visitors. The table of resources and participant paperwork made me visible but became a barrier (Figure 25, below), I felt that it suggested that I was providing an information service and I didn't want to appear like a canvasser who interrupts people as they go about their business. It was better when I moved about the museum with my sketchbook and engaged with visitors as they wandered around, an artist behaving as you would expect in this habitat. At times it was difficult to balance making work and engaging with visitors. Working outside of my sketchbook and large scale became one strategy to combine being present in the work and present with visitors. These experiences gave me a heightened awareness of my identity and what I was doing rather than just being immersed in making.



Figure 25: Public space for residency

The identity or role I had in the museum was not just artist and researcher, the experience of becoming resident was significant to my experience. I refer to this as an 'enculturation' which heightens my awareness of the space, my own identity and provides insight into how I felt in the early stages of making work in the museum. I describe feeling awkward and alien in my new environment having not made the shift from visitor to researcher and artist and wonder if 'pretending' is an important part of working through, processing experiences, and making identity shifts (Neil, 2015).

When I listen to the recording I made at this time I gain insight into feeling vulnerable and the discomfort of not knowing. I sound nervy, anxious, apprehensive and what I am saying is quite factual. I remember being self-conscious as I tried to record what I was feeling but didn't really want to express this fully; I don't sound very convincing about what I say I am doing but I am trying to reassure myself. I ask myself questions to try and work out how to engage the audience for example, something I continue to be concerned about.

There is evidence throughout the blog posts, private reflections, and post-residency reflection that I found the technology to be a distraction from my thoughts in the moment. In one post from the early experiments, I stress that it is important to keep the digital technology as invisible as possible because I was

concerned that the work would become about the technology. Prior to the residency I describe how the technology has 'disrupted what might otherwise have been a continuous flow of process, making and documenting' (Neil, 2014b). There is no mention of reflection here and it is possible that the making without disruption is a process without critical reflection. To support this theory, in the same blog post I concede that 'the amount of reflection that has been enabled by this documentation process has illustrated to me how iterative my ideas, processes and interests are' and continue by sharing the insight I have gained into my work. A similar disruptive experience occurred during the residency; in a private note I write 'the intense nature of doing and recording has left little time for reflection' (Neil, 2014c). I later consider this to be a reference to:

long distance reflection, sense making that can take a step back from everything and take into account many experiences; and therefore having a well-informed overview with which to have understanding and make clear decisions (Neil, 2015).

This is confirmed by my observation at the time that:

it has been a lot of in-the-moment reflection and the luxurious feeling of absorbing experiences to allow ideas to emerge has felt very squashed, but I anticipate that the synthesis or fermentation of ideas may not happen until later (Neil, 2014c).

I specifically refer to 'in the moment reflection' and I think this relates to the quick decision making and instinctive reactions I had to make throughout the day. 'In the moment', meaning to react quickly rather than to mull over or reflect in a lengthy way.

The passing of time led to shifts in clarity. However, it was not necessarily the case that my understanding and thought process became clearer, 'I didn't often wake the next morning feeling and knowing like I did the previous evening' (Neil, 2015). I describe this as moments I feel 'buzzy' and wanting to go in different directions and work quickly and confidently, but '24 hours later becoming more tentative when the clarity and excitement faded' (Neil, 2015), 'things that had clarity yesterday have fogged over' (Neil, 2014d). What I had emotionally experienced the day before had been of-the-moment, transient, and

I seem surprised at its fleetingness. In some ways I questioned whether the clarity had been there at all, but I was certain in that moment. Knowing and not knowing was interchangeable and not necessarily linear or progressive.

In the post-residency reflection (Neil, 2015) I describe how a recording titled 'Afternoon Reflection' sounds animated because I am speaking quickly, enthusiastically and sound relieved. The liveliness of it leads me to conclude that I am thinking through the talking, not recording words that have already formed in my head but thinking out loud, without rehearsal, making thoughts visible and the process of thinking visible. I am capturing thoughts and feelings in that moment. In this recording I state that my feelings are changing throughout the day, that it has been a nerve-wracking process because I have relinquished control and not sure of what will emerge. Because this recording is at the end of the day it is clearly easier to express what have been difficult emotions after they have passed. I may have struggled to articulate how the making process felt in these early stages, but I could hear it. Hearing the fear and relief helped me to re-connect to the shifting emotions that I felt at different times throughout the process of thinking about and making work.

The tools and techniques I used to document sometimes interfered with my process and reflection. I was aware of this interference partly because it prolonged the creative activity: I had more to observe, I could see more of my process, so I had more to think about and time became a mediating factor. There was almost a power relationship between me and the technology, in its presence and influence. Documenting a day's productivity produced a day's worth of data and almost needed another day to process. The 'after hours' reflection involved re-listening to and transcribing conversations, downloading and uploading photographs, doing basic edits on videos and copying and pasting from one platform to another. This was a strange combination of technical work and becoming inspired, sometimes learning how to use software, and reliving and making sense of the day's experiences (Neil, 2015). This was evidence of thoughts and experiences that may have otherwise been forgotten if not recorded.

This aspect of the methodology and process meant that I was intensely immersed in the work I was making and seeing it through additional 'lenses' or perspectives from the documentation. The intensity of the residency and processing of the documentation within that time meant that I spent more time looking at and thinking about the work I was making than I had for a long time with my usual practice. I also found that the form of technology used: audio, photographs, video, enabled different ways to reflect and each impacted on what was reflected (Neil, 2014b). These spaces enabled me to think differently about the same work and gave me different ways in; *Evernote* had the raw stuff, un-edited and un-organised, a sort of kitchen drawer. This repository contained the tangents and cul-de-sacs and links to potentially examine. It was my 'safe' space, private and somewhere to digest thoughts and experiences and also shape them into more presentable forms, a pre-publishing area but valuable fieldnotes (Neil, 2014f).

There was a lot of richness in these experiences that created a dynamic environment to make work. There is an issue that it produced a sort of echo chamber or closed loop, however the repetition, iteration and tracing were already present as themes in the work and the documentation of it became interesting to me as an artist. The externality of the blog and the conversations with visitors also enabled the dialogue to be explored outside of this documentation feedback loop. The autoethnographic methods became like additional materials, tools and approaches for making work.

In both projects the footage where parts of me were also visible in the act of making had a significant impact on what I reflected on and how the work developed. Observing the self, stimulated further questioning about how my work may be about me and my interests. Observing how I looked at the subject matter and made a drawing from it 'the rapid movement between 'artefact' and created image...enabled me to think about my own relationship to the act of drawing and recording, in a more intimate way' (Neil, 2014). The wearing of the equipment felt theatrical at times, footage of me making a drawing while also wearing a headcam (Figures 26-28, below) shows the drawing to one side and includes my face, focused on drawing and the movement of my hand recording.

It is a strange personal view, an intimate viewpoint that shows something about making and reveals the reverse or inside of a drawing. By contrast the third eye view or artist-view of making the drawing seems more clinical and not so personal. There is a sense that it portrays something of what it feels like to make a drawing and the physicality of making a drawing.

From the recordings made in the museum I became aware of how they show surfaces and textures of materials I was not aware of, qualities of light and an atmosphere from being in an empty museum (Neil, 2015). There was something theatrical about the lighting which creates dramatic shadows of my hand and the pen cast over the paper, emphasising the point of contact the pen tip makes with the paper (Figure 29, below).



Figure 26: Still from 'Submerged' project (Neil, 2013)



Figure 27: Still from Residency project (Neil, 2014)



Figure 28: Still from Residency project (Neil, 2014)



Figure 29: Still from Residency project (Neil, 2014)

In the early experimental work, I also worked with the footage of myself drawing by subjectively and unscientifically translating what I had observed see into quantitative data. Figure 30 illustrates how through using film editing software (*Camtasia*) I was able to measure the length of time spent looking at what I was drawing compared to drawing it. The quantitative data became visual: columns of numbers and evidence of examining the raw data became drawings again. Focusing on this slowed me down and observing myself led me to connect with the physicality of making a drawing in more detail as I was giving something that was habitual closer attention. The disruption of pace that the analysis of this data caused was perhaps far useful than the findings it generated. The process of making, moving on to new ideas and work was halted while I pondered on and interpreted what I had recorded.

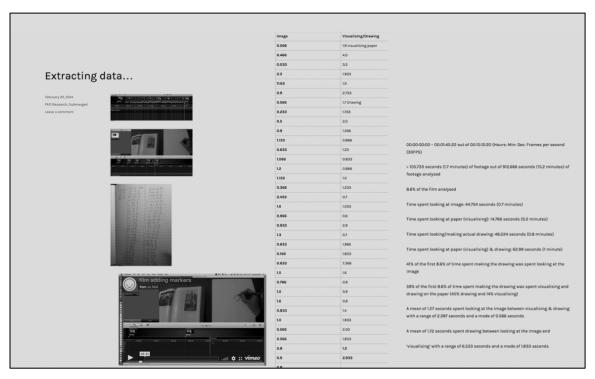


Figure 30: Neil, 2014a blog post 'Submerged: Extracting data'

In the museum I thought of the visitors as participants in my creative process that encouraged dialogue and the revisiting of ideas. There were in the moment dialogues but there was also a larger dialogue involving many voices over the duration of the residency. I describe this as each audience getting a different 'me' each day and a different part of the process (Neil, 2015). The process was not completely transparent: as I moved on each day, new visitors would not be aware of what had previously occurred. Although I am pinning up drawings it is not very clear how it is all unfolding, it is only through conversations or when people go to the blog, they see the process more holistically.

I had conversations with children and adults which challenged me to communicate in different ways. The change in audience, the dynamic I had with them and where I was in the process enabled me to find different ways to explain what I was doing and what I had done encouraging an ongoing sense making for myself. The initial conversations with visitors and myself are a sort of anticipatory reflection where I give slightly different versions of what I have done, what I intend to do, and what I expect to find out.

The iterative nature of the process became very apparent especially when daily I was recounting conversations, connections and ideas that occurred with previous visitors, but also when transcribing recordings and selecting excerpts to create a narrative for the blog. The visitor was a real audience for face-to-face conversations and remained 'present' in my mind through voice recordings and summaries on the project blog. I found that it was important that I imagined an audience reading what I wrote directly onto the blog. This helped to give me a sense of talking outside of myself rather than just to myself. I feel very strongly that the blog provided me with a notional audience, which helped me, write, construct stories and in doing so helped my sense making as reflective. Telling the story of my creative journey, like a public diary, helped me to look deeper into my thoughts and feelings about the work and research. I was able to reflect in detail about the events of the day because much of it had been accurately recorded, although it was not always accurately re-told. The blog does not follow the chronology of the real day and a certain amount of editing and storytelling took place. The story telling is a reflective activity a sense-making but at the time I felt I was giving more of an accurate documentary of my process. I hoped my 'documentary' would reveal what my creative process looked like, de-mystify it and show how decisions are made and ideas develop and become more fixed. Because the reality of this is so messy, confused, repetitive and unclear at times my construction edited and cut a line through it to create a chronology that was not there in such defined terms. It gave me a new space that allowed me to alter the sequence so that I could make sense of the various experiences of the day. Some of this was practical, the data collected had to be listened to, transcribed, photographed, uploaded and it was not possible to document on the blog in real time (Neil, 2015).

The audience is a significant theme for analysis as it was not only a real physical entity but a real virtual one as well as an imagined virtual one as well. I could not be sure who I was talking to on the blog if in fact anyone at all. My notion of audience at any given time helped me to explore thoughts and ideas in different ways - to test out what I was thinking as well as through conversations allow thoughts and ideas to become consolidated or emerge. My practice was therefore informed by this interaction, and I also allowed ideas to be formed

from the thoughts and observations of others. Sometimes this took the form of taking ideas that emerged in conversations and entwining them with other thoughts and ideas. The making of the work felt like a co-constructed process with both real and imagined audiences.

The story writing was very much about being for someone else to read but at the same time this process helped with my own sense-making. As I listened back to the conversations, to transcribe them, the participants spoke to me again. Suddenly memories of the room we were in, other unrelated events that were part of that day came back to me. This was not particularly relevant to the research process, but I could focus on their words, be with them again. Occasionally listening to a participant on the recording I would say to myself, 'I hope I ask this!' and with relief, mostly I do. I am not sure if I am remembering that I did ask that question or perhaps the same thoughts are triggered by what they are saying (Neil, 2015).

5.3 Creating spaces for reflexivity: An autoethnography of Artistic Practice

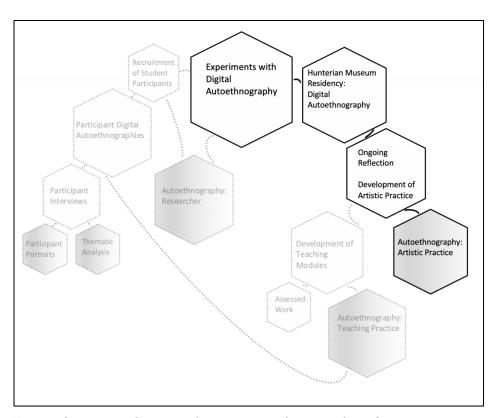


Figure 31: Map of research: An autoethnography of Artistic Practice

5.3.1 Pre-Hunterian: Discussion and findings

My artistic practice is anthropological, an opportunity to observe and interpret human behaviours and constructed environments, the everyday, as well as the more specific and insular behaviours in the 'art world' related to making, documenting, exhibiting and preservation. However, I did not think about my practice like this until after the residency. Looking more closely at the work I make, how and why I make it became the starting point for an extensive reflective investigation, an autoethnography. I started this process by looking at my previous artist statements so that I could re-examine what I considered my practice to be, how have I used words and language to define this (Figure 32, below). I knew what I liked doing, what I was drawn towards, but had reflected very little on why I was interested in those things and working in the way that I did.

I am inspired by often quite mundane objects with an interest in our relationship to them, how they are used, and the context in which we view them. Sentiment and nostalgia sometimes play a big part in my work, either through a personal attachment to the objects, or a constructed narrative.

The visual aesthetics of the objects and images I work with are really important and sometimes it is about finding the hidden beauty in the banal and every day. By playing with interesting juxtapositions and making connections between seemingly disparate artefacts interesting qualities emerge.

Experiences and half recalled memories often inspire responses to objects and imagery the creative process often starts with photographs, the objects themselves and sketches. This 'ideas research' stage often involves revisiting existing work or developing unresolved pieces.

Figure 32: Excerpt from personal statement highlighted to illustrate key definitions

My first video documents my decision making. It wasn't to demonstrate a technique, but to share the moments of my starting point. Because it was

recorded in short bursts using a mobile phone the footage needed to be reassembled on the computer to make the sequence again. I found that recording and re-watching these moments gave me more time to reflect and digest rather than insight, partly because I was finding ways to record and save the video files, there was also the technical process of uploading the footage on to the blog. This clumsiness with my initial techniques and tools for recording slowed me down and gave me opportunities to look at what I had recorded several times. This process of making the recordings was not an invisible third eye or fly on the wall, it was very physical, clumsy, and present.

I came to a stage with the first project where I wanted the documentation to not only inform me about the work but to also become the work. This took me into unknown territory regarding digital media; I researched into conductive threads, mini LCD screens and how to incorporate digital audio and visual elements. The work then became something that I was trying to map out in my head, and I was leaping ahead trying to visualise what this final sum of parts might look like. This was not what I wanted to achieve with the autoethnography, it momentarily became just about making rather than researching into my making; the work seemed to be not about 'making the invisible visible' in terms of process but making it about the technology. However, thoughts and ideas that may have previously been instantly dismissed became extensively documented and defined, given visibility. I decided to tackle this and made a post on the blog, which helped me confront the challenges of authentically documenting my process and address the issue of interference of my methods/technology. I eventually accept this interference as part of the process I was embarking on, and also accept that the digital forms I am using to document with are my working materials, as well as my tools.

Recording my drawing process with the headcam and video camera and watching the footage back enabled me to break down the drawing process, to see and think about the separate components. From this I learnt about my own techniques, but it also altered how I might approach subsequent work. I was able to observe detail of what I do when I am drawing and noticed that 'sometimes I pause and don't make marks when I am looking at the image, I am

copying but sometimes I'm looking away and continuing to make marks and record. So, in a way drawing blind' (Neil, 2014g). I was able to observe the image and the drawing emerging at the same time and it made the inaccuracies, that I was not able to see immediately when I was drawing it, more noticeable. As different parts of the drawing emerge it starts to change the relationships between other things that are already there, and I become more confident in putting things in place. I am surprised at the amount of movement that is magnified by having the headcam compared to what I thought was a quick glance while drawing. I realise that I like to work on a drawing quite quickly and would rather have the pen making marks and moving and allowing something to emerge and grow. I remember when I was drawing how there were some awkward bits that were difficult to get right, but when watching it back, it doesn't seem that way. It appears that working into it things get resolved. When you are in the moment and making a piece of work you are never sure whether those things will get resolved and so it's more problematic in the actual making (Neil, 2014g).

I was not making new work in a contextual vacuum; the work was situated in the context of my previous working habits and experiences and preferred materials and techniques. However, the image I had chosen to work on (figure 33, below) took on additional layers of meaning as the research progressed.



Figure 33: Image of 'the diver' source for starting point

I was not just an artist; I was also an autoethnographer. This was a new identity that emerged from researching my practice and initially was separate to the creative practice. However, I begin to think of myself as the diver, taking on a role, performing as researcher exploring the unknown, submerged and experiencing a new world. I am a navigator and being navigated. This was explored further later through a conference presentation and performance in 2017:

I am drawn to the image of the diver - I then make a series of drawings, stitched drawings and installation work based on this imagery. I later ask myself about my connection to the diver: the frogman ready to dive - about to enter the unknown, to enter a space that is challenging, uncomfortable, unfamiliar, strange and risky. Am I the frogman? (Neil and McGuirk, 2017).

The performance aspect concluded in being in the water (the conference was at a hotel in Latvia which had a sauna and cold plunge pool) where I became the diver with images of the developed work (Figure 34). This long arc of reflection (three years) manifested into a very different type of academic presentation and artwork whereby I was exploring both practice and research as artwork. It was also significant that this became performative.



Figure 34: Still from Performance 'Breaking/Mending/Making' Riga (Neil and McGuirk, 2017)

Using the technology and the process of documenting my practice brought an additional dynamic to it. The digital technologies were not 'silent partners', their disruption to the pace of working and work that was made also influenced what and how I communicated. The technology also changed how I experienced seeing the work, in the same way any drawing medium will alter an image or the way an image is communicated. In these ways the technology felt like an additional medium or material to work with.

The temporal aspects were important, although the process of documenting the making and thinking happened in real time there was time between these moments and when it was seen and listened to again. Organising this data, transcribing, editing, and uploading to the blog created a space to reflect with the experiences again, make sense of them and give them visibility to an audience. I felt at the time it was a disruption, but it was also causing me to slow down, to spend more time with my thoughts, the work, and ideas of what I might do next. Documenting my making felt like creating a piece of work and this alleviated some of the pressure I felt, I was testing and experimenting with materials and ideas, but the documenting was always a resolved 'product'. I often did not know what or why I was making, but while I was wrestling with what I was doing I was still being productive, the documentation was producing something. This process was buying myself time to think and resolve ideas and decisions. I also realise that I did a lot of thinking about connections between ideas, while I am making. While it demonstrates the importance of just making, thinking through making and making to reflect, it felt like a very un-reflective part of my process and how habits quickly become formed.

The slower process, pausing to record and make notes as an autoethnographer enabled me to be more physically and critically aware; my thoughts often fliting between the creative work and ideas, the effects of the research methodology and thinking about how what I am doing relates to students' own learning. These dualities felt very rich, overwhelming, and confusing at times but very fertile spaces. It was in these moments that the work took on new meaning, became lucid and consolidated which I was able to express in writing:

I became interested in how repeat tracings or free-machine stitching of the same image is a form of mimicry but that through the process each one turns out differently and evolves ... when learning we often mimic the actions of those we are learning from but also thinking about 'mimesis' as copying/ imitating/ replicating in terms of drawing is interesting when through this process it changes into something else and no longer replicates the original source in the same way. By contrast 'diegesis' an ongoing narrative - telling rather than showing describes the process by which I am exploring and sharing the making and evolving of the work (Neil, 2014h).

This excerpt from the blog below (Figure 35) combines my thoughts and reflection on the work itself, how this relates to an educational context (The themes of copying and repetition are embedded in pedagogic traditions of art and design education (Elkins, 2001)), and to autoethnography. As a piece of reflection there are many layers to unpack and had it not been for my positioning as researcher (autoethnographer), as well as artist I don't think it would have been expressed in this way anywhere else.



Figure 35: Written reflection on blog

The conclusion to this work became a documented installation, a two-minute video of the work: (https://youtu.be/NucimdL_mKA) and became a piece that incorporated physical pieces and the documented process. It illuminates ideas around repetition, copying, echoes and making with stills from this work in Appendix 1.

The blog also became a useful way to reconnect to ideas that had been disrupted as I could revisit my last lingering thoughts or moments of making. I also noticed iteration in my ideas, processes and interests. I became more sensitive to layers of meaning in the work: finding myself in the imagery of the diver for example, but what I was doing with the autoethnography related to my previous interests in cataloguing, documenting, and museums as repositories of knowledge process of recording, organising and ordering on the becoming further iterations of my interest in museology, and again in my interest with the encyclopaedias as portable museums of image and text. In a way my understanding of my practice became flattened, as I gain insight or interpret where the origins of my interests come from I understand work I have made in the past, make further connections to work I am making in the present and work I may make in the future.

However, the biggest impact of watching my own making was how I felt about the tools, techniques and materials I was using. Seeing myself as subject and object also enabled me to see how I used these tools and materials, what they did in response to me and what I did in response to them. There was something significant about knowing what these materials felt like to hold and use but also what I looked like using them. I felt more connected to the materials, their qualities, and their moments of becoming image or object.

5.3.2 The Hunterian Museum, University of Glasgow Artist Residency as Hunterian Associate: 'Drawn Together: A conversation with the collection'

The blog for the residency, Figure 36 below, and available here: https://drawnconversation.wordpress.com/) is part of my overall

autoethnography and remains as a digital artefact, a research output rather than an artwork in itself, however it is the main repository for digital outputs I would consider artworks: short videos, sound pieces as well as images of sketchbooks, paintings, drawings, textile pieces and sculptural pieces. They form this body of work as research and have been instrumental to my development and understanding of my practice but are also pieces that could stand alone.



Figure 36: Screenshot of front page to navigate the Hunterian Museum residency blog

The residency represented a new chapter in my practice, a way to understand and build on what I brought with me: several years of making, experimenting, projects and themes, techniques, and experience. It was not that I was suppressing this, but the residency was an opportunity to critically engage with what might emerge and why it emerged. What aspects of my practice would come forth and what would this new scenario influence me and the work I make?

I documented a lot about the disconnection I felt when starting the work in the museum, I found myself 'performing' a role and not yet embodying it. I was not a visitor or employee but something in between, a hybrid, both - a visitor who doesn't leave (Neil, 2015). One of the first things I did as resident was to make some drawings in my small A5 sketchbook - breaking myself in by doing something I felt comfortable doing. I could have been anybody in the space drawing. I felt like I was pretending at being an artist in residence, not being deceitful but playful in terms of make-believe.

The first drawings I made were of nests, I liked that they represented a beginning or starting point, they were also empty vessels and structures designed to contain, like the museum itself. I did not know if they would become important but what was important was to start somewhere. This idea had occurred to me before I started the residency, as much as I had tried to go in completely 'blank', I had some ideas of where I might start as well as the reasons for this. In my final summary of the day, I say that it has been hard to remain 'blank' of ideas and not have a clear vision of what I wanted to make before I started (Neil, 2014c).

The drawings from that morning were diverse, see below (Figure 37), representing different ways in as starting points, visiting objects that visitors had talked about and influenced by what they had noticed, and appear unconnected. Some of the drawings have notes, not related to the drawing but thoughts and questions about observing myself that occurred to me while drawing. Some comments on a post-it note share what I was thinking: the emotional connection or relationship people have with drawing, how drawing slows your thoughts down, you are looking and simultaneously interpreting and that the materials you use are important to this interpreting process. The various notes were a mixture of comments about the drawing itself and what I was thinking about at the time. The drawing was helping me to think and looking back at the drawings they are products of observing objects but also products of this thinking.

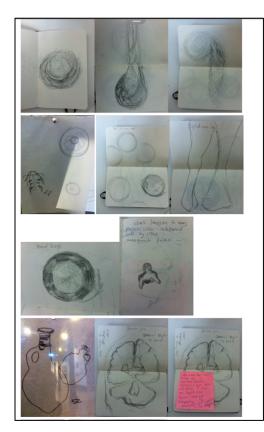




Figure 37: Day 1 drawings

Notes also served as shorthand reminders for ideas, 'Arks, Pairs, Left eye, Right eye', Materials change what we record', 'Drawing helps us see detail', 'drawing slows down looking', 'objects mean different things to us', 'we see things differently', 'slight movements change what we see' (Neil, 2015). These become physical reminders and reassurance of decisive action to take. The conversations, imagery and strands of ideas became prompts for later conversations, and these thoughts and ideas get revisited multiple times and in different ways.

My earlier autoethnographic observations of my drawing practice revealed that I spent as much time looking at the object I was observing as I did to the marks I was making on the paper. Using clear plastic sheets to trace objects through their glass cases with one eye closed I was able to look simultaneously at the drawing marks I was making and the object I was observing. My thinking became less closely focused on the accuracy of the drawing itself and more about the mechanics of what I was doing and looking for details I had not traced yet. I describe the acetate tracing technique as an 'animated' way to draw and I think

I am referring to the physical making of the drawings, feelings while making the drawing, as well as its visual appearance.

While talking about drawing to a visitor I observed how I could capture the effect of depth perception in a drawing using this technique, alternating which eye is closed when recording the image animated the object, it shifted about as I changed which eye was open. I became interested in the double image drawings these produced, Figure 38 below. I initially felt that the autoethnography had more of an impact on the direction of the work but realise that it mainly allowed me to look at how I approached image making in more depth. The double images were a result of me thinking about what it really meant to look at something, so the autoethnography helped me to understand something new about something familiar to me. The autoethnography enabled me to document/capture my journey with a view to understand the creative making process, but as a reflective process itself it changed my relationship to my making. The autoethnography was giving me a new way to look at and analyse and understand my work and working practices. I do not think of this as an epiphany where I have found the definitive way to think of myself as a practitioner but a different way to think about myself in relation to my work, with more insight and sensitivity (Neil, 2015).



Figure 38: Stills from left eye, right eye headcam drawing

The work at this stage started to become about looking at looking. It felt like the research and making were folding in on themselves, destined for a dead end. But there were two clear strands: firstly, the ideas that emerged from the objects themselves, their aesthetic and formal qualities, and contexts, and secondly the feelings and emotional experiences related to looking, thinking, sharing and making: I felt a closeness to the materials, thinking more about the moment the ink makes contact with the paper, the movements of my hand and weight of pressure I was applying.

On the blog I talk about how difficult it was to record what is seen and to also understand what is seen due to the repetitive patterns or complicated patterns of the object. Perhaps being overwhelmed by detail or seeing too much detail. This was particularly the case with trying to record a large coral and on the blog noted that sometimes recording the detail was difficult, almost too hard to because it was so intricate, small or became too patterned, I found myself guessing and getting lost in the repetitiveness.

The Coral that was so complex to draw was situated in a freestanding glass vitrine, so it was possible to record from multiple angles (Figure 39, below). I make a point of noting the link between the coral and two participants enjoyment of it. The acetate tracing enabled me to approach the drawing as blocked out patches of tone and three films were made, one with the headcam and two separate films from other angles where the back of the drawing could be seen. The films were all first go attempts and using the equipment on basic settings. For this film the construction of the drawing as seen from multiple angles was not synced together it was an experiment that was approached as data collection with chance artistic merit.



Figure 39: Still from composite film

The editing of the films was completed in software I had on my laptop that allowed me to make a composite film of all three, learning how to do it as I was going along. The forty-five-second film was a sort of sketch, the technology enabled me to capture something that became a visually interesting piece of work as well as 'data'. It recorded process and thinking and reveals a moment in making from the point of view of the artist as well as the object. This was looking and drawing as play. I was pleased with it as a video, as a product itself and thought it was something interesting to watch but not sure what significance it would have. The actual recording of the coral represents the process of looking and thinking about the coral rather than looking like the coral at all.

For some drawings like the butterfly wings, I recorded shapes and outlines, acknowledging that there was so much I was not able to record and so added written notes that gave descriptions, similes: one had silver patches that looked like blobs of solder or foiling. The other had chrome oxide green stripes. These descriptions were written to try and communicate what was being seen and the comparisons I was making between the surface qualities and textures reveal something of my experience; I know what fresh blobs of solder look like, the technique of applying thin sheets of foil and in my memory what a chrome oxide green looks like. I started to see these descriptions as drawing marks. Making the drawings focusing on detail I thought about recording a very detailed spoken description of an object, I later refer to these as verbal drawings and consider them to be a pre-reflective activity for drawing to help see more clearly, observe details and understand how to approach a drawing of the object.

A recording of looking at some Maze Coral, describing it was to stumble around and find words to describe what I was looking at, 'it looks like it is quite papery, if I were to touch it looks like it would fold and bend somewhere in-between paper and tissue paper, but I know what coral feels like to touch' (Neil, 2014i). I can still remember my experience of looking and finding words and the coral itself is a clear image in my mind. The spoken description enabled me to look more closely and experience that object more immediately. The original audio recording starts quite fluidly with lots of words that describe the object, finding my way around the object with words. Listening back, it doesn't sound like I am

stumbling around to find words, more that I am really looking and thinking, it perhaps felt like stumbling (Neil, 2015).

Finding a cabinet filled with unlabelled strange forms of scientific equipment not knowing what I was looking at I made spoken descriptions, describing what I can see visually, looking for clues about what it is made from and making guesses about its weight and several drawings. If I had come across these on day one, I may have responded differently to them or they might have prompted me to respond to another experience differently but using language to understand what I am looking at, language as marks or preparatory sketches had become an established way of thinking based on the earlier work.

Certain ideas were resurfacing and taking root. I wondered if I was more sensitive to certain things being said because of what I had been thinking about or sensitive to coincidence and making connections between things. Earlier in the day I found a fifty pence coin in my pocket which I immediately connected to the drawings participants had produced, patterns of same scale, illustrated with Figure 40, below. It felt like I was in a heightened state of reflection where everything was noticed and connected to in some way.







Figure 40: The fifty pence piece and examples of participant drawings

Post-residency, my narrative doesn't just focus on the creative work, much of my reflection is on my re-positioning, wider contexts and the residency as a piece of research. I share that the last couple of weeks have been chaotic and describe the residency as being a removal from the everyday and immersive, which as reflected on earlier, required some adjustment at the time. The chaos

was from being 'flung' back into the everyday and this was disruptive from a creative process perspective. I describe this privately as a 're-enculturation' process and speculate that the difficulty is because my roles and identity are not solely focused on the creative process and research when outside of the residency. I describe the identity of being a creative practitioner working in a 'symbiotic' way with other roles I have but for the duration of the residency these additional roles were very much just in the background.

My intentions and ideas form a list that extracts key ideas from the residency and brings them to the fore as potential pieces of work. I explore several starting points to see what evolves in the studio setting and with materials and processes more familiar to my practice. I describe in some detail the making of the drawings where I used my hands directly on the paper with the charcoal material. This is not a technique that I had used before and the only clues to the decision to try this come from wanting to feel a contact or directness to the paper or perhaps thoughts and feelings as a direct record as possible. I describe this as feeling odd it felt like something was missing between my hand on the paper and it also felt surprising that the marks that were left behind were there, a feeling that wears off after the third drawing. The experimentation with materials and ideas continues and is documented sequentially on the blog (Appendix 2). It was a process of moving to and fro through the blog, sketchbooks and digital artifacts from the residency and the pace of this work varied. However, I also made work which was more related to making sense of the research experience, I wanted to try and summarise the residency for myself and created what I called a reflective film (Stills below, Figure 41). Recording the moment I drop an etched image of a drawing from the residency onto ink and slowing it down provided a background, an event to summarise the residency. The slow-motion video provided a sort of framework or structure, a space to reflect in and with. The written captions became an interesting and rich way to create a narrative and reflect while combining the research and practice.

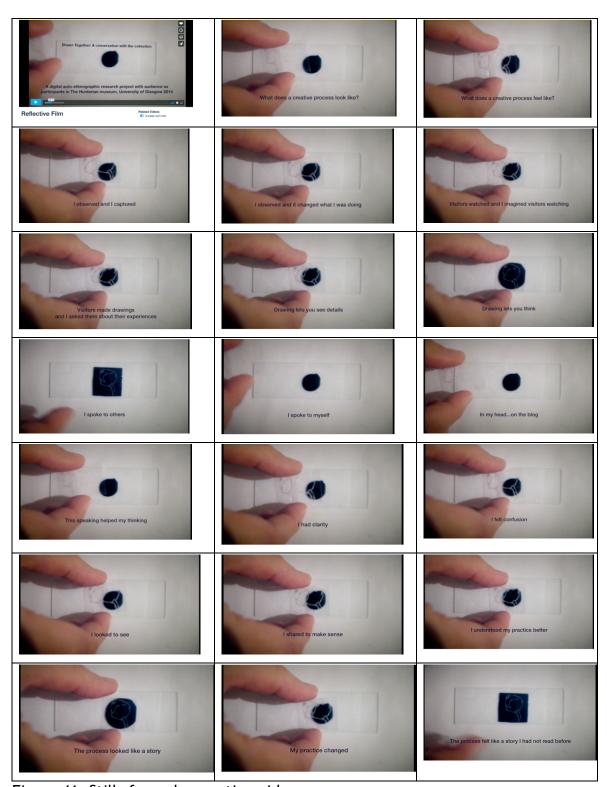


Figure 41: Stills form slow motion video

5.3.3 Post Autoethnography

From the residency experience the final concluding pieces didn't feel as important or significant to my practice as much as the process did. I finished the residency feeling the impact of having recorded myself thinking and making: I found a new sensitivity to the materials and tools I was using, I also developed a

sensitivity to my own presence in the work. This related to being more physically present but also being more aware of how my own thoughts, feelings and experiences could be more visible in the work I make. My roles were not separate identities, they were all me, but I had often compartmentalised them or had them defined for me by others.

The work post-Hunterian shows how became more open, experimental and risk taking in my practice. While this is outside of the initial autoethnography, the impact of the test project and Hunterian residency on my practice was so significant, it warrants its own section. There were many longer-term impacts and findings from the autoethnographic research process. In the body of work that followed (Appendix 3) and continues to be developed, I work with the motif of the diver, and I start to use myself in my work more frequently. Not as selfportraits as such but I find a new connection to my own personal experiences and explore ideas around documenting private performances, 'performances in the home', that enable me to play with my own presence in the work, writing and reflecting. This work was a way for me to explore the less visible internal images of the self and becoming a sort of ongoing tableau with the other selfportrait work. I began to explore ways in which to combine traditional conference presentations with short performances. This was a significant moment as I felt that I had found a way to use the conventions of the presentation space as a location for artwork production. I also developed other strategies that I considered to be artworks but also artifacts of the research. 'Interview with Self 12 Questions' was one of my strategies to reflect on my experience of the autoethnography but was also a continuation of this research approach through writing. It was not initially written for publication but as a conversational reflective piece. Interview with Self Part II became a response and extension to the dialogic reflection documented from the questions in Part I. The performance was a response to visual and spoken excerpts from Interview with Self Part 1, that prompted a live dialogic conversation. I became more playful with my work particularly in exploring the line between research and practice, presentation and performance and my practice in relation to reflection, writing and performing.

5.4 Creating spaces for reflexivity: An autoethnography of Teaching Practice

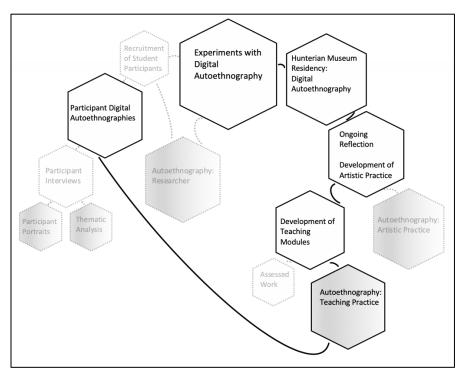


Figure 42: Map of research: An autoethnography of Teaching Practice

When I was experimenting with the digital tools I was reminded of how quick and easy the software made it to try, reject or refine designs and ideas as they appear. Thinking is taking place, but it is more instinctive and decisive. If not fully documented these become transient moments in the digital environment. While it is straight forward to take screen grabs of it is often too easy to create new versions rather than subtly refine and be critical of existing work, making it difficult to see decision-making.

This fast approach to making also relates to how much decisions without trying things out, making work and editing may take place in the imagination. Making as much visible throughout my experiments, I am reminded of how important it is to try things and see the differences between what you see in the mind and the experience of making and seeing what is made. The speed in which work can be made means that ideas and experiences are often not revisited in the light of new experiences.

The mid-point and summative in-depth interviews focused on what participants had discovered, what their experiences were and whether they used digital technologies for their reflection and professional development. The open and unstructured approach to the interviews meant that they were invited to take the lead. For many this was an opportunity to do most of the talking and the interview became an additional space for students to make sense of their experiences. Some required more prompting, or the interview was where they set out their intentions. The recordings were shared with participants straight afterwards for their on-going reflection. The interviews became a key moment in my relationship with the participants. I realised that although there were similarities to a tutorial experience, the students discussing their own research, findings, challenges and successes, meant they were doing most of the talking. Some participants didn't require much prompting at all and on one occasion it was specifically brought up how the interview felt less directive:

this process of interviewing it is a reflection on it and it is a self-assessment of it as well so all of that makes you think about your work in a different way as well ... I think the tutorial is often I think it is very different because I think a tutorial you are contending with different forces at play you have the expectations of the course you have a curriculum as a framework that you know you are being marked against you have got learning outcomes ... people come and give you tutorials doesn't matter where they are from whether they are external or internal they all bring their own preferences and their own aesthetical judgement into it ... that can be difficult so it feels like there are times when you might skew or bend what you are saying, how you say it in order to accommodate (10_02).

The recorded interviews made an impact on how I thought about the usual face-to-face tutorials I did as part of my teaching practice. The expectation and formality of framing the conversational exchange as an interview shifted the responsibility. They became an opportunity for dialogic reflection, participants on several occasions explained that it was in the moment of the interview that they made sense of their work or their relationship to it. These experiences changed how I viewed tutorials and potential methods of assessment which led to using recording equipment more, at least encouraging students to record their conversations, relisten to them and even use as an alternative method for assessment.

Inspired by my own experiences of conducting the interviews with participants I used the technique of conducting an interview with myself. Writing my own questions about my experiences of using digital autoethnography I responded. The period of time between writing the questions and responding to them (about two months) enabled me to respond to them with a genuine distance. The structure created a dialogic space to reflect in and was a playful way to think more critically about my experiences. Figure 43 below is an excerpt from the published interview.

Between October 2013 and June 2015 I experimented with using digital auto-ethnography to observe, record and re-observe myself as an artist. Digital tools such as a digital voice recorder, Go-Pro headcam, and private and public digital platforms were used to observe my non-digital arts practice. My identity as researcher, teacher and artist were inextricably linked. A key question I had for this research was how these digital tools and platforms might help me to develop or gain insight into my reflexivity and artistic practice. Pink et al (2016, p.13) suggest that 'ways that digital ethnographers might reflexively engage with their worlds is concerned with asking ourselves precisely those questions about how we produce knowledge'. The research was therefore also an opportunity for me to understand more about what reflection is for arts practitioners, so that I might be able to support the creative arts students I teach more effectively. This paper is an interview that I conducted with myself in late 2016 which includes further discussion in italics. The interview approach was used as a reflexive technique to support the developing case study.

- 2. Interview with self: 12 questions November/December 2016
- 1. You recorded different aspects of your making. Why did you start to do

I realised when I started to look at various personal statements that I had made about my work, my practice, that I had lost connection with them (these statements). The statements were basically statements that had been carried forward. I had made some observations about what I thought my work was about but, at the same time, it didn't really mean anything to me, or didn't feel very current. New statements felt like updating of previous statements - improving the language to describe the same things without questioning whether these descriptions were still

relevant, and without reflecting on the work itself. It was feeling like this, and also that I wanted to understand more about what was experienced throughout the making process, that led to the idea of recording as much reflection as possible (while experiencing thinking about and making work). This was also to try and experience this as a student might, to understand what emotions and experiences emerge throughout the process to potentially empathise more and find better ways to teach. I was interested in the reflection: the reflective activity that takes place about, and through, making art. What does reflection look like? How can it be captured? Why is it often absent from students' work in a critical or dialogic form? I was interested in what I might learn from recording what I do and think, and whether anything could be revealed, surprise me, or change my relationship to my work. The statements that are often made about a person's practice are often so decisive and assured and I thought this is often what students see². Even when we are allowed into the process by an artist it is often seeing the technical side of them making that work or a narrative of how their ideas developed, not always how they reflect on their work, what the making of the work feels like, or how they make sense of what they do immediately, or over time

2. How important was it to use digital technologies?

The technologies were important because I had already been using a blog to document my work and at times used it to reflect on things to do with my research. I wanted the blog to continue as a way to have an audience for my writing and work.

Figure 43: Interview with self (Neil, 2017)

This published article became exemplar material for a module 'experimental research' for level five BA (Hons) Fine At students. My experiments with the digital technologies to observe myself sometimes crossed over from documentation into pieces I considered to be art works and my practice. Using video recording as a way to slow down and puncture my usual habits also became an approach I suggested to students. Another approach was to make the 'not knowing' and finding ways to not know, become a stranger to the practice, a strategy. Using technology or purposefully slowing down and dissecting aspects of their practice became strategies for reflection.

¹ Artistic statements are commonly made to accompany personal profiles and applications for artistic opportunities. The use of statements about my artistic practice is reflected on in full in the blog post The Beginning' October 2013 https://fietlikleit.wordpress.com/2013/10/18/the-beginning/ (Neil, 2013)
² My own experiences as an art student reinforced this; artists visiting to give a slide show about their work would often present a linear and seamless account of the work. The fear and uncertainty of making work was rarely spoken about.

The impact from the autoethnography and participant interviews on my own practice was significant and this in turn fed into my teaching practice. I felt encouraged to explore the very symbiotic nature of my artistic, teaching and research practice through several collaborative pieces (Appendices 4-6).

Recruitment **Experiments with** Hunterian Museum of Student Participant Autoethnography Digital Autoethnography Participant Digital Autoethnographie Participant Autoethnography Artistic Practice Participan Autoethnography Analysis Teaching **Portraits** Work

6.0 Creating spaces for reflexivity: Participants

Figure 44: Map of research: Participants

6.1 Introduction

Giving participants a research approach of self-observation, which I had begun to term 'digital autoethnography' focused on participants becoming researchers into their own practices. This provided an approach where the student participants were invited to become actively aware of their own learning, which I hoped would become a mechanism for liberation from teacher led approaches. I hoped the methodology would enable students to think about their making processes in different ways, consider their emotional experiences as well as notice things about their practice they hadn't before. I linked the approach to reflective practices, locating practice in wider contexts and professional identities and introduced them to the possibilities of using various digital tools and platforms to research themselves. At this point I considered this part of the methodology as potentially a pedagogical tool as well as a research tool that would help me compare findings with my own autoethnographic experiences. These layers of the methodology would be more apparent through the individual experiences of the participants and the merit of it as a pedagogical approach an area for further research.

A different way to reframe the complexity of this process is to consider the creative making process as the main subject of the research, which was examined through a series of phenomenological enquiries, one of which being my own. The second iteration of the digital autoethnography was for students and provided an opportunity to explore pedagogical ideas as well as the replicability of the method through several participant studies. The student participants would provide breadth and depth to the research and methodology being tested.

6.2 Participant Portraits 01-13

It is important to provide an overview of these portraits because while the thematic analysis identifies themes across the data set it does not provide a narrative of either the common or idiosyncratic approaches participants took. TA on its own does not provide continuity or contradiction across an individual, 'these contradictions and consistencies across individual accounts may be revealing' (Braun and Clarke, 27: 2006).

The participant portraits (Section 6.2 and Appendix 7) provide a detailed overview of the background and engagement that each participant had with the project. They illuminate the varying engagement and different approaches that each took to the challenge of documenting, reflecting and sharing their experiences and findings. The participant portraits are an opportunity to get to know the participants better as individuals.

Across all disciplines there were examples of participants who had specific, diagnosed conditions (seven) that hindered their ability to write written reflection and/or organize their work effectively. A further four participants identified having a personal struggle with writing reflection and its impact on their assessment. For the remaining two participants the research was an opportunity to consider the depth or writing style of their reflection.

Introducing digital autoethnography didn't necessarily provide a quick fix for participants' difficulties, but the research did provide a space to try new approaches to documenting and reflecting on their work while they were making

it, rather than retrospectively at the end of their projects. While it may not have been evident in the work they submitted for assessment, the interviews often prompted reflexivity and provided an additional space for participants to make sense of their experiences through sharing with me. The first interview question asked participants to tell me about their experiences of using digital autoethnography. Each participant approached the research in a personalised way: participants 01, 02, 05 used digital autoethnography as a one-off focused research intervention that led to different degrees of reflection and interpretation in the interviews. For all three participants the interview enabled them to reveal more about their insights into their experiences which for 01 had impacted on the depth of research she made into her theme, for 02 led to more in-depth reflection of her own habits and emerging professional identity, and for 05 a detailed understanding of his process of making work, making mistakes and rectifying them which led to richer accounts for annotation and reflection. The impact of these experiences was not necessarily visible for assessment.

Participants 03, 06, 07, 08, 09, 10 and 13 took a longer-term approach to using digital autoethnography that became apparent through the interviews and evidence in sketchbooks, social media and the work they produced. These participants used several strategies rather than just one to implement digital autoethnography. Their approaches became developed, evolving from the effects on their reflection and practice. The first interviews enabled a discussion of their initial findings with subsequent interviews asking participants to revisit these experiences. For these participants the second interviews were an opportunity to revisit these experiences after a period of time but to also discuss additional experiences, experimentation and deeper reflection on their experiences. These participants also considered the interviews a rich space for reflection, specifically for 10 who considered it a neutral space to say what she wanted without judgement.

Participants 01, 04, 11 and 12 needed more prompting in the interviews. While 01 did engage with digital autoethnography and explored a specific task using it, she did not go beyond this initial experimentation and did not follow up with a second interview; therefore, gaining an understanding of the impact it had was

limited. 04, 11 and 12 discussed the work they were doing in the context of digital autoethnography but did not specifically set out to try anything new. This provided some insight into their relationship to reflection, technology, the issues and benefits. For 12 the theme of her work was more closely related to autoethnography, but she provided some good accounts of the difference between using a sketchbook and blog. 11 had discovered a combination of mobile applications and software that helped her to express her ideas more effectively and 04 had lots of ideas about autoethnography that were shared in the interviews but didn't always materalise as actions. 04 and 12 both used the interview to generate new ideas, possibilities and intentions and while it remained an interview space the experience of interviewing these participants was closer to the demands of a tutorial than the other participants. 04s honesty about how she approached reflection (something done at the end) and like 01, a habit of eradicating mistakes, was informative and useful in understanding their relationship to making work, reflection and assessment. 04 and 01's dislike of mistakes is in stark contrast to 07 who began to purposefully reveal the errors she had noticed in her own working process and pieces. Rather than dismiss the accounts of less engaged participants it is important to consider how and why these participants responded in this way and also that they are a valid contribution to the spectrum of responses and experiences.

Eight participants were in their final year of study (year two for FdA programmes and year three for BA (Hons) programmes with the remaining five at the start or middle of their courses. For those at the start of the programme their main concerns were about the quality of their written reflection compared to those in their second and final years who were also concerned with their professional identity with the exception of 01. This would correspond with the emphasis on programmes where at the start the focus is more on skills acquisition building towards independent direction and professional identities.

One of the technologies that participants borrowed was the Go-Pro headcam: 04 had clear intentions to use the device to help with primary research for her subject matter (recording a journey) anticipating how it would help her gain insight and experience but did not do this. 04 also used the Go-Pro to research

her theme (game playing) but to gain insight from her own participants wearing it while playing. This experience led to more in-depth research and discussion about this approach in the interview. 05,10 and 13's use of the Go-Pro illustrate a spectrum of experiences when using the device to record the act of making. 05 recorded the construction of a model and used the footage to observe behaviors and mistakes in his process which led to more reflection on his own habits and approaches. 10 recorded herself making a drawing which also gave her insight into the process but led to her experiencing this as a performance (an additional camera was also used). The footage became a record of this work but also a piece in its own right: 10 slowed down the footage and experienced the making of the drawing differently. 13 recorded the process of her making work (noticing banal details in everyday life) by recording a train station by holding the Go-pro at her feet. The experience of recording enabled a reflective discussion of what it felt like to do that as well as her noticing the physicality of her own actions and movements while recording. Again, the footage became a way to observe but also a piece of work. 05 was asked whether the footage of recording the making could be seen as a piece in its own right but he felt that it was just for him. It is significant that 10 and 13 are fine art students and 05 is interior design and more likely that the fine art students would see the digital recordings as process and product. This is echoed by other fine art participants: 08's use of the footage from his iPad application where an animation of a digital drawing, while providing him with insight into making the work also became a piece of work and 09's use of Facebook where documenting and sharing work and ideas became a tool for the process rather than just a presentation outlet. This was also evident in design-based students whose work took an arts-based approach: 02 and 12 (both textiles students) had elements of autoethnography present in the themes of their work. Their work was based on documenting personal experiences: 02's work used imagery and text from everyday experiences that required a lot of documentation and attention to detail and 12 recorded her pregnancy after being inspired by others who documented their pregnancies on social media, she incorporated these elements into her own work practice. However, in both these cases the autoethnographic approaches only provided content for the work being made rather than the documentation becoming separate pieces. 06, (fashion) used autoethnography to help with recording her

creative ideas and also quite functionally to record aspects of making (folding fabric like origami) while her footage was not used as separate pieces, through discussion she spoke in depth about the connections she had stated to make about her own identity, personality, the physicality of body movement when folding and conceptually how these linked to the garments she was making that were folded and could change when wearing them. The depth of reflection expressed in the interviews was not evident in her sketchbooks. Using the unstructured interviews for participants to reflect on their creative processes were essential to understanding their experiences.

The portraits provide a more nuanced account of how participants encountered, interpreted, and engaged with digital autoethnography. They reveal how each student embedded being a participant and digital autoethnography into their own practice over time and bring insight to the variables of the study: each individual's discipline, context and experience. The nature of a qualitative research study that is conducted over a long period of time is that a lot of data in multiple forms is produced. The participant portraits give a voice to all participants and provide a narrative for those who may have participated less and who are not as visible in the Thematic Analysis. They have been useful when assessing how digital autoethnography could be used with students, particularly that one approach would not be suitable for all.

7.0 Thematic Analysis: Interview Findings

Participants came to the research with different experiences, attitudes, habits and external contexts. However, they all experienced a shift in their relationship to making and designing as they experienced a complex interchange of their own identity and identity of their practice, awareness of themselves, awareness of their practice and awareness of others' practices. The following themes:

- Identifying with the creative process: A shifting relationship
- Externalising the internal: making the invisible visible
- Nature and nurture of the creative process

formed from what became visible through the thematic analysis, constructed from participants' experiences of 'becoming' artists and making work. These aspects included the temporal, spatial, embodiment, intersubjectivity, their intentions, what participants were willing to share, and what could be observed.

The themes illuminate how participants identified with their own making over time and the shifts that were identified, noticed, and experienced briefly or over extended periods. In the phenomenological tradition this research values the spectrum of different experiences, not aiming just to reach a point of defining just commonalities. Each participants' lived experience is valid; situated within the same context of becoming a practitioner and the culture of making and designing.

7.1 TA Theme 1: Identifying with the creative process: A shifting relationship

Evolving identities

Participants commented on changes in their practices and artistic identities that they noticed over time, described by 09 as 'evolving', but these changes were not always about being more certain or definitive about themselves or their practice. Understanding these shifts did not automatically mean that 09 could

or should pin their identity and practice down, 'I am evolving myself as an artist in the way that I think, so I don't think I have actually found where I am going to go as an artist' (09_01), or in 10's case want to, 'I am always wanting to do lots of different things never any one thing and I think that ties in with issues like identity and a reluctance to put myself in a box (10_V01). 10's background impacted on how they approached making at the start of the course having had a long gap outside of formal education, 'coming from a completely non art environment, the last art I had done was in high school' (10_02). Discipline and professional labels were important to the identities of participants across art and design programmes, nearing the end of her degree 07 felt she couldn't label herself professional, 'freelancer I don't mind calling myself, but professional, I don't know whether it is because illustrator rather than artist ... I never really called myself an illustrator or anything before Uni ... I think a doodler or sketcher or something like that' (07_02). While not feeling ready to identify herself as a professional in her field there had been a significant shift from identifying as a 'doodler or sketcher' to freelance illustrator.

Becoming a student, designer or artist relates to being outside of, and entering a new culture or way of thinking about yourself, described by 10 like learning a new language: 'art is the language you absorb and another culture' (10_02). This was a stark comparison to how she felt towards the end of the year 'I have come in saying I don't know what I am doing, I don't know where I am going you know and actually some of that is alright you know, its ok' (10_01). 10 went beyond not wanting to pigeon-hole her practice but came to think of 'knowing' and uncertainty as a 'material' which could influence her ideas and thinking which suggests that she was learning something about what it is like to make work and be an artist, not just learning how to make things: 'what I am wrestling with is uncertainty and needing to allow myself to accept that uncertainty as being a material, looking at that uncertainty as a material something that can influence my work, that can influence my ideas my thinking and that almost that it is essential' (10_V01).

Participant 09 felt his artistic identity was something thought and felt rather than determined by the work that he made, possibly as a result of his

uncertainty of his practice being in a fine art rather than a brief-focused (design) domain (photography):

I am finding myself as an artist more, I feel a bit more comfortable about what I am doing as well, where as before, I don't know what it is because I have been in my mind panicking if I am a photographer or a fine artist (09_00).

The 'wrestling' of 10, and 'panicking' of 09 suggest great discomfort in these shifts. 09's feelings around his identity were documented early in the course after he had changed from photography to fine art. Similarly, 06 felt uncomfortable labelling herself as a fashion student because her interests were not always within fashion, but in animation, textiles and writing stories (06_01), which suggests a disconnect between a sense of personal identity and the culture of the specific discipline. This discomfort might not be articulated within the culture of the discipline. Contributing to a developing identity, 04 began to realise what she didn't understand <u>before</u> starting the course: 'like if someone had said to me 'grading' or something like that I wouldn't know what grading were' (04_01). Becoming aware of how identity and relationship to practice shifts over time potentially strengthens the bond between self and the culture of the discipline. From previous professional work 10 had a particular idea of reflective practice:

I came to it with baggage ... training I have done, there was a lot of emphasis on reflection. It was completely different because it was about a formula and it was almost like a prescription of reflection, really that isn't reflection, someone else imposing their idea of what reflection is and expecting to fit into it so it's more freeing the kind of reflection we do (10_03).

Technology and identity

Across disciplines there were several examples of where significant aspects of identity impacted on their relationship with the making process, speed, and accuracy in which they could work. 06 is multilingual; recording and relistening to thoughts in their two main languages helped her to construct the most accurate translation for annotation in their sketchbook. Speaking the language that came to mind, the flow of thoughts and ideas were uninterrupted. The

recording literally documents the nuances of their cultural and linguistic identity before the thoughts are reformed for presentation to others. Using the technology to help untangle reflecting in different languages was unique to 06 but using a mobile phone to record her voice instead of typing into it meant that 07 could verbalise what she wanted to straight away and without error: 'rather than fight with auto-correct' (07_01). Recording her thoughts verbally also meant that she could make her own identity through her voice more visible: 'like I have a habit when I am typing to use the thesaurus a bit ... then it doesn't sound like me (07_02).

The digital technologies helped participants see changes in their relationship to their making, with accounts suggesting an awareness of shifts occurring between clarity and fuzziness. In the moment of making or thinking we can't imagine not remembering what we know, experience, and feel. Sometimes this was prompted by a shift in context in which participants were familiar. 02 noticed a similarity between informal lifestyle blogging and reflecting on their work:

I've taken some photographs and I've written about what I was doing that day and it's, gosh you know, I'd forgotten, you know, but it is trying to create that image in your head again of where you actually were and what was going on at the time (02_01).

It was evident that these skills and experiences could be a hindrance if the shift in context was not fully recognised or understood. Participant 13's previous use of a blog had not been critically reflective: 'I would just post pictures without any information so it would just become a stream of images rather than ... informative' (13_01) but became more critically aware of what reflection could be and able to discuss these prior habits.

Participants' relationship to their tools and materials also had a significant impact on their relationship to the making process and their practices. Using temporary materials across paper-based and digital practices enabled changes to be made easily: 'to express the right words I write everything in pencil first ... because like that I am able to change [it]' (06_02). The pencil as a temporary tool becomes a first attempt or 'practise' but also evidence of a reflective act.

06 gave the example: 'I am annotating for a few hours in a day, leave it and do some physical work, and when I go back to it the next day or a few days after I can re-read it and change it' (06_02).

The use of different technologies sometimes changed how participants engaged with writing. 02 noticed differences between the typed reflection compared to the written. They stated that they were less likely to re-read handwritten notes; the writing on the blog made more sense to them and they speculated that the descriptions and reflections had more clarity because the process of typing enabled the text to be edited more easily. The technology also impacted on the style of writing:

the actual handwritten stuff that I have done seems very vague and flowery and all over the place but when I actually type something it seems to be a lot more concise and I'm getting my thoughts down in a way that when I read it back, makes a lot more sense than when I read back, I don't tend to want to read back something I've handwritten 02_01).

02 later speculated that being able to edit as she was going made her writing more palatable on her blog: 'if you're handwriting it, you're just putting everything down' (02_01). 02 described typing into the blog as a reflective process: 'suddenly as you're writing it, you're thinking, I could have done this, or I could have done that' (02_01). This raises the question as to whether it is enough to just write thoughts down or whether it is essential that these are revisited later.

11 described the digital space as a way of connecting all the elements of her practice and the 'freedom for you to think elsewhere' (11_01). For 10 the camera was a significant tool in creating new spaces to reflect on her sculptures; looking through the lens helped her to see the work differently, using the technology to be the stranger and see how others might, (10_V02) gave 10 'perhaps a tiny glimpse to how other people see it as well' (10_03). Documenting their work from one medium to another was a strategy to cater for different perceptions of audience: 'I will then take that home (loose paper) and then type it up in a way for my book, but I will type it up slightly different for

my blog' (04_01). 04 relates her writing style to her perception of audience rather than something implicit in the method used. The use of digital technologies in these examples enabled participants to identify with their creative process in new ways that gave insight into their practice. They gained an understanding of how their relationship to their work or perceptions of their practice can fluctuate.

05 found that although the blog was like a structured diary because 'you can edit a post', it was difficult to navigate: 'you have sort of got to put, this is my edit on it, it gets very difficult, I found it difficult to go back and re-find things you know from weeks and weeks ago cos you don't know exactly what date you did it on' (05_02). However, 04 found that accessing their documentation much easier on the blog compared to the sketchbook:

it is laid out for you to scroll down than to be flicking through books ... know where things are rather than having to look for them or loads and loads of books to get to what I want, it's just easier cause I know that everything that is in my books is on there in some different way (04_01).

The blog space was often revisited by 04, returning to it to add extra information which could be considered a live conversation through the technology, with herself. However, the technology made it easier for 04 to erase this 'dialogue':

It can sometimes be a good thing that I have written it previously and then go back to it because I can see what I were thinking at the time and then now but then sometimes it's not because what I have written at the start will by the time I have finished the start won't make sense because I know what I am doing by the end so I will end up getting rid of that anyway and just starting again (04_01).

How participants used and experienced time, and the tensions from time constraints imposed on them, were a crucial aspect of how they used technology and reflected on their practices. Participants felt that creating a narrative over time or a timeline was helpful for their own sensemaking and communicating with others:

I just make sure they are all in order so that I can see how all the pictures are laid out and then that helps me to remember what way I have done it all ... it gives me a timeline of what I have done and how I have done it (04_02).

This was expressed as taking a methodical approach to their documentation for 08 and useful in terms of bookmarking where he was up to:

I kind of always do reflect on myself ... I always took pictures of my progress what I am going to do what I am doing so I would scrapbook it together and here's a step by step of what I have done even when I work on the computer I still screenshot everything I was doing and also because I will forget what I have been doing, and I can look and see I was doing 'that' now I can just continue so I just use it as like a way of remembering what I was doing because sometimes you can't go through an entire day and finish (08 01).

The fact that the blog automatically 'time stamps' what is added also helped 12 with looking at the sequence and order of events (12_02).

Control

For 03 disabilities played a significant role in her relationship to the making process 'I kind of work really really messy and sometimes that kind of gives me really bad anxiety because then in the middle of something I need to tidy up' (03_01). Other participants expressed how disabilities shaped their relationship to making and reflecting, for 07, dyslexia made documenting thoughts challenging and re-reading annotation difficult, but the voice recording became a strategy to help with that.

The shifting relationship participants had with their making process sometimes became intentionally hidden; 01 realised that their desire to get things 'right first time' meant erasing visible mistakes both physically and mentally 'I have to rub it out and forget it has never happened and just do it again' (01_01). However, 01 realised that recording these mistakes became important evidence, albeit just for others to see, rather than to learn from, 'it will bulk up my work because then it will show it wasn't that at first, it was something else' (01_01). However for 04 it was more important to construct a more controlled narrative of the process and not consider the changes in direction or mistakes as a valid

part of the process: 'what I have written at the start will by the time I have finished, the start won't make sense because I know what I am doing by the end, so I will end up getting rid of that anyway and just starting again' (04_01), suggesting a more descriptive account rather than discursive, dialogic or analytical. With paper-based work 04 disliked erasing or correcting mistakes, preferring to 'screw it up and chuck it' (04_01). 03 recognised a similar tension in her own practice 'I want it to be hundred per cent right', but also recognised that she needed to alter this approach 'it doesn't matter if it's not right, at least I'm doing it, there could be a second attempt of refining it' (03_01). Controlling the making process, or the narrative of it, to such an extent restricts the potential shifts that could occur; the mistakes made through the process, how they are rectified are formative to the development of the work, are important to retain. For example, it was important for 12 that the annotation on sticky notes could be removed or separated from her sketchbook, making notes on the blog with images of her sketchbook instead, 'all in nice order as well so like from starting you can kind of see like how you progress how I progressed on my blog' (12_01). Again, the blog offered an opportunity to organise and portray a more controlled account of the making process. 13's fine art practice became documented over several locations. Blogs and sketchbooks were temporary repositories, with 13 selecting from these to form a coherent order and finalise aspects of her work: 'I have to put in some kind of order afterwards and then this ... I think it gives me a tiny bit of control over it in a way' (13 00).

Several participants found the digital space more flexible and controllable in terms of being able to structure content, edit and delete without any trace. The focus for this seemed to be about controlling the message; the shifting relationship that occurred becomes about covering up dialogic thought, doctoring the thought process rather than reflecting with it. Developing an understanding of the control they held over their relationship to making, stimulated positive changes and the opportunity to let go of habits, 07 was able to loosen up her approach to drawing, making and keeping more of her quick sketches. 02 realised that overly controlling the process from the start was problematic, 'the more I thought about it I suddenly started to have ideas

thinking oh my god why hadn't I thought of that why was I trying to stick so rigidly to my first idea' (02_02).

Considering the other

Participants' understanding of their relationship to their work was sometimes altered through the experience of receiving feedback from others. 09 referred to the experience of a face-to-face crit with his peer group, 'there should be bits left for other people to pick away and maybe see if [what] they get from it' (09_01), which he later describes as enabling an outside view:

the things that people are saying to me about my images and certain things about what I am pulling out from my images was totally there, it was clear, but I wasn't seeing it until other people had said it to me ... I am thinking to myself why have I not seen that, that is pure obvious but I think you can get tied up because it is so personal (09_02).

Similarly, 10 considered it a naivety on her part after realising that the work doesn't have to be really clear, that it was not essential or possible for those looking at the work to 'get it': 'unless you are standing next to your work 24/7 at every visit that anybody ever makes explaining it, then everyone brings their own interpretation to it, everybody brings their own experiences' (10_03). There is a realisation that the interpretation of the work exists outside of them as makers and that their relationship with the work is changeable. However, the input of others was not always perceived as a positive influence for 10, particularly in tutorials: 'whether they are external or internal they all bring their own preferences and their own aesthetical judgement' which 10 found herself altering her own position to please: 'skew or bend what you are saying, how you say it in order to accommodate' (10_02). Reflecting on her work and considering 'other' led 02 to self-edit:

when I'm thinking about it, I'm editing myself you know, thinking would I phrase this if somebody else was reading it or you know speaking to somebody, how would it come across? ... you're conscious of who is going to be reading it or looking at it all the time, so you kind of, you restrict yourself with what you put or you tailor what you put because you think oh, it's got to be suitable for other people to read, or people have to like it or whatever (02 01).

The consideration of 'other' helped other participants make a shift in how they explained their work or re-imagined it from someone else's perspective. 04 explained why the typed up written notes were different for the blog compared to the sketchbook:

there is not as many technical terms and things on my blog as what would be in my work just because I thought if someone else was reading it that didn't do fashion then they wouldn't really be able to understand so yeah I've tried to like dumb it down (laughs) so that if I read it before I started here I could understand it (04_01).

Writing annotations and reflections, 05 initially imagined he was talking to himself rather than someone outside of his work, but later when recording his thoughts out loud, imagined that he was talking to another student: 'explaining my process to them, and that way I had sort of dumbed down what I was saying' (05_01). Using the digital technology as a public facing method for the work led 04 and 05 to Imagine a less knowledgeable reader. While the explanations they gave understated the technical, there is a clear indication that they had an understanding and appreciation of their own development. Rather than omit detail, 13 thought their main audience for her blog was tutors, but considered the possibility that others might access it: 'I would explain something as if they have no idea what I am talking about' (13_01). 06 imagined she was talking to a lecturer and what they might say, 'I am kind of used to questioning and answering myself cause sometimes my sister ... her replies come like a few minutes later ... so I answer like for her and then answer back so it is like a one-way conversation (laughs)' (06_01).

This dialogic approach clearly illustrates a shifting relationship or perspective that the participants had with their work. Thinking about others looking at and reading their work created moments of reflection about the work itself, what and how it should be presented and written about. This provided participants with opportunities to explore different ways of relating to the work. Participants often had a strong awareness of 'other' as critic. 03 described wrestling with what to include and not to include in her writing, feeling that she may be

judged. Wanting to get it right created a tension for them but also consideration that the reflection was also for them:

I thought oh it might just sound a bit gibberish ... but then I thought this is how I'm feeling, this is what I want to use from it so that's what I'm going to put, so there's no point making something up where I'm not feeling that (03_01).

Another critical voice for 03 was their mother: 'I have got this thing in my head that mum's gonna check it ... if it is not perfect, she will say why is this out of place?' (03_02). For 10 the critical voice was their own, it's almost like I have this nagging voice all the time that is kind of playing on loop' (10_V02). Participants were often aware of others' preferences, which for 07 led to their work becoming more client facing 'I think it has gone a bit more professional I will be able to look sort of tune it to what is what a client would want rather than fussing over what looks right (07_01). Using social media became a strategy for this, 'being able to gauge what I am getting likes on *Facebook* can be what I can gear work to which will get more people to notice it' (07_01).

Becoming other

As well as face to face encounters with others or identifying a specific imagined audience for their writing or work in sketchbooks and online, there were also examples of participants having a more general idea of other, 'you've got this imaginary reader or audience in your head ... when I'm thinking about it, I'm editing myself ... how would it come across?' (02_01). Participants, often through using digital technologies, were able to shift from being maker to experiencing their work differently, becoming 'other' or an outsider look in. Making improvements to work as a result of looking at a digital version of it was experienced by participants across art and design disciplines. Referring to using a series of photographs to document her making, 03 explained her newfound awareness:

I can see where I am going wrong more, (laughs) it's more prominent how I'm doing it now, and I can see where I need to make it better, make amendments and where it could be, where the faults are, I can see it and when I do what I'm doing at that time, I can refine more further (03_01).

Watching and listening to recordings was a way of providing feedback for and to themselves. For 07 this meant digitally scanning her paper-based work and looking at it in a digitised form: 'I was able to sort of see where I was going wrong to get to improve' (07_01). This led her to realise that she needed to: 'unlearn some bad habits' (07_01), 'its highlighted a couple of bad habits I have' (07_02). These observations led 07 to change techniques and materials in response: 'I use white ink and highlights a lot more because after seeing it ... how flat a lot of my work is ... I [now] use a mixture between white inks and fine liners' (07_01). The digital technologies sometimes changed the appearance of the work enabling participants to see something new, not making what was always there in the work more visible (theme 2) but creating a different effect, composition or meaning to the work. This frames the technology as a sort of collaborator: bringing something unexpected to the maker. The scan and computer screen became new versions of 07's work, she felt that the camera gave the work a different perspective, 'obviously the camera is not like a human eye so you would see stuff, pick stuff up that you might not have seen' (07_02).

The digital reframe was also useful for juxtaposing work. 09 found sharing his work on the *Facebook* course page was helpful, enabling him to see his work differently: 'it's just good to see where the words and the photographs sit together really and sometimes it's good to get the feedback of a few other people as well, sort of looking at it through fresh eyes really' (09_01). 09 did not use this platform to revisit his work unless it had been commented on: 'I just look at the comments rather than go deep into the image again' (09_01). Looking back at documentation of her drawings, 10 saw details she had not experienced before: 'it almost created sort of like a 3D effect in some of the parts' (10_01). Being able to become 'other' to their own work is potentially empowering and a skill or approach that can be applied that is extremely beneficial post-graduation when access to crits, client briefs, peer groups and teachers might be more limited.

Relationship to time

Becoming aware of their own relationship to their practice or finding strategies to alter these was often related to slowing down aspects of their working approaches. Participants found that reflecting on the process itself rather than just the direction of travel helped these shifts:

extending your thinking to something that you didn't even think about before you would just do it [the process] so it is almost I suppose slowing that process down but I think that is a necessary step for your thinking and for your ideas and a direction (11_01).

On two occasions 10 referred to her relationship to the creative process as a train, this was in response to the idea of making work for assessment: 'the ride's there and you can see the views, but you are kind of always on the train' (10_02). This suggests a disconnect between what she wants to do and the feeling of being carried along. Later, 10 described the making process as a freight train:

I am actually kind of getting used to this idea of sort of not frantically making all the time I have been a bit like a freight train you know with broken brakes coming down the hill in terms of my making I am like crazy mad keep going keep going it's almost like I have recognised that it's almost like a way of avoiding thinking (10_V04).

Making is identified here as not productive when it is used as a way to avoid thinking. In a later reflection, 10 talks about clarity of her 'artist voice', finding a balance between 'reflecting and thinking when not making' (10_V08). The time spent making and not thinking about it, not making and thinking about it, also describe shifts in their relationship to their working.

The experience of being immersed in the work or outside of the work was discussed as an awareness of being present or in the moment. 02 felt that being behind the camera lens became a hindrance and this led to feeling disconnected from that experience (02_01): 'it is like oh my God, I've missed most of this because I was looking at it through a lens rather than looking at it and enjoying the moment'. In contrast the physical relationship with the technology did not interfere with 11 who described how taking regular photographs of her work in progress enabled her to look at it later in a different way:

you are not in that moment as that work is being produced or that lesson is taking place so you are able to think about [when] you worked that time, what you were doing but then take a step back and look at the overall picture it is putting a different dimension on it (11_01).

Similarly for participant 03, being immersed in her work meant that she found it important to take photographs:

taking the images kind of means that you get that time back ... it only takes a few seconds to take that image but then that's there for a long, it stays with you, whereas with memory, you could forget how it's put together (03_01).

Embodied relationship

For some participants, their own bodies became more visible through the recordings, triggering a shift in how they related to themselves, their work, and materials. A new awareness of their bodies, voices and feelings was often tied to noticing new qualities and developing a sensitivity to materials. 10 described an immersive experience using charcoal in her recorded drawing, noticing new qualities in the materials:

I had got this graphite ... it was reverberating around the room so it was twice as loud as the charcoal ... when we played the footage back of the headcam it was actually very strange to watch ... like being on a boat because of the lunging movements you are doing ... you can't ignore the sensory aspect of doing something like that ... you are making movements with your arms and your feet that you perhaps wouldn't ordinarily do and also the sounds that were going on and you are so close to it, remember when you are doing that work you are literally millimetres away from it as well, you are almost in it it's like being in the picture yourself really in a way and you come out of it and you are covered in the material (10_01).

10 talked about becoming more sensitive to the tools she was using to document and when putting the footage together kept the sound in as an important part of the work. 10 described thinking about making in this way as the 'biggest contrast' in what she considers a piece of work and able to see in a more 'contemporary and conceptual way' (10_03). Recording herself constructing with fabric, 06 noticed how her physical technique changed with different materials:

if you fold something small you can use all your fingers giving you more control while the big one you have to use a lot of pins ... and the difference between fabric and paper ... doing it and seeing it is different than seeing it doing it so once I watched it again I will be able to get more ideas of what I could write about (06_01).

Here O6 identifies a difference between how the same event is experienced in the moment and through a different medium. O6 became more aware of her own physicality, what she looked like making work: 'you might miss some small details but while you are watching it you are actually seeing yourself doing it as well and how you have to use your body' (06_01). This is a potentially important shift in seeing the self in the role of maker and to one's identity.

09's work also developed a performative element, realising that existing parts of his identity have always been artworks: 'I think I have always been an artist in a sense I've just never seen it because my body speaks for itself' (09_02), (referring to tattoos). He also noted the importance of how he sounded:

one other thing as well which I have took from you recording it myself, it's the tones and sounds. I am interested in now by listening to myself, like the tones in my voice, so I am going to experiment not actually saying words but making noises and making like sounds with stuff (09_01).

The process of reflecting with the digital technologies led to a several shifts here: 09's own personal identity, how he related to his own work and how he could become further embodied in his work. 09 found a new way to conceptualise the materials used for his work: 'I am thinking of my images as painting and my poems as drawing, as mark making' (09_02).

For participant 10 the value in looking back at recordings was being able to pick up on unsaid things:

I wasn't just looking at what I was saying, listening to what I was saying I was also looking at kind of my demeanour my eye contact, my body language and the contributing things that had gone around on that day or that week or that month that had impacted on the way that it affects my practice (10_03).

Similarly, for 06 it had an impact on her finding herself: 'It is kind of like I am talking to a friend who knows me properly because I hope I know myself better everybody else (06_02).

Trusting the self

Participants expressed their accepting of 'not knowing' and trusting themselves and the making process in different ways, trusting in the creative process and having the confidence to trust themselves as artist and designers. For some it was a gradual process of making sense of their work:

It's a bit of an unknown I don't know where I am going with it what I'm doing and yeah so it's trying to make some order and sense to it and then putting that logically into something that is translatable so it kind of it does make sense that people can understand it that you understand it as well (11_01).

Allowing themselves to try and potentially fail was important. 10 felt that she could get in the way of her own progress: 'allowing fear, allowing doubt, allowing self-criticism to stop me from doing things' (10_02). 09 and 03 realised that trying rather than knowing was an important part of the learning: 'I am never going to know unless I try it and I will never know if it fits with what I want to do so all just a learning curve really' (09_01). For 03 it was trusting in the reflective process:

at first I found it hard, because it was all in my head and I'm thinking what should I write but then when I started doing it more it's just whatever my first thoughts, I just write them down even though it doesn't make any sense (03_01).

It was often the case that the security of 'knowing' was sometimes difficult to challenge:

I find I get so obsessive over things that I find it hard to pull myself away from something as well ... I get stuck on doing the same thing over and over again ... going back to you know forcing myself to say you've done enough of this now (13_01).

Similarly, 10 recalled a point when a tutor advised her to stop making:

I was making a few because I was experimenting with size and scale ... and he said you need to live with the work ... if it's something you are repeating or something you are doing in the same way I think there is a point where if you are not moving away from that you are back into that danger zone ... I am going to carry on doing this ad in finite um and I think that is not good for you as a practitioner or for your development (10_03).

For 10 it was recognising that looking and reflecting on work was no less valuable than making. The shifting relationship with how participants identified with their making was not procedural, but their grasp of it, and how their relationship to it shifted between knowing and not knowing. Participant 13 described a shifting relationship that was cyclical:

if I am really frustrated by my work and I don't understand it and hate it and it makes me feel really disconnected to it and then as soon as I feel disconnected to it I have to figure out a way to try and feel reconnected with it and it's just a big cycle isn't it, it keeps going (13_00).

10 described it more as a duality: 'there is a sense of be humble be naïve be vulnerable allow yourself to be all these things and bare it all to the world and be confident and take the initiative its opposing personalities' (10_03). Participant 10 highlights here what seem like opposing qualities, vulnerability and confidence.

This theme has been a meaningful way to analyse and understand participants perceptions of their identities and making processes as both complex and shifting. Every participant has had their own lived experience and constructed an understanding and narrative around their experiences of making work, being a student, and becoming an artist/designer. The theme has illuminated the practical and functional aspects of making work but also the emotional and personal. Being able to understand making processes in such an individual, nuanced way has helped to consider the impact of using digital autoethnography for participants and how empowering this has been for them. The theme has revealed that the approach has given participants autonomy and, in many cases, additional spaces to reflect in depth about their practices over time and with others. It has also highlighted that many of the challenges of using digital

autoethnography methodology as arts pedagogy lies with legacies of arts pedagogy, reflective practice and the 'institutional inscriptions' (Luke and Gore, 1992) we carry.

7.2 TA Theme 2: Externalising the internal: making the invisible visible

Internal to external

The transference of internal ideas and thoughts to paper or digital space, 'making visible the invisible', was expressed by participants:

it almost feels like, it's like you kind of, it almost like you are talking to yourself really, I suppose you kind of, and I don't mean that in a funny way, I mean that it sort of like it's a way of capturing what is going on in your head (10_01).

Participants developed strategies for speaking out loud and reflecting mainly by imagining someone else they are speaking to. This approach has elements of play and performance, certainly using the imagination. 05 disliked listening back to his own voice but used this strategy for thinking out loud: 'you just sort of ... try and imagine that someone else is in the room that you are actually conversing with (laughs)' (05_01). Seeing oneself performing the making process often had more impact than just assessing a final finished product:

I can see where I am going wrong more, (laughs) it's more prominent how I'm doing it now, and I can see where I need to make it better, make amendments and where it could be, where the faults are, I can see it and when I do what I'm doing at that time, I can refine more further (03_01).

For 05 there was a disconnect between what he thought he had externalised and made visible to others and what he had just explained to himself: 'you've explained it to yourself, and you know because you can see it in your head, but they can't' (05_02). 02 pictured her work being read and seen by others: 'even when you're walking along thinking about what you might be writing, you kind of, you've got this imaginary reader or audience in your head'. 03 initially found that writing what was in her head, difficult: 'I'm thinking what should I write but then when I started doing it more it's just whatever my first thoughts, I just

write them down even though it doesn't make any sense' (03_01). There is a messiness to dialogic reflection, what might feel like an unsophisticated process for a more sophisticated outcome. 05 described the process of thinking about and resolving ideas as an internal process compared to verbalising for recording:

you think them through before just you know being a jumbled mess so you sort of come up with a solution to the problem whereas when you're just speaking you're just sort of find yourself rambling quite a bit up to the point where you've come to a solution but it's getting through all the rambling stage before you come to the solution (05_02).

12 was not aware of the extent of her internal thoughts and described the process of externalising: 'keeping it all in my head what I wanted to write down, a few bullet points on my phone, and then just starting it [the writing], just literally flowed out like five days straight (12_02).

06's found having several languages made writing a slow process, but by recording her thoughts first, she was more comfortable using whatever language expressed it better: 'I think recording actually helps after that listening to it and writing it down like maybe look at the translation of the word I have used' (06_01). As well as being faster and easier to reflect out loud, 06 felt that she got more ideas from speaking, 'like conversation with others' (06_02). 08's difficulties with writing meant he also preferred to annotate and reflect out loud and liked to improvise, talking in the moment: 'I am more vocal, more talkative so I would rather have my blog instead of having writing, me talking about what I believe about it' (08_02). 11 found auditory information easier to understand and explained a complex process of using technology to help externalise ideas. Software spoke her notes and written work and 11 was able to listen and take further notes:

I was able to fully understand what it was, and then I could make my own notes. Then once I understood that I could apply that to the different situations and scenarios that I had to write about ... so it's kind of a long end way to get round without reading something (11_01).

The interviews for the research asked participants to relive and explain their experiences with digital autoethnography and were therefore an opportunity for

participants to make their experiences visible, often surprising themselves with what they unearthed in that moment: 'I think even this process of us talking, this process of interviewing it is a reflection on it and it is a self-assessment of it as well' (10_02). While 10 was aware of my own needs as interviewer: 'you will need to glean from this conversation for you to fulfil your research'(10_02), this did not hinder what she was able to say:

but I don't know what they are, I haven't got a clue and that really helps actually because I don't feel like I need to say something, does Jo need to know, and it's really quite nice that because it is actually a very freeing sort of conversation (10 02).

This was in contrast to her awareness of tutors own preferences about ways of working and aesthetics that sometimes stifled her own opinions to please rather than challenge their views. 10 provided an eloquent and lengthy account of the materials she was using and how they related to hidden narratives in the work and when asked if this was articulated or documented anywhere else it became apparent that it was in the moment of the interview that this description of herself as an artist and her work had been partly constructed 'this is quite a new emerging sort of idea and recognition' (10_02). Similarly, 04 explained ideas for her next piece of work in her interview, which was the first time she had verbalised it. In the interview 06 made a synthesis of her identity and her work:

if I were to reflect myself in my work the shapes of the origamis for example and the confusion of it actually being origami instead of a wearable piece I think it kind of reflects [me] ... one minute I will be interested in that and then I lose interest and want to do something else ... combining different techniques together...I thought how about I create a garment that is changeable (06_01).

This was a significant moment of synthesis present in the interview but very difficult to find in any documentation outside of this. Discussing the work and reflecting on it at that moment enabled 06 to looking at the work and see herself back in it (a bit like me seeing myself as the diver). This understanding was not documented in any written annotation in her sketchbook but demonstrates how complex ideas can be made visible in an interview situation.

Dialogic reflective experiences often resulted from trying to make thoughts and ideas visible for someone else. Participants gave various examples of who they imagined was reading their reflective writing and annotation. The concept of imagined other is discussed in Theme 1 because the impact of imagining 'other' often resulted in a conceptual or emotional shift in the relationship participants had with their work. However, it is significant that the imagined 'other' helped to make thoughts and ideas more visible. For some it was someone in a specific role like an examiner or teacher and for some it was more general, someone with less knowledge than them:

- 'I guess I'm talking to someone who doesn't know anything about it' (01_01);
- 'I would explain something as if they have no idea what I am talking about yeah' (13_01);
- 'Someone similar to myself who is interested in the same things but no one specific' (02_00);
- 'Someone who knows nothing about the work, that I have to engage and inform without putting them off' (02_00);
- 'There could be nobody reading it at all but again it is that imaginary audience that you've got' (02_01).

In a later interview 06 described how recording herself made her emotional state more visible than when writing. She stated that it was like talking to a friend who knew her properly:

because I hope I know myself better everybody else ... if I am recording I can just be honest. It's kind of like a diary but a verbal diary which is easier to do, with written diaries it is not as effective cause I can't hear the way I was feeling whilst I was talking (06_02).

06 spoke about the challenges in not only expressing ideas verbally but also as three-dimensional forms: 'I will usually like to draw instead of actually make it, because with drawing I think it is easier to express designs and ideas' (06_01), and imagining the work as more complex than what she was able to produce:

'most of the garments I have done compared to what Ideas I have in my head they look really simple, even with the origami shape' (06_01).

Creating distance from the work

Feeling too close to the work and not being able to see it as others might was often cited as a barrier to reflecting properly on their work:

probably the hardest thing is that you can't look at your work in the same way that you would look at someone else's, well I can't anyway, and it probably doesn't look the same as it did because I have seen it so many times (13_02).

There was also an aspect that to get closer to the work, understand it better, meant creating distance from it: For 08, the recordings of his process was a way to 'take a step back'. Being able to distance himself from his digital work made on an iPad was difficult but replaying and watching the iPad recordings was a good way to do that: 'you are looking at the full thing you are watching yourself drawing whatever you are drawing' (08_02). 10 also felt too close to her work to 'become a stranger', partly because of limited time:

I suppose I feel too close to it, and I think that the window of time that we have to do this now is not really realistic in relation to the sort of the idea of being able to look at your work differently (10_V06).

13 described getting distance as a form of detachment:

for me it detaches any feelings I have at the time of making ... you are able to look at it as if it's not come from yourself does that make sense ... because when you've made a piece of work it isn't new anymore so to be able to walk into that specific piece of work with a camera even here at this level instead of it being at eye level you are already getting a new perspective on it ... then it becomes something completely different and then it is new again to you to me because even though I made it it's not the same (13_01).

However, the immersion of being in the work sometimes made it a challenge to achieve this detachment:

I get that involved in something in my head it's really hard to take myself away from it and look at it in a productive way because I just follow over the same thoughts over and over again when I am still all mixed up in it (13_01).

The digital spaces were a way to take a step back and spectate, and make aspects of the work more visible, rather than be blindly immersed. 13 describes going back to her work on the blog sometime later: 'I am then detached from it so I can look at that thing as if it's without the feelings I had initially' (13_01).

Digital spaces and different physical locations, helped participants create distance. Photographing her work in places it wasn't intended for enabled 10 to not only view the work and its potential differently, but to gain 'even perhaps a tiny glimpse to how other people see it as well' (10_03). This awareness of how others may see the work has several significances: developing an understanding of audience and making work for others, but also enabling the self to become the audience, see the work as a spectator and experience it anew. 09 described the visual language of his poetry work as a form of mark making that changed when it was digitised or made public,

I am stepping away from that mark making that I have done originally and then I am putting it digital ... I am taking my pictures now on a digital camera so I am looking at them digitally that's alright because that is how it has been took, so I think there is a difference if I am putting my poems on the internet or typing them out from the handwritten ones I have got (09_02).

Creating a closeness to making

For some participants using the digital and revisiting the content created a heightened sense of their own bodies and voices that felt uncomfortable. 13 was self-conscious while making her work in a public space: 'I have filmed quite a bit in the train station, but I always feel like I am doing something wrong when I am doing it, I would be embarrassed if someone knew I was filming' (13_00). Stepping away from the work and revisiting digital footage also enable participants to experience a new closeness to their work: making themselves more visible through seeing the body making, became a recorded and digitized

'performance'. When 10 used video blogging she found that, despite her anxieties, she was fascinated by the things said and how she said them, watching herself 'performing' her thoughts. She said: 'there is something about the way the information is captured, the facial expression and the honesty of it that I think is unique and interesting and helpful as well' (10_V08). Reflecting on the video of her making a drawing, 10 described it as a performance piece:

what it ended up being was more performative really and the video enabled that to be captured as a lot of performance art is, I mean I guess you don't necessarily get the mood and the essence of that moment of making when you are watch something recorded, but I still think that there is value in recording the work in that way (10_02).

06 described how you are too emotionally and physically close to the work while making it but that watching it back also revealed details of the body and this closeness:

while you are watching it you are actually seeing yourself doing it as well and how you have to use your body to do which shapes or how you control it without it moving around too much ... I was able to see myself doing certain things and I can actually see my own body language and kind of evaluate it like why I use that body language in certain parts (06_02).

09 felt that aspects of his own identity (his tattoos) were becoming part of his work and developed a sensitivity to himself as material, a performative material: 'it's the tones and sounds ... I am going to experiment with showing a piece of work and just having sounds in it and seeing how people react to that' (09_01). Developing a sensitivity to materials through performance was also pertinent to 10: 'I had got this graphite ... it was reverberating around the room ... it wasn't just a sound that people could tune out' (10_01).

Surprised by what is remembered and forgotten

There were assumptions about how much could be remembered of personal experiences and decision making. The digital technologies and autoethnography became useful for retaining evidence and information. After listening back to recorded conversations, 09 realised he often missed detail: 'it was weird in a

sense because of how much I couldn't remember, it surprised me' (09_01); and recalled in a later interview:

there was stuff that I can't remember getting said and it sort of it makes you think, you think that you have understood everything and heard everything but a lot of times you can walk away from these conversations if they are not recorded or wrote down and you have not heard everything (09_02).

13 found replaying conversations useful because she could control the pace of them, 'to stop something and think about what's been said with pauses, without continual conversation, because you can't reflect immediately on what you have just said' (13_01). 13 was also surprised by what is not remembered: 'I will probably leave here now and not remember most of what we have talked about ... you can go back in and it's not the same, it doesn't feel like the same conversation that you had, it's strange' (13_01). Some felt that the memory could not be trusted:

it reinvents things and it puts things in a different slant or light, it creates nostalgia ... and the whole process of autoethnography has taught me that, that there is something really valuable in reading, not just what you are saying but the unseen things that you can't capture on, in words or you can't capture in a written account or something (10_03).

Making the process more visible

Participants used drawing and photography to make their research and observations visible. 03 felt that there was a significant difference between what a photograph or drawing revealed. The idea of seeing through drawing is interpreted here as selectively seeing: 03 described how using just drawing to research details of garments would limit her to what she had wanted to see at the time compared to a photograph which could be used to discover additional details later:

if I weren't looking for the trim or anything I wouldn't have drawn that, because it was an image I could see other elements of it I could revisit ... as a photograph you might choose to put something in but later you realise there is something else hidden ... with photographs you get something extra when you re-visit them ... it kind of makes you feel that you were there at that time and you have captured that moment (03_02).

05 felt that making the process more visible for others didn't become work in its own right but did provide insight:

to see the process of your thoughts and your feelings and also being able to get why you've done it such a way and why it is that, what the thoughts or the reasons behind doing such a thing is, I think that can also be useful (05_02).

01 used their recorded process as a form of annotation: 'I used the videos and cut them into like a montage and then used voice recordings from interviews ... to go over it and explain their specialist subject and it was very enlightening' (01_01). 01 felt that showing or 'performing' with her work would be a better way to annotate it for assessment, 'it would be a lot easier to show you an interactive video of my tutorial, narratives where I did things, why I did them' (01_01).

There were several other examples of the documentation becoming more integral to the work/practice, and in 10's case the documentation became more valuable and replaced the original work, 'I ended up taking a whole series of stills of the actual picture, the picture never went anywhere it basically got rolled ... and left it in a corner' (10_01). This demonstrates an interest in what is produced through the process rather than what was intended as a final outcome and 10 was able to recognise what was important to her and her practice at that time. The technology shifted from being a device to record the work into something to make the work with. For 13 the technology shifted from being a passive tool into an active one:

I started filming myself working, making prints, but then afterwards I used it to make work with, so I think it changed the way I was using the camera or the way that I felt like I needed to use it, [it] actually changed from using it as a way to document something into something to actually make work with (13 01).

The technology was not found to be a disruption by these participants but a new tool or material to explore as part of their practice. For 11, the digital version of her work created a new dialogue for reflection:

having it digital I was able to adapt my thinking or change my thinking if I wanted to because I had different bits of research so that I could say well this might work or I could change it to this ... it was more fluid, I could change from one thing to another within the App it has got more flexibility (11_01).

12 found the chronology of her blog useful and liked the simplicity and crispness of the digital and blog, preferring to annotate images of work there rather than in the 'sketchy' and 'messy' sketchbook:

it's like a nice clear photo or a video with my writing underneath, it's got my date already ... it's just the way it's been laid out ... it's easier for me to understand it as well later on ... reading back on my notes and scribbles and stuff later when I feel like I need it (12_02).

11 explained how she used *Evernote*, a platform that functions like a private blog space, as a digital scrapbook:

if I've got some information that I have kept or something that I have written up I tend to put also ideas in there as well, so ideas for a project or if I clip something from the internet and that sparks some idea then I will write that down, but then I will keep that there so I won't delete that because that is an important part of the process for me so it's almost like a scrapbook really of digital notes (11_01).

This scrapbook of digital notes enables web links and personal typed and uploaded images to co-exist in one space, similar to a blog but in the form of a private folder. It creates a flexible space that 11 preferred to the 'commitment' of a sketchbook:

I have used the digital technology to kind of write whatever I wanted you know that connects to that and then I can edit that I can change it I can swap things around that has got more flexibility again or versatility (11_01).

11 found that the portability of this digital space enabled her to continue dialogues across physical spaces:

I clip things from the internet onto *Evernote* and then I use that to back up my explanations in the lesson ... I was able to use it in one room and then take it to a different device in another room so when I was explaining the processes within the sketchbook I then used the app to show where my thinking was going in connection with the project (11_01).

This is a practical application but also interesting in terms of ownership of the reflective space: the space remains the same enabling continuity and control for the student rather than being in several locations.

Emotions made visible

Using digital technology and revisiting footage of making and reflecting sometimes induced strong feelings and emotions. 10 went through a spectrum of emotions over time, initially anxious and intimidated by the technology, of being seen through the lens and afterwards what it felt like to show other people:

I remember cringing, oh god I can't watch it, I can't watch it and it really was it was just like that, no don't show it, no I don't want to see it, you know, that is literally what I was like with it ... but I can look at it now I am alright, I can look at it now (10_02).

05 felt strange talking to himself: 'no one was there so speaking to myself, so I did feel a little bit you know doolally' (05_02). He began to get used to it so that 'after a while it just became second nature, I think you just pick up that skill of voicing instead of thinking' (05_02). 07 expressed that she hated the sound of her voice: 'I never realised guite how northern I sounded (laughs)' (07_01) but continued to record her voice because it meant she didn't have to stop thinking and working to make notes. 06 developed a strategy for coping with the discomfort of hearing herself by focusing on the content rather than the delivery of the recordings 'I always ignore ... how uncomfortable I feel listening to myself but just listen to the ideas (06_01). The digital technologies made aspects of their working processes, personality, and physical presence more visible. However, it was these strong feelings and emotions that also prevented participants from recording themselves. Previously hearing her own accent meant that 02 shied away from recording anything. 'I think it goes back to that whole thing of you hearing your own voice, seeing yourself on anything ... it just seems really odd, seems odd to be recording myself talking you know' (02_01).

Despite finding it useful, 05 couldn't get past his dislike of listening back to his own voice: 'I did find that useful, I just didn't like listening to myself back and it was really really off putting' (05_02) and did not want anyone else to be able to listen to the recording. 12 didn't like listening to her own voice: 'I found myself getting really embarrassed recording myself and I couldn't get used to it because I had tried video and like with the dictaphone and I found myself looking at myself not wanting to hear myself back' (12_01).

Some participants expressed regret at not recording their voice or conversations or continuing with it. 05 had some success in using the Go-pro to record his thinking while making but did not continue this as a strategy for all his work:

I was quite upset when I was submitting my file that I hadn't managed to get that point across and if I had have done it on the GoPro and been able to speak about it like it is now ... I think if I'd have been able to get that message across ... some things are lost in translation in writing (05_02).

05 made the point that recording does not change what your thoughts are while you are making: 'it is still the thoughts that you have even when you're not recording yourself, they're just out loud and ... to look back on instead of more in-depth' (05_01). Although he later comments that 'coming back to it and you're listening to yourself you think well why didn't I pick up on that?' (05_02). He found that looking back he could see potential choices, different possibilities: 'I wonder if one of those other ways would have worked and it may remain in theory' (05_01).

Remaining private

Some participants were aware of what was visible to them but also what remained invisible to others: internal conversations or concepts that remain hidden as internal dialogue. Sometimes this was about intentionally wanting thoughts and experiences to remain hidden. 10 describes what it was like to make a large-scale drawing in the studio: 'I did an experimental one in the studio on the wall so that was the introduction of me allowing myself to be seen making ... before that point making [was] a very private thing' (10_02). The sense of private could also be disrupted by the technology making itself present.

For example, a drawing was recorded in a private space by 10: 'the reason that I chose to do it in my studio, it's quite private, and everybody away and it was strange enough knowing that that camera is watching you (10_03).

Several participants were preoccupied with mistakes they had made and whether they should keep evidence of them or not. There was a general awareness that the mistakes were helpful for assessment and for their own learning but often participants had an overriding desire to eradicate the mistakes and present a perfected version of their work.

Visible mistakes

Participant 03's experience of recording her own making resulted in her noticing and valuing seeing mistakes so that they could be rectified, 'I can see where I need to make it better, make amendments and where it could be, where the faults are' (03_01). 04 had a similar experience seeing her work through a photograph:

I looked at them and I thought that's wrong and then I had to look at the pattern pieces on the floor and then I turned them and put them together and thought like I was quite far out with what I had done (04_02).

In these cases, the benefits of being able to see mistakes was only reflected on in the interviews. It wasn't necessarily important to share evidence of the mistakes themselves but to use the documentation as a prompt for more detailed reflection. 05 found that re-visiting and seeing errors helped with writing evaluations and summaries at the end of the process, 'I found it good for that, looking back and remembering the mistakes I made that I wouldn't have really recognised otherwise or been able to evaluate at the end' (05_01).

Being able to replay the making of work was achieved through video recordings and the affordances of certain digital tools and software. 08 used an iPad application *Procreate* which enabled him to draw digitally and erase and redraw easily. With this App he was also able to re-watch the whole process of constructing and erasing as a video which he was positive about being able to rewatch:

I enjoy seeing ... me as a viewer watching it, I see all the mistakes all the hiccups ... watching can help me decide how I finish it, do I need to add something in this corner here where there is nothing ... it does help and does bring it all together (08_01).

The recording provided immediate feedback, the mistakes become a fluid part of the construction and marks and decisions can be eradicated with ease while making but retained as evidence of the process.

It was mainly fine art participants who used the technology as a creative tool or process although developing a more visceral sensitivity to materials enabled several participants across fine art and design disciplines to develop a better technical and aesthetic awareness, Illustrator 07:

I was able to work out like a lot of areas where I was going wrong especially with watercolour I could actually see it on the paper that I hadn't like, to my eye it looked right, but on the camera you could clearly see where it was still wet, stuff like that, so I was able to sort of pick up bits where I was going wrong as well ... have you ever held a piece of work up to a mirror to see if it was? yeah it was kind of like that on camera (07_01).

The video and photographs created the effect of a mirror for 07, both techniques create a distance between the work and looking at it directly. The mirror in its reversing of the image makes mistakes more visible whereas the digital representation is a different viewing experience that also changes the relationship to the work. 10 also found that the camera helped her to see her work differently:

the camera frames the image it frames what you are looking at and changes your perception of it and that worked really well for me and it has led on to me realising there are other ways to develop and refine my work (10_V01).

This theme has been a meaningful way to understand what is visible, often invisible and, what can be made visible throughout the making process for artists and designers. The theme has made the challenges that students face and the decisions they make from both emotional and practical perspectives more visible

and revealed some of the subtleties around this. It has also illuminated the complexities around the decisions for students of what to make visible to others. It has been important to consider the extent to which what is kept private or made public is personal choice, and that what is most important is that nothing remains hidden to the student. The decision making around what to make visible links to the autonomy or empowerment that using digital autoethnography may have, the types of spaces students use for their reflection (both private and public), and the challenges students may have with making their thinking, processes, and work visible.

7.3 TA Theme 3: Nature and Nurture of the creative process

Using digital technologies to document practice

The use of digital technologies enabled participants to witness their shifting relationship to the creative making process and make aspects of their practice more visible as explored through themes 1 and 2. The use of digital technologies also played an important role in preserving the nature of their own making approaches and being able to re-see it, reflect, and make sense of it. Experiences, moments, and ideas that could otherwise become lost or forgotten became accessible: 'I could re-record it, listen to it again and then write about it easier than remembering it all' (01_01). Similarly, 10 Strongly felt that without the recording of it, the work would have been discarded and limited what could be gained from it:

it would have been just another piece of work on a piece of paper that I would have rolled up and ended up in the bin ... I might have taken a photograph, photographs might remain ... I would never have had the same insight into it ... if I hadn't of videoed it ... I would never have of analysed it looked at it and reflected on it in the way that I have done (10_02).

Similarly, using an iPad for drawing meant that 08 was frequently re-watching his own work, 'I do enjoy seeing how my work progress as I am drawing ... you didn't want that line so you see it getting erased or colour being splattered, moved and blending and it all joining together' (08_01). His descriptions of the

markmaking came from this re-observing. Making video recordings had a practical use for 06:

the opportunity to look back on it more than once and if I forget how I folded certain things I can look back on it and that is better than having my memory, you know, because you can actually see it and seeing it is better than trying to think back on it (06_02).

08 started to share the recordings and questioned whether the process was also a viable product suggesting something aesthetic or purposeful about the process of erasing and redrawing. This led to questioning whether the artwork is final or the video of the process, 'and then people will say the video is the artwork cause it shows what you are doing it shows everything and then some people say that the artwork itself is the proper thing because it's the finished product' (08_02). The digital technologies helped participants to see what had become second nature which enabled them to reflect further on their work, to see something new, and ultimately nurture their creative process.

Repetition, Practising and practice

Repetition of making in practice, practising to improve and the iterative nature of reflection was frequently brought up by participants. Revisiting practice and experiences using digital autoethnography as repetition has been discussed through Theme 2. Here, repetition in practice is explored as: an identifying feature of the work, habit that indicates a lack of criticality, improving a skill, as a concept inherent in the work, a discovery of patterns forming in practice, bodily movements, markmaking, reflective iterative loops, boredom, forgetting and remembering, mistakes. Some of which appear to be the very nature of making/designing, and some by way of nurture or what the student brings to the process. Noticing the repetition in his use of language made 09 realise that he hadn't been reflecting on his own work as much as he thought he had:

a lot of my poems and stuff I have written and you put them together there will be a lot of the same words and things in them but just placed differently because my dialect ... I don't use a lot of different words' (09_01).

In contrast, the diverse approach 02 brought to her practice made it difficult to see recurring themes or habits: 'I don't know if I've done stuff that different to what I would normally do because I've always liked doing something different all the time, you know, I'm not very repetitive with anything' (02_01). Repetition in making was significant for 10 illustrating a tension between developing a personal style, identifiable work commercially and her own critical thinking:

if it's something you are repeating or something you are doing in the same way I think there is a point where if you are not moving away from that you are back into that danger zone again of thinking this is great everybody likes this I am going to carry on doing this ad in finite um and I think that is not good for you as a practitioner or for your development (10_03).

Maintaining a style was something that 07 had begun to realise was critical to her development as an illustrator:

We did character design as part of animation and illustration so its bringing what I learnt from that ... to draw consistently keeping a similar style throughout and not sort of deviating ... I do have a habit of chopping and changing what I am using, like I will be using watercolours and then get frustrated because I would be using markers and suddenly my whole drawing styles changed but obviously different media, different styles, different hand movements sort of thing so I need to sort of pick a medium and stick with it for a certain project if that makes sense (07_02).

There were other examples of participants taking their work across media, 08 copied what he had painted on the iPad onto canvas boards, 'instead of copying from a photograph I am copying a video and a drawing I have done before, but it's not really copying its more outlining or redoing' (08_02). In the process of copying 08 felt that each 'copy' was different and more a re-working and illustrative of how an image or idea evolves, 'I can never re-draw, never re-paint it so all my work will be all original because I can never re-copy the same thing I have done' (08_01). For 09 different media alters the language of the work and changes what would otherwise be repetitive:

I think if it is just an image I've took then it is kind of replicating it in a sense but if it's a project that I am working on and I am looking a bit deeper and it's got a bit of meaning to it then the screen print can say something totally different (09_01).

Some participants were aware of the repetitive and iterative nature of reflection, described by 02 when revisiting her blog:

I have had to keep going over some of it, some of it I've done as one long page so I've been adding to it and I've had to go back, but I do find it hard ... looked back and thought oh I've already put all this, you know, weeks ago and completely forgotten ... once I've written something or done something, I walk away and leave it (02_01)

13 had a different relationship with her recurring thoughts and blog. It became a strategy for detachment:

I think sometimes I get that involved in something in my head it's really hard to take myself away from it and look at it in a productive way because I just follow over the same thoughts over and over and over again when I am still all mixed up in it, where as if I can put something on my blog and go back to it two months later I am them detached from it so I can look at that thing as if it's without the feelings I had initially (13_01).

Going back to something and seeing it differently, in a new context, with new knowledge or new intention was key to participants making sense of their work, 'I don't know what I'm gonna do next, but then the second time, I re-visited the images, it kind of made more sense' (03_01). For 12 the sensemaking came from finding different ways to express the same thing, 'I kind of just ramble on and sometimes I could be repeating myself three times but different ways' (12_01).

Several participants commented on the importance of revisiting learnt skills, repeating and refining them over time. 09 felt it was important to practise his photography: 'as a photographer [it's] good to keep your eye busy and reflect and look back on that work' (09_01). This describes a form of research through practising and taking photographs regularly to maintain a skill level and the habit of looking and recording. Looking back at the images is a form of reflection that develops skill but also may become part of practice. Similarly, 07 felt it was important to be in the habit of making work:

it's disciplining myself to have, make that time, make sure I don't just sit there staring at a blank paper, that I draw something, even if it is bad its, its doing something because you miss one day, I have always thought it is like going to the gym, you miss one day and you will be like "oh I will go tomorrow" and you don't and before you know it you have wasted a whole months membership on doing nothing (07_02).

The analogy of keeping practised with drawing as a form of fitness relates here to maintaining a consistent style but is relevant to all disciplines in terms of nurturing practice by improving skills and techniques including observation. 10 found that her thinking while making was often process and material led:

thinking when you are not making is a different thing you are exploring the intentions of the work in a completely different way. I am recognising that that is no less important and no less valid than actually producing something physical (10_V05).

The cost of fabric for 03 became a risk to factor and determined the research and experimentation that took place:

sometimes you have to spend a lot of time in refining one technique for example making a pocket ... someone might look in your sketchbook and think how come she has done so many of these pockets but the reason being is that you are going to be using really expensive fabric you want to get it right (03_02).

Time spent thinking and making

Finding the right balance between reflecting back on work, planning the next steps and being in the moment while making was often challenging for participants. 03 described the tension between action and reflection that was resolved through documenting by taking a series of images:

when I was taking it apart, I was so immersed ... I've took that apart and now I'm doing this one, now I'm doing this one and it is quite hard to analyse it for a few minutes or whatever because you just want to move on to the next one but taking the images kind of means that you get that time back (03_01).

Participants frequently referred to the comfort they found in just making, working through ideas or responding to materials:

I am more comfortable when I am in that zone making because it's your comfort zone it is where you are happiest ... when I was making the ...

structures Z actually said to me will you stop, stop making them ... he said you need to live with the work (10_03).

This seems to imply a physical and psychological comfort, comfort in knowing what she is doing and not being too challenged emotionally or intellectually. Thinking about this experience in more depth in a later recording 10 discussed how the video blogging had helped her to develop her making and thinking: 'when I am making, I feel less uncertain, but I think that I can do that quite blindly ... I think that what I have recognised ... is the importance of having a period of time that is reflective, that is mindful' (10_V05). This illuminates aspects of the nature of making: it becomes comfortable and needs challenging or is nurtured through challenge. 10 described what it had felt like to make adjustments to continually making: 'I am actually kind of getting used to this idea of sort of not frantically making all the time...I have recognised that it's almost like a way of avoiding thinking' (10_V04). There are two sides to 10's experience, in an earlier interview she gave reasons for just making:

I try not to reflect on it while it is happening because I think sometimes that can get in the way of the making and what I have found ... from what been repeated over again all the time is make, make, make, and things will happen so I have made, made, made, and things have happened (10_02).

This implies a type of thinking *through* making that is difficult to make visible to others. 10's experiences over this period of time give insight into the complexities of making and reflection that she has tried to navigate, how it is made visible and documented. Some of 13's reflective experiences were more limited: watching a recording of a printmaking activity, 13 observed that she 'churned out loads' but didn't think it revealed much about her process of making (13_01). Participant 12 remained comfortable by avoiding risk, working in ways she felt comfortable:

I did keep to techniques and material and things that I was familiar with because I didn't want to start and make it look like a weak piece of work so I wanted to work with stuff that I was comfortable working with what I enjoy working with (12_02).

Making and not thinking sometimes had implications for quality of the work, taking more time over the work and potentially being more present while making had been an issue for 07:

having a bit more patience ... because I tend to just do things and then be frustrated that it doesn't look neat which of course it isn't going to be neat if you are doing it and rushing all your work (07_01).

The context of being a practitioner in the educational setting impacted on participants use of time for their making and reflection, while 02 felt that she benefited from having structure, 'I've never been very reflective on stuff and I think this last couple, few years is making me more so because I've had to do it' (02_01) this became quite constricting, 'Thursday afternoon at this time you're going to sit and write it and if I don't then it just doesn't get done at all'. There was also a sense that the real work would begin after the degree:

I want the degree out of the way now and I can sit and focus on actually doing this ... and go about it in the right way ... looking at other people who've been doing stuff over years and years, you can see how they've developed and I don't think I've ever taken that step back and looked at the whole picture, it's been a case of instant, it has to be done (02_01).

10 felt that she had been slowed down by being very 'end product focused':

you know what you are making and you can get too bogged down with what it looks like and what it is meant to look like at the end ... I am very guilty of it cause I am a bit of a perfectionist ... sometimes you just have to think it doesn't matter it's about that process and what did you get out of that process (10_01).

Being slowed down was not always a negative aspect, many participants found that digital autoethnography enabled them to slow down aspects of their making process which helped with the depth and breadth of their reflection:

I think if anything its engaging in what you are doing because you are able to think about it first as a process of what you are doing and then also to document it, so that helped with reflecting ... it's almost kind of extending your thinking to something that you didn't even think about before, you would just do it, so it is almost I suppose slowing that process down ... it's making that conscious decision before you move on to a

different process or change it dramatically just take a photograph so then you are documenting that step as it is (11_01).

With reference to blogging, 02 found that she was slowed down and able to think more about refining her work:

I would tend to want to do something, go out and learn it, do it and even if it wasn't brilliant, I'd done it and I could put it to one side but now I think I am tending to really go into stuff more ... I think it has made ... extend the time I give myself to do things (02_01).

Although 07 felt that the research project had led her to speed up some aspects of her practice there were also elements that became slowed down, 'I am not rushing the prep as much but I am being a lot more loose and less with the first initial like I use thumbnail sketches a lot more (07_01). Temporality was an important aspect: 03 felt able to keep adding to her reflection, in part responding to what she had already written and also having more to say as time had passed,

I could then expand more on what I had written and what I was thinking and when I was like first writing I just wrote a few sentences and that was it and after a bit when I revisited it and annotating it, I could keep adding more and more (03_01).

For 09 time became a way to reset his judgements about his work,

I looked at the ones that I hadn't gone through, and the two that I had edited is not the ones I would pick out now, so I am thinking maybe I should step back from my work once I have photographed them give it some time and then go back and look at them, and I am going to record that and see how much I change and which ones I would pick out normally (09_02).

11 described the effect of slowing down from using digital autoethnography as a way to 'extend thinking' leading her to make changes to her practice from observing habits, changing how she used tools and techniques with materials. 10 referred to the slowing down that occurred as a sort of mindfulness, living with the work and time not making being as valuable as the frantic periods of continuous making. For 11 the strategy of pausing to take photographs led her

to slow down and in turn become more mindful of the work as it was progressing. The process of taking photographs at each stage also slowed the process of reflecting on ideas down. For 03, pausing to document provided her with evidence to return to, having been completely immersed in the moments of working. She became aware that this documentation would reveal things that may have not been seen or seemed unimportant at the time:

it only takes a few seconds to take that image but then that's there for a long, it stays with you, whereas with memory, you could forget how it's put together ... when I re-visited it back I could see it more clearly ... ways which I wasn't able to see that when I visited the photographs straightaway when I went back on them (03_01).

The process has its own timescale which also links to ideas recurring or work made previously becoming relevant again, later. 10 talked about how understanding emerged over time:

I have made things and I thought what is that about and I think your subconscious thoughts are driving the work you are doing without realising it and like it does drive certain behaviours ... when I say it has taken ages it taken me up to when I am talking so this sort of moment of clarity in the past couple of weeks really that I can see now what the connections are between things (10_02).

Reflecting with the process

There were several examples of participants preferring to summarise their work: waiting to reflect at the end of their process, rather than continuously throughout. The nature of their making process was less visible and frequently this approach was used as a form of self-editing: ways in which they rejected reflection or controlled it in a particular way, 'I don't really like the samples that I did so I didn't want to write about them' (04_01). 04 also disposed of work rather than keep it as evidence of trial and error:

It can sometimes be a good thing that I have written it previously and then go back to it because I can see what I were thinking at the time and then now, but then sometimes it's not because what I have written at the start ... won't make sense because I know what I am doing by the end so I will end up getting rid of that anyway and just starting again (04_01).

For 05 the recordings he made of making and speaking his thoughts aloud enabled him to gain some insight into his thought processes, what he developed and what he left behind. He later provided some detail of those in-the-moment decisions made visible from his recording: 'sometimes you do shoot through a lot of thoughts very quickly ... you are editing what you're thinking really, just discarding things' (05_02). Sometimes making was about discarding as a way to move on, 'sometimes you need to just get stuff out and then just leave it there instead of going back and listening to it again' (09_01). 12 limited what she externalised: 'I find that I have too much in my head I really have to think about things cause if I was speaking, I would probably just go off on loads of little routes really (12 01). Others used the strategy of rejecting 'doing' as a consequence of thinking ideas through, 02 had strict criteria for moving forwards with an idea: 'I come up with an idea and work it through my head and if it hasn't come to a conclusion within twenty-four hours then it is just gone, it's not worth, probably never do it' (02_02). However, 02 described how she was aware of a process: 'knowing that there is a process that you can actually use to get somewhere rather than just blindly starting something or throwing yourself into it ... once you get it started its there to actually fall back on' (02_02). Suggesting the process as a set of tools to use to navigate making her work. The digital autoethnography became a way to nurture this:

I literally went round and took photographs all over the place and then wrote up about the actual place the date the time how I was feeling ... I was conscious the whole time this is for this project so you are being a little bit more selective about what I was taking rather than just randomly taking them (02_02).

This example of research through making as part of her process is very different to 09's initial strategy of taking multiple images and reflecting on them afterwards. However, 09 strategy began to change:

now when I take an image, I take one ... and that is it ... whereas in the past I would maybe shoot that building at like three or four different angles and different styles in a sense and now ... I am being more selective (09_02).

11 found that being able to create a dialogue around the research stages helped with decision making, 'I was able to explain and relate my work to what I had researched and that helped with the direction of the project as well, that helps cement it a little bit more' (11_01). 05 and 12 had different approaches to their decision making, design student (05) and arts student (12), 'before I come up with a solution, I tend to come up with four different ways of doing it then decide on the best one' (05_02). Fine art student 12:

if I have done five samples all similar but on different images then I tend to put the best ones in or if they have all worked I will put them all in then if all five didn't work then I would put at least one in just so that you can see that I've tried that and I have done that (12_01).

Participants had their own ways of expressing different types or stages of reflective activity throughout their process: pre-action reflection, reflection while making and reflection after making. For some participants reflective activity in relation to their work was constant and dialogic, no beginning or end, 'there is always reflection going on all the time in what you are doing. I think, I mean I have a constant sort of narrative of generally quite a critical voice in my head' (10_01). This narrative was a state of problem solving and ongoing for 13, 'it would be less interesting if I completely understood it, cause you're not exploring anything then ... this is something that constantly in your brain isn't it, it's not just something you put down when you get home' (13_02). 13 felt that this was an inherent quality to artistic practice, 'I think it should be I don't know, ever changing and cause if it was just the same all the time it would probably just become a bit stagnant wouldn't it and just not really do anything anymore' (13_01). Some participants expressed their reflection on making as a summary or evaluation, sometimes left until the end of the process, 'I've got this done I don't want to go back now and write about that particular thing, I'd rather get to the end and write about the whole thing' (02_01). 10 felt there was a distinction between the two that could sometimes get confused: 'It's an evaluation that happens when you reflect as well, you are evaluating which is a completely different set of ideas and ways of thinking, and I think you need to be careful that you don't muddle up the two' (10_03).

05 described how ideas and thoughts punctured the moment 'they're all quick usually quick thought processes that go through your mind within a split second and it's there and its gone and it's there and its gone' (05_01), impacting on the ability to reflect in the moment, or be aware of the decisions that have taken place. Looking back at footage 05 realised that in these moments of making mistakes were rectified, without consciously thinking, but not always learnt from. Participants expressed the difficulty in always being able to reflect on their work after they made it, sometimes needing a significant amount of time to process their experiences and outcomes, 'I struggle with that as well thinking about work that I have made and reflecting on it is something that I find really difficult ... and then I might understand it two months, a year later' (13 02). For 09 it was the personal nature of the work: 'thoughts memories all these things come out while you are creating it ... put stuff to the side and leave it for a few weeks or a month or two and then go back and look at it' (09_02). For 05 being able to come back to that reflection enabled him to engage more critically with his decision making, 'the simplicity makes it easier for myself to come back to in future and use, as sometimes you can write a thought but when you come back to it you have a "What was I thinking" moment' (05_00). 10 came to the conclusion that having periods of time not making was as valuable as making it, 'what I have recognised is that how clearer my voice is as an artist now and the engagement with my work that balance between making and reflection, reflecting and thinking when not making have helped me get to this stage' (10_V08). Thinking and not making caused an imbalance for 03 who described her experiences of overthinking to the point of being incapacitated, as a form of disruption:

I have been thinking about it more recently, thinking of things that are holding me back, why things are holding me back and it is the anxiety that is holding me back, and I'm overthinking it, over working myself and I think that, I think that is the major thing because when I am actually doing it, I forget about it and it's not as hard as I'm thinking (03_01).

And for 06, a fine line between inspiration, distraction, and lack/loss of focus:

I could just walk past something that inspires me and that brings me more ideas if I were to go back on the research that I have left ... the

distraction actually helps me see more about what I have already got and what I might find by looking somewhere else (06_02).

02 described moments of insight and inspiration that often extended over time and were in-depth: 'suddenly old techniques that I had learnt years ago ... that would really work for this I am sure you know I could have a go at doing that' (02_02).

Reflecting with others

The impact of others in nurturing roles on participants development and reflective practice was complex. These examples provide some insight into how these nurturing relationships are perceived and how participants changed trajectory as a result of interactions with others: 'they were confused with what I was doing, so I had to make it easier for them to understand ... I scrubbed the entire idea and I changed it' (01_01). 02's experience:

he came over and looked at what I was doing he went "are you designing 1960s pub carpets?" (laughs) I was like yeah it does look like that doesn't it, I can't put that on anything, and I am thinking I am going to have completely I can't use any of those images I am just going down the wrong road completely (02_02).

These experiences illuminate the impact that external comments can have. 06 realised that some external relationships impacted significantly on her decision making, 'she has more experience behind her, so it makes me become submissive' (06_02). 10 described the impact of external influences on her work: 'coming at you from different directions ... those things all contribute towards this sort of like cauldron of ingredients where you are trying to make sense of something and pull something out connected to what you already are doing' (10_V01). Comparing the interview with her experience of tutorials, 10 felt:

you are contending with different forces at play you have the expectations of the course you have a curriculum as a framework that you know you are being marked against you have got learning outcomes ... when people come and give you tutorials doesn't matter where they are from whether they are external or internal they all bring their own preferences and their own aesthetical judgement into it ... so it feels like there are times when you might skew or bend what you are saying, how you say it in order to accommodate (10_02).

Exploring this further 10 spoke about how she has managed tutorial feedback in the past: 'I have used the knowledge and their advice, but I haven't allowed them in the tutorial relationship to pressurise me to making things that I don't feel I have authorship or ownership of, because that is really important' (10_02). Similarly, 12 maintained a sense of her own working practice, 'some people just like their sketchbook really thick things hanging out and I have been told that is how mine should be like, but I don't like working like that' (12_01). Participants were also affected by the nature of assessment practices, often feeling the pressure of being assessed and influencing who they felt they were communicating with when reflecting on their work. 03 developed an understanding of what the relationship between tutors and her practice should be, 'at first I thought the annotations were more about the tutor (laughs) but now it's not, it's more about my own development and how I'm gonna use it and what direction is it going to help me take' (03_01). Although she understood that the transparency of her research was important:

showing my primary research of where I had gone and what I had looked at it was a way of showing the tutors what I had physically looked at by documenting with the photographs. I could have just gone and just did a bit of drawing, but I don't think it would have had the same impact (03_02).

Some participants were concerned with how tutors would assess their reflection:

I would rather have my blog instead of having writing, me talking about I believe about it. I don't know what the tutors will think about that, but I believe it will be easier to understand me talking than understand what I have written (08_02).

Like 08, 11 had a preference to reflect with audio,

I feel like I could verbalise what I was wanting to write but it's just that little hurdle around that, I mean you had the suggestion at the time ... an audio recording would also be possible to submit as well, and I thought actually I hadn't thought about that (11_01).

This encouraged 07 to be efficient in her reflection, 'because tutors are marking it, so I tend to just gear it to trying to be as sort of like not over the top sort of

but just keep it as sort of like to the point as possible really' (07_01). For 12 her blog was just for her and whoever was marking it:

I do tend to think that like the only person who is going to be reading this is whose marking it, my teacher, so I do tend to as if I am talking to them that's what I've done just like I am talking to you or something yeah that is how I tend to write (12_01).

Sometimes the tension was between what participants wanted to do and the needs of the assessment criteria:

I have to you know meet the criteria with what I am doing but sometimes I feel like just leave that behind and just go somewhere else and do what I have just had in my head, I think that is why I have started to limit myself with what I am doing in a way because I have to leave those ideas to one side (06_01).

The practicalities of managing different deadlines on a course also impacts on when and how participants make and reflect on work, 'once everything calms down then it's easier because of the critical studies hand in date ... I had better get that finished before I do something else' (06_01), and similarly for 10:

there isn't always the time to do as much of that as I would like because life kind of gets in the way ... inside and outside of the studio, also when you are moving onto the next thing all of a sudden there is an expectation you have to write a dissertation and various other things (10_03).

For 06, the context of the modules meant that there was not a right moment:

I have to you know meet the criteria's with what I am doing but sometimes I feel like just leave that behind and just go somewhere else and do what I have just had in my head, I think that is why I have started to limit myself with what I am doing in a way because I have to leave those ideas to one side (06_01).

The changing nature of the making process

There is a connection between the shifting relationship (evaluated through theme 1) participants had with their making process and the how the nature of the making process changes over time. Whereas theme one examined how participants perceived their own personal and professional changes, this theme looks at how these nurtured and impacted on the making process. Participants found that digital autoethnographic led to new ways to reflect on themselves through their use of materials: 10 discovered that the work was more personal to her than she had thought and through developing a sensitivity to materials also developed a better understanding of herself in relation to her work:

the connections that I am making about ... the sculpture ... the fragility being important, it was as much about me feeling fragile and vulnerable coming into this environment and me being that person who gets in my own way allowing fear allowing doubt allowing self-criticism to stop me from doing things (10_02).

A strategy of letting go or at least understanding the control we have over our own practices enabled 03 to realise there is no right and wrong 'now I'm a bit more confident it, there's no right and no wrong, 'it's more about my own self-reflecting and what direction I'm going to take, there's nothing more than that (03_01). This also resonated with 10, 'there is this sort of like letting go and letting go with materials and not worrying about the end product (10_03). 06 developed multiple working strategies which could be considered a form of dialogic reflection:

I started working on two separate garments at the same time so if I have done like say printed on one and working on sewing the other or if I am sewing on one I leave the other one on the mannequin so I had actually two mannequins there with me to actually work on both garments at the same time (06_02).

Embracing states of not knowing became a useful strategy for some participants, 10 described the state of not knowing at the beginning of the degree compared to the later stages:

that naivety that I had at that time would be kind of welcomed now in a sense because now I am I am kind of sometimes having a lot of information a lot of knowledge a lot of understanding can be a hindrance (10_03).

13 compared how you look at others work to that sense of 'not knowing' your own work:

probably the hardest thing is that you can't look at your work in the same way that you would look at someone else's ... if that is what I am trying to do for other people then I should do it for myself also, but then how do you get to a point where you can make work and it be strange to you? (13_02).

13's practice was preoccupied with noticing the small events and the mundane but found it difficult to develop a similar relationship to the work, 'that is the most difficult part, you can notice everything going on around you but not looking at your own work' (13_02). Changing the way that she looked at things became a research strategy for 13 to understand and develop her practice further, 'I have to force myself to be in a heightened state of awareness of and to be able to notice you have to be you have to kind of change the way that you are looking at things' (13_01). This led to 13 to experiment with strategies to surprise herself, 'And I started putting things on the camera lens, I started putting Sellotape over it' (13_00). 10 shifted her perspective of her work by asking others to take photographs of what she was doing while she did it:

E the other day took some lovely photographs of the actual plaster balloons as they were dipping and drying and that whole process, and what it enabled me to do is see what was happening, because I don't get a 360 degree view of it, so I was seeing it from different angles as it was occurring which was really interesting so even something as simple as looking at how the plaster was dropping and forming the shapes (10_02).

This theme has been a useful way to identify how the making process can be shaped by what is brought to it: by the practitioner and others. It has illuminated how critical reflection can impact on this shaping or 'nurturing', and therefore the impact that digital autoethnography can have on the autonomy and types of spaces used for critical reflection. The theme has enabled participants own conceptualisations and perceptions of the making process to be articulated and for these to challenge accepted and ingrained depictions of the making process and reflective practice.

8.0 Discussion: Autoethnographies, Participant Portraits, Thematic Analysis and Literature

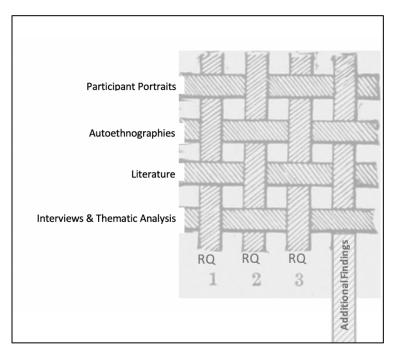


Figure 45: Weaving together

This discussion weaves together what the findings from the: Thematic Analysis, Autoethnographies, Participant Portraits and literature, tell us about the potentials for digital autoethnography to empower practitioners and what it tells us about creative making. Ownership and reflection on practice is an important part of developing an identity as an artist and participants noted their shifting identities. I will firstly discuss empowerment and the power relationships identified, then participants experience of shifting Identities throughout their experiences, how digital spaces make the invisible visible and nurture the creative process, and finally the challenges of integrating digital autoethnography as arts and design pedagogy.

Empowerment and power relationships

I began this research to explore whether digital autoethnography might be an empowering pedagogy enabling students the autonomy to reflect on and explore their creative practice. As an artist I had explored and experimented with digital autoethnography and frequently reflected on the potential of it as an empowering pedagogy. In light of my findings, I realise that its potential for

empowerment in my own work as an independent artist sits within different power relations than those that students experience. My research has made me question what power structures I was subjected to when making work as a student and as an artist/teacher, and to what extent am I replicating these unwittingly in my own teaching. For example, I realised that I previously had a narrow experience of reflective practice which centred on annotating my work or writing notes about ideas for possible future work. I now see reflection as dialogic, about seeking new ways to stimulate reflection with myself constructing meaning from a better understanding of my own culturally embodied voice (Wegerif, 2013). Being able to explain to 'other' real or imagined, is an important aspect of the dialogic self (Dennis, 2015) and a potential strategy for lifelong learning. This was significant to my own experiences; I realised that imagining an audience was a vehicle for my own reflexivity rather than a desire to have real dialogue with others. I refer to this as 'selfish sharing' where I wrote for myself rather than a community. The imagined or real social element being important to the development of this 'inner speech' (Vygotsky, 1930; 1934; 1978), (Mead and Morris, 1934).

Using digital technologies empowered participants through giving them an opportunity to develop their voices due to the public nature of platforms used. The interaction with real or imagined others through these digital spaces helped me to develop my own dialogic voice, so I could talk 'outside of myself' rather than just to myself, choosing what was 'said' publicly on the blog or privately before I pressed 'publish' or on private spaces. This gave me a sense of control and while I was speaking from one identity, I did not have separate identities in these different roles (artist, researcher, teacher) I had several voices, similar to Goffman's (1956) dramaturgical versions of self. Some of these voices were insecure and confused and some had an element of presentation or 'performing' to an audience. Participants also spoke about different voices that they used to communicate with their perception of audience at any given time. 02's sense of audience shaped her writing. For 04 the paper-based annotation handed in for assessment used a very different voice to the voice she used on her public blog, 05 found that the simplified accounts of his work useful to come back to and easier for him to understand. The technology helped 06 to express her

multilingual voice for herself. There were many examples of participants referring to their experiences of dialogic reflection and writing. In some cases, this related to imagining 'other' or a specific audience. The capacity for dialogic reflection through the solitary activity of writing for imagined others on blogs was evident in the literature Dennis (2015) and Wegerif (2013) however, participants also recounted dialogic experiences or the ability to alter positions or perspectives (Kuksa and Childs, 2014; Elwell, 2013; Freitas and Oliver, 2006) that related more strongly to the idea of shifting identities. For participants this often related to being a novice and gaining expertise, being a student and becoming a professional practitioner, but for me this was often between artist, research and teacher perspectives or researcher and researched. Wrestling with being a researcher into practice and being researched was not evident in participants experiences, or the use of metaphor and specific terminology of ethnography: being in the field 'observing myself within a culture' or 'habitat'. Although, 10 did refer to a 'language' existing within a 'system' of assessment/arts pedagogy. Being an autoethnographer was a significant part of my identity, again not expressed by students. The identity brought a layer of meaning to my imagery and ideas: being the researcher as diver.

Making as reflecting or reflecting as making describes a cyclical and shifting relationship. 13 described it as an alternating state of connection and disconnection (13_00) but Archer (2014: 256), describes 'all acts of selfmonitoring' as meta-reflexive and the basis for deeper reflection. Ryan (2013) advocates that lifelong learning is a benefit of embracing 'the self as a subject of critical study in relation to others and the contextual conditions of study or work' (Ryan 2013: 145). While it is not possible to measure this at this stage, the personalisation and independence digital autoethnography requires makes it a potentially effective lifelong learning approach, it was effective for the development of my work and reflective skills as it was for the student participants. 09 recognised that his own identity and relationship to his work was evolving and not fixed and that he had also developed new skills in self-reflection that would continue to be useful post-graduation. For many of the participants, using digital autoethnography gave them valuable skills for their practices post-graduation; strategies to 'unknow' their work, distance

themselves and see their work with fresh eyes, to then 'know' it in new ways, a blend of distance and familiarity (Reed-Danahay, 2017) akin to Bourdieu's (1977) 'habitus'.

The continually evolving or shifting relationship with making include the contexts that are brought to the process at any given time. The 'insider', 'outsider' perspectives that autoethnography provides are not a conflicting dualism of positions but a new position (Reed-Danahay, 2017) and the digital spaces effective for stepping back, enabling a position of 'outsider' to their own work, 'making reflection visible in its multi-layered dimensions ... making their own reflection visible to themselves and others' (Ryan, 2014: 12) or 'putting the maker into the shoes of the viewer' (Kirk and Pitches, 2013), switching between two states (Kuksa and Childs, 2014) and reflecting on self from two positions, 'double identification', (de Freitas and Oliver, 2006). Most of the participants experienced being able to observe their own mistakes and learn from them. Kirk and Pitches (2013) suggest that transferring the information into a different medium, 'allows you to see or "resee" what you've done ... with new information'. A technique I frequently used to experience familiar aspects of my making into unfamiliar ones. In my case not so much to see errors but to be playful, push my understanding of it and stimulate a dialogue between myself and the work.

There was broad agreement in the literature that reflective practice in the arts was a more continuous process: integral and cumulative (Barton and Ryan, 2014), relationships between different aspects of making (Fortnum and Smith, 2007) and continuous (Burnard, 2006). That it was closely aligned to documenting and therefore evidencing and illuminating positions of knowing and uncertainty (Kirk and Pitches, 2013). Mäkelä and Nimkulrat (2011) describe a process that closely relates to digital autoethnography: documentation becomes artifacts and then data to reflect on. The shifting relationship with how participants identified with their making was not procedural, but their grasp of it, and how their relationship to it fluctuates between knowing and not knowing was developmental, 'there is a sense of be humble, be naïve, be vulnerable, allow yourself to be all these things, and bare it all to the world, and be

confident, and take the initiative. It's opposing personalities' (10_03), highlighting what seem like contradictory qualities: vulnerability and confidence. This illuminates the shifting relationship well. It is not that vulnerability and confidence are at different ends of a spectrum but that there is a shifting relationship between them: to have the confidence to be vulnerable. Cocker suggests the development of 'tactics' to observe what is usually unnoticed by 'slowing down their process of observation, for cultivating second sight' (Cocker, 2013: 128). This and allowing oneself to be vulnerable are both strategies for reflective practice. These are what Ryan (2013: 14) describes as 'an alternative reality' that can be 'recast' where the student is empowered through initiating the change.

From the perspective of teacher and researcher introducing digital autoethnography to participants was incredibly empowering for me. Inviting them to research their own practices and providing the structure of resources and interviews I realised that I did not need to control all aspects of the pedagogy for them to document and reflect on their work. I also found that digital autoethnography enabled reflection as a creative act as I reflected on the idea of the work before, then during and after making it. This process facilitated new ways to reflect that became closely entwined with making new work. Rather than stimulating work about reflection it offered creative ways to think about reflection and new opportunities for preparatory and developed work. This is similar to Kirk and Pitches (2013) 'digital reflection mechanisms' where something new becomes expressed from the process of documenting digitally. Being researcher and artist enabled a heightened awareness of both: there was a shift in my relationship with the tools which I describe as a synergy between the digital autoethnographic method, and the work being made and between the method or process of the research and the work being made. In the literature this rich in-between space is referred to as a liminal space (Springgay 2005; Irwin 2004; Detlefsen 2012), boundary-crossing (Reed-Danahay, 1997; Meerwald, 2013), threshold crossing (Kuksa and Childs, 2014) creativity within the cracks (Sullivan, 2010), transformative (Mezirow 2009) and 'critical, transformative reflection' (Ryan, 2013).

However, in terms of empowerment, the situation was different for students. The interviews gave a sense of their uncertainties; being a student and the process of becoming an artist was described as entering a different culture that they did not yet belong to. This perception illuminates some of the power dynamic between students and specialist tutors on their respective programmes. These aspects drawn from the thematic analysis relate to feelings of inadequacy and not yet belonging to their discipline:

- The terminology they might use to describe their work, approaches and experiences
- Editing their writing for the tutor to read
- Editing messiness of their process out of their documentation
- Eradicating evidence of mistakes
- Developing strategies to control what was seen by tutors
- Awareness that tutors had preferences and influence and would make judgements
- Being specifically directed by tutors
- Uncertainty around what would be permitted for assessment
- The impact of comments of tutors
- Assessment and marking criteria steering the work produced
- The expertise of tutors

It is with some irony that participants concealed their thoughts and work, did not recognise the richness of their processes, or believed their responses would be invalidated by others. This was the range of thoughts and ideas they had, the mistakes they made along the way and their own personalised accounts of their experiences. This potentially impacts on what work and reflection is visible for teacher assessment but also what remains visible for further self-reflection. Opportunities to reflect are minimised when mistakes or work not deemed to be of value are eradicated and the powerful benefits of meta-cognition are impeded (Luna Scott, 2015; Mair, 2010; Farmer et al. 2008).

Critical reflection and metacognition require a dialogic approach that Shor and Freire (1987) assert leads to transformative and liberatory learning. However,

the power dynamics related to institutional degree structures, increased marketisation, assessments and teacher positioning can all militate against truly dialogic experiences. It was more apparent that participants sense of insecurity was often around the power dynamics that relate to assessment: what and how work should be documented, reflected on and shared with tutors. The potentially disempowering nature of assessment is echoed by Bain (2010): the relationship between learning, the assessment of learning and student autonomy is often poorly aligned. While Richards and Richards (2013) suggest dialogic 'coconstructed' approaches and Bain (2010) a dialogic approach for assessment resulting in a tutor and student partnership, as teachers, no matter how supportive or empowering we try to be we are still in a position of power over assessment. One source of insecurity for the students was in recording and listening to their own voices and reflections as part of the digital autoethnography. While they may eventually have found the process to be empowering, revealed through their accounts in the interviews, the sense of how they fit into concepts of authority and power is important. Perceptions of what others might think or permit for assessment prevented some participants to consider their voices as valid. Potentially this has a significantly negative impact on the confidence and development of students in their identifying as, and becoming, artists and designers.

From my own more experienced perspective and without the same pressures of what others might think I was able to navigate my discomfort of listening to my voice and seeing myself more easily. My experience of nervously recording the initial creative ideas and use of private spaces to document thoughts illuminated how challenging it is to share feelings and ideas. I re-experienced the delicate early stages of trying things out but was able to return to those moments as a spectator with inside knowledge. I have the memory of what it felt like to make the first recordings, how the experience sounds as a recording and what it feels like to listen back to it. These elements created a complex experience of familiarity and discomfort, a phenomenological event 'like returning home' (Massumi, 2002: 191). I found it fascinating to hear the contrast in confidence, enthusiasm and to be able to reflect on that while it could still shape the work but also to relisten later when it can inform future work. It was also invaluable

that I had recorded evidence of thoughts and experiences that may have otherwise been forgotten, capturing thoughts in-action (Schön, 1983). It was significant in my own experiences that the richer reflective activity developed from further write ups, revisiting the blogs and conversations. These new experiences, while in the shadow of the residency, cast new light back on these experiences 'on-action' (Schön, 1983) but emphasises the iterative and repetitive nature of reflection, also the importance of constructing narrative - dialogues with self to evolve and make sense of thoughts and ideas. Form me significant pieces of work were produced from a long arc of reflection and my embodied experiences of autoethnography and being an autoethnographer. The depth I felt I was reflecting was empowering, I felt immersed and inspired. There was also a rigour of watching back, remembering my felt experience and how it looked visibly.

Similarly, participants were able to control the pace of their reflective practices and there was evidence of them returning to artefacts, documentation, recordings and images, reflecting on-action (Schön, 1983). Reflection was not just in the moment or after but looped and complex in its presentations across different media and expressions. Being able to re-enter the work was functional: participants were reminded of work they had done (Kerwalla et al. 2009) and they were able to see the work presented back to them in a different medium and as a stranger (Kirk and Pitches, 2013). The technologies gave participants control over how they re-engaged with their experiences. Recordings can become non-linear, entered at any point and excerpts listened to out of sequence. They can also be private or 'safe spaces' to hold the raw thinking and ideas. Using the technology as a private as well as public space helps make a distinction between reflecting in-action which often remain as the private spaces, and on-action which are constructed, edited and more public facing. The use of the private and public spaces offers opportunities to discuss with students the nuances of reflective practice and how they can use digital technologies to reflect effectively for their own learning and assessment. Having private documentation allows students to be vulnerable and transparent, hopefully learn from what this reveals to them (Boud and Walker, 1998; Boud, 2001) and reflect on these experiences in assessed work including tutorials and interviews.

Participants made decisions about what documentation to revisit and further reflect on. In some cases, just having the documentation was enough and they did not feel the need to revisit work, preferring to record audio or visuals and move on. For many participants using the digital technologies, particularly recording themselves was a risk. Taking risks and allowing for failure was an important aspect described by Orr and Shreeve (2018: 37) and conducive to students navigating 'an individual path through the territory'.

It was important that as researchers into their own practices, participants made their own decisions about their research approach, not requiring permissions from me, and that they had the opportunity to reflect on these in the interviews. Their voices were a critical part of exploring the potential of empowerment pedagogy rather than contradictorily following another 'oppressive' set of instructions, returning to a 'monologism' (Wegerif, 2012). Participants used many voices across their blogs and annotation, a spectrum from: confessional, chatty, informal, formal and critical. The choice of technologies and spaces used were different for each participant and some referred to this positively as having control across spaces. Discussions tended to focus on practical issues relating to the technologies but also the social and creative contexts (Sclater and Lally, 2013). Participants cycles of making, reflecting, knowing and not knowing were more closely aligned to Sadler-Smith's (2015) reading of Wallas' (1926) four-stage model of the creative process, particularly regarding 'sensibilite', Baaki and Tracey's (2014) assertion that each situation is different and particularly Sullivan (2010) who stresses that progress for artists is discovering what they don't know in order to challenge what they do. DA has enabled participants processes to be observed and then to consider how a creative process model (Wallas, 1926) or 'design thinking' framework (Tschimmel, 2012) applies rather than to use these models as the model for their practices.

I had not anticipated at the start of the research that digital autoethnography would be a way to support and empower students with disabilities and specific learning needs. However, a high proportion of my participants (over 70%)

disclosed disabilities and specific learning needs during the research process. Both Raein (2005) and Maloney (2007) noted the high rate of dyslexia amongst art and design students which Maloney found was often a barrier for written work or experienced as an alienation to writing. Maloney found that using the blogs did not always lead to students reflecting more, however in some cases students found preferred ways to reflect using the technology. One student posted a video to *youtube* where they spoke directly to camera about their planning for a performance piece rather than writing. This aligns to Kill's (2006) findings that students responded well to having autonomy over their choice of form and genre for their writing and not just restricted to the academic essay. This led them to develop innovative and multidisciplinary approaches to their writing which challenges misconceptions that art and design students are not interested in, or able to express themselves, with words.

I found in my research that the digital autoethnography enabled participants to be experimental and multidisciplinary with their recording and writing which empowered them to use their own words and voices in new ways. They began to value other modes of expressing and documenting their work as much as formal writing. The disabilities that participants discussed included dyslexia, dyspraxia, OCD, depression, anxiety, and physical difficulties when writing. These challenges created tensions around confidence. Participants' perceptions of their ability to write and speak about their work was formed from their previous experiences of teachers assessing their work, group critiques, feedback, and tutorials. There was often frustration in not feeling able to externalise or make visible their thoughts and ideas about their work. However, these participants found that the digital technologies and autoethnographic approaches empowered them to express and articulate ideas, be more insightful when discussing their work, represent the work more accurately, provide visuals as an alternative to writing, organise documentation, construct effective narratives, create manageable loops of reflection and challenge ingrained habits and assumptions. Participants were able to approach their reflective practice and documentation creatively in idiosyncratic and multimodal ways and to explore the potentials of digital technologies to create other modes of expression that were valuable and powerful.

Shifting identities

Participants referred to their relationship with making and their professional identity as complex and shifting rather than fixed or static. In the interviews they discussed their creative process as something becoming formed and developed out of their learning experiences rather than as a specific process that was taught and learnt. The idea that they should work in a particular way related to their ideas around assessment and what they should submit rather than how they worked on their practice or projects. Borrowing Sfard's (1998) metaphors for a critical theory of learning, the creative process is therefore both acquired and participated in. Participants experienced these shifts differently but there were also common experiences, often illustrating the differences and similarities across disciplines, the stage of the programme they are on and what they were able to identify as their own shifts within this culture.

Participants were on programmes across art and design-based disciplines: in Hickman's terms, the differences between the disciplines across the sample 'are in degree rather than in kind' (2005: 12). My findings contribute to the literature on artist identities in that participants seemed to have identities that were linked to their core discipline area (fine art or design), but their approaches fell into more blurred boundaries between art and design as depicted below with Figure 46 (15). It is important to note that there were examples of autoethnography being an integral part of participants practice, particularly those with a dominant fine art approach to their work. However, those whose practices had an autoethnographic bent already, did not necessarily adopt digital autoethnography more readily.

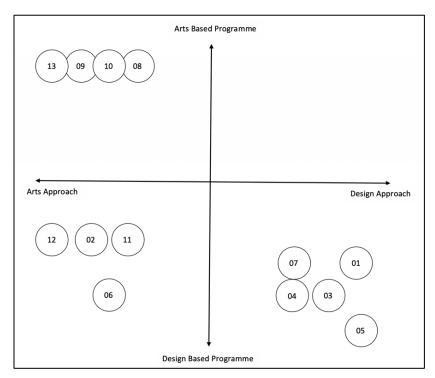


Figure 46 & 15: Mapping of participants according to discipline area and approach taken

The perception of discipline borders did impact on participants and their reflection on their professional identities. Participants approaches to experimenting with and exploring ideas and materials sometimes created tensions between the ways in which they worked and how they felt they were expected to work, develop and present their ideas to tutors. Some felt that an identity within a profession or trade was important and often related to their discipline specific skills or terminology they used. Several participants referred to their own confusion or dilemmas around which discipline or form of practice they belonged to, particularly if it shifted across design-based and arts-based areas or skills focused and creative focused areas. The digital autoethnography gave participants the opportunity to explore this in depth, particularly as their documentation often included seeing and hearing themselves. The shifting relationship that participants had with their practice related to insights they gained through their use of, or decision to not use, aspects of digital autoethnography. In examining practice, participants were engaged in a metacognitive activity that emphasised the developmental rather than mechanistic qualities of making work. This was often transformative: observing the self, led to embodied experiences of making work, which for some led to a shift in the

work they made and their ability to reflect on these making experiences. Participants found new ways to identify what reflection was and what it meant to them and in some cases the documentation of making work for reflection was considered as actual artworks. Discoveries about looking, seeing and recording through drawing led to me thinking about making and reflection in new ways: recorded verbal drawing, anticipatory drawings, increased sensitivity to materials and ideas for new ways to teach. These new experiences of drawing broke down the elements of making drawings, allowed me to break habits I had formed in my practice and demystified the act of drawing. This new understanding of the relationship between the conceptual, material and technique (Fortnum and Smith, 2007), was rich, dialogic, and akin to Kirk's material thinking: 'the medium used both mediates and records a trace' (2014). The new work that was produced from this documentation 'data to reflect on' Mäkelä and Nimkulrat (2011) was also a way to 'recast' my practice and identity (Ryan, 2013). These specific experiences also consolidated my identity as researcher and artist, enabled me to consider the artefacts of the research as artworks and reframe my practice.

I became aware of different roles I had, my work and how I spoke about it changed. I experienced a heightened awareness myself as an artist: spacially, embodied and intersubjectively and this raised questions about ways to think about being an artist, researcher, teacher. I gained insight into feeling vulnerable and the discomfort of not knowing. I felt that allowing myself to be playful by taking on different roles was a significant part of the creativity and new work to emerge. The liminal spaces were rich for me, and my practice, embraced my identity of an autoethnographer, researcher, maker and performer.

Participants were able to identify and reflect on their shifting relationship to their making processes to explore how their personal and professional identities changed over time, gaining confidence in their own decision making, their relationship to others throughout the process, becoming other to reflect on their work differently and embodying their work. This self-efficacy in the making process leans towards a liberatory self-expression which values the development

of individuals self-esteem and sense of identity (Hickman, 2005). The interviews enabled participants to talk about knowing themselves better: their identity as students, artists, designers and professionals. This opportunity to reflect on their strategies used for reflection was powerful and resonates with Luna Scott (2015) recommendation that students are permitted to identify their confusion. The interview became a confessionary space where participants explained their behaviours around this.

Making the invisible visible: nurturing the creative process through digital spaces

Recording thoughts and actions digitally was a way for participants to externalise and document the internal, make these thoughts more permanent, and make aspects of their work and themselves making visible. While these residues of making or 'artefacts' were not always made visible for others or for the purposes of assessment they often made an impact on participants, their decision making, and what they reflected on in the interviews. This in turn enabled participants to consider reflection as a more active part of their practice, to use aspects of their reflective practice and process as work including emotions and what had previously been private activities. Digital autoethnography allowed participants to develop different approaches to explore the creative process: documenting internal thinking, reflecting in different ways through experiencing closeness to and distance from the work (there were examples of becoming an outsider to themselves through seeing or listening to themselves on recording), becoming more aware of their own emotions and mistakes and choosing what to make visible or hidden to others, became evidence of independent research and critically engaged reflection. Participants were able to make their own decisions and control what was shared and made visible and what remained hidden.

But while digital autoethnography may have revealed or evidenced potentially useful or interesting elements of their practice, there were examples of participants editing their process, omitting mistakes and dead ends from their evidence and not completing any reflection until the end, often resulting in missed opportunities for assessment. Similarly, I found it difficult to share my

uncertainty at the early stages of the project, preferring to read later, more constructed accounts knowing difficulties had been resolved. The issue of students eradicating or concealing their lack of knowledge or avoiding reflection on their emotional state was widely discussed in the literature. Boud and Walker (1998); Boud (2001) and Robertson (2011) emphasise the importance of establishing a climate that is conducive to reflection. The digital autoethnographic approach enabled participants to still control what was made visible, what to emphasise and omit from the documentation. This led to conversations in the interviews about the tendency to want to do this while recognising that it would be better for assessment if the errors and reflection on mistakes were included. Participants had ownership over these decisions and for some it did lead to changes in practice where they made mistakes more visible.

Documenting aspects of practice not usually documented and making internal thoughts more visible with digital autoethnography is another form of expressing the ineffable (Eisner, 2003) and values the idiosyncratic approaches that students may take with their reflective practices. As an ethos this lends itself well to the idea of art as a practice which values individual expression, self-esteem and identity (Hickman, 2005) and personal uniqueness. The digital autoethnography enabled participants to develop an understanding of arts pedagogy to consider how their practice could be nurtured through repetition, practise, and forms of reflective practice over time with others and with the process. Participants referred to their experiences of typical pedagogic approaches: crits, 1-1 tutorials, conversations with more expert other, following instruction, revealing that they often felt disempowered in these situations. The discomfort and potential imbalance in these situations is referred to in the literature (Goldschmidt et al. 2009; Percy, 2004; Healy, 2016; Swann, 1986).

This is echoed in the literature by Baldessari and Craig-Martin (2009) who refer to themselves as 'acting like cupid' and 'teaching by your presence', which aligns to Elkin's assertion that possibly art cannot be taught or should not be taught (2009; 2012), a sentiment that has undertones of arrogance and elitism. There is the expert transmission approach discussed by Souleles (2013), or the much cited 'sitting-by-nellie' (Swann, 1986). Swann suggests that these

approaches are remedied through peer learning and formative rather than summative group crits (1986) and Souleles suggests experiential learning and a wider spectrum of required knowledge and skills (2013). While these responses do encourage a supportive and community approach, Orr and Shreeve go further and critique the pedagogy of the crit: 'students and their work are "languaged" into being' (2018: 83) and also insist that 'mystery or elitism' (2018: 24) should be avoided at all costs. These usual pedagogic approaches rely on others and the structure of a course as well as the usual power relationships between students and teachers which are not only democratically challenging but also not easily sustainable beyond the programme of study.

The digital autoethnography offered an opportunity to rupture these didactic transmission approaches because alternative spaces for reflecting and making were formed from participants experimenting with both virtual and physical spaces to record, document, revisit and re-experience their own work. Participants utilised multiple platforms: physical locations, paper-based and digital space. These were autonomous and dialogic spaces, personalised and constructed out of several locations. The digital spaces were outside of the institutions' systems: Facebook pages that were private to the programme but not mandatory and would continue to exist after graduation, personal blogs, Pinterest, Instagram, Evernote. My own blogs were more like research journals than sketchbooks; re-framing what I was doing as digital autoethnography meant I was producing 'fieldnotes' and the narrative I constructed with these on the blog is a chronology of these fieldnotes. Just as autoethnography is both a process and a product, the blog became an artefact of the research. Participants and I experienced the dialogic affordances of using blogs and other digital spaces. Mainly through an awareness of writing while imagining an audience rather than through comment and dialogue, with the exception of how participants (07, 08 and 09), who used Facebook to invite comments and likes and, in some cases, (08) posed specific questions. Dialogic reflective experiences often resulted from trying to make thoughts and ideas visible for someone else. Participants gave various examples of who they imagined was reading their reflective writing and annotation, referring to using multiple platforms or media and sometimes these relating to communicating to different audiences. With

digital accounts linked together or replicated in different ways (screenshots of *Pinterest* bards posted on their blogs for example) imagery and annotation became distributed across various platforms, giving participants the opportunity to revisit their work in various ways and reflecting on their experiences of these different formats. Irwin's (2004) description of space where identities intersect as 'spaces between and spaces between the in-between' create a rich and complex working environment.

In line with what Wegerif (2013: 29) describes as bringing a 'larger dialogic awareness of multiple perspectives to bear, we should enrich our experience of our situation' participants spoke about writing for those assessing their work but also much wider audiences who may encounter the work online. Therefore, although writing is a solitary activity it is with others in mind and for some participants the writing online was for a different audience than the sketchbook even though both may have the same visual content. The imagined audience was integral to participants sensemaking introducing a social element to the solitary process of writing, Dennis (2015) does not distinguish between real or imagined others but that 'they provide an extensive mechanism for the facilitation of a dialogic self' (Dennis, 2015: 288-9).

01 became aware of her own lens on the world through the lens of the headcam, 'when you actually looked through it you think to yourself is that how I see things?' (01_01). While these experiences do not necessarily translate into assessable reflection, they illustrate the shifts in understanding and dialogic reflection participants had about themselves in these spaces. Although it is possibly the potential of a blog to be public that also holds students back from honest reflection. *Facebook* was often where 09 experimented with placing his photographs and poetry together, initially as snippets of annotation to accompany the images, the sometimes cryptic text became more formally structured poems with the imagery. The *Facebook* page became a space to experiment with process but also presented these pieces as finished pieces. For 09 this was the first time he saw these juxtapositions outside of the camera and notebooks. Eventually this space became even more dialogic with 09 performing his own analysis of the work and this in turn becoming artistic pieces in their

own right. In common with other participants with a fine art focus, 09 created his own loops of reflection and practice that seem far from the creative process and reflective practice cycles illustrated. 13 described how the technology fed into her own reflective loop:

I get stuck on doing the same thing over and over and over again ... going back to you know forcing myself to say you've done enough of this now, stopping doing it and going back to that point where I go out and take pictures and then put them on my blog and look back at them on my blog is kind of just a big cycle really (13_01).

Speaking out loud, and recording my initial thoughts and ideas, instantly made them more conversational; I talked to the recording device as 'other' and then listened back, thus forming a dialogic loop of my own words.

The educational space became something students controlled to pull together internet research, their ongoing thoughts, experimentation, documentation of work in progress and finished pieces. Some participants (five), mostly from fine art (four) had blogs and used them, as I did, like a journal of their working process, often linking to or embedding other digital platforms, instead of, alongside, or as an extension to their sketchbooks like Budge's approach (2013) or like 'off-loading' (Gröppel-Wegener, 2012). There was no singular approach taken: some participants hosted all or selected paper-based work in their digital spaces, some had evidence of work in digital spaces like *Pinterest* boards in their paper-based work. Some kept these locations separate with no replication between them. The particular blend of tools and platforms that participants used created idiosyncratic 'mashups' (Wheeler, 2009). How they combined to make dynamic learning spaces is not clear but illustrate the importance for students to work instinctively rather than prescriptively. Significantly, using these spaces often led to the nurturing of creativity that impacted on the work made, both conceptually, and aesthetically.

Table 3 below, maps participants and my activity in digital spaces against definitions of the types of activity found in the literature. Where participants did not solely use blogs (13 was the only participant who did) the spaces refer to

blogs *Pinterest*, *Facebook*, *YouTube*, *Instagram*, *Evernote* and private recordings.

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Key:

*over a long period of time here is interpreted as longer than one module on their programme

X Indicates convincing evidence

/ Indicates some evidence

Table 3: Participants use of blog spaces and/or other similar digital spaces

This table does not include the reflection that took place in the interviews which against Richardson's (2006) criteria would be 'complex writing' for all participants. The digital autoethnography offers a diverse range of digital spaces beyond the limitations of blogs and it was vital that participants were able to explore, use and reflect on their own choices of technology. There is a range of advice in the literature regarding how prescriptive to be with using digital technologies (mostly blogs) for reflective writing: to scaffold and support students but also encourage independence and autonomy. The framework of digital autoethnography does offer opportunities to discuss the possibilities of digital tools for reflective practice while remaining open and flexible (Kerawalla, 2009) for students. It could also be modified to be more structured (Robertson, 2011). Digital autoethnography aligns more closely to the multimodality and discipline specific teaching of reflective practices that Barton and Ryan (2014) advocate as well as the successful strategies developed by (Kirk and Pitches, 2013) in that, individuals can maintain their own spaces for creation and for making the tacit processes more visible.

The digital ethnographic space supported the nurturing of creative processes, but it also afforded spaces for disruption. While disruption can feel uncomfortable it is important to the creative process because it enables a temporal space that can slow down and change, enable experimental spaces, and boundary crossing spaces. Experiences in these new spaces disrupted the usual perspectives by allowing the usually invisible perspectives to become visible to participants and potentially others.

I thought of my blog as an extension to the studio, like Budge (2013), somewhere to think and make work, a new lens to view my practice. I was able to construct a dialogue with my 'fieldnotes', and these 'complex relations' (Tosun and Baris, 2011) enabled me to juxtapose image, text, video, and create a dialogue between these different forms. The technology was also a distraction and disruption from habit. The tools and techniques I used to capture and document sometimes interfered with my process and reflection. I was aware of this interference partly because it made everything take longer: I had more to observe, I could see more of my process, so I had more to think about and time became a mediating factor. I found that experimenting with new spaces to document, reflect on and create work also allowed me to create problems to solve, create new situations, new contexts, and audiences which stimulated different responses as well as a space to notice mistakes, to become more familiar, to become surprised and to become an outsider. The technology was able to record and make visible previously inaccessible spaces, see what drawings look like as they are being drawn from behind, a perspective not usually accessible brought an element of surprise. Kirk's (2014) recorded process paintings illuminated the hidden layers of her panting, a 'palimpsest', Kirk leading her to question whether digital making in this way was akin to 'material thinking': where the medium used both mediates and records a trace (2014). For Wilks (2005: 6) it was about making the transient accessible, 'a space where alternative narratives and critical exchanges might be articulated'.

Slowing down and witnessing their own making frequently led to participants gaining insight into the materials they were using, a sensitivity to the qualities of these materials, how they sounded, smelt, felt in their hands, responded to

their body movements and how their bodies responded to the materials. In the interviews at least, participants gave rich accounts of their experiences with materials and techniques, more than just description. This was a significant finding of my own, not only seeing the materials from different points of view but what they looked like close up, zoomed in, sped up or slowed down. As I found a new sensitivity to the materials and tools I was using, I also developed a sensitivity to my own presence in the work, conceptually and physically. Revisiting the digital documentation became a space to see aspects of the self in unexpected ways, intimate and theatrical because capturing these moments of making where often it is close up or a detail being observed, the technology did more than just document it became a material. This 'perspectival' or 'movement-vision', seeing myself moving, rather than just 'mirror-vision' (Massumi, 2002), I experienced seeing myself in an unfamiliar way. As the documentation with me (body and voice) started to become my practice rather than just documentation of it, seeing myself as part of the making, I began to more purposefully include myself in my practice by developing performances, like 09's voice becoming part of his work. Seeing myself drawing and drawings reappearing in my documentation videos changed my relationship to drawing, suddenly I was able to think about drawing and reflection in different ways: words as drawing, reflection as drawing, description as drawing, audio as drawing, performance and the body as drawing. For participants the products of their reflection also became more embedded in their work, more significantly for students working on the arts rather than design spectrum. Participants with a dominant arts-based practice, including myself, were more likely to be influenced and their work influenced, conceptually and/or physically by their reflective practices, blurring making and reflection: making as reflection and reflection as making. Participants with a more dominant design-based practice were more likely to be influenced by aesthetic and technical discoveries, altering their processes, materials, techniques, and habits.

Participants also found that their blogs and other digital spaces as 'digital sketchbook' spaces enabled them to 'step away from the immediacy of their work' (Gröppel-Wegener, 2012: 92-3). All participants to a lesser or greater extent, embraced Wackerhausen's (2009) 'second order' reflection in the way

they attempted to 'elucidate and challenge the trails of everyday practice' (2009: 464). In some cases (participants 04, 08 and 12) habits were mainly reinforced and they stayed loyal to their established practices described as 'first order' reflection by Wackerhausen (2009). Some participants, as Wackerhausen suggests, became strangers to themselves, visited foreign territories and learnt alien concepts (2009). They used the digital to step away from the immediacy of their work (Gröppel-Wegener, 2012; Kirk and Pitches, 2013) but also to step away from the physical immediacy of the studio or face to face interactions and a glimpse of how others might see them and their work. For 10 the privacy of the studio was disrupted by the presence of the technology 'knowing that that camera is watching you' (10_03). Having an awareness of being surveyed often led to a heightened sense of being in the moment as the technology becomes a physical spectator, and the artist becomes aware of an outsider's view. Furthermore, replaying recorded footage takes you back into that moment and removes the self from the in-the-moment making, detaching, creating a third eye or ear, new perspective, or viewpoint to reflect from.

The digital technologies enabled distancing but also a way to remember what was forgotten or mis-remembered and return to the moment or experience. This was useful to reassure after moments of confusion and in developing an understanding of what is experienced in the moment and afterwards. The distancing became important for more critical reflection and therefore important to be able to return to the documentation rather than rely on their memory of the making experiences. Many participants referred to forgetting and remembering incorrectly affecting their reflective capabilities. Audio recordings were also used to remember information from tutorials, conversations or lessons. Kerawalla et al. (2009) found that blogs were sometimes used to navigate back to a moment of thinking. This was the case for me particularly during the residency. I had experienced extremes of clarity and confusion over a short period and revisiting the moments of clarity was helpful. This extended to transcribing the recorded interviews. Making the transcripts required many hours of re-listening and typing the words, and then being able to read what I had heard was an immersive experience. Strangely, I could anticipate the conversation as I was listening, partly from memory but also the logic of the

conversation; I didn't feel like I was listening to myself asking the questions illustrated by frequently thinking to myself 'I hope I ask this!'.

I recognised that the technologies I used were not 'silent partners', the affordances of the technologies determined what, how, when and where I reflected and became spaces to be creative in (Buckingham, 2009). They were an active agent in shaping my reflection and reflective practices; accelerating and amplifying what I might have done in a sketchbook, 'for the "message" of any medium or technology is the change of scale or pace or pattern that it introduces into human affairs' (McLuhan, 1964: 8). Pausing to document was time consuming, often slowing participants down. While this was beneficial it was also a cause for frustration, disruptive to being immersed in the moment. There was a sense that time was almost a material for participants, how they worked with the temporal impacted on the work they made and their relationship to it. The digital space was often used as a live, living space, frequently visited and amended compared to the sketchbook which was often not revisited and remained closed and conclusive space. Revisiting work and ideas also created a changeable space; even with a recording, we see what we want to see, what is relevant at the time. The continuous shifting of ideas, knowledge and experiences meant that although the digital recordings remained fixed, they were affected by what participants wanted from them at any given time. The digital spaces offer a different dynamic to other first-hand experiences, potentially having captured more than a drawing or written observation could, and therefore the potential to see new detail. Transferring to a different medium does not merely replicate but enables the content to be seen 'from one plane of meaning and appearance to another' (Friedberg, 2006: 11). This was evident in Kirk and Pitches (2013) research; the digital was a substitute for audience, 'encouraging the student to see their or others' work from an alternative standpoint' (2013: 11) a permanent 'retrievable "mirror" against which they could benchmark their own phenomenological impressions of the event' (2013: 11). Returning to documentation and work, seeing it differently, in a new context, with new knowledge or new intention helped participants make sense of their work. There is a sense that revisiting is a distancing mechanism (Kirk and Pitches, 2013), enabling you to become

'audience', 'putting the maker into the shoes of the viewer' (Kirk and Pitches, 2013: 3) which creates a rigorous space for reflection and learning (Ryan, 2014).

The portability of the spaces I used, either equipment or networked access to platforms became an extension to my studio space. My identity was not fixed in locations, I could take these different working spaces and immerse myself in them anywhere. Participants often referred to accessing their multiple spaces anytime and anywhere as convenient, but they were often a way to not break the narrative and remain present with their work. Different spaces provide a sense of different audiences and can be used in different ways but one's identity remains the same. Boellstorff's (2012) position on what the digital brings to autoethnography reiterates: it is about relationships between offline and online. It also relates to different physical spaces, private or public spaces. My own experience of becoming enculturated in the museum led to a heightened sense of the spaces I was inhabiting, a combination of front stage, behind the scenes (Goffman, 1956), online public and private digital spaces, privately inside the sketch book (then publicly as I posted pages online), publicly working large scale, and removing myself from my daily life to be resident. These were all immersive spaces. Even behind the scenes there were further private spaces, encrypted files with interviews, unpublished blog posts and incidental public spaces (YouTube, Vimeo and Podbean) that hosted video and audio so I could embed or add links to the blog. Participants had a similar array of spaces that crossed boundaries and for some that included becoming student, how they connected between social and formal aspects of their lives, how public their studio space was and whether they exhibited their work or not.

The 'boundary-crosser' (Reed-Danahay, 1997) and knitting of the researcher and researched together (Meerwald, 2013: 45) are perhaps inevitable outcomes of moving across spaces to research, reflect on and present work in both autoethnography and the digital that in particular, results in a 'yoking' together of online and offline identities (Elwell, 2013). These are all referred to as liminal spaces, spaces between, that are experienced by switching from one to another (Kuksa and Childs, 2014) the space that exists as you leave one and enter the

other. The impact this has on reflective practices depends on how this liminal space is engaged with; rather than think of the self as having a different identity or purpose in each space, it is more useful to think of these multiple spaces as different lenses.

The digital platforms were useful for constructing and exploring reflective styles: narrative making and storytelling. It was easier to construct and alter the chronology on the blog, drawing from private repository spaces. This encouraged revisiting and reflecting on practice but also creating new narratives out of it. Ellis and Bochner (2000) state that stories potentially distort the past because they 'rearrange, redescribe, invent, omit and revise' but they say autoethnography is not about accuracy. The digital technologies provide an element of accuracy but as sources are still highly subjective and subject to interpretation. The sketchbook has a set chronology or if left until the end is in danger of missing important elements out and therefore is also a distortion of what may have happened. The digital spaces offered both fixed and unfixed representations: we can construct an order and chronology that appears fixed and located but we see what we want to see, what is relevant at the time both these aspects can be altered. For participants the blog structure created a timeline, a narrative of their creative journeys often highly controlled and edited. The reflective activity on my own blogs did not follow the real chronology: the order that the experiences and 'fieldnotes' appeared, did not reflect the real timings of the day. For each day the content appeared as a continuous stream of imagery, links and text and one day equalled one post, drawn from multiple sources, at the end of each day. The process of doing this systematically at the end of each day meant that I did reflect throughout the process, while I was making work and documenting it and at the end of each day when I revisited the documentation. The blog space in these instances was less about in the moment 'confessions' and more about constructing a narrative, storytelling and remembering, potentially inhibiting inner dialogue as selfpresentation is prioritised over self-reflection (Turkle, 2015: 81). Some participants had an uneasy relationship with digital platforms for this reason, 08 disliked how people used social media to 'build themselves up to be perfection' $(08_01).$

What are the challenges of using digital autoethnography methodology as arts pedagogy?

Summarisation of challenges

Digital Autoethnography is based on a social science research methodology rather than an established art or design pedagogy. It therefore needed explaining to potential participants and staff across the discipline areas. My digital autoethnographies provided exemplar material but presented a dilemma when working with participants. One of the biggest challenges was finding the balance between informing students about the research but not imposing my own experiences on them. There were also several concepts to introduce: using social science research methods to research themselves, arts-based research methods, reflective practice and using digital technologies. It was essential that I gave a context for these elements without being directive. Using a methodology outside of usual practice was an advantage for working with participants across several art and design discipline areas.

Discipline identity was important but there was little evidence that participants felt territorial (Becher and Trowler, 2001). Participants mostly worked with approaches and materials relevant to their ideas and needs rather than in order to remain within a discipline, although this is an aspect that could change depending on whether the borders between disciplines on progammes are tight or more relaxed (Black, 1973; Bichard, 2008; Haywood, 2008; Blair et al. 2008; Becher and Trowler, 2001; Fleming, 2010; Hickman, 2005), notably photography was not visible as a separate discipline in the literature. Also, I did not have any participants from the photography programme. The approach I took focused on participants discipline areas as the wider context for the digital autoethnographic pedagogy. This enabled participants to be in, document and observe 'a conversation with the materials of a situation' (Schön, 1983: 78) regardless of specialism. This is supported by Fleming (2010) who focuses on the common threads between art and design disciplines, finding closed definitions unhelpful. It is a challenge that reflective practice is poorly defined and not always fully supported or strategies taught. If it is supported (Kerawalla et al.

2009) it is important for that to not become prescriptive (Robertson 2011) or dictated when and how to reflect (Farmer et al. 2008; Wheeler, 2009). Participants often had engrained ideas of what reflective practice was and how it could be useful to them. For some this was based on very different contexts, 10's background in social care left her with 'baggage' and the research project enabled her to think about reflective practice very differently and move away from a more formulaic approach and understanding of it.

Participants did not focus their discussion on creative models or cycles except in relation to cycles of emotion and feelings about how the work was progressing, notably 13: 'as I feel disconnected to it, I have to figure out a way to try and feel reconnected with it and it's just a big cycle isn't it, it keeps going' (13 00). A significant challenge for using digital autoethnography is participants desire to control through expertise and knowing their practice well. This impacted on what participants were willing to share especially when they felt they were being judged on what they didn't know. It was important that participants began to trust their own processes (McNiff, 1998) even if they did not fully understand it. This is particularly difficult as you shift from the relief of certainty one moment, to the confusion of not knowing the next. Using reflective practice as a vehicle to explore attitudes, experiences, feelings, emotions and ideas, being vulnerable and transparent about uncertainty and confusion, becomes undermined if they are being asked to demonstrate their understanding (Boud and Walker, 1998: 194), because 'students expect to write for assessment what they know, not reveal what they don't know'. Luna Scott believes metacognition or 'thinking about thinking', can be taught through teachers permitting students to identify their confusion (2015), leading to autonomy and empowerment, (Luna Scott, 2015; Farmer et al. 2008). Through becoming 'other' to the work and imagining 'other' when talking about the work, Digital Autoethnography provides a strategy not dependent on the institution or reliant on transmission from the teacher. It is not sustainable if assessment remains motivated and driven by staff, and students are dependent on teachers, rather than making their own decisions about what they do and don't know (Boud, 1995). At this point it is not clear whether participants intend to continue with these strategies post-graduation however they were often acutely aware of the

autonomous shifts or self-assessment that occurred as a result of using digital autoethnography.

For participants it was trusting that they would begin to know through their process of sensemaking over time and to have the self-confidence in their own abilities and decision making to move away from where they felt comfortable. Participants did discuss the differences between making and thinking or reflecting, however this was complex: thinking and making, making and not thinking, thinking and not making, mixed in with the physical and emotional experiences they had. To reduce this to Schön's (1983) reflecting-in action and reflecting-on action does not do this complexity justice. Throughout the discussions it was apparent that the decision making, around making and when and how to reflect, was mainly made by the participants. They described different stages, even states of reflection, almost different saturations of reflection depending on what they were doing and where they were in their process. They had different experiences of being 'in the moment', at times this was being immersed in making and not thinking about it and other times being immersed in thinking about making or an aspect of their practice. Discussions around these experiences enabled a more in-depth examination beyond the much relied on Schön's 'reflection-in-action' and 'reflection-on-action' where the complexities of reflective activity and its relationship to technology could be explored and 'even the most repetitious rituals and patterns of expression can be viewed anew' (McNiff, 1998: 3). Digital autoethnography helped to expand the language around reflection, partly because new approaches and spaces for reflection were being experienced and discussed. This supports the recommendation of Barton and Ryan that reflective practice should be scaffolded for students to avoid conceptualisations of reflective practice and assessment being merely 'perfunctory and inconsistent' (Barton and Ryan, 2014: 409).

Tension in the process

There is a strong alignment between self-discovery and artistic creation (Taylor, 1991) and the making process a process of discovery (Learmonth and Huckdale, 2012). The challenges of self-discovery are heightened at times through digital

autoethnography: 13, 10 and 03 referred to embracing uncertainty, a significant shift in their relationship to their work. A desire to get it right but also accepting that it is ok to not get it right, 03 realised that there were many opportunities to go back, re-see and refine. 10 and 13 in particular embraced the not knowing aspect of making, shifting from it being an issue, to becoming comfortable with not-knowing (13) to it becoming an active 'material' (10).

The focus on marketisation of education is not compatible with transformative pedagogies, particularly if immediate student satisfaction is sought, it is also at odds with a 'student as researchers' approach. While art and design practices could be framed as a form of research (Walkington, 2015), students as researchers or artists and designers as researchers, this is not how undergraduate curricula is presented to students. I anticipated that one of the challenges of digital autoethnography might be that students would dislike being researchers in their own practices with no specific guidelines to follow or definitive answers being provided. The research approach could be seen as risky because it challenges an authoritative, didactic role and encourages the student to become a contributor (researcher of practice), rather than a consumer. Participating in, rather than acquiring (Sfard, 1998) their learning, in an attempt to secure their pedagogic rights via a potentially critical pedagogy (Barnes and Jenkins, 2014). While this has a liberatory aim it is not an easy approach when it may induce anxiety and challenge (Barnes and Jenkins, 2014). While participants acknowledged that there were benefits from recording and revisiting their recordings and reflection, they often expressed discomfort in making their personal thoughts visible. The gap between what students might perceive as value from a learning experience and what is pedagogically ideal creates a tension.

There were several aspects of digital autoethnography that unsettled participants: the additional time and effort required to do it, confidence with the digital technologies and the pre-conceived ideas they came with about digital technologies and reflective practice. The digital autoethnographic approach is more aligned with self-assessment which in turn links closely to lifelong and sustainable learning (Boud, 1995; 2000). The participant interviews

as part of the reflective process have huge potential as dialogic spaces for learning and assessment beyond the tutorial approach and supports Bain's (2010) and Freire's (1996; 1970) ideas around validating voices for assessment through dialogic interactions between students and teachers. Bain suggests that spaces and practices are developed to nurture these dialogues (2010) in order to better align the assessment of learning and student autonomy.

Becoming visible as a practitioner and developing awareness of their own visibility took on several meanings for participants and generated a spectrum of emotions. There are examples in this study of some participants feeling discomfort in doing activities that are performative, becoming what Barnes and Jenkins (2014) call 'unsettled', by aspects of making, thinking, feeling, what is private and what is public. The digital autoethnography could be seen here as challenging students' 'common-sense understandings' (Barnes and Jenkins, 2014) of what teaching and learning should be. To experience a more critical education it is necessary to 'decouple' students from knowledge because 'learning is hard and often involves high levels of anxiety and effort' (2014: Paragraph.19). For most of my participants the discomfort they experienced using digital autoethnography was discussed critically and sometimes positively as opportunities for significant learning and change to their reflective practice and work. This illustrates that counter-intuitively, the discomfort felt becomes an opportunity for significant learning and potentially a preservation of her own pedagogic rights (Barnes and Jenkins, 2014). Rather than become a challenge, embracing uncertainty was a useful and creative strategy. This appears to contradict the idea of knowing-in-action, 'emotion, value, felt experience with the world, memory, and narrative explanations of one's past do not stand still in a way that allows for certainty' (Clandinin and Connelly, 2000: 37). However, it was clear that the emotional challenge of sharing their uncertainty and vulnerability was sometimes prohibitive due to their physical discomfort from listening to their own voices or seeing themselves recorded. Similar to issues that Bolton (2018: 19) found: fear of failure and ridicule, time factors and priorities, motivation, too painful and revealing to do.

These tensions raise ethical issues that inform the recommendations for practitioners (section 9.4). There was value in doing the autoethnography as an educator: experiencing the feelings around making work, how I managed my documentation and how it was shared. It was important to develop an understanding of the participants, who is identified in recordings made by them and where the recordings are made available. Some work was private and only shared with me in interviews, some was just for assessment, and some was on public platforms. It is an area for further exploration: how prescriptive to be with the platforms used (Farmer et al. 2008) and whether they are hosted inside or outside of the institution (Reeves, 2011). While it could be argued that part of the autonomy that potentially leads to more empowerment comes from students choosing their own tools and platforms, this does create issues in terms of how the technology is supported by the institution and how students are supported in using them and the potential of using certain approaches. Participants were not as Farmer et al. (2008: 130) found, aware of the extent of the 'nature and possibilities of blogging as a self-reflexive practice'. My own example of using digital autoethnography did provide a context for the pedagogical aims without being too directive, but again relied on participants engaging with these. If the approach is not built into the curriculum, module or assessment it is difficult to manage. I provided access to equipment I used, a blog space with technical information and the offer of help. These additional support mechanisms were not utilised very much by participants. Conducting the research outside of the curriculum led to several participants expressing uncertainty that they would be allowed to submit verbal recordings or video as reflection for assessment but were also not sure if they wanted to if they could.

There is often an assumption that reflection is inherent in art and design practice (Burnard, 2006; Barton and Ryan, 2014) and therefore the challenge is how this thinking and decision making is made more visible or critically engaged with. While the digital technologies and platforms can document, and relay experiences, many participants had concerns about making their mistakes and uncertainty visible. 01 and 04 and 07 were very critical of their own mistakes and described frequently eradicating mistakes, throwing work away rather than reflecting on it or keeping it as evidence of decision making, wanting to present

their best selves. The digital autoethnography made these mistakes more visible but also provided flexibility to edit, again and again over time, rather than deciding in the moment the error was made. Grade focused students jeopardise their attainment potential through this tension between 'honest' reflection that may illuminate flaws and what is not known and creating a self-constructed sanitised version because 'staff-driven' assessment makes students dependent on the teacher or the examiners 'to make decisions about what they know and they do not effectively learn to be able to do this for themselves' (Boud, 1995: 38).

Digital autoethnography challenges traditional art and design and reflective practice pedagogy. Digital technologies in educational contexts have had a relatively short history: the design and use of blogs has evolved but still have the capacity to be just used as static repositories, informative but descriptive (Nardi, 2004), consumerist (Oravec, 2002) and as Yang and Chang (2011) point out using blogs specifically in educational environments has not gained the same traction or popularity in the same way that the use of them for noneducational contexts. Blogs and other digital spaces may have the capacity for dialogic and critical reflection but using them does not ensure this (Kerawalla et al. 2008). Using the digital spaces did not automatically mean participants were going to reflect more or reflect more critically or dialogically. Blogs that were summaries of the work were mainly descriptive and used to 'off-load' (Gröppel-Wegener, 2012: 92). Pinterest was a widely used platform among participants who used the concept of 'boards' like design moodboards: as spaces to 'pin' imagery taken from the internet. Pinterest functions as an organisational space and the potential for reflection and decision making. That was evident with some participants who had several boards illustrating how their ideas had become refined, but generally participants boards were a dumping ground of imagery rather than critical reflection, however, being able to see a vast amount of related imagery in one space is visually stimulating. *Pinterest* has the capacity to add annotation, links, and dialogue with each image, however participants did not make use of this feature. A significant challenge and potential ethical issue of digital autoethnography is firstly the ease in producing documenting and collecting evidence which can be edited and deleted before any revising or

reflection takes place. Platforms like *Pinterest* make it so easy to search the internet 'pin' imagery and amass large quantities of secondary material. Deleting evidence was also an issue for participants working with paper-based materials and not particular to the digital. Secondly, as a research approach digital autoethnography creates a lot of data, work, and content which when reexamined reveals more detail. This issue was echoed in my own autoethnographies, the reflective document (Neil, 2015) written as a reflection after the residency was over 40,000 words, not including blogs, private repositories and publications, but also in my collation of data that participants produced as a result of the digital autoethnographies.

9.0 Conclusion

9.1 Research Questions

RQ1: In what ways does digital autoethnography potentially empower practitioners to reflect on and explore creative practice?

Digital autoethnography empowered participants to reflect on their personal and professional identities as they explored their reflective practice in depth. It provided a sustainable approach to self-reflection, development, and critique for their practice during their studies but also has the potential to continue to do this post-graduation. Empowerment was apparent during the interviews where participants used the language they had developed around their creative and reflective practices to elucidate the discoveries they had made about their practice and their identities through their research. This had a significant impact on participants with disclosed disabilities and specific learning needs as the multimodality of the approach led to them creating their own sustainable approaches to documenting work and reflection.

Participants engaged with reflective practice in a shifting relationship: they experienced a long arc of reflective activity because the digital autoethnography enabled them to revisit and recontextualise their experiences over time. Participants were able to explore the nuances of reflective practice beyond the model of reflection-in-action and reflection-on-action (Schön, 1983).

Digital autoethnography encouraged autonomy because it offers an alternative arts pedagogy which challenges dominant, often disempowering, and transmissive approaches to teaching and learning (Swann, 1986; Daichendt, 2010; Elkins, 2012). Digital autoethnography goes beyond merely questioning, or offering alternatives to, the content or structure of teaching. It contributes a different emphasis on current pedagogies (Souleles, 2013); it empowered participants to independently try new ways of reflecting and exploring their practice. This was often transformative for them in developing strategies for critical reflection, becoming inspired by these new experiences, and generating new work from these.

RQ2: What spaces for reflection might digital technologies mediate for arts practitioners?

The digital technologies mediated complex spaces for reflection that enabled participants to experience, explore and reframe their practice with different audiences in mind. Their heightened sense of 'other' from using publishable and networked spaces led to more dialogic and critical reflection. The blogs and social media platforms were liminal spaces for reflection where participants were able to imagine and communicate to 'others' but also revisit their own reflection as 'other' as well. Digital autoethnography was not just a method for participants to document and observe their practices, it created situations of not knowing, and being researcher and researched. This is what created liminal spaces between the structures of the curriculum, physical spaces, virtual spaces, the personal and professional, places: 'within the cracks and erasures of the structures in place' (Sullivan, 2010). This finding aligns well to Shreeve and Orr's (2018) concept of the 'sticky curriculum': a metaphor for an arts curriculum that is shaped by teachers and students and has 'challenges, conflicts, dilemmas and ambiguity' (2018: 24). Their student-centred lens to arts and design-based studio education, advocate for a curriculum that supports risk taking and poses questions to which no one answer can be given: 'it will give a vehicle to ask students questions that the lecturers do not know the answers to' (2018: 107). Using the digital to observe acts of creation, their work emerging as well as behaviours around making work, enabled participants to reflect more immersively on their practice, leading them to recognise the performative and embodied aspects of making and materials. These experiences provided new perspectives outside of the usual critiques and tutorials with their tutors and peers.

The digital spaces, including audio voice recordings and video, as well as social media platforms were dynamic and active spaces. Using the digital spaces to record, revisit and share with others gave participants an alternative to just using paper-based written reflection. Although these spaces were often challenging for participants, it was often the challenges of the digital tools and platforms: feeling discomfort, technical confidence, competence, volume of data produced, that yielded the more in depth critical and dialogic reflection.

Digital tools and platforms are sustainable spaces for reflection: they can be used as archives and live spaces for continued reflective activity. For arts and design-based practitioners the digital technologies were spaces that helped students independently synthesise their research and practice. This was evidenced by participants being able to reflect throughout their making processes using the digital and the autoethnographic practices as well as enabling them to create viable outcomes and artworks.

RQ3: What are the challenges of using digital autoethnography methodology as arts pedagogy?

There are several challenges when using digital autoethnography as arts pedagogy from the perspectives of teachers and students. For participants the personal discomfort they experienced when listening to and observing themselves sometimes curtailed their use of the digital technologies. However, although this was raised as something that prevented them from continuing with these methods, they talked about these experiences reflectively and critically rather than simply complaining about them. Their discomfort often meant that they tried alternative approaches, reflected on their preferred methods for documenting and reflecting on work and interrogated their preferences to understand something about their habits and behaviours.

Digital autoethnography can be a labour-intensive process for those undertaking it, in the time it takes to do alongside making work but also the amount of data it produces. It may be challenging for teachers to manage the process of digital autoethnography without it becoming too mechanical or prescriptive. Teachers may not be comfortable with it as a pedagogic approach, particularly if they are not keen to do it themselves. It may not be appropriate or appealing for every student. Additional work with digital autoethnography post-study has enabled me to explore and develop shorter interventions such as recorded tutorials *as* interviews that have been effective.

There are also practical challenges such us how students are supported with the digital tools, and technologies, particularly whether these are hosted or permitted within the institution. This support extends to the ethical use of social

media and technologies when not hosted and secured within the institution and whether students have access to the internet, tools and software.

9.2 Reflections on the Methodology

A significant outcome of the study related to my own reflections on the methodology, particularly my thinking on how methodologies can shift and reform across the research process. This research methodology developed through autoethnographic dialogue of ideas about artistic research and more established social science approaches as well as through dialogue with audiences at conferences, throughout the residency and my own writing. The methodology was planned for each approach, reflected on, and revised. The research, methods and methodology straddle several fields: education, arts practice, and technology. This parallel between the artistic making process and the process of allowing the research methodology to emerge focused on deliberative experimentation. Although the stages were planned, I was responsive and flexible in trying different approaches that arose during specific stages of the data collection especially when generating data through making processes. Framing digital autoethnography as a research activity was an important detail. Scrutinising one's habits and approaches to making work could potentially focus the reflection on deficiencies or negative qualities, however as a research activity, digital autoethnography provided rich material for analysis and discussion rather than negative introspection. The research approach is adaptive, idiosyncratic to the researcher and therefore has the potential to be inclusive and effective across disciplines and sectors.

Methodological limitations and areas for further study

Any study has limitations however it is important to acknowledge these and my responses to them. Working across several arts and design-based disciplines made the study wide in its scope and discipline specific sample size small, however, this gave rise to some interesting findings of how participants across arts and design identified with both their wide discipline area and the more nuanced aspects of it. Being able to interview participants from different design based and arts disciplines illuminated the flexibility of digital autoethnography as a methodology, especially as there were examples of similar approaches:

using digital technologies for reflection used by performing arts and dance students (Kirk and Pitches, 2013).

The study was conducted in an HE in FE institution which has some distinctive differences to most institutions in the HE sector. The HE in FE sector or College-based HE is assumed to promote wider participation, be less research focused and have more intensive classroom contact (Bathmaker, 2016). While participants may have been less exposed to a culture of research within the institution this strengthens the impact of the study, particularly as participants were asked to engage as researchers into their own practice and be participants in a teacher's study. However, taking the digital autoethnographic approach to a wider audience to gain further insight into its potential: pre-degree students in FE, undergraduates in HEI settings, practicing artists and teaches who have used it are perspectives for further study.

Many of the research studies from the literature focused on the impact of a limited range of digital platforms such as blogs or social media, sometimes narrowed down to specific platforms such as *Twitter* or techniques such as using video for recall. This study did not have such a focus but instead invited participants to define the scope of their investigations. This study is therefore limited to those decisions. It could be argued that participants having autonomy over which tools and platforms are used brings a currency to the study, especially when what is available and possible digitally changes so quickly. While this may be more empowering for participants there are issues of how the technology might be supported by the institution.

The interviews as methodology

It was not anticipated, but the interviews were a crucial part of the methodology of autoethnography as arts pedagogy. The full impact of digital autoethnography was not always visible in students' own documentation or through their work but became visible in the reflexivity facilitated by the interviews. The interviews became an important part of the autoethnographic process in that they afforded dialogue and reflection which then influenced how participants understood autoethnography and progressed their own

autoethnographic work. Participants shared their own experiences and interpretations of using digital autoethnography. They described, explained, expanded, recalled, and reflected in-the-moment through discussion. This was a very different process compared to submitting work for assessment for an assessor to interpret and mark. The interviews became a dialogic form of self-assessment. This links to Bain's (2010) model which supports self-assessment as a form of negotiation and as being an important factor in student's ability to reevaluate their own performance and use this as a strategy post-graduation.

Using interviews enabled participants to speak freely and evidence the shifting relationship they had to their practices and emerging professional identities. The interviews also provided a consolidation of experiences and a new construction of them for further reflection. There were several examples of reflecting in the moment to make sense of experiences but also to vocalise intentions. This was very different to a more traditional tutorial where the tutor may be more vocal about their interpretations and opinions. The method of interviewing led participants to refer to their feelings and bring elements of the personal into their discussion of the work: what it felt like to make the work, their challenges and successes. Ellis and Bochner state:

in conversations with ourselves we expose our vulnerabilities, conflicts, choices and values ... showing how we changed over time as we struggled to make sense of our experience ... the text is used, then, as an agent of self-understanding (2000: 748).

As interviewer I was positioned as someone who didn't know what they had experienced, and I asked them to tell me. This was a feature of some of the imagined audiences that participants had when writing annotation or using their blogs. Several participants described 'dumbing down' their explanations of their work or imagined explaining to someone who doesn't know as much as they do about the work, or even the discipline area. On the other end of the spectrum, participants imagined explaining to someone they knew well, even themselves. The interview invited participants to explain through seeing for themselves, rather than being told what to see.

It was a significant part of the methodology that I had previously completed my own digital autoethnography, so that I had my own lived experience of using it to reflect on my own artistic practice but also as a researcher I had tested my methods. My own blogs and links to media and artefacts provide good examples of the messiness of the creative making process, its experimental nature, sense making process and constructed narratives that were far from formulaic procedures or process models. Providing examples enabled participants to explore, reject and take ideas. Because I was continuing to process and make sense of my own experiences, I was able to engage with potential participants as one of them rather than an authoritative pedagogue. It was important for me to question my own attitude and assumptions about reflective practice but also have experience of what I was using and testing as a teaching method. My own experience of using digital autoethnography on my own artistic practice enabled an authentic and credible dialogue to take place with students in the interviews.

There is potential in the methodology used in this study for adaptations. Having continued with digital autoethnography in my own practice and teaching post-study I have found that the approach has worked with other cohorts of students including pre-degree students and shorter interventions. For example: approaching the tutorial as an interview to elicit more critical reflection and sharing these recordings with students, has been very effective. Their annotation of work submitted for assessment used extracts from transcribed responses from the 'interviews' which they were able to further reflect on.

9.3 Significance to the field

With its multifarious research design this study created interesting disciplinary tensions: bringing together approaches from the arts, technology and social sciences cultivated spaces for reflection that have provided new insight into arts and design pedagogy. The research design is distinctive to this study in how the arts and design, students as researchers into their own practices, technology use, and social science methodology intersect. The study itself and the findings have several areas of significance to the field.

Arts and design pedagogy

My study indicates that digital autoethnography is a critical pedagogy more aligned to heutagogy: it 'places emphasis on a transformative or emancipatory process for the individual and in the more widely constructed social relations in which the individual participates' (Starr, 2010: 4). As an heutagogy it has the potential to be used with other groups of practitioners and students across arts and design disciplines. Significantly, the approach can be adapted for a range of contexts across arts and design undergraduate and postgraduate practice and does not require changes to curriculum design, institutional or department structures. My study provides evidence that digital autoethnography can be used as a strategy for dialogic and critical reflection that can exist as integrated and/or outside of the current structures of art and design education. Framing the participants as researchers into their own practices could be an act of resistance to the hegemony of market values that Adams (2013) alerts us to.

There is no defined set of methods in artistic research and practice beyond making *as* research and research *into* making (Smith and Dean, 2009) and few practitioners situate their practice as interdisciplinary (and therefore contributing to disciplines outside of the arts and design). This study embraced the interdisciplinarity of digital technologies, reflective practice, arts and design practice, and pedagogy. It sought to understand the experience and process of making for both artistic practice and teaching. It blurs both social science and artistic approaches. Recording and engaging in researching arts practice *through* forms of artistic practice, in part to examine and consider the pedagogic possibilities, quickly demonstrated the scope of how artistic and social science research approaches work together.

While autoethnography has its origins in the social sciences there is a strong connection between artists and anthropology, ethnography, and autoethnography. There are many examples of artists using forms of autoethnography to observe their practices and themselves (Kirk, 2014; Fortnum and Smith, 2007; Cocker, 2013; Mäkelä and Nimkulrat, 2011). Digital autoethnography challenges traditional arts and design pedagogies where mastery and mimicry are often the basis for learning (Black, 1973; Blair et al.

2008; Eisner, 2003; Healy, 2016; Hickman, 2005; Elkins, 2001; 2014; Percy, 2004; Souleles, 2013; Swann, 1986). The language around researching the self is powerful. There is less separation of the process of making and what is made, fieldnotes became artifacts: residual artifacts of the artistic research and artworks in their own right.

Digital autoethnography offers an empowering heutagogy for undergraduate students. Interviewing participants as part of the methodology of the study also contributes a new approach to more traditional arts and design pedagogical approaches. They challenge the idea of pedagogy as transmitting expertise (Souleles, 2013; Swann, 1986; Baldessari and Craig-Martin, 2009) and only valuing written reflection or annotation in sketchbooks and on blogs. The use of these unstructured phenomenological interviews elicited lived experiences from students that encouraged a more dynamic engagement with reflective practice and researching own practices. Using the interview to reflect on experience of digital autoethnography led participants to discuss fully, and reveal, their reflective thoughts critically, partly because they were discussing the methodology and their lived experience of it. This exemplifies meta-reflexivity, being reflexive about our own reflexivity as the basis for deeper reflection (Archer, 2014). The study highlights the importance of students developing their own strategies for reflective practice and not relying on given models and cycles of thinking. The study illuminates the importance of discussing reflection and facilitating opportunities for students to think about reflective practice and provides replicable strategies to do this.

Reflective Pedagogies

This study makes a valuable contribution to understanding reflective practice as a dynamic rather than passive or hidden aspect of arts and design pedagogy. Digital autoethnography aligns to Schön's reflection-action and on-action, however Schön's theories assume a confidence and competence in reflective practice. If the student does not possess this there is potentially limited autonomy in that they overly rely on others rather than develop their reflective and creative independence. There is the potential for a situation where 'lack of self-confidence and awe of the teacher' is counterproductive to 'open

instructional conversation' (Goldschmidt et al. 2009: 300). There is also a danger of any sort of learning or reflective 'loop' becoming uncritical and habitual, what Ryan and Ryan (2013: 246) describe as hegemonic: 'normalising forms of practice rather than enacting change at a broader level'. My study showed that by providing students with an open strategy as a starting point (autoethnography) and the affordances of digital technologies to bring new experiences and ways of working is a powerful way to break these loops, become more critically engaged and challenge embedded habits.

Using the digital technologies and autoethnography to distance and remove students from the immediate situation (Kirk and Pitches, 2013) led to unexpected observations being made and a revealing of the tacit - or at least an opportunity to revisit, reinterpret and revaluate practices that may have become habitual (Polanyi, 1958; 1962; 2005). The study reveals reflective processes to be more complex than Schon's model make them appear. Taking documentation and reflection into a different medium is useful, it creates new juxtapositions and distancing that do not fit easily into Schön's in and on action reflection. Reflection was not just in the moment or after but complex in its presentations across different media and expressions and being able to re-enter the work in different ways. The digital autoethnography led to reflection being a sort of material and a dynamic part of making: different types of reflection and multiple strategies for self-reflection that may or may not include others rather than simply reflecting-on action (Schön, 1983). Ultimately reflexivity is about challenging what we have come to believe, a dynamic process, 'finding strategies to question our own attitudes, theories-in-use, values, assumptions, prejudices and habitual actions; to understand our complex roles in relation to others' (Bolton, 2018: 10).

Digital Technologies for Reflexivity

Discussion and existing literature around the integration of using digital technologies in education tends to focus on very specific applications and contexts. It also tends to focus on practical aspects rather than building on, or creating new, pedagogical ideas. This study found several significant benefits to students using a variety of digital tools and platforms when framed as digital

autoethnography: meta-cognition around what reflective practice is, slowing down of practice, extension of thinking time, increased critical and dialogic engagement with practice and the fostering of more independent and self-directed reflective practice. The study extends theories around the benefits and affordances of digital technologies as social and community spaces through discovering that it is not essential that the 'other' is a physical person. The digital technologies became a second person, or third if the tutor/assessor was also considered. The digital technologies created an important awareness of audience, who this audience for the reflection is, even if it is to develop a heightened awareness of what is wanted to be kept private but also developing a voice for public reflection also.

9.4 Recommendations to practitioners

The methodology of the study provides a practical approach that practitioners can use with their students as well as their own personal artistic practices. Digital autoethnography is not an approach that will suit everybody in their creative practice or teaching. Making work, reflecting on experiences and sharing personal insight with others, is a fragile process. For teachers it requires a high level of sensitivity: knowing how and when to support or potentially intervene. It is effective to introduce digital autoethnography as a research method with the interviews an opportunity to share their findings. There are indicators that this framing of research into practice enabled participants to maintain a distance and perspective that limited any negative spiralling of self-introspection, or periods of inactivity as a result of this.

I recommend that practitioners introduce the context of the digital <u>and</u> autoethnography. It is the combination of both elements that leads to the critical and dialogical reflective activity. It is important to have a structure for introducing, supporting and concluding digital autoethnography with students but not make it too prescriptive (Kerwalla et al. 2009; Robertson, 2011) or mandatory.

It was important that participants chose their own tools and platforms, decided how to interpret digital autoethnography, how they would use it, reject it, or experiment with it. They created their own rules of engagement and ultimately had control over what they did, they had ownership over the digital spaces they worked and what they shared with their tutors and me as the interviewer. While this may create issues with how the technology is supported by the institution, it is essential that students are able to personalise their approach. Identifying their own preferred platforms and combination of tools and social media as well as having access to new approaches, like using the Go Pro cameras, that are introduced to them was important in this study.

I highly recommend that practitioners engage in their own digital autoethnography as a precursor to introducing it to students. By conducting their own digital autoethnography, practitioners are able to: enter into an authentic dialogue with their students, develop a sensitivity to the challenges of making, documenting and sharing insight, question their own attitudes and assumptions about reflective practice. My own autoethnographies were essential to the research design with participants and I also benefited from the impact this research approach had on my own practices. The interviews were also a vital element and I recommend that students are given the opportunity to summarise and reflect on their experiences because it was in the interview space that moments of synthesis, development and potential were expressed.

9.5 Afterword

The nature of an extended project means that the landscape it is situated in can shift or develop significantly. The research that has started to appear post-study remains diverse but highlights the currency of my own study. Botella et al's. (2018) study aimed to determine the 'nature and number of stages present in the creative visual artistic process' (2018: 9) of which they identified seventeen. More aligned to my approach, Orr and Shreeve's term 'sticky curriculum' (2018) was encountered at the tail end of my study, it provides a useful metaphor for an arts curriculum that is shaped by teachers and students and has 'challenges, conflicts, dilemmas and ambiguity' (2018: 24). Their volume takes a student-centred lens to arts and design-based studio education, and they advocate for a curriculum that supports risk taking and poses questions to which no one answer can be given: 'it will give a vehicle to ask students questions that the lecturers

do not know the answers to' (2018: 107). My study makes an important contribution alongside these texts. They will continue to be useful companion literature for further research in this area, particularly in highlighting the benefits of developing arts and design pedagogies that create more liminal spaces in the arts and design curriculum.

10.0 References

Adams, J., (2013). Creativity and Democracy: iJADE Conference Issue. *International Journal of Art & Design Education*. **32**, 272-274.

Adams, J., Cochrane, M. and Dunne, L., (2012). Introduction. In: J. Adams, M. Cochrane, and L. Dunne, eds. *Applying theory to educational research*. Chichester: Wiley. pp. 1-10.

Adams, J. and Arya-Manesh, E., (2019). Transformative Interventions: Creative Practices in an Education Doctorate Programme. In: A. Sinner, R. Irwin, and J. Adams, eds. *Provoking the Field: International Perspectives on Visual Arts PhDs in Education*. Bristol, United Kingdom: Intellect. pp. 48-58.

Anderson, G. L. and Herr, K., (1999). The New Paradigm Wars: Is There Room for Rigorous Practitioner Knowledge in Schools and Universities? *Educational Researcher*. **28**(5), 12-40.

Anderson, T., (2008). Toward a theory of online learning. Theory and Practice of Online Learning. 2nd ed. In: T. Anderson and F. Elloumi, eds. *Theory and practice of online learning*. Athabasca, AB: Athabasca University. pp. 45-74.

Archer, M., (2003). Investigating internal conversations. In: *Structure*, *Agency and the Internal Conversation*. Cambridge: Cambridge University Press. pp. 153-166.

Ardichvili, A., (2001). Lev Semyonovich Vygotsky. In: J.A. Palmer-Cooper, D.E. Cooper and L. Bresler, eds. *Fifty modern thinkers on education: from Piaget to the present day. Routledge key guides.* London; New York: Routledge. pp. 33-36.

Baaki, J. and Tracey, M., (2014). Design, Designers and Reflection-in-Action. In: B. Hokanson and A. S. Gibbons, eds. *Design in educational technology: design thinking, design process, and the design studio.* Cham: Springer. pp. 1-13.

Bain, J., (2010). Integrating student voice: assessment for empowerment. *Practitioner Research in Higher Education*. **4**(1), 14-29.

Baldessari, J. and Craig-Martin, M., (2009). Conversation. In: S. Madoff, *Art School*. Cambridge, Mass.: MIT Press. pp. 41-52.

Barnes, C. and Jenkins, C., (2014). Student Satisfaction Negates Pedagogic Rights, Theirs and Ours! *Student Engagement and Experience Journal*. **3**(2), Paragraphs 1-19. Available here:

https://westminsterresearch.westminster.ac.uk/item/9w6q3/student-satisfaction-negates-pedagogic-rights-theirs-and-ours

Barney, D., (2019). A/r/tography as a Pedagogical Strategy: Entering Somewhere in the Middle of Becoming Artist. *International Journal of Art & Design Education*, **38**(3), 618-26.

Barone, T., (2008). Going Public with Arts-Inspired Social Research: Issues of Audience. In: J. Knowles, and A. Cole, eds. *Handbook of the Arts in Qualitative Research: Perspectives, Methodologies, Examples, and Issues*, Thousand Oaks, CA: SAGE Publications, Inc. pp. 485-92.

Barrett, E. and Bolt, B., (2007). *Practice as research: Approaches to creative arts enquiry*. New York: I. B. Tauris.

Barton, G. and Ryan, M., (2014). Multimodal approaches to reflective teaching and assessment in higher education. *Higher Education Research and Development*. **33**(3), 409-24.

Bathmaker, A., (2016). Higher education in further education: the challenges of providing a distinctive contribution that contributes to widening participation. *Research in Post-Compulsory Education*. **2**(1-2), 20-32.

Becher, T. and Trowler, P., (2001). *Academic tribes and territories: intellectual enquiry and the culture of disciplines*, 2nd ed. Philadelphia, PA: Open University Press.

Beijaard, D., Meijer, P.C and Verloop, N., (2004). Reconsidering research on teachers' professional identity. *Teaching and Teacher Education*. **20**(2), 107-128.

Berry, K. S., (2006). Research as bricolage: Embracing relationality, multiplicity and complexity. In: K. Tobin and J. L. Kincheloe, eds. *Doing educational research: A handbook*. Rotterdam: The Netherlands: Sense Publishers. pp. 87-116.

Bichard, M., (2008). Keynote: Confident, connected but never complacent. In: L. Drew and Group for Learning in Art and Design. *The student experience in art and design higher education: drivers for change*. Cambridge: Jill Rodgers Associates, U.K.

Biggs, J.B., (2003). *Teaching for quality learning at university*. Buckingham: Open University Press/Society for Research into Higher Education.

Black, M., (1973). Notes on Design Education in Great Britain. In: D.W. Piper, ed. *Readings in Art and Design Education Book 1- After Hornsey*. London: Davis-Poynter.

Blair, B., Cummings, A., Dunbar, T., Hayward, D. and Woodman, J., (2008). BAU-WOW! A model for creative practice, thinking, learning, research and innovation in the 21st century. In: L. Drew and Group for Learning in Art and Design. *The student experience in art and design higher education: drivers for change*. Cambridge, Jill Rodgers Associates, U.K.

Boellstorff, T. (2012). Rethinking Digital Anthropology. In: H. A. Horst and D. Miller, eds. *Digital Anthropology*. London: Berg. pp. 39-60.

Bohm, D., (1996 republished 2014). On dialogue. London; New York: Routledge.

Bolton, G., (2018). *Reflective Practice: Writing and Professional Development*. 5th ed. London: Sage.

Borton, T., (1970). Reach Touch and Teach: Student Concerns and Process Education. New York: McGraw-Hill.

Botella, M., Zenasni, F., and Lubart, T. I., (2011). A dynamic and ecological approach to the artistic creative process in arts students: an empirical contribution. *Empirical Studies of the Arts.* **29**, 17-38.

Botella, M., Glaveanu, V. P., Zenasni, F., Storme, M., Myszkowski, N. and Wolff, M., (2013). How artists create: creative process and multivariate factors. *Learning and Individual Differences*. **26**, 161-70.

Botella, M., and Lubart, T., (2015). Creative processes: art, design and science. In: G.E. Corazza, and S Agnoli, eds. *Multidisciplinary Contributions to the Science of Creative Thinking*. Singapore: Springer. pp. 53-65.

Botella, M., Nelson, J., and Zenasni, F., (2017). It is time to observe the creative process: how to use a creative process Report Diary (CRD). *Journal of Creative Behaviour*. **53**, 211-221.

Botella, M., Zenasni, F. and Lubart, T., (2018). What Are the Stages of the Creative Process? What Visual Art Students Are Saying. *Frontiers in Psychology*. **9**, 22-66.

Bottery, M. and Wright, N., (2000). The directed profession: teachers and the state in the third millennium. *Journal of In-Service Education*. **26**(3), 475-87.

Boud, D., (1995). Assessment and learning: contradictory or complementary? In: P. Knight, ed. *Assessment for Learning in Higher Education*. London: Kogan Page. pp. 35-48.

Boud, D., Keogh, R., and Walker, D., (1985). *Reflection, Turning Experience into Learning*. London: Kogan Page.

Boud, D., and Walker, D., (1998). Promoting reflection in professional courses: the challenge of context. Studies in Higher Education, 23(2), 191-206.

Boud, D., R. Cohen, and J. Sampson., (1999). Peer learning and assessment. Assessment and Evaluation in Higher Education **24**(4), 413-26.

Boud, D., (2000). Sustainable Assessment: Rethinking assessment for the learning society. *Studies in Continuing Education*. **22**(2), 151-67.

Boud, D., (2001). Using journal writing to enhance reflective practice. In: L.M. English, and Gillen, M. A. eds. *Promoting Journal Writing in Adult Education*. *New Directions in Adult and Continuing Education* No. 90. San Francisco: Jossey-Bass. pp.9-18.

Bourdieu, P., (1977). *Outline of a Theory of Practice*. Translated from French by Richard Nice. Cambridge: Cambridge University Press (Cambridge Studies in Social and Cultural Anthropology).

Bourdieu, P., (2003). Participant-objectivation. *Journal of the Royal Anthropological Institute*. **9**, 281-94.

Bourdieu, P. and J.C. Passeron., (1990). *Reproduction in Education, Society and Culture*. 2nd ed. London: Sage Publications.

Bourgault, R., Rosamond, C., and Ingalls Vanada, D., (2020). Layering, unknowing, and unlocking: Thinking beyond structure through arts-based research. *Journal of Curriculum and Pedagogy*. 1-19.

Brake, D. R., (2012). Who do they think they're talking to? Framings of the audience by social media users. *International Journal of Communication*. **6**, 1056-76.

Braun, V. and Clarke, V., (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*. **3**, 77-101.

Braun, V. and Clarke, V., (2012). Thematic analysis. In: H. Cooper, ed. *The Handbook of Research Methods in Psychology*. Washington, DC: American Psychological Association. pp.57-71.

Brew, A., (2011). Learning to Pause. In: A Kantrowitz, A. Brew and M. Fava, eds. *Thinking Through Drawing: Practice into Knowledge*. New York: Teachers College, Columbia University. pp.67-72.

Brew, A., Kantrowitz, A., Fava, M., (2013). Drawing connections: new directions in drawing and cognition research. *Tracey: drawing and visualisation research*. Loughborough Univ. https://ualresearchonline.arts.ac.uk/id/eprint/5604/

British Education Research Association., (2011). *Ethical Guidelines for Educational Research*. Available from:

https://www.bera.ac.uk/publication/bera-ethical-guidelines-for-educational-research-2011

Brookfield, S.D., (1995). *Becoming a critically reflective teacher*. San Francisco: Jossey-Bass.

Brown, J.S., Collins, A. and Duguid, P., (1989). Situated cognition and the culture of learning. *Educational Researcher*. **18**(1), 32-42.

Brown, S., (2005). Assessment for Learning. *Learning and Teaching in Higher Education*. **1**, 81-89.

Buckingham, D., (2009). Creative visual methods in media research: possibilities, problems and proposals. *Media, Culture & Society.* **31**(4), 633-52.

Budge, K., (2013). Virtual Studio Practices: Visual Artists. Social Media and Creativity. *Journal of Science and Technology of the Arts.* **5**(1), 15-23.

Burnard, P., (2006). Rethinking the Imperatives for Reflective Practices in Arts Education. In: P. Burnard and S. Hennessy, eds. *Reflective Practices in Arts Education, Landscapes: The Arts, Aesthetics, and Education, Volume 5.* The Netherlands: Springer. pp.3-12.

Burnard, P., Hennessy, S., (2006). *Reflective Practices in Arts Education*, *Landscapes: The Arts, Aesthetics, and Education, Volume 5.* The Netherlands: Springer.

Campbell, A., McNamara, O. and Gilroy, P., (2004). Qualitative Data Analysis. In: *Practitioner Research and Professional Development in Education* London: SAGE Publications Ltd. pp. 125-45.

Chang, H., (2008). Autoethnography as method. Walnut Creek: Left Coast Press.

Chilton, G., and Leavy, P., (2014). Arts-based research practice: Merging social research and the creative art. In: P. Leavy, ed. *The Oxford handbook of qualitative research*. New York: Oxford University Press. pp. 403-22.

Clandinin, D, J. and Connelly, F, M., (1996). Teachers Professional Knowledge Landscapes: Teacher Stories-Stories of Teachers-School Stories-Stories of Schools. *Educational Researcher*. **25**(3), 24-30.

Clandinin, D.J. and Connelly, F.M., (2000). *Narrative inquiry: experience and story in Qualitative Research*. San Francisco, Calif.: Jossey-Bass.

Clarke, V. and Braun, V., (2013). Teaching thematic analysis: Overcoming challenges and developing strategies for effective learning. *The Psychologist*, **26**(2), 120-23.

Clarke, V. and Braun, V., (2017). Thematic analysis. *The Journal of Positive Psychology*. **12**(3), 297-98.

Cocker, E., (2013). Tactics for Not Knowing Preparing for the Unexpected. In: R. Fortnum and E. Fisher, eds. *On Not Knowing - How Artists Think*. Kettles Yard: Black Dog Publishing. pp. 126-35.

Cohen, L., Manion, L. and Morrison, K., (2011). *Research Methods in Education*. 7th ed. London: Routledge/Falmer.

Connelly, M. and Clandinin, J., (1986). On narrative method, personal philosophy, and narrative unities in the story of teaching. *Journal of Research in Science Teaching*. **23**, 293-310.

Daichendt, G. J., (2010). *Artist-teacher: a philosophy for creating and teaching*. Bristol, UK: Intellect.

Daniel, B., Harland, T., (2018). *Higher Education Research Methodology*. London: Routledge.

Dash. P., (2021). Journeys. *Paul Dash Artwork*. [Accessed 21 Oct 2021]. Available from: https://pauldash.squarespace.com/

Davis, B. and Phelps, R., (2005). Exploring the Common Spaces of Education and Complexity: Transphenomenality, Transdisciplinarity, and Interdiscursivity. Complicity. *An International Journal of Complexity and Education*. **2**(1), 1-4.

Davies, C. A., (1999). *Reflexive ethnography: A guide to researching selves and others*, London: Routledge.

Davies, R., (2021) Scribblah. *Wordpress Blog*. [Accessed 21 Oct 2021]. Available from: https://scribblah.co.uk/

de Freitas, N., (2002). Towards a definition of studio documentation: working tool and transparent record. *Working Papers in Art and Design*. **2**, Paragraphs 1-27. Available here:

https://www.herts.ac.uk/__data/assets/pdf_file/0011/12305/WPIAAD_vol2_freitas.pdf

de Freitas, S. and Oliver, M., (2006). How can exploratory learning with games and simulations within the curriculum be most effectively evaluated? *Computers and Education*. **46**, 249-64.

Deng, L., Yuen, A., (2011). Towards a framework for educational affordances of blogs. *Computers and Education*. **56**(2), 441-51.

Dennis, C., (2015). Blogging as public pedagogy: creating alternative educational futures. *International Journal of Lifelong Education*. **34**(3), 284-99.

Denzin, N. K., (1971). The Logic of Naturalistic Inquiry. *Social Forces*. **50**(2), 166-82.

Denzin, N. K., and Lincoln, Y. S., (2000). *Handbook of qualitative research*. 2nd ed. Thousand Oaks, Calif: Sage Publications.

Denzin, N. K., and Lincoln, Y. S., (2005). Introduction: The Discipline and Practice of Qualitative Research. In: N. K. Denzin and Y. S. Lincoln, eds. *The Sage handbook of qualitative research*. 3rd ed. Thousand Oaks, Calif.: Sage Publications Ltd. pp. 1-32.

Detlefsen, J., (2012). A Conversation About A/r/tography: What Are the Qualities of Living Inquiry That Foster a Qualitative Whole in Art Education? *Visual Arts Research.* **38**(2), 71-82.

Dewey, J., (1933/1993). How we think. New York: D.C. Heath.

Dewey, J., (1934). Art as experience. New York: Minton, Balch and Company.

Dewey, J., (1938). *Experience and education*. New York: Collier Books, Macmillan.

Doig, B., Illsley, B., McLuckie, J. and Parsons, R., (2006). Using ePortfolios to enhance reflective learning and development. In: A. Jafari and C. Kaufman, eds. *Handbook of Research on ePortfolios*. Hershey, USA; London, UK: Idea Group. pp. 158-67.

Driscoll, J., (1994). Reflective practice for practise - a framework of structured reflection for clinical areas. *Senior Nurse*. **14**(1), 47-50.

Driscoll, J., (2000). *Practising Clinical Supervision: A Reflective Approach*. London: Bailliere Tindall.

Driscoll, J., (2007). Supported reflective learning: the essence of clinical supervision? In: *Practising Clinical Supervision: A Reflective Approach for Healthcare Professionals*. 2nd ed. London: Bailliere Tindall. pp 27-50.

Eisner, E., W., (2003). The Arts and the Creation of Mind. *Language Arts*. **80**(5), 340-44.

Eisner, E. W., (2004). Response to Arthur Efland's and Richard Siegesmund's Reviews of The Arts and the Creation of Mind. *The Journal of Aesthetic Education*. **38**(4), 96-98.

Elbaz-Luwisch, F., (2007). Studying Teachers' Lives and Experience: Narrative Inquiry into K-12 Teaching. In: *Handbook of Narrative Inquiry: Mapping a Methodology*. Thousand Oaks Calif.: SAGE Publications, Inc. pp. 357-82.

Elkins, J., (2001). Why art cannot be taught: a handbook for art students. Urbana: University of Illinois Press.

Elkins, J., (2012). What do artists know? Pennsylvania: The Pennsylvania State University Press.

Elkins, J., (2014). Art Critiques A Guide. 3rd ed. Washington DC: New Academia.

Elliot, J., (1991). *Action research for educational change*. Milton Keynes: Open University Press.

Ellis, C., (1991). Sociological Introspection and Emotional Experience. *Symbolic Interaction*. **14**(1), 23-50.

Ellis, C. (2004). The ethnographic I: a methodological novel about autoethnography. Walnut Creek: AltaMira Press.

Ellis, C, Adams, T.E. and Bochner, A.P., (2010). Autoethnography: An Overview [40 paragraphs]. Forum Qualitative Sozialforschung / Forum: Qualitative Social Research. 12(1).

Ellis, C. and Bochner, A. P., (2000). Autoethnography, personal narrative, and personal reflexivity. In N.K. Denzin, and Y.S. Lincoln, Y. S. eds. *Handbook of qualitative research*. 2nd ed. Thousand Oaks, Calif: Sage Publications. pp. 733-68.

Elwell, J., (2013). The transmediated self. *Convergence: The International Journal of Research into New Media Technologies*, 20(2), pp.233-49.

Fanghanel, J., (2009). The role of ideology in shaping academics' conceptions of their discipline. *Teaching in Higher Education*. **14**(5), 565-77.

Fava, M., (2011). Developing a Cognitive Model of Observational Drawing. In A. Kantrowitz, A. Brew and M. Fava, eds. *Thinking Through Drawing: Practice into Knowledge*. New York: Teachers College, Columbia University. pp.79-85.

Fendler, R., (2013). Becoming-Learner: Coordinates for Mapping the Space and Subject of Nomadic Pedagogy. *Qualitative Inquiry*, **19**(10), 786-93.

Ferguson, L., Myrick, F. and Yonge, O., (2004). Students' involvement in faculty research: Ethical and methodological issues. *International Journal of Qualitative Methods*. **3**(4), 56-68.

Fielding, M., (2004). Transformative approaches to student voice: theoretical underpinnings, recalcitrant realities. *British Educational Research Journal*. **30**(2), 295-311.

Finley, S., (2019). Multimethod arts-based research. In: P. Leavy, ed. *Handbook of arts-based research*. New York, N.Y.: The Guilford Press. pp. 477-91

Fleming, M., (2010). *Arts in Education and Creativity: A literature review*. 2nd ed. London: Creativity, Culture and Education.

Fortnum, R. and Smith, C., (2007). The Problem of Documenting, Fine Art Practices and Processes. *Journal of Visual Arts Practice*. **6**(3), 167-74.

Frayling, C., (1997). *Practice-Based Doctorates in the Creative and Performing Arts and Design*. Lichfield: UK Council for Graduate Education.

Freeman, M., (2007). Autobiographical understanding and narrative inquiry. In: D.J. Clandinin, ed. *Handbook of narrative inquiry: Mapping a methodology. Thousand Oaks, CA:* SAGE Publications, Inc. pp. 120-45.

Freire, P., (1996). *Pedagogy of the oppressed*. Revised ed. London: Penguin books.

Friedberg, A., (2006). The virtual window. Massachusetts: The Mit Press.

Gage, N, L., (1989). The Paradigm Wars and Their Aftermath A "Historical" Sketch of Research on Teaching Since 1989. *Educational Researcher*. **18**(7), 4-10.

Gardiner, J., (1993). Toward a Feminist Theory of Self: Repressive Dereification and the "Subject-in-Process". *NWSA Journal*. **5**(3), 303-24.

Geertz, C., (1973). Thick Description: Towards an Interpretive Theory of Culture. In: *The Interpretation of Cultures Selected Essays by Clifford Geertz* New York: Basic Books Inc. pp. 3-30

Gibbs, G., (1988). Learning by doing: A guide to teaching and learning methods. London: Further Education Unit.

Gibbs, P., Cartney, P., Wilkinson, K., Parkinson, J., Cunningham, S., James-Reynolds, C., Zoubir, T., Brown, V., Barter, P., Sumner, P., MacDonald, A., Dayananda, A., Pitt, A., (2017). Literature review on the use of action research in higher education, *Educational Action Research*. **25**(1), 3-22.

Giroux, H., (2002). Teachers as transformatory intellectuals. Educate. 1, 46-49.

Giroux, H., (2010). Rethinking Education as the Practice of Freedom: Paulo Freire and the Promise of Critical Pedagogy. *Policy Futures in Education*. **8**(6), 715-21.

Goldschmidt, G., Hochman, H. and Dafni, I., (2010). The design studio "crit": Teacher-student communication. *Artificial Intelligence for Engineering Design*, *Analysis and Manufacturing*. **24**(3), 285-302.

Goodson, I.F., (1992). Studying teachers' lives: An emergent field of inquiry. In: I. F. Goodson, ed. *Studying teachers' lives*. London and New York: Routledge. pp. 1-17.

Goodson, I.F. and Numan, U., (2002). Teacher's Life Worlds, Agency and Policy Contexts. *Teachers and Teaching: Theory and Practice*. **8**(3), 269-77.

Goffman, E., (1956). *The presentation of self in everyday life*. Edinburgh: University of Edinburgh.

Gray, C., Malins, J., (2004). Visualizing research a guide to the research process in art and design. Aldershot, Hants, England: Ashgate.

Great Britain. Department for Education., (2013). Art and design programmes of study: key stage 3 National curriculum in England [online]. London: HMSO. Available from: https://www.gov.uk/government/publications/national-curriculum-in-england-art-and-design-programmes-of-study

Gröppel-Wegener, A., (2012). Developing Academic Writing Skills in Art and Design through Blogging. *Journal of Academic Writing*. **2**(1) 85-94.

Guba, E. G. and Lincoln, Y.S., (1982). Epistemological and Methodological Bases of Naturalistic Inquiry. *Educational Communication and Technology*. **30** (4), 233-252.

Guillemin, M., (2004). Understanding Illness: Using Drawings as a Research Method. *Qualitative Health Research*. **14**, 272-89.

Hammersley, M., (2006). Ethnography: problems and prospects. *Ethnography and Education*. **1**(1), 3-14.

Hammersley, M. and Atkinson, P. (1995). *Ethnography: principles in practice*. London; New York: Routledge.

Hammersley, M., Atkinson, P. (2007). *Ethnography: principles in practice*. 3rd ed. London; New York: Routledge.

Hannigan, S., (2012). A/r/tography and Place Ontology. *Visual Arts Research*. **38**(2), 85-96.

Harland, T., (2009). People who study higher education. *Teaching in Higher Education*. **14**(5), 579-82.

Hatton, N. and Smith, D. (1995). Reflection in teacher education: Towards definition and implementation. *Teaching and Teacher Education*. **11**(1), 33-49.

Healy, J., (2016). The Components of the "Crit" in Art and Design Education. *Irish Journal of Academic Practice*. **5**(1), Article 7.

Healey, M., (2005). Linking research and teaching exploring disciplinary spaces and the role of inquiry-based learning. In: R. Barnett, ed. *Reshaping the university: new relationships between research, scholarship and teaching.*Maidenhead: McGraw-Hill/Open University Press, 30-42.

Healey, M. and Jenkins, A., (2009). *Developing undergraduate research and inquiry*. York: HE Academy.

Healey, M. and Jenkins, A., (2010). *Undergraduate research and international initiatives to link teaching and research*. Council on Undergraduate Research. **30**, 36-42.

Heap, T. and Minocha, S., (2012). An empirically grounded framework to guide blogging for digital scholarship. *Research in Learning Technology*. **20**, 176-88.

Heikkinen, H., (2002). Telling stories in teacher education: A narrative-biographical view of portfolio work. In: R. Huttunen, H. Heikkinen and L. Syrjälä, eds. *Narrative research: Voices of teachers and philosophers*. Jyväskylä: Department of Social Sciences, University of Jyväskylä. pp. 123-41.

Hennessy, S., (2006). The conditions and consequences of reflective practices In arts education In: P. Burnard and S. Hennessy, eds. *Reflective Practice in Arts Education*. Netherlands: Springer. pp.183-92.

Hentschke, L. and Del Ben, L., (2006). Challenges for Artists and Teachers Working in Partnership In: P. Burnard and S. Hennessy, eds. *Reflective Practice in Arts Education*. Netherlands: Springer. pp. 33-44.

Herr, K. and Anderson, G.L., (2005). *The action research dissertation: a guide for students and faculty*. Thousand Oaks, Calif.: SAGE Publications, Inc.

Hewson, C., (2016). Ethics issues in digital methods research. In: H. Snee, C. Hine, Y. Morey, S. Roberts and H. Watson, eds. *Digital methods for social science: An interdisciplinary guide to research innovation*. Houndmills, Basingstoke, Hampshire; New York, NY: Palgrave Macmillan.

Hickman, R., (2005). Why We Make Art and Why It Is Taught. Bristol: Intellect Books.

Hine, C., (2017). From virtual ethnography to the embedded, embodied, everyday Internet. In: L. Hjorth, H. Horst, A. Galloway and G, Bell, eds. *The Routledge Companion to Digital Ethnography*. Abingdon, Oxon; New York: Routledge. pp. 21-28.

Hokanson, B. and Gibbons, A. S. eds., (2014). Design in educational technology: design thinking, design process, and the design studio. Springer International Publishing.

Holloway, I. and Todres, L., (2003). The Status of Method: Flexibility, Consistency and Coherence. *Qualitative Research.* **3**(3), 345-57.

Holt, N. L., (2001). Beyond technical reflection: Demonstrating the modification of teaching behaviors using three levels of reflection. *Avante*. **7**(2), 66-76.

Holt, N. L., (2003). Representation, Legitimation, and Autoethnography: An Autoethnographic Writing Story. *International Journal of Qualitative Methods*. **2**(1), 18-28.

Hooks, B., (1994). *Teaching to Transgress: Education as the Practice of Freedom*. New York: Routledge.

Horst, H.A., Hjorth, L. and Tacchi, J., (2012). Rethinking Ethnography An Introduction. *Media International Australia*. 145(1), 86-93.

Horst, H.A. and Miller, D., (2012). *Digital anthropology*. English ed. London; New York: Berg.

Hourigan, T. and Murray, L., (2010). Investigating the emerging generic features of the blog writing task across three discrete learner groups at a higher education institution. *Educational Media International*. **47**(2), 83-101.

Hughes B.H., (2013). Making sense of professional identity through critical reflection: a personal journey. *Reflective Practice: International and Multidisciplinary Perspectives*. **14**(3), 336-47.

Hughes, S., Pennington, J. L. and Makris, S., (2012). Translating Autoethnography Across the AERA Standards: Toward Understanding Autoethnographic Scholarship as Empirical Research. *Educational Researcher*. **41**(6), 209-19.

Internet live stats © Copyright InternetLiveStats.com., [online]. Available at: https://www.internetlivestats.com/total-number-of-websites/ [Accessed 13 Aug. 2019].

Irwin, R. L., (2004). A/r/tography: A metonymic metissage. In: R. L. Irwin and A. de Cosson, eds. A/r/tography: Rendering self through arts-based living inquiry. Vancouver, BC: Pacific Educational Press. pp. 27-38.

Irwin, R. L., and de Cosson, A., (2004). *A/r/tography: Rendering self through arts-based living inquiry*. Vancouver, BC: Pacific Educational Press.

Irwin, R. L., and Springgay, S., (2008). A/r/tography as practice-based research. In: S. Springgay, R. L. Irwin, C. Leggo, and P. Gouzouasis, eds. *Being with a/r/tography*. Boston, MA: Sense Publishers. pp. xiii-xxvii.

Iser, W., (1972). The reading process: A phenomenological approach. *New Literary History*. **3**(2), 279-99.

Jevic, L. and Springgay, S., (2008). A/r/tography as an Ethics of Embodiment. *Visual Journals in Preservice Education Qualitative Inquiry*. **14**(1), 67-89.

Jimoyiannis, A. and Angelaina, S., (2012). Towards an analysis framework for investigating students' engagement and learning in educational blogs. *Journal of Computer Assisted Learning*. **28**(3), 222-34.

Johns, C., (1994). A philosophical basis for Nursing Practice. In: C. Johns, ed. *The Burford NDU Model: Caring in Practice*. Oxford: Blackwell Scientific Publications.

Johns, C., (2004). *Becoming a reflective practitioner*. 2nd ed. Oxford, UK: Blackwell Publishing.

Johns, C., (2006). *Engaging reflection in practice: A narrative approach*. Oxford, UK: Blackwell Publishing.

Jones, S.H., Adams, T.E. and Ellis, C., (2013). *Handbook of autoethnography, Research methods / cultural studies*. Walnut Creek, Calif.: Left Coast Press.

Kemmis, S., (2006). Participatory action research and the public sphere. *Educational Action Research*. **14**(4), 459-76.

Kerawalla, L., Minocha, S., Kirkup, G., and Conole, G., (2008). Characterising the different blogging behaviours of students on an online distance learning course. *Learning*, *Media and Technology*. **33**(1), 21-33.

Kerawalla, L., Minocha, S., Kirkup, G., and Conole, G., (2009). An empirically grounded framework to guide blogging in higher education. *Journal of Computer Assisted Learning*. **25**(1), 31-42.

Kill, R., (2006). Coming in From the Cold: Imperialist Legacies and Tactical Criticalities. *The international journal of art and design education*. **25**(3), 308-17.

Kincheloe, J.L., (2001a). Social Studies Teachers as Researchers: Action Research as a Teaching Method. *Counterpoints*. **100**, 349-70.

Kincheloe, J.L., (2001b). Describing the Bricolage: Conceptualizing a New Rigor. *Qualitative Research Qualitative Inquiry*. **7**(6), 679-92.

Kincheloe, J. L. and Berry, K. S., (2004). *Rigour and complexity in educational research: Conceptualizing the bricolage*. Maidenhead: Open University Press.

Kincheloe, J.L., (2005). On to the Next Level: Continuing the Conceptualization of the Bricolage. *City University of New York Qualitative Inquiry*. **11**(3), 323-50.

Kincheloe, J. L., and McLaren, P., (2005). Rethinking Critical Theory and Qualitative Research. In N. K. Denzin and Y. S. Lincoln, eds. *The Sage handbook of qualitative research*. Thousand Oaks, Calif.; London; New Delhi: Sage Publications Ltd. pp. 303-42.

Kincheloe, J.L. and Tobin, K., (2006). Doing Educational Research in a Complex world. In: J.L Kincheloe and K. Tobin, eds. *Doing Education Research*. Rotterdam, The Netherlands: Sense Publishers. pp. 3-14.

Kirk, C., (2014). 'Painting' as Emergent Knowledge: A Practice-Led Case Study of Contemporary Artistic Labour. *Journal of Visual Art Practice*. **13**(2), 114-29.

Kirk, C., Pitches, J., (2013). Digital reflection: using digital technologies to enhance and embed creative processes. *Technology, Pedagogy and Education*. **22**(2), 213-30.

Knowles, J. G. and Holt-Reynolds, D., (1991). Shaping pedagogies through personal histories in preservice teacher education. *Teachers College Record*. **93**(1), 87-113.

Knowles, J. G., (1992). Models for understanding preservice and beginning teachers' biographies: Illustrations from case studies. In: I. F. Goodson, ed. *Studying teachers' lives*. London, UK, and New York, NY: Routledge. pp. 99-152.

Knowles, J.G., (1993). Life history accounts as mirrors: A practical avenue for the conceptualization of reflection in teacher education. In: J. Calderhead and P. Gates, eds. Conceptualizing Reflection in Teacher Development. London; Washington, D.C.: Falmer Press. pp.70-91.

Kolb, D. A., (1984). Experiential learning: Experience as the source of learning and development. Englewood Cliffs, N.J: Prentice-Hall.

Kuksa, I. and Childs, M., (2014). *Making sense of space*. Oxford: Chandos Publishing.

Kur, E., DePorres, D. and Westrup, N., (2008). Teaching and Learning Action Research: Transforming Students, Faculty and University in Mexico. *Action Research*. **6**, 327-49.

Kushner, S., (2006). Adolescents and Cultures of Reflection: More than Meets the Eye. In: P. Burnard and S. Sarah Hennessy, eds. *Reflective Practices in Arts Education*. *Landscapes - the Arts, Aesthetics, and Education*. 5th ed. Dordrecht: Springer. pp. 13-22.

Land R., (2016). Toil and Trouble: Threshold Concepts as a Pedagogy of Uncertainty. In: R. Land, J.H.F. Meyer and M. T. Flanagan, eds. *Threshold Concepts in Practice*. *Educational Futures (Rethinking Theory and Practice)*. Rotterdam: Sense Publishers.

Lave, J., (1991). Situating learning in communities of practice. *Perspectives on socially shared cognition*. **2**, 63-82.

Lave, J. and Wenger, E., (1991). Situated learning: legitimate peripheral participation. Cambridge: Cambridge University Press.

Law, J., (2003). Making a Mess with Method. *Centre for Science Studies*, *Lancaster University*. http://www.comp.lancs.ac.uk/sociology/papers/Law-Making-a-Mess-with-Method.pdf

Law, J., (2004). *After method: mess in social science research*. Abingdon, Oxon: Routledge, Taylor & Francis Group.

Law, J. and Urry, J., (2005). Enacting the social. *Economy and Society*. **33**(3), 390-410.

Learmonth, M. and Huckvale, K., (2012). The feeling of what happens: A reciprocal investigation of inductive and deductive processes in an art experiment. *Journal of Applied Arts and Health*. **3**(1), 97-108.

Leavy, P., (2014). *The Oxford handbook of qualitative research*. Oxford: Oxford University press.

Leavy, P., (2019). *Handbook of arts-based research*. New York, N.Y.: The Guilford Press.

LeBlanc, N., and Irwin, R. (2019). A/r/tography. *Oxford Research Encyclopedia of Education*. [Accessed 23 Oct. 2021] Available from:

https://oxfordre.com/education/view/10.1093/acrefore/9780190264093.001.00 01/acrefore-9780190264093-e-393.

Lee, N., (2019). Mapping A/r/tography Transnational storytelling across historical and cultural routes of significance. [online]. [Accessed 21 October 2021]. Available from: https://nicoleyslee.wixsite.com/mappingartography

Leggo, C., Sinner, A., Irwin, R., Pantaleo, K., Gouzouasis, P. and Grauer, K., (2011). Lingering in liminal spaces: a/r/tography as living inquiry in a language arts class. *International Journal of Qualitative Studies in Education*. **24**(2), 239-56.

Lévi-Strauss, C., (1966). The Savage Mind. Chicago: University of Chicago Press.

Lincoln, Y.S. and Guba, E.G., (1985). *Naturalistic Inquiry*. Newbury Park, CA: Sage Publications.

Lindström, L., (2006). Creativity: What Is It? 53 Can You Assess It? Can It Be Taught? *Journal of Art and Design Education*. **25**(1), 53-66.

Lubart, T., (2001). Models of the Creative Process: Past, Present and Future. *Creativity Research Journal*. **13**(3-4), 295-308.

Luke, C. and Gore, J., (1992). Introduction. In: C. Luke and J. Gore, eds. *Feminisms and Critical Pedagogy*. New York: Routledge. pp.1-14.

Luna Scott, C. (2015). The Future of Learning 3: What kind of Pedagogies for the 21st Century? *UNESCO Education Research and Foresight*, *Paris*. [ERF Working Papers Series, No. 15] Retrieved from

http://unesdoc.unesco.org/images/0024/002431/243126e.pdf

Lupton, D., (2015). *Digital sociology*. Abingdon, Oxon: Routledge, Taylor and Francis Group.

Lyons, L., (2012). Drawing Your Way into Understanding. *Tracey Drawing Knowledge*. University of Loughborough.

http://www.lboro.ac.uk/microsites/sota/tracey/journal/edu/2012/lyons.html

Lyons, L., (2021) 'stuff.in.jars' [Instagram]. 07 Aug 2021. [Accessed 21 Oct 2021]. Available from: https://www.instagram.com/p/CSRGTqpMvPV/

Mace, M and Ward, T., (2002). Modelling the Creative Process: A Grounded Theory Analysis of Creativity in the Domain of Art Making. *Creativity Research Journal*. **14**(2), 179-92.

Madoff, S., (2009). Art School. Cambridge, Mass.: MIT Press.

Mair, C. ed., (2010). Structured Reflection Facilitates Metacognitive Awareness and Learning, proceedings of the Improving University Teaching Conference, 2010, Washington DC.

Mair, C., (2012). Using technology for enhancing reflective writing, metacognition and learning. *Journal of Further and Higher Education*. **36**(2), 147-67.

Mäkelä, M, and Nimkulrat, N. eds., (2011). Reflection and documentation in practice-led design research proceedings of the NORDES, 4th Nordic Design Research Conference: Making Design Matter, 2011, Helsinki, Finland.

Maloney, P., (2007). Blogs, Reflective Practice and Autonomous Learning in Graphic Design Communication proceedings of ALT-C 2007: Beyond Control, learning technology for the social network generation conference, 2007, Nottingham UK.

Marshalsey, L., (2015). Investigating the Experiential Impact of Sensory Affect in Contemporary Communication Design Studio Education. *The international journal of art and design education*. **34**(3), 336-48.

Mason, R., (2005). Art teachers and action research. *Educational Action Research*. **13**(4), 563-80.

Massumi, B., (2002). Parables for the Virtual: Movement, Affect, Sensation. Durham, NC: Duke University Press.

Maton, K., (2012). Habitus. In: M. Grenfell, ed. Pierre Bourdieu: Key Concepts. 2nd ed. UK: Acumen Publishing. pp. 48-64.

Mead, G. H. and Morris, C. W., (1934). *Mind, self and society from the standpoint of a social behaviorist*. Chicago, Ill.: University of Chicago Press.

Meerwald, A., (2013). Researcher | Researched: repositioning research paradigms. *Higher Education Research and Development*. **32**(1), 43-55.

Merleau-Ponty, M., Lefort, C. and Lingis, A., (1968). *The visible and the invisible: Followed by working notes*. Chicago: Northwestern University Press.

Messer, J., (2012). Practicing interdisciplinarity. *TEXT*, 14 (Special issue: Beyond practice-led research). 14, 1-11.

Mezirow, J., (2009). An overview on transformative learning. In: K. Illeris, ed. *Contemporary theories of learning*. Abingdon: Routledge. pp. 90-105.

Mills, D. and Morton, M., (2013a). New Times, New Ethnographies? In: D. Mills and M. Morton, eds. *Ethnography in Education*. London: SAGE Publications Ltd. pp. 94-114.

Mills, D. and Morton, M., (2013b). Reading Ethnography, Writing Ethnography. In: D. Mills and M. Morton, eds. *Ethnography in Education*. London: SAGE Publications Ltd. pp. 22-42.

Minocha, S., (2009a). Role of social software tools in education: A literature review. *Education and Training*. **51**(5/6), 353-69.

Minocha, S., (2009b). An empirically grounded study on the effective use of social software in education. *Education and Training*. **51**(5/6), 381-94.

McLeish T B and Strang V., (2014). Leading interdisciplinary research: transforming the academic landscape. London: Leadership Foundation for Higher Education.

McLuhan, M., (1964). *Understanding Media: The Extensions of Man.* Canada: McGraw-Hill.

McMurtry, A., (2011). The complexities of interdisciplinarity: Integrating two different perspectives on interdisciplinary research and education. *Complicity:* An International Journal of Complexity and Education. **8**(2), 19-35.

McNiff, J., (2007). My Story is My Living Educational Theory. In: D.J. Clandinin, ed. *Handbook of Narrative Inquiry: Mapping a Methodology*. Thousand Oaks, CA: SAGE Publications. pp. 308-29.

McNiff, J., (2017). *Action research: all you need to know*. Thousand Oaks, CA: SAGE Publications.

McNiff, S., (2008). Art-Based Research. In J. G. Knowles and A. L. Cole, eds. Handbook of the arts in qualitative research: perspectives, methodologies, examples, and issues. Thousand Oaks, CA: SAGE Publications. pp. 29-41.

McNiff, S., (1998). Art-Based Research. London: Jessica Kingsley Publishers.

McNiff, S., (2013). Art as Research, Opportunities and Challenges. Bristol: Intellect.

Moran, B., (2009). Aesthetic Platforms. In S. Madoff, ed. *Art School*. Cambridge, Mass.: MIT Press.

Nardi, B. A., Schiano, D. J. and Gumbrecht, M., eds., (2004a). *Blogging as social activity, or, would you let 900 million people read your diary? proceedings of the 2004 ACM conference on computer supported cooperative work (CSCW '04) Association for Computing Machinery, New York.* pp. 222-31.

Nardi, B. A., Schiano, D. J., Gumbrecht, M., and Swartz, L., (2004b). Why we blog. *Communications of the ACM*. **47**(12), 41-46.

National Society for Education in Art and Design., (2013). *National Curriculum in England: DfE/NSEAD*. Accessed from https://www.nsead.org/files/72cad37f5dfb4caf5a7def2ab9f60dd6.pdf

National Society for Education in Art and Design., (2019). The National Curriculum in England [online]. *National Society for Education in Art and Design*. Available from: https://www.nsead.org/resources/curriculum/the-national-curriculum-in-england/

Neil, J., (2013). The beginning. *Feltlikeit Wordpress Blog.* 18 October 2013. Available from: https://feltlikeit.wordpress.com/2013/10/18/the-beginning/

Neil, J., (2014a). Extracting Data. *Feltlikeit Wordpress Blog*. 22 February 2014. Available from: http://feltlikeit.wordpress.com/2014/02/22/extracting-data/

Neil, J. (2014b). Disruptive Process. *Feltlikeit Wordpress Blog*. 22 February 2014. Available from:

https://feltlikeit.wordpress.com/2014/02/22/disruptive-process/

Neil, J., (2014c). Summary for day 1 15/10/14. Evernote Private Repository. 15 October 2014. [Unpublished].

Neil, J., (2014d). Morning Reflection Day 5 1 19/10/14. *Evernote Private Repository*. 19 October 2014. [Unpublished].

Neil, J., (2014e). Making Some Work Part 1. *Feltlikeit Wordpress Blog*. 22 February 2014. Available from:

https://feltlikeit.wordpress.com/2014/02/22/making-some-work-part-1/

Neil, J., (2014f). Making the invisible visible: Using digital technologies to capture, recall and re-see the reflective process (Narrative of Trial Project). [Unpublished].

Neil, J., (2014g). What is visible? Recall - transcript from audio created in response to watching the making a drawing documentation. *Feltlikeit Wordpress Blog*. 22 February 2014. Available from:

https://feltlikeit.wordpress.com/2014/02/22/what-is-visible-recall-transcript-from-audio-created-in-response-to-watching-the-making-a-drawing-documentation/

Neil, J., (2014h). Iteration. *Feltlikeit Wordpress Blog*. 22 February 2014. Available from: https://feltlikeit.wordpress.com/2014/02/25/iteration/

Neil, J., (2014i). Maze Coral [Transcript] Day 5. 19 October 14. [Unpublished].

Neil, J., (2015). Reflection on The Hunterian Museum write up from Artist Residency 2014. [unpublished].

Neil, J., (2017). Digital Autoethnography: Interview with Self. *Prism: Casting New Light on Learning, Theory and Practice*. 1, 46-72.

Neil, J. and McGuirk., (2017). Breaking/Mending/Making a theoretical dialogue and practice collaboration [Presentation]. 2017 Nordic Summer University, Saulkrasti, Latvia.

Nelson, R., (2013). *Practice as research in the arts: principles, protocols, pedagogies, resistances*. Houndmills, Basingstoke, Hampshire; New York: Palgrave Macmillan.

Nind, M., Curtin, A. and Hall, K., (2016). *Research Methods for Pedagogy*. London: Bloomsbury.

Oravec, J., (2002). Bookmarking the World: Weblog Applications in Education. *Journal of Adolescent and Adult Literacy*. **45**(7), 616-21.

O'Reilly, K., (2009). Key Concepts in Ethnography. Los Angeles: SAGE.

Orr, S. and Shreeve, A., (2018). Art and Design Pedagogy in Higher Education: Knowledge, Values and Ambiguity in the Creative Curriculum. Abingdon, Oxon; New York: Routledge.

Osbaldiston, N., (2013). *Culture of the Slow: Social Deceleration in an Accelerated World.* London: Palgrave Macmillan.

Page, T., Adams, J. and Hyde, W., (2011). Emerging: the impact of the Artist Teacher Scheme MA on students' pedagogical and artistic practices. *European Journal of Teacher Education*. **34**(3), 277-95.

Percy, C., (2004). Critical absence versus critical engagement. Problematics of the crit in design learning and teaching. *Art, Design and Communication in Higher Education*. **2**(3), 143-54.

Peshkin, A., (1988). In search of subjectivity - one's own. *Educational Researcher*. **17**(7), 17-21.

Peters, S. and Shephard, E., (2018). Learning through mistakes: An important part of the learning and research process. In: V. Tong, A. Standen and M. Sotiriou, eds. *Shaping Higher Education with Students: Ways to Connect Research and Teaching*. London: UCL Press. pp. 115-23.

Pink, S., (2014). Digital-visual-sensory-design anthropology: Ethnography, imagination and intervention. *Arts and Humanities in Higher Education*. **13**(4), 412-27.

Pink, S., Horst, H., Postill, J., Hjorth, L., Lewis, T., and Tacchi, J., (2016). *Digital ethnography: principles and practice*. London: Sage Publications.

Pinner, R. S., (2018). Re-learning from experience: using autoethnography for teacher development. *Educational Action Research*. **26**(1), 91-105.

Polanyi, M., (2005). Personal Knowledge. London: Routledge.

Qualley, D., (1997). Turns of thought. Portsmouth, N.H.: Boynton/Cook.

Quicke, J., (2010). Narrative strategies in educational research: reflections on a critical autoethnography. *Educational Action Research*. **18**(2), 239-54.

Raein, M., (2005). From practice to reflection and on to reflexivity. In: T. Binder, P.G. Krogh, J. Redström and R. Mazé, eds. Proceedings of In the making: First nordic design research conference, 2005, København. pp. 242-49.

Räsänen, M., (2005). Multi-roled and skilled teachers of art. *International Journal of Education through Art*. **1**(1), 53-63.

Reed-Danahay, D, ed., (1997). Auto/ethnography: rewriting the self and the social, Explorations in anthropology. Oxford; New York.: Berg.

Reed-Danahay, D., (2017). Bourdieu and Critical Autoethnography: Implications for Research, Writing, and Teaching. *International Journal of Multicultural Education* **19**, 144-54.

Reeves, T., (2011). Engaging Art and Design students using institutional online learning spaces. In S. Sonvilla-Weiss and Owen. Kelly, eds. *Future Learning Spaces*. Helsinki: Aalto University publication series. pp. 72-82.

Richards, R. and Richards, L., (2013). Sponges do not make their own water: student engagement through dialogue and the development of reflective consciousness. *Reflective Practice: International and Multidisciplinary Perspectives*. **14**(6), 774-86.

Richardson, L., (2000). Evaluating Ethnography. *Qualitative Inquiry*. **6**(2), 253-55.

Richardson W., (2006). *Blogs, Wikis, Podcasts, and Other Powerful Webtools for Classrooms*. Thousand Oaks, CA.: Corwin Press.

Ritchie, J., Lewis, J., McNaughton, Nicholls, C. and Ormston, R., (2014). *Qualitative research practice: a guide for social science students and researchers*. Los Angeles, SAGE.

Robertson, J., (2011). The educational affordances of blogs for self-directed learning. *Computers and Education*. **57**(2), 1628-44.

Rolfe, G., Freshwater, D., and Jasper, M., 2001. *Critical reflection for nursing and the helping professions: A user's guide*. Basingstoke: Palgrave.

Rousell, D., Lasczik Cutcher, A., Cook, P. J., and Irwin, R. L., (2020). Propositions for an environmental arts pedagogy: A/r/tographic experimentations with movement and materiality. In: A. Cutter-Mackenzie-Knowles, K. Malone, and E. B. Hacking, eds. *Research handbook on childhoodnature assemblages of childhood and nature research*. Springer International Publishing. pp. 1815-1843.

Ryan, M., (2013). The pedagogical balancing act: teaching reflection in higher education. *Teaching in Higher Education*. **18**(2), 144-55.

Ryan, M., (2014). Reflective Practice in the Arts. In: G. Barton, ed. *Literacy in the Arts: Retheorising Learning and Teaching*. Springer International Publishing. pp. 77-90.

Ryan, M. and Ryan, M., (2013). Theorising a model for teaching and assessing reflective learning in higher education. *Higher Education Research and Development*. **32**(2), 244-57.

Sachs, J., (2001). Teacher professional identity: competing discourses, competing outcomes. *Journal of Education Policy*. **16**(2), 149-61.

Sadler-Smith, E., (2015). Wallas' Four-Stage Model of the Creative Process: More Than Meets the Eye? *Creativity Research Journal*. **27**(4), 342-52.

Sandino, L., (2007). Relating process: accounts of influence in the life history interview. *Journal of Visual Art Practice*. **6**(3), 191-99.

Savin-Baden, M. and Wimpenny, K., (2014). *A Practical guide to arts-related research*. Rotterdam: Sense.

Schön, D., (1983). The Reflective Practitioner: How Professionals Think in Action. New York: Basic Books.

Schön, D. A., (1987). Educating the Reflective Practitioner. USA: Wiley.

Sclater, M., (2012). Theorizing from Bricolage Researching Collaboration in Art and Design Education. In: J. Adams, M. Cochrane, and L. Dunne, eds. *Applying theory to educational research*. Chichester, UK: Wiley Blackwell. pp.157-74.

Sclater, M and Lally, V., (2013). Virtual Voices: Exploring Creative Practices to Support Life Skills Development among Young People Working in a Virtual World Community. *International Journal of Art and Design Education*. **32**(3), 331-44.

Scrivener, S., (2000). Reflection in and on action and practice in creative-production doctoral projects in art and design. *Working Papers in Art and Design* 1. *Available from*:

https://www.herts.ac.uk/__data/assets/pdf_file/0014/12281/WPIAAD_vol1_scrivener.pdf

Sfard, A., (1998). On Two Metaphors for Learning and the Dangers of Choosing Just One. *Educational Researcher*. **27**(2), 4-13.

Shor, I. and Freire, P., (1987). What is the 'Dialogical Method' of Teaching? *The Journal of Education*. **169**(3), 11-31.

Sinner, A., (2017). Cultivating researchful dispositions: a review of a/r/tographic scholarship. *Journal of Visual Art Practice*. **16**(1), 39-60.

Sinner, A., (2021). Speculative steps with story shoes: Object itineraries as sensual a-r-tography. *Educational Philosophy and Theory*. 1-11.

Sinner, A., Irwin, R. and Adams, J, eds., (2019). *Provoking the Field: International Perspectives on Visual Arts PhDs in Education*. Bristol, United Kingdom: Intellect.

Smith, H. and Dean, R.T, eds., (2009). Practice-led research, research-led practice in the creative arts, Research methods for the arts and humanities. Edinburgh: Edinburgh University Press.

Souleles, N., (2013). The Evolution of Art and Design Pedagogies in England: Influences of the Past, Challenges for the Future. *International Journal of Art and Design Education*. **32**(2), 243-55.

Springgay, S., Irwin, R. L. and Kind, S.W., (2005). A/r/tography as living inquiry through art and text. *Qualitative Inquiry*. **11**(6), 897-912.

Springgay, S., Irwin, R. L. and Kind, S W., (2008a). A/r/tographers and living inquiry. In J. G. Knowles and A. L. Cole, eds. *Handbook of the arts in qualitative research*. Thousand Oaks, CA: Sage. pp. 83-92.

Springgay, S., Irwin, R. L., Leggo, C. and Gouzouasis, P, eds., (2008b). *Being with a/r/tography*. Rotterdam, Netherlands: Sense Publishers.

Starr, L., (2010). The use of autoethnography in educational research: Locating who we are in what we do. *Canadian Journal for New Scholars in Education*. **3**(1), 1-9.

Strang, V. and McLeish, T. B., (2015). *Evaluating interdisciplinary research: a practical guide*. Durham University, Institute of Advanced Study.

Sullivan, G., (2004). Art practice as research: Inquiry in the visual arts. Thousand Oaks, CA: Sage.

Sullivan, G., (2010). Art practice as research inquiry in visual art. Thousand Oaks, CA; London: Sage.

Swann, C., (1986). Nellie is dead. Designer. March, 18-20.

Taylor, C., (1991). *The ethics of authenticity*. Cambridge, MA: Harvard University Press.

Tight, M., (2013). Discipline and methodology in higher education research. *Higher Education Research and Development*. **32**(1), 136-51.

Tolich, M., (2010). A Critique of Current Practice: Ten Foundational Guidelines for Autoethnographers. *Qualitative Health Research*. **20**(12), 1599-1610.

Tosun, N. and Baris, M., (2011). E-Portfolio Applications in Education. *TOJNED*: The Online Journal of New Horizons in Education. **1**(4), 42-52.

Tschimmel, K., (2011). Design as a Perception-in-Action Process. In: T. Taura and Y. Nagai, eds. *Design* Creativity 2010. London: Springer. pp. 223-30.

Tschimmel, K., (2012). Design Thinking as an effective Toolkit for Innovation. In Proceedings of the XXIII ISPIM Conference: Action for Innovation: Innovating from Experience. Barcelona.

Tullis, J.A., (2013). Self and Others: Ethics in Autoethnographic Research. In T.E. Adams, S. Holman-Jones and C. Ellis, eds. *Handbook of Autoethnography*. Abingdon, Oxon; New York: Routledge. pp. 244-62.

Turkle, S., (2015). *Reclaiming Conversation: The Power of talk in a Digital Age*. New York: Penguin Press.

Turkle, S., (1999). Cyberspace and Identity. *Contemporary Sociology*. **28**(6), 643-48.

Tversky, B., (1999). What does drawing reveal about thinking? In: J. S. Gero and B. Tversky, eds. *Visual and spatial reasoning in design*. Sydney, Australia: Key Centre of Design Computing and Cognition. pp.93-101.

Van Maanen, J., (1988). *Tales of the field: on writing ethnography*. Chicago, IL: University of Chicago.

Van Manen, M. (2017). But Is It Phenomenology? *Qualitative Health Research*. **27**(6), 775-79.

Vygotsky, L. S., (1978). *Mind in society: The development of higher psychological processes*. Cambridge, Mass.: Harvard University Press.

Wackerhausen, S., (2009). Collaboration, professional identity and reflection across boundaries. *Journal of Interprofessional Care*. **23**(5), 455-73.

Wagner. E., (1994). In support of a functional definition of interaction American. Journal of Distance Education. **8**(2), 6-29. Walkington, H., (2015). Students as Researchers: Supporting Undergraduate Research in the Discipline in Higher Education. *Higher Education Academy*. https://www.heacademy.ac.uk/system/files/resources/Students%20as%20researchers_1.pdf

Wallas, G., (1926). The art of thought. New York: Harcourt, Brace.

Wegerif, R., (2005). Reason and Creativity in Classroom Dialogues. *Language and Education*. **19**(3), 223-37.

Wegerif, R., (2008). Dialogic or dialectic? The significance of ontological assumptions in research on educational dialogue. *British Educational Research Journal*. **34**(3), 347-36.

Wegerif, R., (2013). *Dialogic: Education for the Internet Age*. London: Routledge.

Wenger, R., (1998). *Communities of Practice: Learning, Meaning and Identity*. Cambridge: Cambridge University Press.

Wheeler, S., (2009). Learning Space Mashups: Combining Web 2.0 Tools to Create Collaborative and Reflective Learning Spaces. *Future Internet*. **1**(1), 3-13.

Wibberley, C., (2015). Getting to Grips with Bricolage: A Personal Account. *Qualitative report*. **17**(50), 1-8.

Wild, C., (2013). Who Owns the Classroom? Profit, Pedagogy, Belonging, Power. *International Journal of Art and Design Education*. **3**(32), 288-99.

Wilkes, S., (2005). Subjectivity through E-motion: Digitised Documentation in a Dialogical Dimension, proceedings of the Documentation of Fine Art Processes and Practices Symposium, 2005, Lancaster University.

Williams, J. and Jacobs, J., (2004). Exploring the use of blogs as learning spaces in the higher education sector. *Australasian Journal of Educational Technology*. **20**(2), 232-47.

Yang, C. and Chang, Y., (2011). Assessing the effects of interactive blogging on student attitudes towards peer interaction, learning motivation, and academic achievements. *Journal of Computer Assisted Learning*. **28**(2), 126-35.

Zimmerman, E., (2010). Creativity and Art Education: A Personal Journey in Four Acts. *Art Education*. **63**(5), 84-92.

11.0 Appendices

Appendix 1: Stills from experimental digital autoethnography

Accessible from: https://feltlikeit.wordpress.com/category/submerged/



Figure 47: Still from 'Submerged'

The thread drawing of the diver is seen submerged in water that dissolves the fabric between the thread and fabric. It is illuminated from the video projection above



Figure 48: Still from 'Submerged'

Repeated stitched drawings of the diver, copied but each a variation of the last, leads from the bowl to the wall over the projection of it being made.

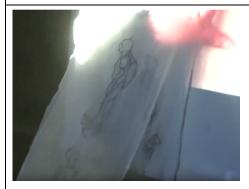


Figure 49: Still from 'Submerged'

Footage is looped together and projected on the wall behind.

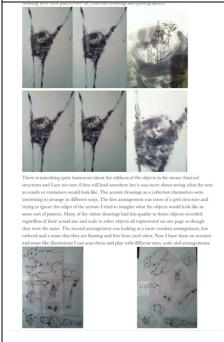


Figure 50: Still from 'Submerged'

Layers and repetitions of the imagery and parts of the process become layered

Appendix 2: Hunterian work post-residency

Accessible from: https://drawnconversation.wordpress.com/



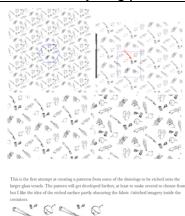
Using my hands and ground-up charcoal. Photographed drawings overlaid with traced images. Pieced together and photographed to form patterns.

Figure 51: Screenshot of development work from post-residency blog post



Ink drawings with traced drawings overlaid.

Figure 52: Screenshot of development work from post-residency blog post



Imaging the objects as patternobjects regardless of their size and scale repeated.

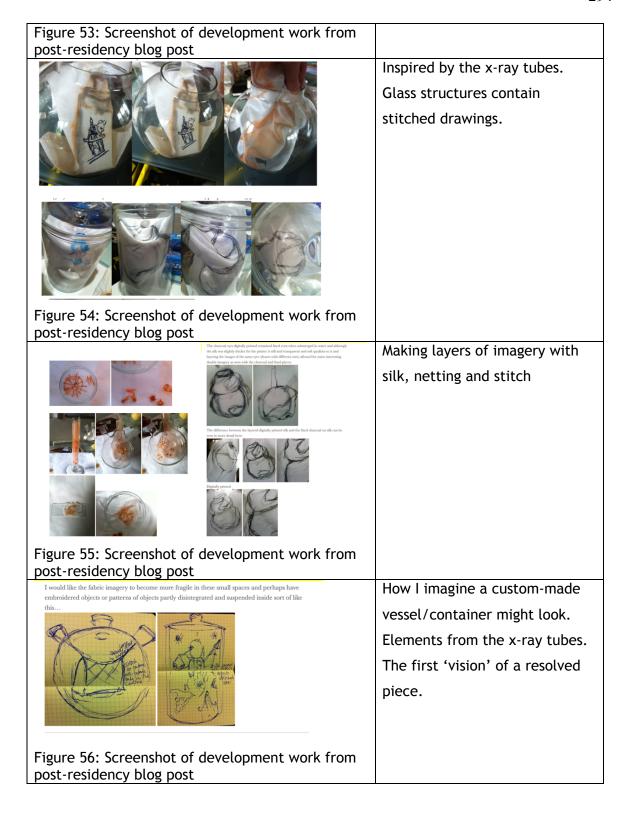




Figure 57: Screenshot of development work from post-residency blog post

Early test piece using the laser cutter to reproduce drawings onto a microscope slide. Images of the etchings making shadows extended my ideas and were also further iterations of replicating and tracing.



etched slide onto ink. Freezeframing moments and slowing the video down created imagery that helped me to keep reflecting on my ideas. A few seconds are turned into 2 and a half minutes.

A spontaneous video placing an

Figure 58: Screenshot of development work from post-residency blog post



Figure 59: Hyperbolic paraboloid and gemstones. Silk, thread, net and glass

The final pieces were more like assemblages that brought together elements of resolved fragments.

The final pieces are a product of the creative process and a product of the research. I still feel that this is the case although I don't necessarily see these as separate entities.



Figure 60: Coral. Wool felt, thread and glass



Figure 61: Gas discharge tube. Silk, thread, ink, glass etched drawing



Figure 62: Left eye Right eye. Silk, ink, glass etched drawing



Figure 63: Gemstones. Silk, net, thread, glass and retort stand



Figure 64: Cells: Net. thread, glass etched drawing



Figure 65: Coral Wing. Silk, thread, glass etched drawing



Figure 66: Eye Eye. Silk, glass etched drawing



Figure 67: Butterfly Wing 1. Silk, ink, glass etched drawing



Figure 68: Butterfly Wing 2. Glass etched drawing



Figure 69: Left eye, Right eye. Glass etched drawing

Appendix 3: Artwork post-research study







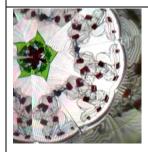
Figure 70: Self as diver. UV thread, Laboratory equipment and crochet net

Identifying myself as the diver exploring new territory, being submerged and out of my depth. I continued to work with the imagery from the encyclopaedia.



Figure 71: Water experiment. Miniature drawings, water, water toy

The idea of being submerged and out of control coincided with personal difficulties I was having. I found myself vulnerable, not in control and exposed. A series of self-portraits or private performances, 'performances in the home'. I was making drawings, sculptural objects, videoing and working with stills and slowing down footage to create more pieces to explore these ideas but also as work to reflect with.



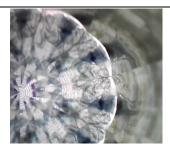


Figure 72: Kaleidoscope experiment. Miniature drawings, kaleidoscope

The kaleidoscope brought chance and chaos to my image making and additional layers to the idea of repetition, reflection, tracing and mimicry. I was exploring how I could become more physically part of the work, perform with it and through it.



Figure 73: Collaborative work. Etchings and stitch

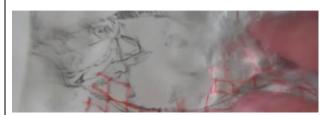


Figure 74: Video still of recorded process. Etchings and stitch



Figure 75: Video still of recorded process. Etchings and stitch

An opportunity to collaborate from a chance meeting.
Influenced by his own early encounters with encyclopaedias and etchings of fish we exchanged imagery and physical work.

My process of using the sewing machine to stich into his prints and submerging them into water to remove the dissolvable film were videoed and shared. Our exchange became focused on new ideas and interpretations that had begun to emerge. His interests: Heidegger who discusses the concept of the Riss (a German word meaning both to sketch and to tear) are introduced. Our collaboration was accepted at a conference. I read a short text: an autoethnographic monologue which describes the street, house and room that contained the encyclopaedias from when I was a young child.



Figure 76: Video still from collaborative performance

We then led the audience to a sauna room - we were presenting in a hotel and decided to develop our academic presentation into part performance. Neither of us had done a performance as artwork before and this moment became a new and live piece of work.



Figure 77: Video still from collaborative performance



Figure 78: Video still from collaborative performance

Plunged into the water as diver and artist prints were placed around me in the water. We both stood there for a few moments surveying our work and watching it change and becoming something new. This was a presentation and piece of work that signified new territory for me and made a significant impact on my practice and future work and academic presentations.



Left to right:

Figure 79: Trapeze Artist 01. Photograph

Figure 80: Trapeze Artist 02. Photograph

Further documented 'private performances' were of my imagined self as trapeze artist and I became this identity. This work was a way for me to explore the less visible internal images of the self and becoming a sort of ongoing tableau with the other self-portrait work.

The still images became moving ones much like a simple flip book and I created the illusion of action and movement. This work felt like a sort of recovery but also an explosion of ideas related to my identity and practice. I felt





at ease responding to ideas and using myself in the work.

Left to right:

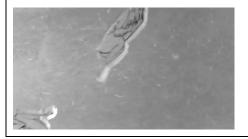
Figure 81: Trapeze Artist. Still from animation Figure 82: Trapeze Artist. Still from animation



Figure 83: Trapeze Artist. Still from animation



Figure 84: Vanity Case: Work to reflect with. Vanity case, spyhole, video



Vanity Case: Work to Reflect with

I started to think about the work I was making not as finished pieces but as work to reflect with. Work that was made in order to slow thinking and making down.

Through the spyhole viewer in the lid of the case you can see the slowed down footage of my self-portrait tumbling in the water.

The slowness makes the water look like thick syrup.

Figure 85: Still from Vanity Case: Work to reflect with



Figure 86: Vanity Case. Fabric, stitch drawing, vanity case, light, and spyhole



Along similar lines Vanity Case is a stitched self-portrait that can only be seen when the viewer peers through the spyhole and illuminate the stitched drawing by pressing the button.

Figure 87: Vanity Case. Detail, fabric, stitch drawing, vanity case, light, and spyhole



Figure 88: Moving to the sound of my thoughts. Video, audio, monitors and headphones

Moving to the sound of my thoughts used dancing water speaker technology that converts sound into movement. The movement affected the self-portrait drawings contained inside the speakers. The video was manipulated and played through two monitors with my heartbeat heard through the headphones.

WRITING AND SUBVERTING PRACTICE THROUGH TECHNOLOGY MEDIATED SPACE Spoken narrative performance from an autobiographical account of childhood Joanna Neil

It is 1977 in the suburbs of Bedfordshire. A quiet cul-de-sac. A barren landscape that you enter but can't escape. Short, flat, dried out grass, the promise of future gardens front and back. Oddly shaped turf between pawement and road, trees and shrubs in their infancy. Expanses of repetitive pale flat bricks and Lego-style window frames that look sucked into place, flush and taut. Tarmac, concrete curbs and low brick walls to trip over, graze knees on, and dog shit to tread in. Each house in Moriston Road, nearly identical, distinguished only by the car on the driveway and the net curtains at the windows.

Figure 89: Excerpt from a Prequel to Practice

A Prequel to Practice I responded to an open call 'New Modes of Art Writing' as an opportunity to extend the autoethnographic monologue I had written about my early encounter with the encyclopaedias. As well as using the writing I developed a live performance. This was a significant moment as I felt that I had found a way to use the conventions of the presentation space as a location for artwork production.

1.2 Preamble

Between October 2013 and June 2015 I experimented with using digital auto-eth-nography to observe, record and re-observe myself as an artist. Digital tools such as a digital voice recorder, Go-Pro headcam, and private and public digital platforms were used to observe my non-digital arts practice. My identity as researcher, teacher and artist were inextricably linked. A key question I had for this research was how these digital tools and platforms might help me to develop or gain insight into my reflexivity and artistic practice. Pink et al (2016, p.13) suggest that 'ways that digital ethnographers might reflexively engage with their worlds is concerned with asking ourselves precisely those questions about how we produce knowledge'. The research was therefore also an opportunity for me to understand more about what reflection is for arts practitioners, so that I might be able to support the creative arts students I teach more effectively. This paper is an interview that I conducted with myself in late 2016 which includes further discussion in italics. The interview approach was used as a reflexive technique to support the developing case study.

- 2. Interview with self: 12 questions November/December
- 1. You recorded different aspects of your making. Why did you start to do this?

I realised when I started to look at various personal statements that I had made about my work, my practice, that I had lost connection with them (these sta ments). The statements were basically statements that had been carried forward. I had made some observations about what I thought my work was about but, at the same time, it didn't really mean anything to me, or didn't feel very current. New statements felt like updating of previous statements - improving the language to escribe the same things without questioning whether these descriptions were still relevant, and withou that I wanted to und-ing process, that led experiencing thinking this as a student m throughout the prod I was interested in th through, making art. is it often absent fro in what I might learn be revealed, surprise are often made abo thought this is often by an artist it is ofter tive of how their ide ately, or over time.

2. How importar

The technologies we ment my work and a wanted the blog to c

¹ Artistic statements are (
opportunities. The use of
'The Beginning' October: 2013)
² My own experiences as
work would often preser
making work was rarely s

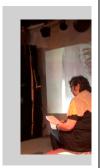
Interview with Self 12 Questions November-December was one of my strategies to reflect on my experience of the autoethnography but was also a continuation of this research approach through writing. It was not initially written for publication but as a conversational reflective piece.

Interview with Self Part II

Figure 90: Excerpt from Interview with Self 12 Questions

ing the footage to a 10° of a second enabled me to measure (in time) co-ordination of eye, hand and nory. This made me think about what is memorised, the co-ordination of body and mind (my hand was often left making marks as my head moved away), so I found something out about the physicality of my

Interview with Self Part 2 (performed spoken)



became a response and extension to the dialogic reflection documented from the questions in Part I. The performance was a response to a pre-recorded artwork (a compilation of slowmotion pieces, kaleidoscope and related imagery) of visual and spoken excerpts from Interview with Self Part 1, that prompted a live dialogic conversation.

Figure 91: Excerpt from Interview with Self Part

The Video 'Moving to the Sound of My Thoughts' was presented at a conference (Drawing Conversations 2: Body, Space, Place) and became an opportunity to experiment with writing reflection over existing work



Figure 92: Still from digital poster: 'Moving to the Sound of My Thoughts'



Figure 93: Still from digital poster: 'Moving to the Sound of My Thoughts'



Figure 94: Still from digital poster: 'Moving to the Sound of My Thoughts'

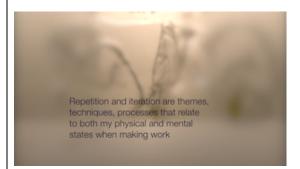


Figure 95: Still from digital poster: 'Moving to the Sound of My Thoughts'



Figure 96: Still from digital poster: 'Moving to the Sound of My Thoughts'

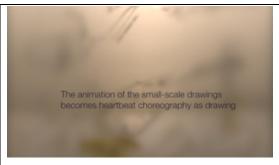


Figure 97: Still from digital poster: 'Moving to the Sound of My Thoughts'



Figure 98: Still from digital poster: 'Moving to the Sound of My Thoughts'



Figure 99: Conversation with Selves: You and I are discontinuous beings. Silk, stitch, water

'Conversation with Selves' You and I are discontinuous beings. Being the researcher and the researched, the 'you' and the 'I' are both me in a conversation with the self. My work at this point was exploring the lived and imagined selves, where I depict moments of incapacitation and loss of control, as well as powerful alter egos. I describe these identities as performed and documented, often symbolising empowerment and changes of state. The stitched drawing was based on stills from the animated portrait drawings from earlier work.



Figure 100: Detail of Conversation with Selves: You and I are discontinuous beings. Silk, stitch, water



Figure 101: Still from performance piece: Impression | Depression



Figure 102: Still from performance piece: Impression | Depression



Figure 103: Still from performance piece: Impression | Depression

The Embodied Experience of Drawing Impression | Depression

This was a performance of work related to the self-portraits. The rectangular space or drawn 'bed' becomes the space to contain the body. Gestures create this drawn boundary and move it. In a tension between action and inaction, effort and effortlessness



Figure 104: Still from performance piece: Impression | Depression



Figure 105: Still from performance piece: Impression | Depression



Figure 106: Still from performance piece: Impression | Depression

Appendix 4: Workshop: 'Verbal Drawing': We All Draw: International Interdisciplinary Symposium 2015 South Bank, London.



Figure 107: Participant A Verbal Drawing Workshop



Figure 108: Participant B Verbal Drawing Workshop



Figure 109: Participant C Verbal Drawing Workshop

The 'verbal drawings' were spoken thoughts, recorded as my eyes traced over the visually challenging object (brain coral). I considered these as reflective drawing, a pre-drawing. I was interested in the reflection we do before action which relates to 'not knowing'. Rather than thinking or understanding through making a physical drawing, the process of looking and understanding, or drawing with words, becomes a reflective activity before making a physical mark on 'paper'.

I designed a workshop for a drawing symposium 'Thinking through Drawing' where the participants made their own verbal description of a strange object. This work explored how words are used to create and help us understand, think about and prepare for drawing. Spoken words could be considered as preparatory sketches for further creative processes and outcomes.

Participants recorded their own verbal drawings as a preparatory sketch.



Figure 110: Participant D Verbal Drawing Workshop

Participants then re-listened to their recording again and made drawings from their descriptions. The participants filled in questionnaires about their experiences:

One participant described having more knowledge about the object before they started drawing, because they had taken more time to analyse it and another described this having a better understanding of the 'character' of the object... Another described the experience of hearing one's own observations as familiar

'I was sort of laughing at myself saying something and going, yeah that's how I felt, which is really odd'

They described how this felt like a conversation that could be continued. One participant, who used only the audio to make their drawing, felt that they were drawing a translation of the audio.

Appendix 5: Resource for Workshop: 'Verbal Drawing': We All Draw: International Interdisciplinary Symposium 2015 South Bank, London. Full document can be accessed here:

https://www.scribd.com/document/302908223/We-ALL-Draw-2015-Programme

Verbal Drawing: Exploring experiences of looking, seeing and describing Joanna Neil

How can we use words to create and help us understand, think about and prepare for drawing? The observation of an object prior to making our first mark is a reflective and formative process. This experience of looking, seeing and understanding becomes the drawing but our thinking is not often documented. What is thought about and felt when looking for the first time? Recording thought as spoken words can serve as a preparatory sketch for further creative processes and outcomes. Through re-listening to 'verbal sketches' the process of looking, thinking and sense-making can be experienced again, albeit in an abstracted form and transferred and transformed into a final gesture.

Materials

- Objects for observational drawing (I made my objects unfamiliar by using materials on them
 to obscure, disguise or alter them. This was to encourage participants to observe the objects
 more closely and to experience unfamiliarity when looking)
- Voice recorders/mobile devices for recording on
- Written instructions for recording and playback for any given devices
- Headphones (Over head type for hygiene)
- Selection of paper and drawing materials

Space

The workshop can work as a drop-in or a structured session for 5-10 participants. Space is needed to allow participants to record their verbal descriptions without too much surrounding noise.

Duration

25-50 minutes allowing up to 5 minutes for participants to make their recordings.

Who the workshop is usually aimed at

Experimental drawing activity for any age and type of group

Intended outcomes

- Develop an understanding of reflexivity in drawing.
- Exploring experiences of looking, seeing and describing.
- Think about how we use words to create and help us understand, think about and prepare for drawing.

Variations

- · Vary the time between making the recording and making the drawing
- Make a drawing by listening to the description only
- Make a drawing from someone else's description

Step by step instructions

Instructions for participants:

5 minutes

Look carefully at one of the unfamiliar objects and create and record your own verbal drawing as a preparatory sketch. Use the voice-recording device to capture your observations. Take a recording device and object. While you examine the object you have selected record what you are seeing and experiencing while you are looking at the object.

Describe and try to understand what you are looking at. Observe and describe the textures, patterns, lines and shapes. What can you say about the colours, tones and surface qualities of the object?

What words can you use to explain what you are looking at? How does the object feel? What does the object or parts of the object remind you of? Can you use any similes to describe the object or your experience of it, e.g., 'It has a surface like the inside of a shell'

Try and examine the object thoroughly, really look and search for words to express and describe what you see and feel.

15-40 minutes

Choose a drawing material and re-listen to your verbal drawing again, drawing it from your description. You may wish to also look at your object as well, or just listen to your recording and partly draw from memory. Perhaps try both.

Appendix 6: Workshop, Performance and Soundscape Nordic Summer University Conference (winter session), Riga Latvia



Figure 111: Drawing Workshop Riga (before)



Figure 112: Drawing Workshop Riga (after)

Observation/Transformation/Translation

A further iteration of the 'verbal drawings' developed into a proposal for collaborative performance piece which brought together aspects of research, presentation, workshop and performance together.

Observation:

Looking as a decisive act and the experience of observation prior to 'making' is a reflective and formative process that is often not captured or documented. What is thought about and felt when looking for the first time? Participants were asked to verbally record experiencing Riga, Latvia as something new and unfamiliar to them.

Transformation: As a group the participants listened back to their own private recordings but worked simultaneously on a large paper making their drawings. This was in front of an audience who listened to a soundscape that I made of all the participants audio, layered over each other to form a cacophony of sound.

Appendix 7: Participant Portraits

Group 1	01
Participant	
Course/Year	Final Year BA (Hons) Animation and Illustration
Sources	One interview, images, <i>Pinterest</i> , Go-Pro and voice recorder
	for her final assessed project
Notes on	Audio and video recordings used to bulk work for assessment
approach	Used DAE to research others' experiences to help understand
taken	subject matter (Game play experiences) other digital spaces to
	research historical references (armour and character design)
	Voice recorder used as aide memoire
Key	Needed prompts in interview and struggled to elaborate on her
observations	experiences. Short responses about specific events rather than
	overview but expanded on the research in the interview. The
	recordings become artefacts of her creative research rather
	than provide insight into her own thinking, problem solving or
	planning. Descriptive of tools used rather than analysis.
	Listening back to what people had said helped with writing up
	and prompted visual memory which directly impacted on
	imagining and creating characters for her design process. Spoke
	positively about being able to understand the experiences of
	others' and their perspectives. <i>Pinterest</i> boards are densely
	filled (Figures 113 and 114), unfocused with accumulated
	imagery and is unclear how she will use and refine her ideas
	from them.
Examples	Figure 113: 01 Pinterest Board (section) example 1
	ga. a

	Figure 114: 01 Pinterest Board example 2
Participant	02
Course/Year	Final year BA (Hons) Textiles Design (Top Up)
Sources	Questionnaire, two interviews, sketchbooks, blog, photographs
	Pinterest
Notes on	Documentation on the blog was often from her sketchbook to
approach	support handwritten reflection. Photography used to document
taken	moments and reflect on experiences. <i>Pinterest</i> , both for
	personal related research as well as for the course
Key	Spoke confidently and the interview responses were long and
observations	included in-the-moment reflective commentary, providing a
	description of what and how she did things as well as some
	personal analysis. Considered audience for the blog and had
	previous experience of lifestyle blogging. Comparisons between
	the two showed the lifestyle blog had more references to
	family and personal achievements. 02 noticed differences
	between her reflection when typed or written; the type of
	language used in the writing being less concise (more vague and
	flowery) compared to typing directly which she could edit as
	she went along. She also noticed that she was less likely to re-
	read handwritten notes compared to the blog which made sense
	to her when she read them back. Her awareness of potential
	audience shaped her writing, but she didn't get anything else
	back from doing it apart from the benefit of writing. She
	preferred the carefree approach she had with <i>Pinterest</i> (Figure
	115), again bringing something informal to a more formal
	context. The interview became the space where more evidence

of reflexivity occurred. The two blog excerpts (Figures 116 and 117) illustrate different types of reflective activity, Figure 116 reflects on her own process but says little about the project she is working on, and Figure 117 provides more context to the work in progress but still only a snippet rather than in depth description or analysis of the work.

Examples



Figure 115: 02 Pinterest page for course research



Sometimes I think too much and don't get round to doing. I can sit in the yard in the evening and come up with some amazing ideas, but by the time morning comes around the ideas have either faded, seam overly complicated or I have just gone off them.

I've been following a few creative types on different social media platforms and it's nice know I'm far from alone when it comes to actually creating anything from an idea

It seams to me like I put restrictions on myself rather than letting the creativity flow and seeing where it takes me – to that end I have been trying my best to get something, anything down one way or another, that way if I low where something is going I can work on it more, if not it can be abandoned for good or stored away for future ideas.

I've drawn inspiration from all over the place, from close up images I have photographed over the years that I look back on and realise there is no context to them, I don't know where or when they were taken, how I felt, what was the mood, why did I take the photo? From techniques I did as part of my FMP last year and from a specialist project I did on altering silhouettes...



Close up detail of Victorian cotto mill – Queen Street Mill Burnley Lancashire



Moss on a picnic bench Spring Wood picnic are Whalley, Lancashire

Figure 116. 02 excerpt from course blog Figure 117. 02 excerpt from course blog

Participant	03
Course/Year	Final year BA (Hons) Fashion Design (Top Up)
Sources	Questionnaire, two interviews, photographs, Pinterest
Notes on	Video and photography for visual research (garments in
approach	shops/museums), to document making or deconstructing
taken	garments. A structured and more selective approach to
	Pinterest, both for personal related research as well as for the
	course.
Key	03 developed a partnership with digital technologies that was
observations	not easily visible until she spoke about it. In discussing her
	approaches, she explained how she thought more carefully
	about how she was using the photographs and video. The
	technology gave her the control to speed up and slow down
	aspects of her research and reflection effectively and she was
	able to build in elements of surprise into her practice: revisiting
	imagery revealed different things. She described being able to
	revisit what it felt like at the time looking at video recordings.
	Making the recordings stimulated a heightened awareness of
	those moments. Other examples of using video illustrated how
	the documentation was more functional: it enabled her to
	document the sequence of taking something apart and it was
	only in the interview when she recalled these examples that
	she spoke about these experiential experiences in more detail.
	Her approach enabled her to organise the work more
	effectively and create a dialogue through revisiting
	documentation and experiences. This was partly through her
	hands-on approach to the research but also knowing that more
	information would become visible to her over time as well as
	being able to see mistakes and observe how she rectified this as
	she went along. As she started to allow herself to write for
	herself, a shift from focusing on the annotation as something
	for the tutor, she wrote more about her initial thoughts and
	feelings. Positive feedback from this approach affirming that it
	was mostly important that the annotation as reflection was for

	her. 03's <i>Pinterest</i> boards (Figures 118 and 119) were much
	more selective and focused.
Examples	Talloring techniques Swring clothes Expecke talloring Fashion serving Fashion facular The AMATONY OF THE LEWIN JACKY Free ball Figure 118: 03 Pinterest board example 1
	ACTIVE AC
	Figure 119: 03 <i>Pinterest</i> board example 2
Participant	04
Course/Year	Second year (final year) FdA Fashion
Sources	Two interviews, blog
Notes on	Blog used as a space to link to websites, YouTube videos as well
approach	as her own images of her design process and <i>Pinterest</i> boards
taken	
Key	The first interview focused on 04's intentions to use technology
observations	particularly a Go-Pro to document experiences (walks and
	locations relevant to the Pendle Witch trials from the 17th
	century to inspire her designs). The blog was a curated space,
	used to organise loose bits of paper that formed a paper-based
	research file. The audience for the blog was perceived as
	different and important to her that it had less technical terms.
	The blog was used to construct an abbreviated narrative of her
	process, a summary: 04 preferred to add written reflection at
	the end of the process rather than as she went along so the
	annotation had limited discussion of the decision making and
	possibilities. The images (below) are from a series of

consecutive blog posts (Figures 121-125) and demonstrate many significant changes in just a few steps including the change in consumer for the garment. However, posting imagery on her blog 04 was able to notice mistakes and rectify them. *Pinterest* was used to host large quantity of diverse source material often on one 'board' (Figure 120) but there appeared to be a disconnect between the extensive research and the decision making on the blog. The recorded interview enabled wider reflection and ideas to emerge, even ideas about a future project that would use the Go-Pro. 04 imagined, anticipated findings and the usefulness of using the technology for research.

Examples

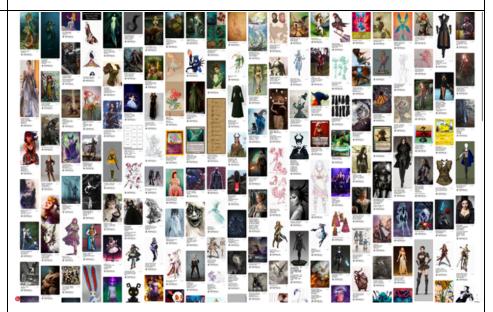
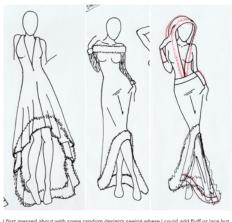
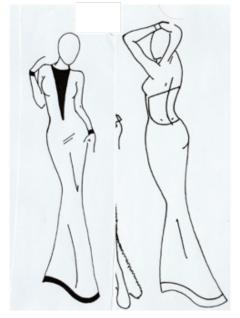


Figure 120: 04 Inspirations Pinterest board



I first messed about with some random design's seeing where I could add fluff or lace but these designs still do not satisfy me so back to drawing.

Figure 121: 04 Design stage on blog 01



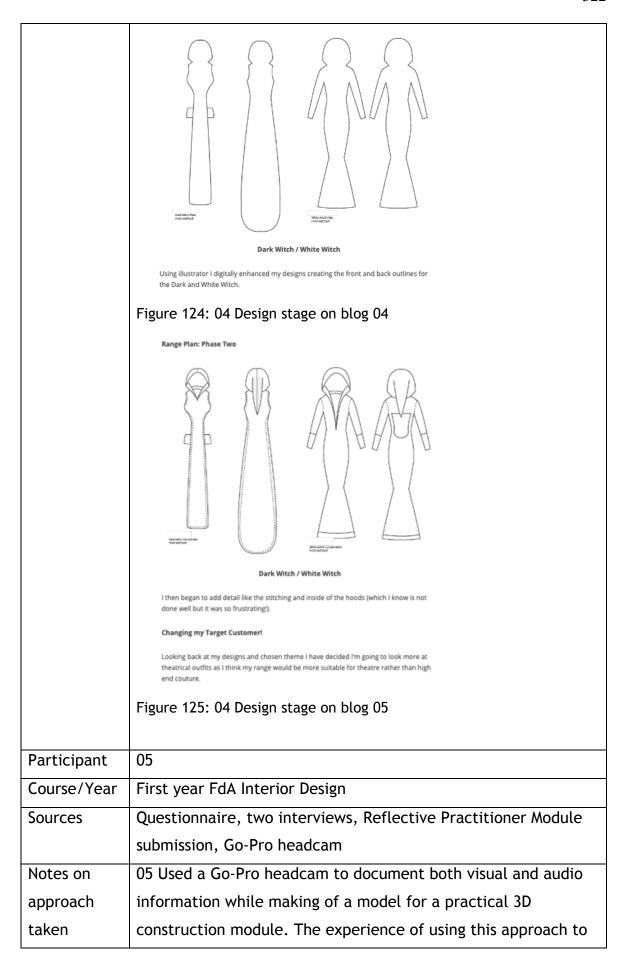
So I drew the first dress out and loved it so I thought I would build on It, I then drew the back out giving it a hood which I plan to extend and make more pointed like a witches hat and created a hole in the back to again make it more seductive, also the black panel on the front shall be removed and show a little cleavage and the black panels on the hem and cuff shall be replaced possibly with a white lace.

Figure 122: 04 Design stage on blog 02

Finished Designs



Figure 123: 04 Design stage on blog 03



	reflect on his work was also documented in a separate module
	'Reflective Practitioner'.
Key	05 found that recording himself making his work enabled him to
observations	document his thoughts and decisions more thoroughly and
	summarise his work at the end. He noticed how he quickly
	rectified mistakes in the moment and made rapid decisions.
	Watching the recordings enabled him to explain the work in
	more detail whereas previously he hadn't given much thought
	to how he adjusted the work in progress. 05 noted how using
	the technology and revisiting the recordings slowed down his
	usual pace of working and preferred to use paper-based
	approaches to record and document his work, also preferring to
	draw observations and ideas rather than take photographs. His
	experimentation with documenting with new tools and writing
	about these experiences led to a better understanding of his
	preferred working approaches, metacognition: reflecting on
	what reflection was, the different types of reflective activity
	and how it related to making, thinking about and evaluating
	work. An excerpt from an assessed module (Figure 126) makes a
	direct reference to using autoethnography. 05 had a strong
	dislike of listening back to his voice and felt self-conscious and
	concerned with how others may think of him.
Examples	Another way I found was helpful in being a reflective practitioner was the use of auto-ethnography. This type of practice is good for documenting things that are happening in the moment, as thoughts can come in and out of your head fast when you're in a creativity streak things happen fast, so recording yourself whilst these thought processes are happening is good for recalling them later on. I may use this again in the future, even though I found listening to my own voice back a little unenjoyable I will have to get used to this over time to gain the most from this type of reflective practice.
	Figure 126: 05 excerpt from Level 4 Reflective Practitioner module file
Participant	06
Course/Year	Second year (final year) FdA Fashion
Sources	Questionnaire, two interviews, voice recorder, video,
	photographs sketchbooks

Notes on	Recording ideas and conversations with others using the voice
approach	recorder. Using video to record making work
taken	
Key	The multilingualism of 06 had initially been an issue for her
observations	reflection and annotation of her work. Thinking in several
	languages, writing as she was thinking become challenging
	particularly if she tried to translate words for the reader. 06
	described how her thinking and talking were much faster than
	writing, in part due to the mix of languages she would use in
	her head or with family. The audio recordings enabled her to
	quickly use the best language that helped her to express her
	thoughts, feelings and what she could observe. 06 felt that the
	voice recordings helped to broaden her vocabulary and she was
	able to express herself with the right words. Verbally recording
	her reflection her flow of thoughts was not interrupted.
	However, the annotation in her sketchbooks (Figures 127 and
	128) did not reflect the depth of her ideas and understanding,
	of herself and her work, that was evident in these personal
	recordings or how she spoke about them in the interviews. 06
	started to make connections between seeing her own body
	when making the work and the work itself (based on folds in
	origami), seeing the changeable folds as a metaphor for her
	own identity. The final images of her garments (Figure 129)
	alongside the interview discussion provide a more sophisticated
	articulation of the work compared to what is documented in
	the sketchbooks.

Examples

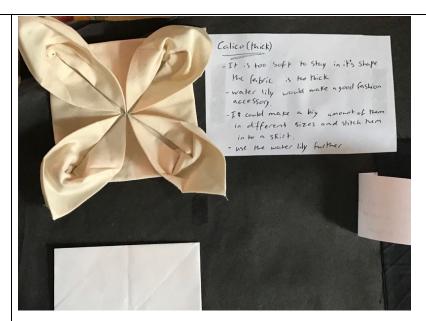


Figure 127: 06 sample and annotation from sketchbook

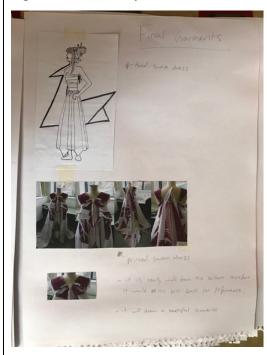


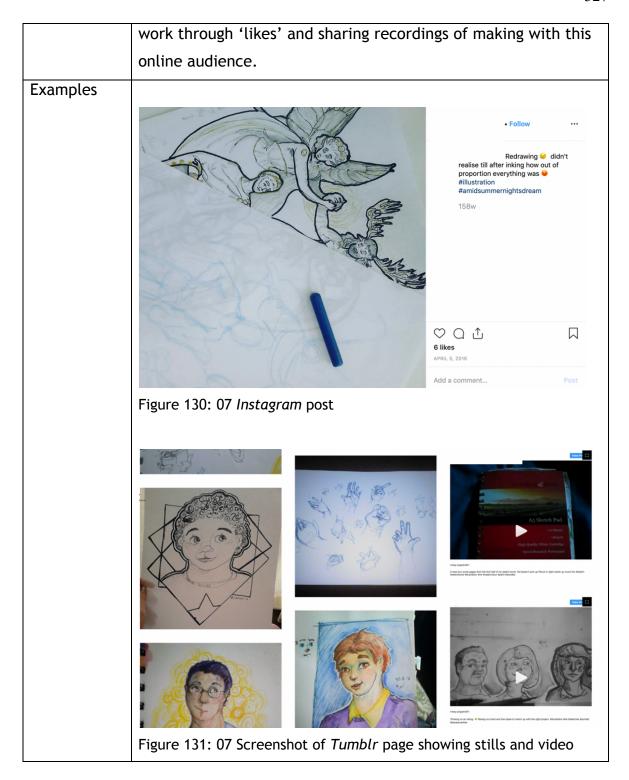
Figure 128: 06 sample and annotation from sketchbook





Figure 129: 06 final photoshoot of the garments

Participant	07
Course/Year	Third year BA (Hons) Animation/ Illustration
Sources	Two interviews, Facebook, Youtube, Tumblr, Instagram,
	Pinterest, video, photographs
Notes on	Used video and own mobile phone to observe her herself
approach	drawing to help with technical skills and with written
taken	reflection.
Key	07 Struggled with dyslexia but speaking her thoughts and
observations	notation made the challenges of writing and typing words
	easier. 07 managed multiple spaces and combined elements of
	recording her process with promoting her practice
	professionally. This culminated in 'live draw' events (Figure
	133) on <i>Facebook</i> . Her own discoveries of her practice did help
	her to make changes to her working habits, both how she
	approached the process of making work but also improvements
	to technical elements like stretching her paper and adding
	more highlights. The annotation that accompanied her public
	posts was quite humorous and chatty (Figure 130), similar to
	how she spoke in the interviews. The <i>Pinterest</i> page (Figure
	132) similar to other participants was dense with found imagery
	with little editing and organisation. From looking back at
	recordings of making drawings 07 felt that she was able to
	improve her work by working more loosely but also slowing
	down the process. watching recordings helped her to be more
	critically engaged with her making process, helping her to slow
	down some aspects of making, become more observant and
	sensitive to the quality of her work. While this slowed the think
	and making process down, she felt more at ease with a looser
	approach to her work. Taking more time with the process
	allowed her to consider decisions more. 07 noticed mistakes,
	qualities in the materials as well proportion and technical
	issues. There was also a professional side to sharing work on
	social media platforms (Figures 131 and 134): better
	communication with client led briefs, an indication of popular



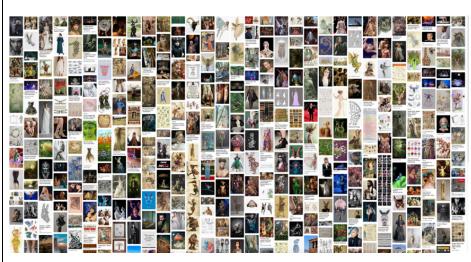
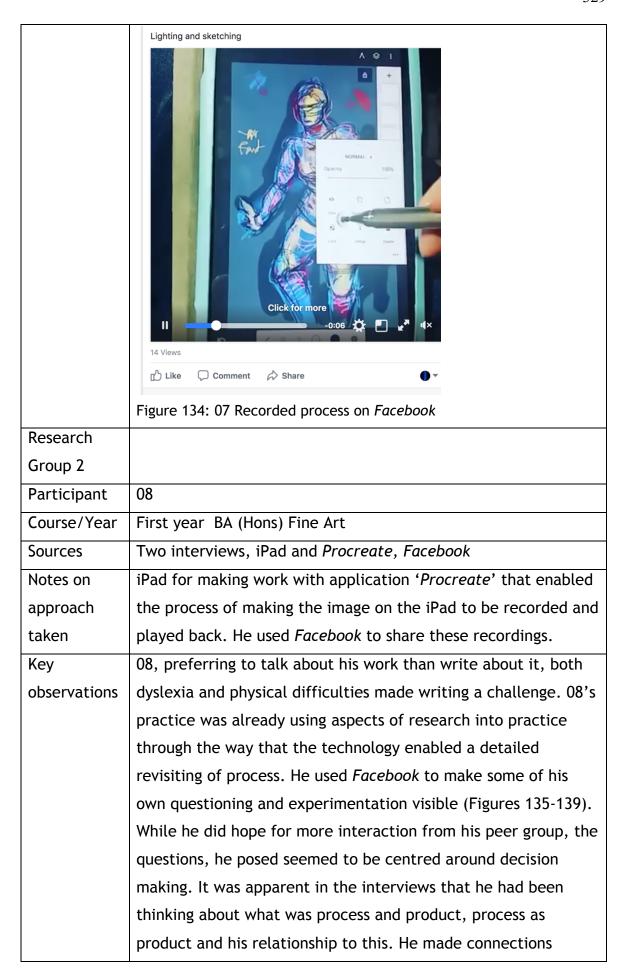


Figure 132: 07 Pinterest board for one theme



Figure 133: 07 Live draw event on Facebook



between what it was like to paint and 'paint' using the iPad. Working with imagery and ideas through different media, to explore something different about it seemed a consistent approach, playful and seeing everything as a potential tool to use. There was also a sense that he relied on getting permission rather than having confidence in what he was doing, not being sure if he could submit verbal reflection and in several posts he indicated that he was stuck and needed input in order to move forward. He saw two sides to social media, as somewhere that people present fake versions of themselves but also a really useful way to share and disseminate work. 08 believed that the videos and re-watching them were a form of reflection, he described the re-watching of the process on the iPad as being able to take a step back because he was looking at himself drawing. This was particularly useful when noticing mistakes for the first time and watching how the wrong line or mark was changed. He noticed that sometimes the same mistake was repeated over and over.

Examples

The video i showed in teh gallery warning the volume is sitll loud

VIMEO.COM

Video test

This is an expermeation i have used of my voice added to videos

Figure 135: 08 Still from video of process as animation

Video of drawing window in class. Question I have for all is of what people prefabricated the video as footage or just the image it self? And where I can go with this? Yes this could be a online crit about my style of work just think some feed back on my work is what I need to move forrward

Figure 136: 08 Facebook post asking for feedback



Figure 137: 08 iPad versus Traditional posted on Facebook

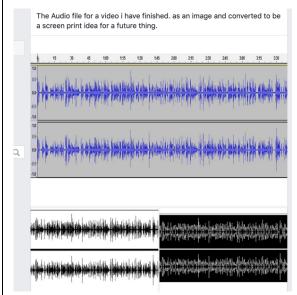


Figure 138: 08 Sound file as illustration

Finished drawing of camera: I am neither photographer nor am I a painter I am my self every thing is a tool of experimentation from photography to the brush strokes I make. From cameras to iPads even the paper I sketch on are all tools of progression

Figure 139: 08 Self-reflection posted on Face

	Figure 139: 08 Self-reflection posted on Facebook				
Participant	09				
Course/Year	First year BA (Hons) Fine Art				
Sources	3 interviews, 1 recorded Tutorials, Facebook, voice recordings				
Notes on	Listening back to recorded interviews and tutorials. Using				
approach	Facebook to put images and text together and to experiment				
taken	with new pieces of work. Recording poems spoken.				
Key	09's work is a mix of photography, poems, print and sculpture.				
observations	He felt conflicted about his artistic identity, partly because he				
	had changed from photography to the fine art degree. 09 was				
	wary of research admitting it was something he didn't do very				
	much because he didn't want others' voices influencing his				
	own. 09's used Facebook for several purposes. He shared both				
	photographs and writing as well as personal reflections (Figures				
	140-145). Occasionally a comment would make him revisit an				
	image that he had shared. While this didn't prompt further				
	analysis of the image the asynchronous nature of posting and				
	receiving comments disrupted and engaged him in revising				
	older work. Later posts began to take the form of reflective				
	annotation where he deconstructed the poems (Figures 146 and				
	147) and also shared his thoughts on the deconstruction of				
	them. The revisiting of work and recordings of talking about the				
	work had a direct impact on how he positioned himself as an				
	artist and how he reflected and made changes to his practice				

(Figure 140). Even though his work was autobiographical it took elements of autoethnography for him to gain some distance and perspective of what was so familiar to him.

Examples

something I forgot to mention today in my interview was that the research brief in the second year was a game changer for me in my practice. jo I said to you in person that I had to eat my own words on this brief I couldn't connect with it to begin with cause I didn't intract with the brief but when I did a lot changed for me on how I was approaching my practise without knowing it myself

Figure 140: 09 Excerpt from Facebook continuing the interview



Figure 141: 09 Sharing imagery on Facebook



Figure 142: 09 Sharing imagery and writing on Facebook

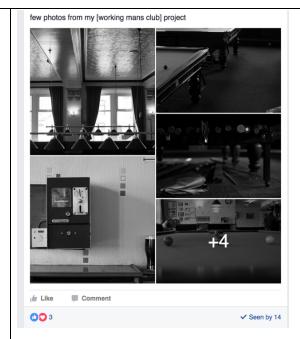


Figure 143: 09 Sharing imagery on Facebook

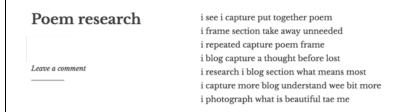


Figure 144: 09 Sharing writing on Facebook



Figure 145: 09 Sharing writing on Facebook

dugs pain close scars tennament scheme boy time weak past mental wee memories thoughts these are all words that reoccur in my poems I've never noticed so much how many times i use them in different poems till i started looking at the poems sat next to each other. i think by the words that get repeated says a lot about my past some thing i think i focus on to much when it come to my poems and photography by looking at the words picked out here? should i still be focusing my work on this subject? does my work say more to me that others? am i doing this for me or my sanity? can i ever move on and stop the work being about my past? should i be asking these questions or should i just do work? do i have the right to question what was wrote after words?

Figure 146: 09 Reflection of deconstructing of poems on Facebook

first time I've done this a break down of one of my poems - feed back is welcome e

the streets burn soul drifts black as the night the path ally ways with gates holding in the poverty take aways and pubs limited health holes filled with pot paused memories outskirts of town filled with fields to depressed to walk big dogs small chains the owner beating him self a canal with a beginning and end but no map could say a vicious sickle but set as a circle capsized by the government life jacket food from a bank

the streets burn soul drifts black as the night the path - this line of the poem has Blackburn in it as the poem is about here and also represents the amount of drug use and where drugs will lead you in life

ally ways with gates holding in the poverty - this line represents all the ally ways are getting gates now as people where driving up them getting scrap metal from peoples yards

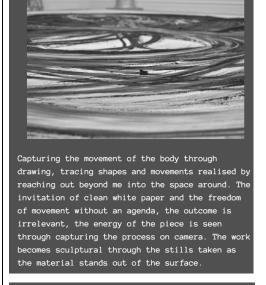
take aways and pubs limited health - this line represents alcohol addiction in the working class and how its cheaper to eat from all these cheap take aways than buying proper food

Figure 147: 09 Reflection of deconstructing of poems on Facebook

	5
Participant	10
Course/Year	First year BA (Hons) Fine Art
Sources	Three interviews, blog, GoPro, Vlog, photography, Facebook
Notes on	Using the GoPro to record herself drawing. Created video
approach taken	diaries for reflection.
Key	After recording a drawing being made 10 shared rich
observations	descriptions of the emotional, physical and technical on her
	blog (Figure 148). Her reflections were shared in the interviews

and self-reflection using a video diary technique. 10's awareness of her own behaviours around making and reflecting as well as reflecting with others was detailed and insightful. Observing qualities of the materials she was using, becoming aware of smells, sounds and tactile elements seemed to come from a heightened self-awareness while recording. Even referring to uncertainty as a material, 10 makes a deep connection between her own emotions and the physical appearance, meaning and direction of her own work. The interviews were a significant part of her own self-reflection: 10 felt it was important to not be hindered by her perception of others' agendas. She acknowledged that I would have my own agenda through the questions but being unaware of these in the unstructured interview left her to speak freely.

Examples



As I began to draw I forgot about the cameras, the gestures and movements almost felt like a dance between the paper and myself. The charcoal was very soft and made a very reassuring sound as it was swept across the material. The whole process of both the sounds and repetition of movements felt very sensory and cathartic. The pattern I was making became irrelevant and the drawing became about simply the gestures and movements in different directions. Towards the end of the drawing the charcoal ran out, I continued making the gestures with my hands until the musical piece ended.

Figure 148: 10 Screenshot of blog post

	How can you be an artist if you don't know who you are How can you shape your art when you cannot shape your thoughts How can you be seen when all you want to do is conceal How can you find your way when the path is ever changing How? How? How?
	Figure 149: 10 post on Facebook
Participant	11
Course/Year	First year FdA Textiles
Sources	One interview, photographs, applications and software:
	Claroread, mind mapping software 'Inspiration', Evernote
Notes on	Course Reflective Practice Module: Used photographs,
approach	Applications for mobile device and software
taken	
Key	11 shared her experiences of being a participant through one
observations	interview and sharing her module file for an assessed module
	'Reflective Practitioner' where some of her experiences of
	using digital autoethnography were reflected on. 11 found
	reading and processing large amounts of text difficult and a
	barrier to her own learning and had additional learning support
	in place. She had made use of several platforms and software
	to assist with reading, planning and her own reflection. Some of
	the approaches 11 took, particularly frequent photographs of
	her process, helped her to be present, think more about where
	she was in that moment but also where she could take her work
	in the future. The technology she used were very specific tools
	which in combination became part of her process that helped
	her to use a sketchbook in quite a traditional way. For her
	disability needs, being able to listen back to her own writing
	became a form of conversation that helped with her reflection
	and sensemaking. The technology gave her the opportunity to
	work fluidly across different platforms as well as different
	spaces and real locations. 11 preferred to submit her work in its
	paper-based forms, having control over how the work was seen

	resulted in the technology tools and platforms became invisible				
	at the assessment point				
Examples					
Participant	12				
Course/Year	Second year FdA Textiles				
Sources	Two interviews, blog/Imagery of artwork, Pinterest				
Notes on	blog, mobile phone, tablet and occasionally a dictaphone to				
approach	document her reflective thoughts and making process as well				
taken	regular use of a sketchbook and sometimes a personal diary				
Key	12 began the first interview with regret that she had not				
observations	recorded a previous tutorial. She realised that she hadn't taken				
	in everything that was talked about, finding it useful at the				
	time but not retaining all the information. She had previously				
	found it useful to record lectures and listen back to them				
	because she had struggled to make notes quickly enough. The				
	digital technologies enabled 12 to see her work in a more				
	polished way which seemed to give her confidence. She did not				
	go beyond the practices she would usually do; however, the				
	interview was an opportunity to talk about her work and				
	approaches more fully. There was an interesting relationship				
	between the blog (Figures 150 and 151) and sketchbook, apart				
	from enjoying the aesthetic values of the blog it was not used				
	for her own reflection in any depth but was used to tell a story				
	of her progress. The nature of her work became				
	autoethnographic and the documentation of this, mainly visual,				
	was used to create imagery rather than to reflect with. There				
	were several barriers for 12, although confident with				
	technology she did not like to watch and listen to herself,				
	despite this being prominent in the visual work. Their seemed				
	to be a lack of confidence and also set ways of working which				
	led to concern that the sketchbook could be spoiled. There was				
	contradiction between being precious about the sketchbook and				

being concerned it would get spoilt with annotation and the preference for seeing her imagery digitised.

Examples

I came to a point in this term where I fell behind with my work because of personal reasons and lost of interest in the course. I questioned myself on way I was not enjoying myself and at what point did I loose this interest. I found that on my previous course on ALU foundation I really enjoyed doing a large installation, creating collages and collaborating with photography student. I knew this was something I have to do again. Go back to something I enjoy, this has become my drive. I have not go many samples but this is down to me not enjoying my self and having any interest in the module. I have a vision, I have the motivation and I am happy with where I am and what I am creating.

Figure 150: 12 Excerpt of refection from blog

SAMPLE CHANGE

MAY 17, 2016 ~ LEAVE A COMMENT



I did the first letter sample on the sewing machine and didn't like the scruffy messy look. I decided that it might look better if I was to do It by hand which would give me more control on how It will turn out.

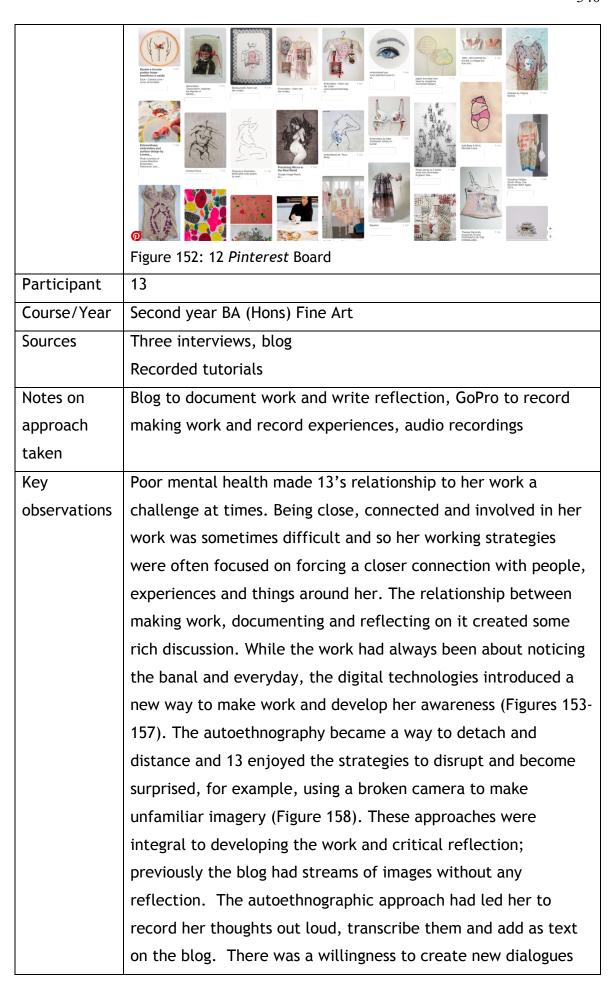
First sample will be found in sketch book

SAMPLE

IMAGE ~ MAY 17, 2016 ~ LEAVE A COMMENT



Figure 151: 12 Example of using the blog



with the work, wanting to see it differently and also being comfortable with not knowing exactly what the work was. Recording in a train station, recording the floor as she walked became interesting videos of the everyday and being able to access the inaccessible in terms of imagery/experiences. Noticing the everyday things were a big part of her practice anyway. But how 13 used the technology, particularly the Go-Pro camera, shifted, from something to document making to something to make work with. She described needing to be in a heightened state of awareness to be able to notice, the recording helped her to discover things in this way by looking back at them. She found that listening back to conversations beneficial, as well as the detachment, the recordings helped her to remember the details which she described as 'strangely familiar' when listen back. Being able to stop the recording also helped her to pause and think about what had been said because you can't reflect immediately on what you have just said. 13 said she struggled with reflecting immediately and that she might understand it two months or maybe a year later

Examples



Figure 153: 13 Documented art studio on blog

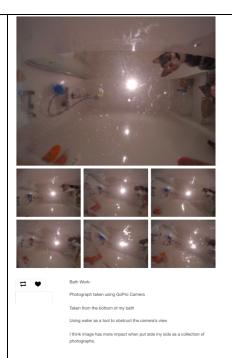


Figure 154:13 Using the Go-Pro in the bath



Figure 155: 13 Go-Pro documentation



Figure 156: 13 Documenting marks on the floor



Figure 157: 13 Go-Pro to document different ways of experiencing work



Figure 158: 13 Image from broken camera

Appendix 8: Pre-study Questionnaire

Q1: How often have you used the following to help you document your reflective thoughts?

Tool/Platform	Never	Rarely	Occasionally (Monthly)	Often (Weekly)	Very often (Daily)
Wordpress					
Blogger					
Tumblr					
Mahara					
Evernote					
One Note					
Phone					
Tablet					
Dictaphone					
Video camera					
Go-Pro					
Paper based sketchbook/file					
A personal diary					

Q2: How often have you used the following to document the making process of your creative work?

Tool/Platform	Never	Rarely	Occasionally (Monthly)	Often (Weekly)	Very often (Daily)
Wordpress					
Blogger					
Tumblr					
Mahara					
Evernote					
One Note					
Phone					
Tablet					
Dictaphone					
Video camera					
Go-Pro					
Paper based sketchbook/file					
A personal diary					

. uper basea site tempoons rite					
A personal diary					
Q3: How do you use digital tec	hnologies in you	ır creative practio	ce? Please tick all	that apply	
[] Not at all					
[] For sound					
[] For visual					
[] To document finished work					
[] To record research (photograph	oh inspiration/vi	sits etc)			
[] To promote finished work					
[] To promote myself (online CV	/Portfolio)				
Q4: To what extent do you agr	ee or disagree v	vith this statemer	nt? 'I am confident	t trying new di	gital technologie
Strongly Agree/Agree//Neither	Agree or Disagre	ee/ Disagree/ Stro	ngly Disagree		
Q5: To what extent do you agr	ee or disagree v	vith this statemer	nt? 'I am likely to	try new techno	ologies'
Strongly Agree/Agree//Neither	Agree or Disagre	ee/ Disagree/ Stro	ngly Disagree		

Q6: When learning how to use a new technology (tool, software, platform) how do you prefer to learn it? Please tick all that apply:

[] Watching video instruction

[] One - one instruction

[] Hands on just trying it out and learning by doing/playing

[] Group working

[] Reading a book/manual

Q7: To what extent do you agree or disagree with this statement? 'I find it easy to write thoughts about work I have made'

Strongly Agree/Agree/ /Neither Agree or Disagree/ Disagree/ Strongly Disagree

Q8: To what extent do you agree or disagree with this statement? 'I enjoy thinking about the work I am making'

Strongly Agree/Agree/ /Neither Agree or Disagree/ Disagree/ Strongly Disagree

Q9: To what extent do you agree or disagree with this statement? 'I think a lot about my future in the creative industry'

Strongly Agree/Agree/ /Neither Agree or Disagree/ Disagree/ Strongly Disagree

Q10: To what extent do you agree or disagree with this statement? 'I find it difficult to talk about my work'

Strongly Agree/Agree/ /Neither Agree or Disagree/ Disagree/ Strongly Disagree

Q11: To what extent do you agree or disagree with this statement? 'I enjoy talking about my work to others'

Strongly Agree/Agree/ /Neither Agree or Disagree/ Disagree/ Strongly Disagree

Q12: When you do write about your work in progress who do you imagine you are talking to?

Q13: When you do write about your final pieces who do you imagine you are talking to?

Q14: What emotions or feelings do you associate with the creative making process? Please tick all that apply:

Q15: Reflect on a piece of creative work you have completed or worked on recently and write a short piece here about it: What it was (description), what you found challenging when making it (challenges), what was successful (achievements) how you felt when you made it (feelings)

Q16: What are you looking forward to achieving in your work over the next six months?

Q17: What are your concerns or anticipated challenges regarding your work for the next six months?

Q18: To what extent are you aware of any of the following research terms?

	Not at all	Aware	Very aware
Ethnography			
Autoethnography			
Digital Auto-ethnography			
Practice Based Research			
Practice Led Research			

Q19: Are you interested in studying after your degree?

Appendix 9: Plain Language Statement Museum Visitors



Plain Language Statement

1. Study title and Researcher Details

Making the invisible visible Drawn together: A conversation with the collection

Joanna Neil School of Education Education Research PhD Interdisciplinary Learning, Education, Technologies and Society

2. Invitation paragraph

You are being invited to take part in a research study. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Ask us if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part. Thank you for reading this

3. What is the purpose of the study?

The purpose of the study is to make a piece of <u>art work</u> during a <u>week long</u> residency that responds to visitors' experiences of being in the museum and my own (as an artist and researcher). The research is about how we can explore creative ideas through conversations and how recording these using digital technologies can help. The study also encourages visitors to contribute to the developing artwork by looking at the objects in the museum and making their own drawings like I am doing. Drawing what we are interested in and talking about our thoughts may give us different ways to think about our experience. The study is also a way to talk to different audiences about the research I am doing.

4. Why have I been chosen?

As a visitor to the <u>museum</u> I am interested in your reasons for visiting and what you got from your visit to the museum.

5. Do I have to take part?

Taking part is voluntary. You may wish to take part in all of the activities, some of the activities or not take part at all.

6. What will happen to me if I take part?

There are different levels of participation: You will be given some drawing equipment and I will explain what I am doing. You can choose to make your own drawings to keep and not take part in the study or agree for me to photograph what you have done to help create the artwork. You can also agree to have an image of the work you make on the project blog: http://drawnconversation.wordpress.com/

I will ask if you agree for our conversation to be recorded. The recordings will be made using a voice recorder so that I can listen back to the conversations I have had throughout the week. Once I have listened to the recordings and written them <u>out</u> I will no longer use the recordings. I may want to quote from the written transcription for the project blog site or for any future written research. Any quotations from conversations will be anonymous. The conversation will last as long as you want it to and can be stopped at any time. If you decide you do not want to carry on being recorded or wish the recording to be deleted the recording will stop and be deleted. I will start the conversations with some prompt questions.

7. Will my taking part in this study be kept confidential?

Any involvement in the research will be kept confidential and any reference made to conversations will be as anonymous quotations.

8. What will happen to the results of the research study?

The results of my own work, and the conversations I have had, will be documented on a daily basis and appear on the project blog. With permissions drawings will be photographed and incorporated into the final artwork and also exhibited on the project blog http://drawnconversation.wordpress.com/

This project also contributes to my PhD research study and results of the research may be used in this publication. Quotations and research findings may also be used in conference papers and other academic publications.

9. Who is organising and funding the research? (If relevant)

I have organised this research with The Hunterian, University of Glasgow, University Avenue. University Centre Blackburn College, University Close, Blackburn, BB2 1LH are supporting funding for the research

10. Who has reviewed the study?

Principle Supervisor:
Professor Victor Lally
<u>Victor.Lally@glasgow.ac.uk</u>

Student Engagement Officer: Ruth Fletcher Ruth.Fletcher@glasgow.ac.uk

The College of Social Sciences Research Ethics Committee has also reviewed this research

11. Contact for Further Information

Joanna Neil

If you take part in the research and have any concerns about the conduct of the <u>research</u> you would like to discuss independently please contact: Dr Muir Houston: Muir.Houston@glasgow.ac.uk who is the College Ethics Officer.

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Appendix 10: Plain Language Statement Student Participants



Plain Language Statement

1. Study title and Researcher Details

Making the invisible visible Wearable technology in the arts

Joanna Neil School of Education Education Research PhD Interdisciplinary Learning, Education, Technologies and Society

2. Invitation paragraph

You are being invited to take part in a research study. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Ask us if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part. Thank you for reading this

3. What is the purpose of the study?

The purpose of the study is to look at how creative practitioners use wearable technology to record and document their creative practice in relation to several themes:

- Using wearable technology to help develop/reflect on a creative practice
- Using wearable technology to form practice. The technology becomes artwork/part of artwork
- Using wearable technology to communicate practice for assessment/presentation/dialogue

The research is also about how we can explore creative ideas through conversations and how recording these using digital technologies can help.

4. Why have I been chosen?

As a participant on the 'Wearable Technology in the Arts' project you are involved in using different forms of technology as part of your creative process.

5. Do I have to take part?

Taking part is voluntary. You may wish to take part in all of the activities, some of the activities or not take part at all. Any decision to not take part or at any stage withdraw from the process will not affect any assessment grades, feedback or any relationships with staff.

6. What will happen to me if I take part?

As a participant you will use wearable and digital technologies to record your own thoughts and creative making process. You agree to only record yourself, me and other participants who are taking part in the research. It is very important that non-participants do not get captured on audio or visual recordings.

During your involvement with the 'Wearable Technology in the Arts' project I will talk with you about how you have worked with digital and wearable technologies in your creative practice. This may include taking photographs of your work and making audio recordings of our conversations. These recordings will be used for me or us to reflect on and be made available to you so that you can listen back to them.

You may also wish to make your own recordings of these conversations with your selected technology to help with your own reflection of your working process. I will ask if you agree for our conversations to be recorded. The recordings will be made using a voice recorder so that we can listen back to the <u>conversations</u> and I can also transcribe them. Once I have listened to the recordings and written them <u>out</u> I will no longer use the recordings. I may want to quote from these written transcriptions for the project blog site or for any future written research. Any quotations from conversations will be anonymous.

The conversation will last as long as you want it to and can be stopped at any time. If you decide you do not want to carry on being recorded or wish the recording to be deleted, the recording will stop and be deleted. I will start the conversations with some prompt questions. You may also choose to share written notes or information that is published on your own blogs with me, which I may quote from or analyse as anonymous data.

I will also ask for you to participate in formal interviews and/or undertake questionnaires about your experiences at the start and end of the project. This information may be used to quote from as an anonymous participant in the research. Formal interviews will last between 30 to 45 minutes and questionnaires will be designed to take no longer than 20 minutes. All interviews will take place at University Centre Blackburn College, University Close, Blackburn, BB2 1LH or Chelsea Space, Chelsea College of Arts, 16 John Islip Street, London, SW1P 4JU.

The digital and wearable technologies may be your own devices or devices loaned without cost to you for the duration of the project. Technical support will be provided in the use of any unfamiliar technologies and equipment.

7. Will my taking part in this study be kept confidential?

Any involvement in the research will be kept confidential and any reference made to conversations will be as anonymous quotations.

You may consent to the use of audio/film recording to be used in future conferences and for your own creative purposes.

8. What will happen to the results of the research study?

The results of this project contribute to my PhD research study and results of the research may be used in this publication. Quotations and research findings may also be used in conference papers and other academic publications. My own narrative may include quotations from conversations or observations (where permissions have been given) and may be documented on my personal research blog.

9. Who is organising and funding the research? (If relevant)

I have organised this research with University Centre Blackburn College, University Close, Blackburn, BB2 1LH and Chelsea Space, Chelsea College of Arts, 16 John Islip Street, London, SW1P 4JU. University Centre Blackburn College, University Close, Blackburn, BB2 1LH is supporting funding for the research.

10. Who has reviewed the study?

Principle Supervisor:
Professor Victor Lally
<u>Victor.Lally@glasgow.ac.uk</u>

The College of Social Sciences Research Ethics Committee has also reviewed this research

11. Contact for Further Information

Joanna Neil

If you take part in the research and have any concerns about the conduct of the <u>research</u> you would like to discuss independently please contact: Dr Muir Houston: Muir.Houston@glasgow.ac.uk who is the College Ethics Officer

Appendix 11: Consent Form Museum Visitors



Consent Form

Title of Project: Making the invisible visible Drawn together: A conversation with the collection

Name of Researcher:

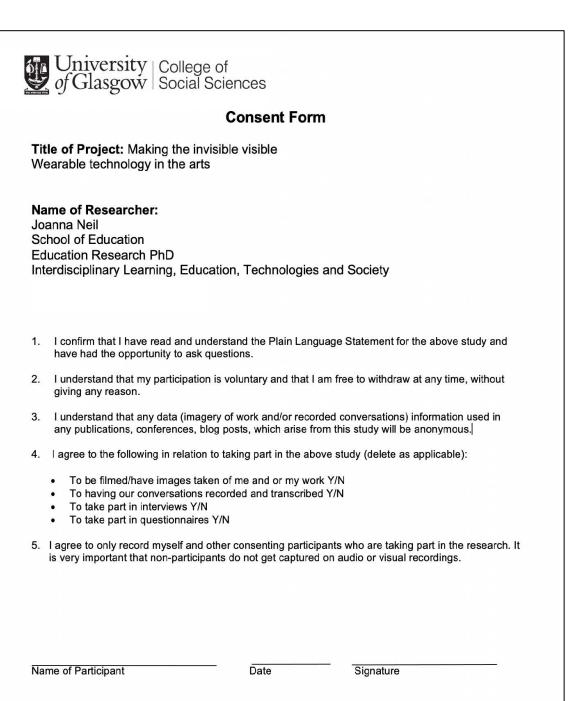
Joanna Neil School of Education Education Research PhD Interdisciplinary Learning, Education, Technologies and Society

- I confirm that I have read and understand the Plain Language Statement for the above study and have had the opportunity to ask questions.
- 2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason.
- 3. I understand that any data (imagery of work and/or recorded conversations) information used in any publications, conferences, blog posts, which arise from this study will be anonymous.
- 4. I agree / do not agree (delete as applicable) to take part in the above study.

Name of Participant	Date	Signature
Name of Person giving consent (<u>if</u> different from participant, eg Parent)	Date	Signature
Joanna Neil Researcher	Date	Signature

1 copy for subject; 1 for researcher

Appendix 12: Consent Form Student Participants



1 copy for subject; 1 for researcher

Signature

Date

Joanna Neil Researcher