



MONASH University

*Becoming digital: An exploration of digital media in young people's
lives*

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Table of Contents

Table of Figures.....	1
Abstract.....	3
Chapter 1: What is the digital?.....	4
1.1 Introduction	4
1.2 Defining the digital	4
The role of digital media in production and representation	5
The role of digital media in meaning making	7
The role of digital media in identity representation and formation	9
Emerging tensions	13
1.3 A rationale for the study	14
Research questions	14
1.4 Some conceptual tools for investigating young people's relationship with digital media.....	15
A poststructural understanding of identity	15
An anti-essentialist perspective on digital media	18
A constructionist approach to the thesis.....	20
1.5 Organisation of the thesis	21
Chapter 2: Understanding young people's digital media practices	23
2.1 Introduction	23
2.2 Young people and youth studies.....	23
Towards a definition of young people	23
Key areas of interest emerging from social studies of young people	28
Key concerns emerging from social studies of young people.....	31
2.3 Previous research on young people and digital media	37
2.5 Interventions into young people's digital media practices	40
Participatory interventions	41
Protectionist interventions	43
Chapter 3: The importance of critical digital literacies	47
3.1 Introduction	47
3.2 What are digital literacies?.....	47
3.2 Tensions within academic understandings of 'critical' digital literacy	48
A critical literacy approach – an ethical analysis.....	48
A critical media literacy approach – acknowledging the personal	50
Digital design literacies – the importance of making	51
3.3 Addressing the needs of the individual.....	53
The 'ideological' and the 'personal'	54
'Collective concerns' and 'individual practices'	55
'Technical mastery' and a 'critical disposition'	56
3.4 Critical digital design – towards a framework for digital literacy	57
Transcendental critique	58
Visualisation.....	58
Critical self-reflection	59
Interpretation and re-articulation of digital concepts	60
3.5 Conclusions	60
Chapter 4: Research methods.....	61
4.1 Research aims	61
4.2 Research questions	61
4.3 Comparative case study as research design	61
4.4 Provocation as a means of generating data	64
Provoking for critical self-reflection.....	66

Provoking to explore attributions, discourses and ideologies.....	68
4.5 Research process.....	69
4.6 Access and recruitment.....	70
4.7 Participants	70
4.8 Data collection.....	71
First phase	71
Second phase.....	72
Third phase.....	73
Fourth phase.....	74
4.9 Philosophy of research approach.....	75
Ontological and epistemological concerns.....	75
Becoming ‘critical’.....	76
4.10 Establishing credibility	79
4.11 Trustworthiness	79
Credibility	79
Transferability	80
Dependability	81
Confirmability	81
4.12 Authenticity	82
4.13 Analysis of data.....	83
Narrative analysis.....	83
Thematic analysis.....	84
4.14 Ethical considerations	85
Gaining informed consent.....	86
Minimising harm	87
Confidentiality.....	88
Chapter 5: Young people’s digital biographies.....	90
5.1 Introduction	90
Organisation of findings and discussion	90
5.2 Bankview College - a government secondary school in outer Melbourne	91
Stacey, 15 years.....	91
Simon, 15 years	93
Ben, 16 years	96
Rachel, 15 years	98
Trent, 16 years.....	100
Mark, 16 years.....	102
5.3 City College – a co-educational private school in Melbourne	105
Grace, 15 years.....	105
Penny, 15 years	108
Maddy, 15 years	110
5.4 Williams Road Collective – a youth arts centre in outer eastern Melbourne.....	112
Sean, 19 years.....	112
Dylan, 16 years.....	114
Chantelle, 16 years	116
Heidi, 16 years	118
5.5 Conclusions	120
Chapter 6: Young people’s digital dispositions.....	123
6.1 Introduction	123
Organisation of findings and discussion	123
6.2 Young people and the label of the ‘digital native’	124
6.3 Tacit understandings.....	128
6.4 Issues of risk and safety	131
6.5 Architecture of the internet	139
6.6 Internet provenance and governance	146

6.7 Conclusions	151
Chapter 7: Young people’s digital identities	153
7.1 Introduction	153
Organisation of findings and discussion	154
7.2 Identity representation	155
The role of photos	155
The importance of ‘friends’	162
7.3 Identity formation – a series of becomings	167
Vocational becomings.....	168
Social becomings	172
7.4 Tethered identities	176
How identities are tethered.....	177
7.5 Conclusions	185
Chapter 8: Young people’s digital connections	187
8.1 Introduction	187
Organisation of findings and discussion	187
8.2 Projecting the self – Facebook Newsfeed and Instagram	188
8.3 Interacting with others – Facebook Chat, text message and Skype messenger ...	199
8.4 Co-operating with others – Steam, YouTube and Wattpad	204
8.5 Communicating more formally - Email	208
8.6 Testing provisional aspects of self – Snapchat and Qooh.me	209
8.7 Conclusions	215
Chapter 9: Discussion of findings	247
9.1 Introduction	247
9.2 The role that digital media play in the young people’s lives	247
Identity representation and formation	248
Becoming	249
Communication	250
Civic participation	251
9.3 Young people’s critical understandings of digital media	251
Social hierarchies of digital platforms	252
Cybersafety and security	253
The role of significant others	253
9.4 Broader implications, insights and interpretations	254
Bounded identities.....	255
The structuring nature of digital platforms	258
Young people’s affective experiences of digital media	262
The individualisation of digital responsibilities and risks.....	265
The need for critical digital literacies.....	268
9.5 Conclusions	270
Chapter 10: Reflections and implications	272
10.1 Introduction	272
10.2 Reflections on the research process	273
10.3 Implications for academic researchers	274
10.4 Implications for schools and education officials	277
10.5 Implications for technology companies	280
10.6 Implications for parents and families	284
10.7 Implications for young people	286
10.8 Conclusion	288
References	289
Appendices	303
Appendix 1: Explanatory statements and consent forms	303

Appendix 2: Notes from pilot study	310
Appendix 3: Summary of the research process	315
Appendix 4: Online questionnaire	317
Appendix 5: Instructions for Provocation 1.....	320
Appendix 6: Instructions for Provocation 2.....	322
Appendix 7: Interview one questions.....	324
Appendix 8: Instructions for Provocation 3.....	325
Appendix 9: Interview two questions	327
Appendix 10: Instructions for Provocation 4.....	328
Appendix 11: Information cards for re-articulation	329
Appendix 12: Interview three questions.....	334
Appendix 13: Consent form for participation in the exhibition.....	335
Appendix 14: Documentation of the exhibition	336
Appendix 15: Sample narrative analysis	337
Appendix 16: Evidence of coding for thematic analysis	343
Appendix 17: Monash University human ethics certificate of approval.....	346
Appendix 18: List of websites and digital programs.....	347

Table of Figures

Figure 1: Marcus Tatton's sculpture 'Corruptus Indigicus', 2012	8
Figure 2: Eugenia Lim's video installation 'Narcissus', 2012	9
Figure 3: Screenshot of the Play School website circa 2007	91
Figure 4: Screenshot of Miniclip homepage circa 2006	94
Figure 5: Simon working on his timeline of digital practices.....	95
Figure 6: Ben's Steam profile 2014.....	96
Figure 7: Screenshot of Wattpad homepage circa 2010	99
Figure 8: Screenshot of Pokemon homepage circa 2006.....	101
Figure 9: Screenshot of Reach website homepage 2015	102
Figure 10: Mark working on his timeline of digital practices	104
Figure 11: Screenshot of Club Penguin homepage circa 2007	106
Figure 12: Grace working on her timeline of digital practices	107
Figure 13: Screenshot of Farmville website circa 2009.....	109
Figure 14: Screenshot of Moshi Monsters homepage circa 2009.....	111
Figure 15: Sean's timeline of digital practices in the 'Becoming Digital' exhibition	113
Figure 16: Dylan's map of digital and non-digital experiences	116
Figure 17: Heidi's timeline of digital practices in the 'Becoming Digital' exhibition	118
Figure 18: Sean's map of digital and non-digital experiences	126
Figure 19: Chantelle's map of digital and non-digital experiences.....	127
Figure 20: Rachel's Facebook cover photo July 2014	130
Figure 21: Rachel's map of digital and non-digital experiences.....	132
Figure 22: Mark's map of digital and non-digital experiences	133
Figure 23: Stacey and Rachel's model of the internet.....	140
Figure 24: Chantelle's model of the internet.....	140
Figure 25: Mark and Simon's model of the internet	141
Figure 26: Sean working on his timeline of digital practices	143
Figure 27: Trent and Ben's model of the internet	147
Figure 28: Grace, Penny and Maddy's model of the internet.....	148
Figure 29: Sean's model of 'old man' internet.....	149
Figure 30: Maddy's Facebook profile November 2014.....	156
Figure 31: Penny's Facebook profile November 2014.....	157
Figure 32: Ben's Facebook profile January 2014.....	157
Figure 33: Grace's re-designed 'like' icon	160
Figure 34: Stacey and Rachel's model of the internet.....	161
Figure 35: Trent's Facebook profile June 2014	162
Figure 36: Sean's Facebook profile June 2014	163
Figure 37: Rachel's Facebook profiles June - December 2014.....	163
Figure 38: Maddy's Facebook cover photo October 2014	164
Figure 39: Grace's Facebook cover photo October 2014	164
Figure 40: Sean Facebook cover photo June 2014	165
Figure 41: Penny's Facebook cover photo November 2014.....	165
Figure 42: Sean's re-designed Facebook 'friend' icon.....	167
Figure 43: Trent's re-designed Facebook 'friend' icon.....	167
Figure 44: Simon's Steam profile October 2014.....	169
Figure 45: Screenshot of Mark and friends' YouTube channel 'Screencheats'	170
Figure 46: Sean's Tumblr page June 2014	171

Figure 47: Dylan's Flickr page September 2014.....	171
Figure 48: Stacey's Facebook page of 'groups' and 'likes'	173
Figure 49: Stacey's Facebook profile pictures 2014	173
Figure 50: Stacey's Facebook cover photo December 2014	174
Figure 51: Trent's Facebook cover photo June 2014	181
Figure 52: Mark's Steam profile June 2014	183
Figure 53: Mark's Facebook profile June 2014	183
Figure 54: Grace's Instagram page September 2014	183
Figure 55: Grace's Facebook post September 2014.....	184
Figure 56: Penny's Instagram page September 2014	184
Figure 57: Penny's Facebook post September 2014	184
Figure 58: Ben's map of digital and non-digital experiences.....	190
Figure 59: Maddy at the wedding, Facebook post November 2014	193
Figure 60: Stacey at the debutante ball, Facebook post October 2014.....	193
Figure 61: Grace at the dance competition, Facebook post July 2014	193
Figure 62: Heidi's re-designed Facebook 'friend' icon.....	194
Figure 63: Sean's membership to the Facebook group 'United against Abbott'	195
Figure 64: Trent's map of digital and non-digital experiences.....	198
Figure 65: Rachel's Facebook post June 2014	205
Figure 66: Qooh.me posts from Dylan, Penny and Rachel.....	211
Figure 67: Qooh.me posts from Dylan and Mark	212
Figure 68: Qooh.me dialogue between Dylan and anonymous	213
Figure 69: Qooh.me dialogue between Mark and anonymous	213
Figure 70: Qooh.me dialogue between Rachel and anonymous.....	214
Figure 71: Qooh.me dialogue between Mark and anonymous	214
Figure 72: Qooh.me dialogue between Rachel and 'Lachlan James'	215

Abstract

This thesis investigates the increasingly complex ways in which young people engage with digital media. The study took an approach informed by new literacies and critical internet studies to examine the (dis)connections that exist across the digital and non-digital contexts of young people's everyday lives. In particular, it focused on how digital media use plays a part in young people's capacity to form and represent their identities, communicate with others and participate in society. Drawing on a year long period of data generation with 13 participants (aged 15 to 19 years) from the Melbourne metropolitan area, the study documented young people's digital practices; the critical understandings that these young people brought to their digital practices; and how and where these understandings were developed.

In contrast to popular notions of the empowered and enabled 'digital native', the findings present a more restrained picture of young people's digital lives. For example, the findings show how young people's formation of online identities remained closely 'tethered' to their offline corporeal identities – with little evidence of the fluidity and flexibility of practice popularly associated with the internet. The findings also highlight the influence of the coded architectures of digital platforms that were being used by young people, together with the social contexts in which digital practices were embedded, in particular within peer group, school and family. This shaping was especially notable in the limited ways in which young people were using digital media to communicate and interact with others.

Above all, the study highlights the limited tools and resources that these young people were able to draw on in order to understand the more complex and interconnected practices they experienced through their use of digital media. As such, the study concludes by considering the problematic gaps that exist between young people's experiences of digital media, academic theorisations of this relationship, and common educational approaches to digital literacies.

Chapter 1: What is the digital?

1.1 Introduction

The use of the word 'digital' has become synonymous with newness, innovation and improvement. Like many words, it is constantly evolving to reflect the increasing reliance of modern society on digital devices and data. Phrases like digital media, digital learning, digital profile and 'digital native' are in common use today, indicating that the 'digital' refers to much more than just a way of encoding data. However, it is important to be clear on what the digital refers to because how the concept is understood determines the way we approach and contextualise its use.

This chapter begins by defining what is meant by the digital and extends this to explore how the introduction of digital encoding has come to frame and underwrite many aspects of modern life. It considers how digital media influence and reconfigures identity representation and formation, paying particular attention to the notions of fluidity and experimentation. In doing so, several key tensions emerge which obscure understandings of how young people are actually using digital media, as well as the role that adults and educators can play in supporting the development of their digital literacies. Bearing this in mind, a rationale for the study is presented and the research questions are outlined. It then introduces some conceptual tools for investigating young people's relationship with digital media, including: a poststructural understanding of identity; an anti-essentialist perspective on technology that considers digital media as texts; and a constructionist approach to the thesis. This chapter also draws on works from the arts as a way of introducing key ideas. From an artistic perspective the seamlessness with which digital practices have been incorporated into daily life is interrupted and a new vantage point for reflection is offered. A similar approach is used in the methodology of the study, where creative practices are used to open up new perspectives on digital media.

1.2 Defining the digital

At the most basic level, the digital can be described as a binary code in which there are only two possible states, off and on, symbolised by 0 and 1. In this way, the flow of information that is 'captured' by binary code is discrete and discontinuous, so that each tenth of a second on a clock may be captured, for example, but not each point in

between. By comparison, analogue, digital's predecessor, continuously translates information via electric pulses of varying amplitude. Encoding information digitally has advantages. By using binary code, large amounts of information can be compressed so that transmission and storage of data is far more efficient. Further, being composed of only two signals, data is more easily decoded. In short, digital data is easier to store, manipulate and replicate affording the user greater control and precision of information. Analogue, by comparison, has infinite values of data so the process of decoding is more time consuming and prone to errors. The sheer amount of information involved in analogue transmission is its greatest shortcoming, however, analogue is able to represent changing values and continuously variable qualities, which is more akin to the way humans experience the world.

The role of digital media in production and representation

While much has been made of the quantitative advantages of digital storage and transmission of data, the digital also heralds qualitative changes that are often overlooked. In the documentary 'Side by Side' (Kenneally, 2012), popular filmmakers were interviewed about the switch to digital film and the technical and social repercussions of this 'revolution'. Many points raised in the documentary typify the issues in our engagement with the digital more broadly. In the first instance, the quality of the digital image is questioned, with one cinematographer, Wally Pfister, hesitant to switch to digital, claiming 'I'm not going to trade in my oil paints for a set of crayons'. It seems that while digital resolutions have improved many filmmakers still believe the digital cannot recreate the quality of film, with some claiming the greater texture and grain structure in the photochemical image is superior. However, the changes brought about by digital film extend beyond the technical with everything from the 'work-flow' of the crew to the viewing experience of the audience affected. For example, filmmakers are no longer limited to using reels of film that can capture only 10 minutes of action, as is the case with photochemical film. With digital film the photographer can catch endless amounts of footage and 'take' what they need later. Underpinning the documentary was the question of whether greater quantitative capacity equates to qualitative improvements; a question commonly raised in regard to digital communication today. Due to digital technology it is now cheaper to make a film, however, it is not known whether greater access to the means of production will result in better films. Film director David Lynch, used

the analogy of pen and paper to explain that just because more people have access to such tools does not mean better stories will be written.

Accompanying the introduction of any new technology is a sense of nostalgia for what may be lost, changed or reconfigured. It is Manovich's (2013) contention that despite continuation with 'old' media, new media actually significantly changes the techniques for expression, representation and interpretation: 'this ability to combine previously separate media techniques represents a fundamentally new stage in the history of new media, human semiosis and human communication (p.47). Manovich's work is part of the growing field of software studies, which examines software systems and their cultural and social effects. As Kitchin and Dodge (2011) explain 'software instructs computer hardware – physical, digital circuitry – about what to do' (p.3). While this might appear a simple definition, software has profound effects upon society as it 'produces new ways of doing things, speeds up and automates existing practices, reshapes information exchange, transforms social and economic relations and formations, and creates new horizons for cultural activity' (Kitchin & Dodge, 2011, p.3).

Through software and new media 'artefacts and traces of the past' are recombined and reconfigured into what Galloway (2011a) describes as an 'ever-expanding present' (p.384). With the introduction of digital encoding and transmission, the world of filmmaking, like many other cultural forms of expression, is at a threshold marked by both excitement and trepidation. Many things that were impossible with image creation are now possible with the manipulability of the digital and the relative ease of filming and editing. However, other questions are also raised. For example, with the ubiquity of mobile digital technology will communal viewing of films become a thing of the past? And with such rapid development of technology, in 50 years time, will the digital devices to view this data still exist?

Another significant question might be to consider how digital identities will be represented. Poster (1995) considers this issue in his analysis of databases. Electronic databases enable storage of large volumes of information to create a 'picture' of the individual that is searchable by computer; however, unlike narratives, which are 'complex and flexible' these are 'severely restricted forms of discourse' (p.66). In this way, Poster believes that 'databases configure reality, make composites of individual

experience that could be characterised as caricature' (p.66). Given how evident databases are in profiling and presenting individual identity in today's society these are important questions to consider. Most significantly, these issues arise from the fact that digital encoding is discrete and discontinuous and therefore different to how humans experience the world, signaling a critical break in the way reality is represented.

Further to this, digital media shape patterns of behavior in other significant ways. 'Lock-in', for example, is a phenomenon by which 'technologies make it progressively difficult for us to separate ourselves from them' (Jones & Hafner, 2012, p.100), meaning they shape the behavior of their users in particular ways. For example, Lanier (2010) explains that with the creation of the MIDI (Musical Instrument Digital Interface), which is a protocol for recording and playing music through digital synthesisers, the scheme for making and representing music changed, and not necessarily for the better. While MIDI could be described as a technological breakthrough, it also meant that a musical note went from being a 'bottomless idea that transcended absolute definition' to become a 'rigid' structure that was impossible to alter (Lanier, 2010, p.9). Much was enabled through the creation of the MIDI, however, Lanier contends that something fundamental was lost. He goes on to suggest that the MIDI has become so locked in that it is now impossible to digitally represent music through any other program. Jones and Hafner (2012) cite a similar phenomenon with the choice between Xbox and Playstation, a decision that results in the user becoming 'locked in' to engaging with a particular tool in a particular way. While the differences between analogue and digital appear subtle, these differences become amplified through our everyday use of digital devices and media, thereby shaping experiences of life.

The role of digital media in meaning making¹

In his work *Corruptus Indigicus*, sculptor Marcus Tatton 'scatters' large-scale steel 0s and 1s over the landscape inviting the audience to engage with what he calls 'today's hieroglyphics' (Tatton, 2012, p.106). What is interesting about this work is that

¹ While society uses digital encoding in many different ways, this thesis focuses on *digital media* or any media that are encoded in a machine-readable format. This includes computer programs and software, web pages and web sites, digital video, social media, digital audio and e-books. It considers the role of digital media in meaning making and identity representation and formation.

viewers sit, lean and step over the binary code so that they are shaped, if only momentarily, by the work. In this way, the sculpture becomes a metaphor for the way our life experiences have become shaped, physically and mentally, by the digital. From a theoretical perspective, Jones and Hafner (2012) draw on the work of Marshall McLuhan and Andy Clark to argue that the tools that mediate our experience become extensions of us. In this way, ‘they fundamentally change the way we experience and think about space and time, fundamentally change the kinds of relationships we can have with people who live far away from us, and fundamentally change the kinds of societies we can build’ (p.3).

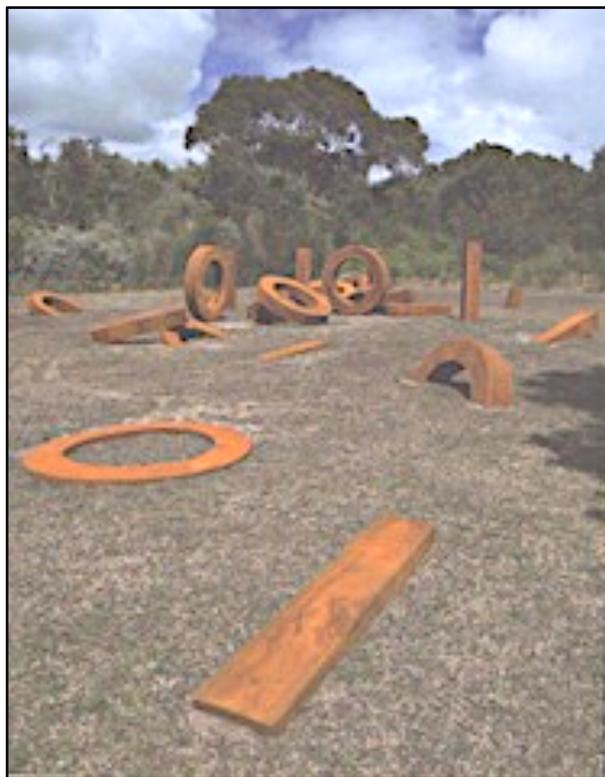


Figure 1: Marcus Tatton's sculpture 'Corruptus Indigicus', 2012

It is this epistemic change that Tatton asks the audience to consider. While the steel structures of 0s and 1s are designed and shaped by humans in response to the context and contours of the landscape, they also encourage the viewer to engage with them in particular ways. For example, a zero laid on its side beckons the viewer to take a seat on it, while a 1 on its side might encourage a ‘tight rope’ walk along its length. However, there is also room to interpret, participate and ‘play’ in and around the sculpture. This experience parallels our engagement with the digital; the creators may well determine the design and capabilities of the technology, but the user can adapt, respond and modify it to suit their ends. Just how this reciprocal relationship plays

out is dependent on several factors, but from any angle, the digital – whether it refers to machines, spaces or data – has shaped the ways in which contemporary life is experienced and made sense of.

Drawing on the work of Williams (1974), Buckingham (2008) explains that technology is ‘socially shaped and socially shaping’ (p.12). Seen in this way digital practices are determined by the ‘inherent constraints and possibilities which limit the ways in which it can be used’, which are, in turn, ‘largely shaped by the social interests of those who control its production, circulation, and distribution’ (Buckingham, 2008, p.12). This study is focused on the relationship between the technical and the social – a place where the grounds are continually shifting. Such an intersection has been brought about by society’s increasing reliance not only on communicating through technology, but also to form and represent an identity.

The role of digital media in identity representation and formation

In her video installation work *Narcissus*, artist Eugenia Lim explores the process of performing an identity through digital media. In the work the audience enters the room to find a camera linked up to a television set. Lim takes a seat in front of the camera and the television so the audience can see in real time and on screen what is happening. Lim is shown brushing and re-brushing her hair in an almost feverish way. She then pauses for five freeze frame images that are performed to and at her own image. When the idea of ‘striking a pose’ for the camera is seen in isolation just how unusual and new this process of identity presentation is highlighted².



Figure 2: Eugenia Lim's video installation 'Narcissus', 2012

² See: <http://www.eugenialim.com/?portfolio=narcissus>

This work offers a view not often seen – the viewers are witness, but not audience, to the performance of identity. In this light, the process of identity presentation is defamiliarised, offering a new perspective on everyday digital media practices. Lim describes digital video as the ‘ultimate mirror medium’ claiming ‘anyone with a webcam can YouTube their individual brand of "Broadcast Yourself" narcissism’ (Lim, 2012). Watching the work highlights the performative element of identity presentation; a concept outlined by Goffman (1959), but which has taken on particular resonance in the digital era.

This sociological reading of identity put forward by Goffman in his book *The Presentation of Self in Everyday Life* (1959) has been well used in research around digital media (see Jones & Hafner, 2012; Boyd, 2007; Mendelson & Papacharissi, 2011). Goffman delineates the ritualised and expected versions of identity presented to the world on the ‘front stage’ from the more honest and often contradictory version of self ‘back stage’. He argues that identity includes ‘impression management’, which is a conscious or subconscious process where people try to influence the perceptions of other people about a person, object or event so that particular goals and ideals can be achieved. In Lim’s digital work, however, the ‘front stage’ and ‘back stage’ coalesce introducing a different, more complex set of propositions that muddy Goffman’s clear-cut delineation. Her work breaks down the ‘front stage’ and ‘back stage’ and shows just how contingent one is on the other, revealing some of the gaps in Goffman’s theory. Indeed, Buckingham (2008) argues that while Goffman’s theory is helpful it is also limited as it suggests that the ‘back stage’ version of self is somehow more truthful to ‘real’ identity. Further, while differences between ‘front stage’ and ‘back stage’ might exist, digital media demonstrate the reciprocal relationship between the different selves, be they online or offline, ‘front stage’ or ‘back stage’. Seen in this light, identity is fluid, reflexive, a ‘work in progress’. Janks (2010) argues there are benefits to imagining identity as fluid and hybrid as it can ‘resist essentialising people on the basis of any one of the communities to which they belong or to which we assign them’ (p.99). The idea that identity is socially constructed, fluid and multiple underpins the theorising of identity in this thesis, however, there are assumptions bound up in these concepts that are important to clarify.

To conceive identity as ‘fluid’ means that ‘it is no longer conceptualised as a stable entity that one develops throughout adolescence and achieves at some point in (healthy) adulthood’ (Moje & Luke, 2009, p.418). Nevertheless, an important aspect of identity is that it is ‘recognised’ by others. As Gee (2000) explains:

Being recognised as a certain “kind of person,” in a given context, is what I mean here by “identity.” In this sense of the term, all people have multiple identities connected not to their “internal states” but to their performances in society (p.99).

Gee goes on to acknowledge the presence of a ‘core’ identity ‘that holds more uniformly, for ourselves and others, across contexts’ (p.100). However, he suggests that the definition of identity as ‘recognised’ is more useful as an analytic tool in theorising and researching education. In a similar way, Buckingham (2008) argues that in the digital era it is more appropriate to talk about ‘identification’ rather than identity, as it is realised through our social interactions and negotiations with other people. In the digital era identity ‘work’ is experimental, as individuals forge a sense of self through their relationships with other people and the discourses and contexts they encounter.

However, one way that the fluidity of identity is more contained in digital spaces is through the collapsing of context (Boyd, 2011). Not only do social networking sites like Facebook blur the boundary between public and private, but with a largely invisible audience the role of context in the process of making meaning is altered. For example, changing language, ideas and values for different audiences and contexts becomes more difficult through social networking sites, as identity becomes more ‘fixed’ through the profile. In this way, the identity an individual has at work is no longer separated from their social identity, as ‘friends’ on Facebook may include family, work colleagues or even employers. While individuals might still perform different identities for different people, the digital environment collapses contexts encouraging the blurring of these versions of self. Indeed, the idea of having just one identity has been reinforced by Facebook, as founder Mark Zuckerberg is quoted as saying, ‘the days of having a different image for your work friends or co-workers and for the other people you know are probably coming to an end pretty quickly’ (Kirkpatrick, 2011, p.199). By contrast other social media sites like Google Plus

enable the user to group contacts according to social context, which might be a distinct advantage of this site over Facebook.

Several researchers (Potter & Banaji, 2011; Sunden, 2003) argue that what digital media afford the user is not a new process of identity formation, but the opportunity to make these processes visible. Boyd (2007), for example, writes that digital profiles are a type of *digital body* where the individuals must write themselves into being. While the audience might know the offline identity of the individual, the online identity that is presented through a digital profile works in an aspirational way. Boyd asserts that in a digital context individuals are ‘inclined to present the side of themselves that they believe will be well received by these peers’ (p.13). Similarly, Sherry Turkle (2011a) writes that an online profile is an avatar of sorts or ‘a statement not only about who you are, but also who you want to be’ (p.180).

Other researchers have argued that digital media create places where roles and identities can be worked through. Dean and Laidler (2013) write that for their female participants Facebook afforded them a space that sat outside the dichotomous representations of femininity presented in popular culture. On Facebook they could circumvent ‘some of the disadvantages of binding feminine identity with consumerism’ enabling them to ‘dress, look and feel more naturally’ (p.7). According to Dean and Laidler ‘The Facebook Girl’ is able to transgress these binaries as new means of self-expression are afforded through social media. In a similar way, Selwyn (2009a) details how for the University students in his study, the Facebook wall was a place where they could become familiar with the ‘identity politics’ of being a student. It became a space where the issues that arise from University staff, academic conventions and expectations could be reported and reflected upon. Mendelson and Papacharissi (2011) examined the role of Facebook photo galleries in introducing the self and performing identity. For these new college students the repetition of photos of the individual or the individual with friends served to introduce and assert an identity independent of family. Further, the ‘collectively performed narcissism’ (p.269) was thought to be a step toward self-reflection and self-actualisation, rather than self-absorption.

This positive reading of the role narcissism plays in the process of identity formation presented in these studies challenges the issues raised by Lim's artistic work used earlier. Again perspective is of importance, as how a particular behavior or instance is interpreted is dependent on the standpoint of the viewer. What these studies and theories do highlight, however, is that there are significant changes at work when considering how identity and digital media intersect and these need close examination. If narcissism does serve a purpose, as Mendelson and Papacharissi (2011) contend, the flip side of this also needs to be considered. For example, if the emphasis is on appearance and social groupings, rather than other features of identity, then what sort of anxieties does this create in the user? For each assumption another question emerges suggesting that perceived benefits often bring with them new socialities that also need consideration.

Emerging tensions

In defining the digital, this section has outlined the opportunities and challenges that are associated with digital forms of production, representation and identity formation. In doing so a set of tensions emerge for those concerned with researching young people's digital literacies:

- Digital media provide new opportunities for representation, but the structures of digital platforms encourage particular patterns of engagement and communication;
- A more fluid sense of self might liberate young people from essentialising discourses, but at what point does this become destabilising;
- Young people shape digital media to suit their needs, but at the same time they are being shaped by the technologies they use;
- Representations of self through digital media can lead to productive 'identity work' for young people, however, as this is often a socially constructed process, relying on the feedback and validation of others can create anxieties.

In many respects these tensions are strengthened by popular and educational discourses, which tend to be based around either a sense of panic over the way young people use digital media, or an uncritical celebration of the power of digital media to transform lives for the better. The major challenge of these discourses is that they position adults and educators in contradictory ways and obscure the differences in how young people are actually using digital media. Neither discourse provides a

realistic way of thinking about how young people use digital media or how adults and educators can support them to make the most of the opportunities that digital media offer. A more nuanced way of understanding the gaps and connections that exist between young people's digital lives and the formal and informal discourses that support their digital literacies is needed.

1.3 A rationale for the study

The complex relationship young people have with digital media requires grounding in empirical data from research. This study probes and tests the assumptions embedded in contemporary discourses around young people's use of digital media to offer a more nuanced account of this relationship. While there are now several studies documenting young people's digital lives (Davies & Eynon, 2013; Boyd, 2014; Ito et al, 2010), these have tended to rely on self-reports of behaviour and/or observations. There remains a need for closer scrutiny of the mutual shaping that takes place when young people use digital media in order to empirically explore some of the shifts, tensions and contradictions outlined in the preceding section. This requires a research approach that can unpack and explore how young people negotiate this relationship, including the resources they draw on to develop their critical understandings.

While digital media offer young people an array of possibilities for representation and communication, individual dispositions and capabilities determine the extent to which these potentialities may be realised. The findings of this study therefore have relevance for adults, educators and parents who seek to support young people to become active and discerning users of digital media. Popular discourses around the 'digital native' (Prensky, 2001a) are seductive, but it is the tacit critical digital literacies that the study aims to uncover, explore and extend. It is within this domain that the present study aims to make a contribution.

Research questions

1. What role do digital media play in young people's lives? In particular, how do young people use digital media to represent and form their identity, communicate with others and participate in society?
2. What are young people's critical understandings of digital media? How did they develop these understandings of digital media?

In exploring the first research question, I set out to understand the various ways young people use digital media to represent their identities, socialise with others and participate in society. I also set out to explore the way they spoke of these practices, including whether popular and educational discourses figured in their explanations. The second question explored the young people's deeper, often more latent conceptions of the architecture and processes of the digital context, as well as their critical understandings of the social, economic and political pressures that influenced their digital practices. Exploring these issues required moving beyond discourses that exoticised young people as either 'digital natives', who have a natural affinity for digital technologies, or 'victims' needing protection from the dangers of the internet.

1.4 Some conceptual tools for investigating young people's relationship with digital media

While the scope of the present study is broad, several conceptual tools helped to focus and guide the investigation. What follows is an overview of each of these tools.

A poststructural understanding of identity

The present study takes a poststructural approach to theorising identity. While there are several different theories of identity that sit within a poststructuralist paradigm, the present study uses Deleuze and Guattari's (1980/2013) 'becoming'. A foundational point within the poststructuralist paradigm, however, is that identity is conceived as fluid and multiple. As explained, these are both characteristics that are potentially accentuated by the architecture and processes of the digital context. Digital media, for example, offer individuals an expanded range of possibilities, combinations and features to experiment with personal and social identities. This is manifest most obviously through the practices and rituals associated with entering and using websites (i.e. creating a profile, login). Users become 'carriers of virtual passports' (Ribeiro, 2009, p.292), which enable them to traverse and 'enter' various digital spaces, becoming slightly different versions of self through their engagement. Further to this, developing these social identities occurs through interactions with others, which, in the digital context, might be thought of as a succession of written and visual 'statements' and exchanges (Ribeiro, 2009).

The present research aimed to explore the fluidity of young people's identities as they are represented and reformed through digital media. While the focus is on identity, this strand of the project also investigated the process of mutual shaping that takes place when young people use digital media. As Zielinski (2006) argues, it is important researchers try to understand the effect of technological systems on the individual, to 'assist the forces of imagination to penetrate the world of algorithms as far as is possible' (p.10). He argues that this is 'potentially invaluable for shedding light on a culture that is strongly influenced by media and for opening up new spaces for maneuvering' (p.10). Understanding the processes of identity formation and representation as they occur in and across digital media opens up opportunities for reflection and movement outside those designated by algorithms and systems, which was an integral goal of this research. Despite definitions of identity evolving to include fluidity and multiplicity, Banks (2015) contends that 'scholarship still frames the self as rooted in the physical body' (p.2). She suggests that most media and communication studies focus on comparing single online space with offline spaces, meaning how individuals experience and integrate digital identities are less often considered. It would be more fitting to approach identity as a 'subjectively experienced assemblage of identities' (Banks, 2015, p.2) that emerge and dissipate in ongoing ways through digital media.

One way to theorise the 'assemblage of identities' Banks (2015) refers to is through Deleuze and Guattari's (1980/2013) 'becoming'. Becoming is the process of change, flight or movement within a context; the variety of contexts experienced through digital media provides opportunities for multiple 'becomings'. An important shift in language (i.e. becoming rather than being), and therefore thinking, is evident here. Becoming unpicks the idea that there are such things as stable identities, within which our world can be understood and acted upon. As Stagoll (2005, p.26) explains becoming is the 'very dynamism of change' and signifies the perpetual state of transformation that the individual is in. In the present study, when participants use technology different modes of their use carry over into other modes so that the actions of humans and technology become more than the sum of their parts, they become an assemblage. In response, the individual user is responding continuously to the changes that take place. In this sense, they are drawn into an on-going and potentially

powerful process of becoming (Parikka, 2011). Seen through the lens of becoming, shape identity formation in ways that can be difficult to identify.

To expand on the subtle and nuanced aspects of this process, this section draws on a new wave of theorists in the field of media ecologies. Fuller (2005) argues that digital media are connected to other components to form a system or ecology of interrelated processes, so that relationships exist between all components, living and non-living, in a complicated system of exchanges and influences. In this way, digital networks are more explicitly connected to ontological processes. This line of thought was further advanced in a special edition of *The Fibreculture Journal* where the idea that digital networks are ‘milieus of engagement’ (Parikka, 2011, p.36) and becoming was advanced. Following Fuller’s (2005) perspective, digital networks or systems are not just a description of the interconnectedness of digital media with modern life, but also a reimagining of the affordances of digital technologies. He writes, ‘Media are experimented on, not simply in terms of their affordances as standards, but also in terms of what may be mobilised or released when they come into conjunction with another scale, dimension of relationality, or drive’ (Fuller, 2005, p.172). At the same time, Fuller argues that there are wider social and political forces at play that prevent digital media from being infinitely malleable. There is an acknowledgement here of the limitations of media to transform, but these limitations lie not just in the media themselves but in the ‘architecture’ that surrounds them. In this way, digital media are not just a neutral space for participation, but are shaped by external forces, which, in turn, shape the individual user and their conceptions of self.

The foundations of these ideas can be traced back to the work of Simondon (1959/2010), who drew attention to the fact that technological progress can only be measured when it takes into account ‘the entire system of activity and existence constituted by what man produces and what man is’ (p.230). Technological innovation and the unique combinations and networks that result, provide a series of threshold moments for the individual – ‘frontiers’ for new conceptions of self. Seen through a poststructural lens, users' identities are continually shifting and transforming due to their interaction with various digital media. There is no end point or goal in this quest for self. The impact of digital media therefore requires

consideration not only the products and material results, but also how society and life experiences may be changed in the process.

An anti-essentialist perspective on digital media

While there are many ways digital media can be conceived, this thesis contends that they are best regarded as ‘texts’, as this enables a more interpretive and reflexive approach to our engagement. Traditional definitions consider a text to be an unabridged body of material that can be instantiated into many different forms, be it book, manuscript, film or newspaper. However, the materiality of the text is integral to the way meaning is made from it. Burnett, Merchant, Pahl and Rowsell (2014) explain that digital media reconfigure the interplay between the materiality of the ‘text’ and the immaterial emotions, memories and experiences involved in making meaning. In particular, the immersive qualities of the screen mediate reality in ways that shift the relationship between the material and the immaterial. However, most significant for the present study is that when approached as a text, digital media are seen as being ‘written’ and so can be subsequently read, reinterpreted and even re-written by future actors.

Grint and Woolgar's (1992; 1997) anti-essentialist perspective is based on the premise that technology has ‘interpretive flexibility’ (p.37). It counters technological determinism or the idea that the qualities inherent in technology are responsible for changes in social and cultural practices. They contend that the process of designing technology is akin to writing, whereas the use of that technology could be likened to reading. In this way, ‘the relation between readers and writers is understood as mediated by the machine; and by interpretations of what the machine is, what it is for and what it can do’ (p.70). Further, the software has been written with a particular user in mind, in much the same way that the thought of a target audience might guide the stylistic and structural choices of a book. However, there is a degree of flexibility in the way the text is interpreted. Considering digital media as texts means that definitive ideas of how the text can be read and what can be done with it are destabilised, and encourages the notion ‘that the nature of an artefact is in its reading’ (p.72). Woolgar (1991) outlines three responses to technology as text theory extending the concept beyond the idea of interpretive flexibility to demonstrate the reflexive role of the reader.

The first two responses to the 'technology as text' theory are the instrumental and the interpretivist. The instrumental response suggests that while the 'impact' of the technology may be built in, this is both 'reconstructed and deconstructed during usage' (p.38). An interpretivist response to technology as text extends this idea further and encourages analysis and study of 'the ways in which technology texts are written and read' (p.38). This counters the 'blackbox' perspective on technology common in much social science research, where the creation of an artefact is largely hidden from the user. This approach suggests that the organisational content is 'isomorphic' (p.38) with the technical content, so that the genesis of the technology can be readily interpreted. Of interest to the present research is that when digital media are seen as texts, the user is 'active', reading and interpreting the artefact rather than adopting a more predetermined pattern of use. The final response to the 'technology as text' theory argues that there is a reflexive component where the user or reader may speak back to the 'writer', so that there is ambivalence over exactly who the writer is. Further, the texts themselves produce texts, encouraging the consideration of intertextuality in any meaningful interpretation of digital media. Woolgar (1991) argues that a conventional constructivist approach to the social study of technology may miss these reflexive responses to digital texts.

To approach digital media as texts affords the researcher and user a potentially more active and critical position that could be effectively adopted in the field of digital literacy studies. When discussing the relevance of textual organisation, Grint and Woolgar (1997) argue that the more prosaic concepts of subheadings and sentence length are less relevant. Of greater concern is the relationship between entities; including how certain aspects are highlighted, reinforced or undermined by the text. As they explain:

Textual organisation refers critically, as far as the sense to be made of it is concerned, to the relationships made possible between the entities within and beyond the text. Certain characters become central to the story and others peripheral; groups of actants join forces while others disperse; the activities and achievements of some are highlighted, while others are relegated to the background, silent and unnoticed (p.73).

Drawing attention to gaps and silences is a hallmark of more traditional critical literacy studies and could be usefully applied to digital media. Ultimately, Grint and Woolgar seek to question a simple technical reading of technology by asking 'how and why a particular level of technical explanation appears obvious, natural, reasonable' (1992, p.378) when such assumptions are deeply entwined with social constructs.

A constructionist approach to the thesis

The present study adopted a constructionist approach to the thesis to not only give primacy to the data, but also to highlight the importance of linguistic and discursive elements in making sense of it. As the research can only account for individuals' social reality, which is 'accessed, described, and understood through the linguistic traditions and discursive communities by means of which they are constituted' (Reed, 2009, p.434), discursive and linguistic tools are an important axiom around which the relationship young people have with digital media might be understood and researched. Further, as this research is concerned with young people's reality of their digital becoming, it stands to reason that this reality or belief is constructed by individuals through their engagement not only with digital media, but also with the discourses they encounter to facilitate, build and critique their understanding and skills. Luke (2013) argues it is now 'conventional wisdom...that realities are constructed by human beings through discourse' (p.136). As such, this study was located in the dialogical exchange between individuals and the discursive structures they encountered.

Using a constructionist approach also means that the research is exploratory, rather than setting out to confirm or deny a particular theory or stance. The interaction between the researcher and the participants leads to the generation of concepts, which become the product of the 'research act' (Holloway & Wheeler, 2002). In this way, the data generates new theoretical ideas or helps to modify already existing theories or uncover, in more detail, the dimensions of a phenomenon (Denzin, 1983). This approach to social science is inductive. Researchers move from the data to description and then to theory. Rather than imposing accounts or following assumptions they try to give accounts of reality as seen by others. As Brooks and Warren (1970) explain: 'to understand an action we must understand the people involved, their natures, their

motives, their responses, and to present an action so that it is satisfying we must present the people' (p.609). A constructionist approach to the thesis not only has implications for the collection and interpretation of data, but also the way the way the findings of the research are analysed.

While the study has introduced several conceptual tools to investigate young people's relationship with digital media (i.e. a poststructural understanding of identity and an anti-essentialist perspective on digital media), constructionism calls for an inductive approach to analysing the data. In this way the theoretical findings of the research project are based largely on the data that were generated and collected. Bearing this in mind, it may be that the data is better analysed through different theoretical frames than those outlined at the beginning of the thesis. While this may lead to tensions and contradictions, it may also lead to significant insight into the effectiveness of the theoretical and conceptual tools that are applied in popular, academic and educational approaches to understanding the relationship young people have with digital media. In this way, the research aimed to contribute to a better understanding of 'the complex contours of meaning associated with social forms that are interactionally and/or discursively produced' (Holstein & Gubrium, 2008, p.6).

1.5 Organisation of the thesis

This thesis is presented in three main parts. The first section (Chapters 1-3) contextualises the study and analyses key theory and research relevant to the project. Chapter 1 provides a framing for the study by defining the digital and outlining some of the opportunities and challenges that arise when making meaning in and of the digital context. It also provides a rationale for the study and introduces three conceptual tools to investigate young people's relationship with digital media. The second chapter critiques the empirical and theoretical approaches to researching young people as a focus of study and justifies the use of key terms throughout the thesis. It builds the study's rationale by concluding that digital literacies rather than protectionist or interventionist discourses might support young people in the digital challenges they face. Chapter 3 then turns to educational approaches to developing digital literacies, highlighting numerous tensions that exist in current models and suggesting several techniques that may potentially bridge these tensions. These

techniques are trialed as part of the research method and help to guide the collection of data.

The second section of the thesis (Chapters 4-8) focuses on the collection of data and the discussion of findings. Chapter 4 outlines the study design, methodology and data analysis. Chapters 5 to 8 present the findings. Adopting a constructionist approach to the thesis means that the structure and content of these chapters are based strongly on the themes that emerged from the data. These chapters address the research questions and respond to some of the conceptual tools introduced in the first section of the thesis. The final section of the thesis (Chapters 9-10) analyses the data and explains how the thesis has contributed to and extended contemporary understandings of young people's relationship with digital media. In addition, Chapter 10 makes some practical suggestions for the various groups who have a stake in supporting and developing young people's critical digital literacies.

Chapter 2: Understanding young people’s digital media practices

2.1 Introduction

The previous chapter defined the ‘digital’ and introduced some conceptual tools to investigate young people's relationship with digital media. This chapter considers the nature of young people as a specific focus of study; it also highlights and critiques the key themes evident in existing empirical literature on young people and digital media. It focuses on how particular stakeholders have defined, researched and supported young people's relationship with digital media, and in doing so identifies the gaps, tensions and challenges that have emerged. This strengthens the study's rationale.

In the first section, a sociocultural approach to defining and understanding young people's everyday experiences is justified and the key tensions that arise from this body of literature are examined. The chapter then turns more specifically to digital media to examine previous empirical research in this area, and then to critique current interventions available to young people to support their digital media use. Noting the strengths and limitations of current interventions the chapter also outlines the knowledge and ideas young people might draw on in order to reflect and analyse the dynamic processes that underpin the digital context and their position within it. An important point that emerges from this discussion is that the way adults, educators and researchers define and approach young people as a distinct social group is closely connected with the kinds of interventions and practices they enact when it comes to supporting their digital media use.

2.2 Young people and youth studies

Towards a definition of young people

Attempts to delineate and define ‘young people’ as a distinct social group brings to light many of the theoretical tensions that underpin 'youth studies'. Different terms abound, all with different associations and connotations. The term ‘teenager’, for example, is used to refer to someone in the age range of 13-19 years, and came into popular use in the 1950s as a marketing category (Buckingham, 2008). It therefore has problematic associations with advertising and consumption. Although there is some variation in definition, a ‘young person’, is generally considered to be someone between the ages of 12-25 years (McGorry, Parker & Purcell, 2006). Psychology

adopts the term 'adolescence' to refer to the time between childhood and adulthood. Sociology, on the other hand, tends to use the term, 'youth', which, in a similar way to psychology, is defined as the stage between childhood and adulthood. Furlong (2013) argues however that 'youth is a broader category than adolescence' as it is not linked to 'specific age ranges nor can it be linked to specific activities, such as paid work or having sexual relations' (p.19). This section focuses on psychological and sociological traditions for defining and understanding young people. The benefits and limitations of these approaches are discussed in order to develop a stance on analysing the digital identities and communication practices of young people.

Psychological accounts of adolescence (Hall, 1904; Erikson, 1968/1971) describe it as a time of 'storm and stress', highlighting risk, experimentation and crisis as defining features of adolescence. Gillies (2000) explains that such developmental accounts tend to be 'physiologically focused and associated with transitions' (p.213). She describes the transitions as a series of 'tasks' which, when completed, signal arrival at adulthood. Gillies (2000) summarises the tasks as: achieving independence from parents; achieving individual autonomy; developing an appropriate sexual identity; and internalising dominant social values. Adulthood therefore holds the promise of a more complete and stable identity, when compared to the confusion and conflict of adolescence.

Despite popularity in mainstream discourses, these psychological accounts of adolescence have been widely criticised on three fronts. First, they are biologically determined in that they are based on the assumption that adolescents are somehow trapped in their bodies and prey to the physical, social and emotional 'excesses' of youth (Hall, 1904). White and Wyn (1997) question the literature that describes young people as ruled by emotional and physical turmoil. Second, psychological definitions are made in relation to adults, meaning young people are seen as subordinated or 'other' by comparison. Adults are not just conferred a dominant biological state, but also a dominant social status, which carries with it 'the autonomy and rationality, of individual sovereignty, and of citizenship' (Sercombe et al., 2002, p.14). Third, psychological accounts overlook the very different and divergent experiences of being a young person due to variations in race, class and gender

(Alvermann, 2009). Indeed these structural factors mean that being a young person has different meanings depending on context and place.

This research is underpinned by the premise that the digital experiences of young people are unique, meaning they should not be treated as a homogenous group. As Helsper and Eynon (2010) point out, young people vary greatly in their skills, resources and motivations when using digital media, meaning their dispositions towards it vary markedly. In the context of this research, 'disposition' is taken to mean the conscious and unconscious inclinations young people have toward digital media, which predisposes them to engage with digital texts in particular ways. These dispositions are the result of a variety of factors, including: their early socialisation to digital tools and texts, the influence of significant others (i.e. family and peers) and formal and informal discourses encountered. This differs from Bourdieu's use of the term 'disposition', which sees it as a set of pre- or unconscious inclinations that lead to a particular 'way of being' or 'habitual state' (Bourdieu, 1977/2011, p.214). The present study is informed by the understanding that individual dispositions to digital media are unique, however, not all of these will be pre- or unconscious. One of the goals of the research process was to examine these digital dispositions (see Chapter 6), and in doing so better contextualise and understand the digital practices observed during the data generation period.

The analysis of digital identities and practices in the present study deliberately avoids a psychological approach to understanding adolescence. This means that participants' interpretations and understandings of digital media are not seen as inferior or naive, but instead as giving valuable insight into the possibilities and challenges that arise through engagement. Lesko (2012), for example, argues that young people have knowledge and understanding, which, while different to adults, is meaningful to their social experiences. Indeed, this research responds to the call for greater sensitivity to young people's views when considering their digital practices and literacies (Buckingham, 2006; Livingstone & Haddon, 2009). In light of this, the focal point of the present study is the voices and experiences of young people. Indeed, the poststructural understanding of identity adopted approaches young people's identities as a series of becomings, which are multiple, fluid and socially constructed, rejecting the notion that they are fixed, homogenous or biologically determined.

In contrast to psychological accounts that focus on the internal personality and identity struggles of 'adolescence', sociologists tend to approach 'youth' in terms of their social context. Factors such as class, gender and ethnicity shape the experiences of youth in particular ways, leading researchers to take a broader view of it as a social category. However, similarities can be identified between psychological accounts of *development* and functionalist accounts of *socialisation* (Buckingham, 2008). As Gillies (2000) explains, in sociological approaches 'young people are studied within their structural context, so their vulnerability and lack of power in society are foregrounded' (p.224). Like traditional psychological approaches, sociological accounts also imply, but perhaps more subtly, that young people are somehow 'incomplete' and in need of normalisation or socialisation, 'rather than a being in their own right' (Buckingham, 2008, p.4). Wyn (2011) argues that conceptualising youth as an emerging or arrested adulthood has had ongoing influence in research and policy on the sociology of youth. As she explains, these concepts are problematic because they are based on the assumption that development and maturation follow a chronological, linear pattern, as well as the idea that adulthood is a 'universal, normative state' (p.35). To counter the influence of these age-based, developmental approaches, Wyn and Woodman (2006, p.495) focus on how generational shifts shape the 'experience' and 'meaning' of youth.

While the construct of generations like the 'baby boomers', generations 'X', 'Y' and 'Z', the 'net generation' and the 'millennial generation', might simplify and generalise the experiences of particular 'cohorts' of people, they do 'go beyond simply viewing youth as a transitional phase in the life cycle' (Wyn & Woodman, 2006, p.496). This does not discredit the impact of psychological and developmental processes on youth, however, as Wyn and Woodman contend, the idea of generations recognises that 'experience of age is shaped by social conditions' (p.497). This concept was first detailed in Mannheim's (1952) landmark essay *The Problem of Generations*, which analyses the social and historical construction of generations. Generational location points to 'certain definite modes of behavior, feeling and thought' (Mannheim, 1952, p.291), which are, most notably, formed during the experiences of youth. For example, a defining feature of the 'net generation' (Tapscott, 1998), or those born between 1982 and 1991, is a supposedly inherent affinity for computers and digital

media due to constant exposure to digital technologies. The idea of generations not only locates people in particular ‘cohorts’ but also characterises how they will engage with particular ideas and acquire knowledge. Pilcher (1994) points out that Mannheim’s theory ‘identifies generational location as a key aspect of the existential determination of knowledge’ (p.483). While the concept of generations forms a useful backdrop to understand the social experiences of the young people in the present thesis, it is problematic to generalise skills and dispositions with technology across whole cohorts.

This research adopts the term ‘young people’ to refer to the participants in the study. This avoids the associations that the label ‘adolescence’ has to psychological theories, which, as explained, tend to position young people as somehow incomplete or simply in transition to adulthood. The present study approaches young people as ‘complete’, even if they are looking to build future careers and lifestyles. As Kehily (2007) explains, the transitional period of young personhood is ‘between being dependent and becoming independent’ (p.3), rather than any form of arrested adulthood. In a similar way, there has been a conscious decision to avoid labeling the young people in this study ‘youth’. While there is a diverse body of work on the sociology of youth, it has connotations to normative or correctional processes, which inadvertently position young people as needing education, regulation or help – i.e. ‘youth at risk’ (Capuzzi & Gross, 2014).

The present study acknowledges the specific social conditions experienced by this group of young people, who could be described as generation Y, the net generation or millennials. Many of these labels are propagated through the popular and news media, however, they reflect something of the public sentiment toward young people. As Ruddock (2013) explains, ‘studying how youth are represented in the media tells us a great deal about the public sentiments and concerns that defined particular historical moments’ (p.2). Regardless of their truth these public perceptions shape policy and discourse in ongoing and significant ways and therefore have an influence on what it means to be a young person. This has particular relevance to the present research as the social and cultural conditions position young people to engage with digital media in particular ways.

Key areas of interest emerging from social studies of young people

Adopting a sociocultural perspective on researching young people encourages a consideration of all experiences, activities and relations that constitute and contribute to their ‘lifeworlds’ (Malone, 2014). This section attempts to identify briefly some of the key areas that influence and shape what it is like to be a young person in the contemporary era. There are three areas of research that are relevant to the present study: youth cultural practices; civic participation and the influence of place and space. What follows is a brief overview of the literature in these key areas.

Youth cultural practices

A diverse array of disciplines across the social sciences and humanities are dedicated to developing cultural perspectives on young people’s lives, particularly around youth cultures and subcultures. As many researchers have shown, cultural practices provide opportunities for young people to rehearse and represent their identities and their relationships with others (see Robards & Bennett, 2011; Morgan & Warren, 2011). Of significance is the fact that youth cultural practices are not ‘imposed’ upon young people, but instead are ‘reflexively constructed by active and effectively empowered social subjects’ (Bennett, 2015, p.776). In negotiating these cultural practices young people create and develop a sense of self. Holland, Lachiotte, Skinner and Cain (2001) use the concept of ‘figured worlds’ to account for how young people engage with virtual worlds, and the worlds of popular culture and fantasy, to *create* identities for themselves. When participating in figured worlds, ‘People tell others who they are, but even more importantly, they tell themselves and they try to act as though they are who they say they are’ (Holland et al., 2001, p.3).

Some research has explored how the internet opens up the available subject positions young people can explore and experiment with as youth cultures have increasingly moved online. As Bennett (2004) explains, youth cultures are ‘cultures of “shared ideas”, whose interactions take place not in physical spaces such as the street, club or festival field, but in the virtual spaces facilitated by the internet’ (p.163). Gee (2004) contends that many cultural practices – whether they take place in the physical or virtual world – involve more than just participation in a culture or community, and include a type of informal learning. Gee puts forward the notion of ‘affinity spaces’ to describe ‘a place or set of places where people affiliate with others based primarily on

shared activities, interests, and goals, not shared race, class, culture, ethnicity, or gender' (p. 67). Affinity spaces on the internet potentially enable young people to transcend physical and geographical limitations to engage and learn with others about their own personal interests and hobbies.

Civic participation

In the broadest sense, participation refers to young people becoming involved in decision-making processes that involve 'their well-being, their education and their communities' (Livingstone, Bober & Helsper, 2005, p.288). With this in mind the internet is seen as a way of engaging young people in civic issues and building their participation. As Collin (2010) explains, this has led to two areas of research that focus on the potential for the internet and other digital technologies to: reinforce traditional forms of democracy; and/or create new forms of participation. For example, research by Vromen (2007) concluded that rather than encouraging new political actors or new forms of participation, the internet tended to reinforce the existing political practices of young people. Vromen (2007) also found that when it comes to political participation a 'digital divide' clearly exists, 'which is delineated on demographic characteristics of geography, education level, income level and occupational classification' (p.48). More optimistically, Collin (2008) contends that the internet is significant in shaping civic participation in that it is 'a unique and autonomous platform for the realisation of project based identities' and it provides 'a legitimising space for new political practices' (p.527). However, she also questions whether these forms of online participation will lead to broader social change.

These studies demonstrate that networked digital technologies such as the internet do not *themselves* increase civic participation. As Collin (2008, p.539) explains, for young people the internet is perhaps better understood as 'a tool for identifying issues, learning more and integrating participation into their everyday lives', rather than a solution to growing concerns over political disengagement. Young people's civic participation is therefore less a question of digital technology and more about the institutional and discursive frameworks that surround it. As Collin (2015) points out, increasing the civic participation of young people requires examining the capacity of political institutions to adapt to the 'networked, personalisable and participatory imperatives of digital society' (p.1466). Theocharis (2015), on the other hand, argues

that the definition of ‘political participation’ should be updated to reflect the different and creative forms of expression that abound in digital networks. New definitions, he argues, should acknowledge ‘that the act of activating one’s personal networks via digital media with the aim to mobilise others for social or political purposes constitutes a *mode* of participation with different manifestations’ (p.5, emphasis in the original). The research explores the civic participation of a group of young people. In particular, this research is interested in whether digital media are able to mobilise or further engage these young people in civic issues.

Place and space

Traditionally, place has been thought of as a unique or self-contained location. However, Hopkins (2010) explains that it is increasingly recognised ‘as having open and permeable boundaries, shaped by complex webs of local, national and global influences’ (p.11). Indeed, digital technologies have shifted how ‘place’ is thought about and integrated into our everyday lives. This influences the formation of identities. As Hopkins notes ‘the specific places or locations that young people find themselves in also act as an important marker of identity and sense of identification’ (p.11). Without fixed notions of place and space the markers for identity become more nebulous. In the digital era, the individual becomes a ‘global citizen’ who, through mobile technologies, can be in many places at once. Turkle (2006) calls this the ‘habit of co-presence’ (p.124). In fact, she writes that ‘being “elsewhere” than where you might be has become something of a marker of your own self-importance’ (p.124). While technological progress might create a more global perspective, this should not elide a consideration of the specific influences of place and space in young people’s lives. Farrugia (2015) argues that ‘a spatial perspective on childhood and youth highlights issues such as the different intersections of play, education, and work in different spaces and places, the significance of mobility and immobility for understanding inequality, or the way that young people’s identities are constructed through relationships to place’ (p.609). Digital technologies both expand and complicate conceptions of place and space. Of particular significance to the present study is the way that digital technologies have blurred the distinction between public and private spaces.

Boyd (2007; 2014) contends that parents' concern over the safety of their children has led to increasing restrictions on their participation in public spaces. As a result, she argues that young people are turning to digital media to engage in practices that traditionally would take place in public spaces - to 'hang out, jockey for social status, work through how to present themselves, and take risks that will help them to assess the boundaries of the social world' (Boyd, 2007, p.21). However, these digital practices simultaneously blur the distinction between public and private, which has raised concerns over how young people maintain control over their content and relationships with others. Berriman and Thomson (2015) counter this concern by arguing that young people have a more nuanced understanding of privacy and control over digital media than first thought. They put forth the idea of 'spectacles of intimacy' to explain the graduated levels of visibility and risk young people negotiate when using digital media. As they explain, 'Young people are constantly experimenting and realising the affordances of social media, combining these creatively with face-to-face socialities, and trading off visibility and participation' (pp.595-596). Young people's social media practices are therefore shaped by societal trends, peer expectations and the specific qualities of these digital texts. The changing nature of place and space in the contemporary era bring about significant issues for researchers, parents and young people to contend with. The research reported here explored how a group of young people interpreted and navigated the digital spaces they encountered and the extent to which the physical places (i.e. school, home) influenced this.

Key concerns emerging from social studies of young people

While youth research has tended to focus on how young people engage with and are influenced by recognisable discourses and practices, their lived experiences are shaped by another set of concerns. These are issues particular to a growing sense of independence, which leads to exploring and experimenting with burgeoning identities, relationships and vocations. However, as most young people are still tied to the family unit and other institutional frameworks (i.e. school), these become a series of tensions that must be negotiated on the path to adulthood. As Cohen and Ainley (2000) point out, some young people are better at negotiating these challenges than others. This section outlines some of the key tensions that are of concern to young people.

The role of institutions in shaping young people's experiences

When considering the role that institutions play in young people's lives, significant contradictions and conflicts emerge. On the one hand, there is a general belief that education is the path to employment and career success. In their longitudinal study of young Australians, McLeod and Yates (2006) describe the education system as increasingly selective: 'as the form of work changes, and as certification escalates, students and their parents face heightened awareness of the competitive arena, an inflated sense of schooling's significance in mediating life chances' (p.52). Given the competitiveness and selectivity of the education system, it would be reasonable to assume that completion of a degree or training promises gainful employment. However, recent statistics from Graduate Careers Australia demonstrate that the employment rate for university graduates is at its lowest level in more than 20 years³. For young people this has meant 'fewer opportunities for full time employment' (Walsh, 2010, p.25). It also appears that young people are being trained in career pathways that will disappear in the next 10-15 years due to the use of automatic equipment in manufacturing or 'automation'. A recent report by the Foundation for Young Australians (2015) showed that 58 per cent of students aged under 25 years in Australia are enrolled in fields of study that will be 'radically affected by automation in the next 10-15 years' (p.25). While 71 per cent of vocational education students are in career paths that will disappear in the next 10-15 years. The current state of the job market means pathways from education to work are more precarious than in the past. Implicit is a greater expectation upon young people themselves to make their way in the world, as institutions and the education system are less able to guarantee vocational success. When compared to generations past, these societal changes reconfigure the relationships and dynamics of young people's life worlds.

The role of the family in shaping young people's experiences

While the idea of the traditional 'nuclear' family might have weakened in recent times, the Australian Bureau of Statistics (2012 -2013) reports that 85 per cent of families are 'couple families' with two parents in a registered or de facto marriage⁴. Families therefore play a significant role in young people's lives by offering financial

³ See: http://www.graduatecareers.com.au/wp-content/uploads/2015/06/AGS_REPORT_2014_FINAL.pdf

⁴ See: <http://www.abs.gov.au/ausstats/abs@.nsf/mf/4442.0>

and material support, as well as creating a sense of belonging and collective identity. In more recent years, a significant trend has been for young people to live at home for longer periods of time, sometimes well into their adult years (Muir et al., 2009). This is not only the case in Australia, but also in the US, where Pew Research data indicates that 36 per cent of 18-31 year olds are living at home: the highest proportion in over four decades⁵. While young people have always relied on family for the emotional and material support to reach adulthood, the somewhat reduced job opportunities extends the duration of this reliance. Wyn, Lantz and Harris (2011) make the point that this is due to the process of individualisation in late modernity, which has meant that family takes on a greater significance as a 'resource' for young people:

One of the most important implications of the process of individualisation, whereby risks, costs and responsibilities for navigating life have become increasingly vested in individuals, is that family support, resources and contact, which have arguably always been important, are now more important than ever (p.4).

This creates a significant tension for young people to negotiate. Despite an increasing sense of independence and the development of more individual identities, the family is relied upon to provide financial and material support. This complicates the idea that there is any linear pathway to adulthood, work or independence. As White and Wyn (2013) argue, given these changes there is less evidence that 'youth is a process of becoming independent of family' (p.131).

The significance of peer relationships in young people's lives

While most young people are not financially or materially independent, there is an increasing sense of freedom when it comes to their relationships with others. Not only are there expanded opportunities to initiate and maintain friendships, but the dynamic nature of peer networks during this period tend to increase the instances of bullying. Recent research has focused on girls as both the perpetrators and victims of bullying (see Duncan & Owens, 2011; Ringrose, 2008), however it should be noted that this bullying behavior is found amongst boys as well. A study by Merten (1997) on a

⁵ See: <http://www.pewsocialtrends.org/2013/08/01/a-rising-share-of-young-adults-live-in-their-parents-home/>

group of teenage girls was particularly influential in exploring the complex links between popularity, meanness and competition. One of the more significant findings was that being mean – which to this group of girls meant leaving conflict unresolved and aggression – often resulted in increased popularity. The complex hierarchies designating popularity also determined how young people could use meanness to both maintain their status as well as challenge those above. As Merten explains: ‘hierarchical position was an essential factor for the successful use of meanness in the sense that a girl’s effectiveness in being mean depended on her status in the clique’ (1997, p.187).

Merten adds that the disconcerting nature of these relationships is not surprising given that many adult women also struggle to ‘mediate the opposition between solidarity with friends and competition for individual success’ (p.189). While Merten’s study might be a more extreme example of young people’s peer relationships, it highlights the difficulty in balancing popularity and success with fairness. Given the selectivity of the education system and the growing individualisation of contemporary society, these less desirable qualities actually help one to succeed in an increasingly competitive world and are therefore normalised or implicitly reinforced. As with many of the tensions outlined in this section the real issues at stake are to do with the social and cultural context, which encourage young people to act and behave in particular ways.

A significant number of studies on young people have shown that bullying is now prevalent in digital spaces (Dredge, Gleeson & Garcia, 2014; Slonje & Smith, 2007; Kowalski, Limber, Limber & Agatston, 2012). This is commonly called ‘cyberbullying’ or ‘an intentional, aggressive and repetitive behavior perpetrated by a more powerful individual against someone more vulnerable through the use of technology, such as internet, social media and cellular phones’ (Cenat, Hebert, Balis, Lavoie & Gurrier, 2014, p.7). Studies have shown that particular groups of young people are more likely to be cyberbullied. For example, young people with low self-esteem (Brewer & Kerslake, 2015) are more likely to experience online victimisation, as are those who identify as non-heterosexual (Schneider, O’Donnell, Stueve & Coulter, 2012). Kofoed and Ringrose (2012) outline five features that make cyberbullying different from more traditional forms of bullying. These are: the

anonymity, confusion or hiding of the perpetrators' identity and the 'disinhibition' that this encourages; the sense that victimisation is inescapable due to the 'always on' culture of social media; the blurring between in and out of school activities; the extensive audience that can witness the bullying; and 'non-simultaneity in emotional intensity' (p.7) produced by digital technologies that can both slow down and accelerate the speed of communication. As Kofoed and Ringrose (2012) explain, technology 'mediates desires' and creates a series of 'travelling affects'(p.16), or emotional responses that circulate through people and digital media. For this reason school policies and processes to recognise cyberbullying often fail because the interactions between young people move quickly and easily between online and offline contexts, as Nilan, Burgess, Hobbs, Threadgold and Alexander (2015) explain: 'most social media interaction between young people involves peers they know offline, so it is difficult to separate offline and online harassment because they tend to reinforce each other' (p.2).

These studies highlight the fact that being a 'millennial' or part of the 'net generation' also means negotiating new and complex social processes, as it is increasingly difficult for young people *not* to have a presence on these networks. While technology might increase the instances of bullying whether it has the same impact as face-to-face bullying is difficult to establish. As a study by Mitchell, Jones, Turner, Shattuck and Wolak (2015) showed, cyberbullying was easier to stop and 'had significantly less emotional impact' (p.1) than traditional bullying. However, another study by Nilan et al. (2015) found that cyberbullying was more detrimental as it 'turns the bullied student inward on themselves in a highly negative way' (p. 6). Clearly, more research is required to understand how this behaviour is both socially constructed and individually experienced. While technology might increase the instances of bullying, several organisations and working groups see technological tools and resources as a way of addressing these issues⁶.

The significance of identity in young people's lives

While there are a variety of ways of defining young people's identities there are several core assumptions that contemporary youth researchers have agreed upon.

⁶ See <https://www.youngandwellcrc.org.au/research/safe-supportive/>

First, identities are always developed in a social context. Furlong (2013) explains that because of this identities are ‘always shaped by the culture within which the individual is embedded’ and are therefore ‘conditioned in time and place’ (p.239). Postmodern definitions extend upon this arguing that because social contexts and institutions are increasingly disjointed and dysfunctional, identities become ‘unstable’ (Rattansi & Phoenix, 2005, p.106). Identities are also thought to be multiple. As Furlong (2013) explains, ‘we may simultaneously identify as a member of a particular ethnic group, as a male or female, as a student and an employee, a member of the working class, as gay and as Catholic’ (p.239) As this description highlights many of these identities are oppositional and potentially conflict with each other (i.e. as gay and Catholic). A final point is that unlike psychological accounts, which contend that ‘identity formation’ is limited to adolescence, ‘identity work’ now takes place across the life course. As Côté (2014) explains youth marks ‘the beginning of *inevitable* lifelong identity confusion and crises, where young people *and adults* are all destined to a lifetime of de-centred existence with no stable, core sense of themselves’ (p.165, emphasis in the original).

With this in mind, all the key areas explored in this section relate in some way to young people’s identity. For example, informal digital writing involves play and communication but, as Merchant (2005) points out, there are complex identity performances simultaneously taking place. Similarly, how individuals negotiate their peer networks both online and offline is indicative not only of how they perceive themselves, but also how they are perceived by others. Indeed, recognition by others whether through face-to-face discourse or via online communication, emerges as an important aspect of identity formation and representation in the contemporary era. A common thread running through all these issues is that identity is something that the individual must build or make, as it is less firmly linked to structures and institutions than in generations past (Urry, 2000). In many ways, this point is reflected and reinforced by using digital media, which often involve actively representing identities through profiles and avatars. This research explores the myriad ways young people carry out their ‘identity work’ through digital media, while also considering the way these experimentations and explorations manifested in the offline world.

2.3 Previous research on young people and digital media

All of these issues and arguments discussed above are reflected in various ways in the empirical research on young people and digital media. This chapter now reviews this literature to explain how the present study will extend upon current understandings and insights. In terms of generational concepts of young people, one of the most influential discourses in shaping both popular and academic conceptions of young people and digital media is that of the ‘digital native’ (Prensky 2001a, p.2). Prensky coined the term ‘digital native’ to make the argument that young people (typically those born after 1980) are highly skilled users of technology, whom ‘digital immigrants’ (those born before 1980) struggle to teach. In his original conception of the ‘digital native’, Prensky (2001b, n.p.) even argued that ‘teenagers brains are almost certainly physiologically different’ from adults due to their time in front of computers. While Prensky (2009) later distanced himself from his original argument, it is still a popularly referenced and researched concept (see Ebner & Schiefner, 2010; Palfrey & Gasser, 2008). The discourse of the ‘digital native’ has been debunked by several notable empirical studies (Helsper & Eynon, 2009; Hargittai & Hinnart, 2008; Kennedy et al., 2007), which demonstrate that not all young people are equally transformed by technology or as adept as the discourse suggests. Yet it still continues ‘to have an influence on policy and practice’, particularly in education (Jones & Czerniewicz, 2010, p.318).

The present study contributes to a growing body of research that seeks to explore the *diverse* and *divergent* experiences young people have with digital media. These studies approach digital practices as socially and culturally situated and use a variety of research techniques to capture the ‘voice’ of young people. The design of such studies tends to be longitudinal, so the researchers can not only develop a rapport with participants, but also build a more detailed and nuanced account of their engagement. For example, Davies and Eynon’s (2013) study on teenagers and technology drew on extensive interviews conducted over several years. Their aim was to present a ‘balanced’ view of teenagers' technology use that spoke back to the negative picture typically presented in the popular media. They raise the important question of how adults can support young people in their use of technology given that teenagers have ‘their own subculture of technology’ and ‘vary so much in the importance they attribute to these things’ (p.136).

For over a decade Danah Boyd has been researching how young people use social media in their everyday lives. Her most recent book *It's Complicated* (2014) documents 'how and why social media has become central to the lives of so many American teens' (p.5) and how they navigate the 'networked publics' they encounter. Boyd also worked with Ito et al. (2010) on a collaborative, ethnographic project conducted over three years to develop a detailed understanding of how young people use digital technologies to learn. Their starting point involved recognising that despite the 'dizzying' speed of technological development, 'underlying practices of sociability, learning, play and self-expression are undergoing a slower evolution' (p.1) due to structural conditions. Through their ecological approach a framework was developed that explains the various ways young people can use technology to learn.

A final study worth noting is that of Sonia Livingstone and Julian Sefton-Green (forthcoming), which studied a class of 13-to 14-year olds at an urban secondary school over the course of a year. Drawing on detailed interviews, home visits, and class and school observations the study captured a holistic picture of the young people's everyday experiences during a critical year in their school lives. While digital media were not the sole focus, the researchers were interested in exploring the degree of change the 'digital age' brings to these young people's lives. One of the most telling conclusions from the study was that 'the promise of harnessing connection is largely sacrificed to a mix of conservative and competitive pressures that maintain the status quo' (n.p.).

Each of these four studies 'speak back' to the popular and often constraining ways society frames and approaches the relationship young people have with digital media. In particular, each presents a realistic, balanced picture of everyday experiences, with helpful insights into how digital media might be used to instill more positive communication and learning practices in young people. As these studies contend, this involves consideration of the structural conditions and educational discourses that surround this relationship, as well as improving the role adults might play in supporting these digital practices.

While the present study aimed to build a detailed picture of young people's digital lives, it also focused on the more specific qualities of the digital context. This research approaches digital media as texts in order to analyse the structural specificities of the media in question, as well as to find ways in which these texts might be different or better. In this way, it is a critical study of the intersection between the technical and the social, with a particular focus on how young people negotiate this confluence. The research extends on the work of these previous studies by operationalising a critical approach, which is reflected in the research design (see Chapter 4.5).

There are several studies and conceptual frameworks that have relevance to the present research. Recent work by Hodkinson (2015), for example, builds on previous studies (see Robards 2010) that use the analogy of the bedroom to understand social networking sites. Hodkinson (2015) argues that contrary to popular fears, social networking sites actually 'retain intimacy' and 'that their individual-centred format continues to facilitate the exhibition and mapping of identities' (p.1). Recent research into sexting by Ringrose, Harvey, Gill and Livingstone (2013) and Dobson and Ringrose (2015) also has significance. This growing body of research considers the specific communication practices and social processes that emerge as a result of digital technologies. Dobson and Ringrose (2015) conclude their paper with a call for research and education that considers how digital technologies initiate new forms of communication, in this case, sexual expression:

As well as encouraging debate and discussion of the distinct technological features that structure digital spaces and necessitate certain responsibilities around ethical communication and sharing of data (Hasinoff, 2012) we might also encourage discussion about the various kinds of sexual expression that emerge in digital cultures, many of which clearly violate norms of sexual expression and appropriate behaviour in school spaces, but may be considered legitimate, ethical and normative in the digital cultural/community context in which they occur (p.12).

While Dobson and Ringrose's discussion relates to sexual expression, their recommendation could also apply to online behavior and social processes more generally. Of significance to the present research is that these studies and conceptual

frameworks are responsive to the specific nature of digital media and trace the new forms of sociality that emerge from it. This research aimed to extend on this work by charting the socialities associated with the use and production of digital texts and how these were interpreted, analysed and manipulated by young people. However, as explained earlier it contextualises this against the overall ‘picture’ of digital media use.

2.5 Interventions into young people’s digital media practices

The focus of this chapter now shifts to consider how institutions and external actors support young people’s digital media use. It examines how young people can be supported in identifying the underlying social and political forces that shape the digital texts they encounter. Further, the development of critical capabilities requires resources, space and time, so it is a challenge for individuals to acquire these skills on their own. It becomes important that young people are afforded opportunities to understand these structures so they can both master and reflect on their practice within digital spaces. But what opportunities currently exist for young people to engage in reflexivity? After having explored the social and cultural experiences of young people and the increasingly important role digital media play in them, attention now turns to the places and spaces young people develop their digital skills so they may negotiate and benefit from digital media. Intrinsic to this analysis is an attempt to unpack the problems and challenges that emerge from interventions that are designed to develop digital skills.

There are many resources and programs targeting digital media that have been made available to young people. They tend to fall into two main categories: participatory interventions, concerned with the development of digital skills; and protectionist interventions concerned with safeguarding young people from the potential threats of the internet. A particular focus of this research is exploring how young people are positioned by such structures. Beyond this, it seeks to understand what discourses of knowledge are most effective in helping young people to become discerning and active participants with digital media. First, the participatory discourse is initiated through a range of policies and initiatives. Supranational organisations, technology companies and out of school programs have all played a role in developing this discourse, mainly through the programs and resources they initiate and provide.

Second, the protectionist discourse is outlined. This is developed through cybersafety, cyberbullying and e-safety programs, which are often conducted in schools. However, supporting resources are also made available to parents and community organisations. How effective these interventions are at scaffolding young people's digital skills is a contested topic.

Participatory interventions

At the supranational and national level digital competence is considered a priority, leading to various organisations and government bodies producing resources, programs and frameworks that seek to build and improve digital skills. UNESCO has developed the *Media Education Handbook* with a special section the *Internet Literacy Handbook*⁷, while the OECD's *New Millennium Learners*⁸ sets out to explore the impact of digital technology on the cognitive skills and learning expectations of students. In Australia, 'Digital Skills' are listed as an important 'enabler' of the digital economy in a report entitled *Advancing Australia as a Digital Economy*⁹. Part of this involves developing a 'new curriculum for technologies' (p.15) that will be implemented through the Australian Curriculum. In the US, *The Framework for 21st Century Learning*¹⁰ has a strong focus on developing digital and media skills. The report argues that in the 21st century 'citizens and workers must be able to create, evaluate, and effectively utilise information, media, and technology' (n.p.). Governments and education institutions are expected to engage with the initiatives outlined in these documents. Several researchers (Buckingham, 2007; Area & Pessoa, 2012) argue that integrating digital skills into all core subjects at all levels of education is best practice. However, how these ideas are interpreted and implemented varies from country to country and school to school.

Technology companies also play a role in establishing digital skills through programs and resources. Microsoft offers a 'Digital Literacy' curriculum¹¹ broken down into

⁷ See: http://portal.unesco.org/ci/en/ev.php-URL_ID=23714&URL_DO=DO_TOPIC&URL_SECTION=201.html

⁸ See: <http://www.oecd.org/edu/ceri/centreforeducationalresearchandinnovationceri-newmillenniumlearners.htm>

⁹ See: <http://apo.org.au/files/Resource/Advancing-Australia-as-a-Digital-Economy-BOOK-WEB.pdf>

¹⁰ See: <http://www.p21.org/about-us/p21-framework>

¹¹ See: <http://www.microsoft.com/About/CorporateCitizenship/Citizenship/giving/programs/UP/digitalliteracy/eng/default.aspx>

stages from beginners to advanced, complete with resources and assessment. While it is unlikely that young people themselves would seek to complete this course, with its rather formalised and structured steps to advancement, after school programs, community organisations, or parents and mentors might direct them to this resource. The ‘Intel Computer Clubhouse Network’¹² program is geared at after school and community care facilities to help ‘poor and disadvantaged’ children have a safe place to go where they can learn to use ‘cutting edge technology’ (n.p.). The aim, in part, appears to be to help bridge the digital divide and, given the emerging importance of the out of school or home context in honing digital literacy skills, this seems worthwhile. Livingstone (2011) writes of a new digital divide emerging: ‘although many parents do invest in domestic internet access, to keep their child “ahead” or at least stop them “falling behind”’, many parents are ‘often lacking the necessary financial, social or technical resources’ (p.15) to keep their child up to date. These programs provide resources to help young people ‘catch up’ on their digital skills. However, given that many young people do not attend after school or other community based programs such an intervention is limited in its reach.

Alongside these resources are the programs that are provided in out of school contexts. For some young people this may be a particularly appealing avenue for learning with and about digital media, free from the more controlled opportunities and lessons offered by schools. Hull and Pandya (2004) argue after-school programs can be an important space in which to develop digital and visual mastery. Literacy today, they argue, requires ‘an awareness of and a sensitivity to the power and importance of representation of self and others’ and this can be fostered in after-school programs, which are ‘potentially spaces that support readers and writers in their critical, aesthetic, loving, and empowered communication’ (Hull & Pandya, 2004, p.42). Research by Vickery (2012) into an after school program reached similar conclusions, suggesting that a supportive and nurturing environment is important in scaffolding certain aspects of digital literacy. Vickery notes the inability of schools to provide meaningful digital media experiences due to the ‘discourses of risk’ (p.9) that have shaped the way young people’s use of technology and digital media are viewed. For this reason, it was difficult for the adolescents in her study to develop social, networking and critical digital understandings in a school context. In contrast, the

¹² See: <http://www.intel.com/content/www/us/en/education/computer-clubhouse-network.html>

after school program, which used technology as an intervention for ‘at risk’ youth, provided an informal learning space where young people could develop skills, ‘acquire social capital’ and ‘negotiate empowered identities’ (Vickery, 2012, p.x). As these studies demonstrate, the afterschool program is a useful learning space for the cultivation of digital skills and much could be learnt about the way knowledge is developed in this environment.

Protectionist interventions

Parallel to programs that develop digital participation and skills is what is commonly called cybersafety or e-safety. A protectionist approach often stems from state initiated reports and research, but is not often enshrined in policy or curriculum. Instead, community or national initiatives lead to the development of websites and organisations that schools and educators can use as a resource if and when required. In Australia there is ACMA’s ‘Cybersmart’¹³ program, ‘Cybersafe Kids’¹⁴ for parents and schools, the Federal Government’s ‘Stay Smart Online’¹⁵ and ‘ThinkUKnow’¹⁶ (Australia and the UK). In New Zealand there is ‘Netsafe’¹⁷, in the US ‘GetNetWise’¹⁸ and in the UK ‘Kismart’¹⁹. These represent only a small selection of the many other cybersafety websites and resources available on the net. The sheer number of resources demonstrates that staying safe online is a serious priority for institutions and organisations across the world. While these websites may be a helpful resource it is important to consider exactly whom they are aimed at. Indeed, it is possible their creation does more to satisfy parental concerns about the dangers of the internet than the needs of young people themselves. Further to this, media have played up the issue turning it into what Drotner (1992) calls a ‘media panic’, following on from Cohen’s (1972) notion of a ‘moral panic’. According to Buckingham and Jensen (2012), a characteristic of ‘media panics’ is that they direct attention away from the real, more intractable issues in an attempt to reinstate some form of social or generational order. In the case of children and media, the underlying issue might be the social change that is brought about by digital technology. Despite their concerns about ‘media panics’, Buckingham and Jensen (2012) argue that it is

¹³ See: <http://www.cybersmart.gov.au/>

¹⁴ See: <http://www.cybersafekids.com.au/>

¹⁵ See: <http://www.staysmartonline.gov.au/>

¹⁶ See: <http://www.thinkuknow.org.au/site/>

¹⁷ See: <http://www.netsafe.org.nz/>

¹⁸ See: <http://www.getnetwise.org/about/>

¹⁹ See: <http://www.kismart.org.uk/>

important to engage with popular debate over these issues to acknowledge the ‘complexity and diversity of how media operate’ and the ‘roles of interest groups and claim-makers’ (p.422). Ultimately, these researchers are calling for a more nuanced and complex debate about the effects of digital media on children.

Extending the discussion, Hope (2013) argues that in adopting a protectionist discourse, cybersafety positions young people in constraining ways. Indeed, binary language structures the discourse where young people are positioned as ‘innocent victims’ or ‘dangerous perpetrators’; ‘naïve technology users’ or ‘rational “digital natives”’ (pp.87-92). The fact that young people’s voices are often not considered in the construction of this discourse means that the real challenges young people face in their engagement with digital media are not considered. Such paternalism does little to empower young people to ask questions of digital media and how it shapes their view of the world. In short, it does little to develop critical use of digital media. An understanding of the skills young people already have around digital technology might be a useful starting point. Buckingham (1998) argues that young people’s use of popular media frequently shows a ‘clear understanding of media language and a form of ironic distance that is at least potentially critical’ (p.40). The lynchpin here is the phrase ‘ironic distance’, which depending on how it is scaffolded, can result in learning that is either cynical and negative or critical and constructive. What is needed is a less prescriptive form of protectionism and instead a program that takes into account the actual problems and gaps in young people’s engagement with digital media. Large-scale research projects like EU Kids Online²⁰ help in this regard by showing that while digital media might introduce risks, they also provide a range of opportunities for learning and communication.

More recently, the European Centre of Studies and Initiatives (CESIE) developed the ‘Virtual Stages Against Violence’ (VSAV) project, culminating in the production of a teacher’s guide to ‘Digital and Media Literacy Education’. It involved four countries (Austria, Germany, Italy and Romania), took place over two years and has since been promoted in other countries, including Australia²¹. The project works from the

²⁰ See: [http://www2.lse.ac.uk/media@lse/research/EUKidsOnline/EU%20Kids%20II%20\(2009-11\)/EUKidsOnlineIIReports/Final%20report.pdf](http://www2.lse.ac.uk/media@lse/research/EUKidsOnline/EU%20Kids%20II%20(2009-11)/EUKidsOnlineIIReports/Final%20report.pdf)

²¹ Promoted in Australia by ‘Australian Science’. See:

<http://www.australianscience.com.au/education/toolkit-digital-media-literacy-education/>

premise that the protectionist paradigm of media education does not work and seeks to better understand the challenges that young people face in their encounters with digital media. It consulted young people throughout the project and the resources that were produced – an online game, a theatre play and a toolkit for teachers – aim to disseminate the key message of the VSAV project, which is that ‘any object can be considered a dangerous weapon or a useful instrument, depending on the knowledge and awareness that we have while using it’ (Ranieri, 2011, p.5). This project stems from a changing view of young people and their relationship with media. However, critics argue that single interventions in cybersafety, as opposed to on-going whole school approaches, are ineffective at changing cultures. Indeed, research by Harris, Davidson, Letourneau, Paternite and Miofsky (2015) questions the efficacy of a single issue approach in developing critical understandings of these complex social issues. While the creators of the Alannah and Madeline Foundation’s e-Smart program²² would argue that the only effective way to promote responsible and positive internet use is to adopt a whole school approach. Not only does their program provide cybersafety tips and lessons for students, but it also helps generate an ‘effective road map to guide schools in developing a sustainable whole-school approach to cybersafety, cyberbullying and bullying’ (n.p.).

The cybersafety discourse tends to position children and young people as passive victims in the digital context. Rather than being able to make critical and informed decisions about their internet use, they are seen as vulnerable and easily led. While some cybersafety programs do teach an element of critical thinking, this does need to become more of a focus if young people are to be more actively in control of their use. It could be argued that the range of interventions outlined in this chapter cannot deal with all the issues that digital media present young people with. While each of these discourses might have been a necessary step in the relationship society has with digital media, critical understandings and capabilities also need to be cultivated. Given the dynamically patterned and interconnected nature of digital media, participation and protection are not the only skills young people need to come to terms with the changes brought about by digital media. Also needed is an awareness of how social engagement and identity representation are constructed through this

²² See: <https://www.esmartschools.org.au/Pages/eSmartSchoolsPortal.aspx>

medium and how this shapes processes of becoming and participation in contemporary society. This perspective may well lead to decisions that better protect the individual against such harms as they would also have a better understanding of the social and political contours of the digital context.

Implicit in this discussion is the understanding that effective digital media use is dependent on the capabilities of the individual to identify, understand and negotiate the various components involved. The participatory and protectionist discourses outlined in this chapter fall short of developing these kinds of dispositions and skills. Young people require a critical digital literacy that is tailored specifically to digital texts and is more responsive to their personal needs. The next chapter focuses more specifically on critical digital literacy, arguing that given the challenges that emerge from digital media this approach is the most logical way to improve competence. It explores models and approaches that might better suit the needs of young people in the contemporary era and considers how these initiatives and ideas are enacted. Most significantly, it focuses on the specific digital dispositions and capabilities that might result from such approaches.

Chapter 3: The importance of critical digital literacies

3.1 Introduction

Considering the interconnected nature of digital texts, young people require particular forms of literacy to help them identify and understand the array of social, cultural and economic forces that shape them. Given that these are important sites for young people to form and represent their identity, communicate with others and participate in society, negotiating the contours of digital media with awareness, understanding and agency is important. This chapter explores ways to support young people's digital practices so they can make the most of the opportunities that emerge from digital media. To do this it reviews the dominant pedagogical approaches to digital literacies, outlining the tensions and challenges that currently exist. It contends that these are challenges and tensions that need to be addressed if digital literacy programs are to meet the needs of the individual. This chapter draws from current and previous models of digital literacy to give theoretical insight into a more nuanced approach that is responsive to the challenges of the contemporary digital context.

3.2 What are digital literacies?

In the contemporary era, the success of young people as students, engaged citizens and future employees has been linked to 'digital literacy'. Some theorists claim that without the skills to use and evaluate the digital tools now found in most informal and formal contexts, students will be 'left behind' in various aspects of their lives – from employment to social interaction (Chase & Laufenberg, 2011; Meyers, Erickson, & Small, 2013). Defining what is meant by digital literacy however has proven complicated, as the spaces, texts and tools which contextualise such practices are continually changing. Perhaps for this reason, some commentators adopt broad definitions of digital literacies. Thorne (2013), for instance, defines digital literacies as 'semiotic activity mediated by electronic media' (p. 192), which, while accurate, avoids outlining the more specific skills and practices required. Other definitions of digital literacy have tended to fall into the categories of either mastery and operational proficiency, or evaluation and critique (Lankshear & Knobel, 2011). Jones and Hafner (2012) define digital literacy along proficiency lines, which involves operating digital tools and 'the ability to adapt the affordances and constraints of these tools to particular circumstances' (p. 13). Whereas Gilster (in Pool, 1997, p. 9) argues digital

literacy is about ‘knowledge assembly’ and ‘how to assimilate the information, evaluate it, and reintegrate it’.

While these definitions have all been successfully operationalised in various settings, there is a growing sense that they cannot account for the diverse and dispersed range of digital practices and processes of everyday life. Indeed, the increased complexity of contemporary digital contexts has caused several researchers to call for new frameworks through which to study and develop these new literacies (Avila & Pandya, 2013; Coiro, Knobel, Lankshear & Leu, 2008). Further tensions arise when faced with the task of defining what it means to engage critically with digital media. It could be considered a set of ‘skills and practices’ (Avila & Pandya, 2013, p. 2), a form of curatorship (Potter, 2012) or empowering consumers to shape content (Jenkins, 2008). Indeed, the multiple forms of critical digital literacy reflect the array of academic disciplines involved with this area of research and their different theoretical underpinnings and goals. Against this backdrop there is clearly a need to challenge and test what is meant by critical digital literacy in the complex, contemporary digital landscape.

3.2 Tensions within academic understandings of ‘critical’ digital literacy

A critical literacy approach – an ethical analysis

The development of a distinct ‘critical digital literacy’ and its relationship with education has been approached in a number of different ways. First, there is the notion of the critical consumption of digital forms. Beginning in the late 1980s, a variety of models provided theoretical frameworks for critical digital literacy education along these lines. These models built on sociocultural perspectives of literacy and sought to contextualise digital practice within history, culture and power. Within these models criticality is framed in such a way that it can be translated across contexts and media. Green’s (1988) three-dimensional model of literacy involves operational, cultural and critical dimensions, thereby scaffolding the individual into transforming and producing meaning through their literacy practices. At the time, this represented an expanded notion of literacy, with the operational concerned with effective language use, the cultural concerned with meaning making and the critical with understanding manifestations of power (Green, 2002, p. 27). Janks (2000) identifies an ability to ‘understand and manage the relationship between language and

power' (p. 175) as the key concern of critical literacy. She argues that issues of domination, access, diversity and design should be seen as enterprises that are 'crucially interdependent' (p. 178) and that 'deconstruction without reconstruction or design reduces human agency' (p. 178). Similarly, Luke's (2000) definition of critical literacy involves three components. The first is 'metaknowledge' of 'meaning systems and the sociocultural contexts in which they are produced and embedded'. The second involves the technical skills to negotiate these systems; and the final 'involves the capacity to understand how these systems and skills operate in the interests of power' (p. 72).

In each of these approaches, the two components of digital literacy outlined earlier – the mastery of the technical and/or an evaluative or critical component – are evident. Yet there is little in these conceptualisations of critical digital literacy that appears specifically 'digital' in focus and, as such, they can be applied across contexts and media. This neglect of what is specifically distinctive about the digital context is also evident in more recent definitions of critical digital literacy. Avila and Pandya (2013) describe critical digital literacy as having two goals: 'to investigate manifestations of power relations in texts, and to design, and in some cases redesign, texts in ways that serve other, less powerful interests' (p. 3). While design and production are considered in these models, the more important component – essentially what 're-design' relies on – is recognising how the forces and effects of ideology and power are manifest in the text. In the digital context, this presents a set of new and unique challenges to literacy. Nevertheless, these critical digital models echo Freire's (1970) critical pedagogy, where the goal of literacy education is to overturn social and political inequalities. Some theorists like Area and Pessoa (2012) argue that digital literacy equates to no less than a civic education—thus underscoring the social and moral obligations developed as part of individuals' digital literacy competencies. In a similar way, Kellner (2001) advocates a return to the instructional principles of Dewey by highlighting the connections between education and democracy. He writes that without the 'proper resources, pedagogy, and educational practices' (p. 68), technology has the potential to increase the existing divisions of cultural capital, power and wealth. A key feature of this approach is its focus on analysing ideology, which requires individuals to adopt an ethical perspective on their engagement with digital forms.

A critical media literacy approach – acknowledging the personal

In response to this more objective approach to critique, another strand of critical digital literacy has emerged which has sought to highlight the personal experiences of individuals. In this approach, the ideological is downgraded, while the ‘politics of pleasure’ (Alvermann, 2004) is foregrounded. UK media theorists like Buckingham (2003) and Sefton-Green (1998) have drawn attention to young people’s everyday use of digital texts in which a ‘correct’ ideological reading of these texts is less important than how they connect with learners’ lives. The problem with contemporary forms of critical literacy, Buckingham (2003) asserts, is that they tend to be based around one commonly perceived reading of political correctness that educators impart to their students. In this model, students are seen as ‘victims of media manipulation’ (p. 118), while educators act as gatekeepers over the knowledge and skills that will liberate them from the repressive ideologies expressed through popular media. Buckingham (2003) describes this didactic, politically correct approach to critical literacy as ‘self-aggrandising’ (p. 108) on the part of the researchers and educators involved. Drawing on the work of Masterman (1985), Buckingham (2003) argues that the goal of critical literacy is ‘not simply critical awareness and understanding, it is critical autonomy’ (p. 107). In this approach, critical analysis provides opportunities for ‘identity work’ (p. 109) in which a variety of social identities can be experimented with. Also highlighting the personal aspect of critique, Potter (2012) describes the production and representation of identity through digital media as a type of ‘self-curatorship’.

Other models have also focused on the individual in developing critical practices in specific digital contexts. Burnett and Merchant’s (2011) ‘Tri-partite Model’ of critical practice specifically targets social media. Building on Greenhow and Robelia’s (2009) idea of ‘advantageous online community practices’ (p. 136), Burnett and Merchant advance a conceptual model that highlights the inter-relationships between identity, practice and networks that take place around, through and outside social media. This shifts the focus of the model from the media to be critiqued to how the individual engages with these media, integrating identity with critical practice. They write:

Critical practice in this context may be less about digital technology as an abstract force (one that considers how it might structure our thoughts and actions) and more

about an interrogation and evaluation of what we and others are actually doing on and off-line. (p. 51)

This model marks a shift in the locus of practice that may be more suitable for networked, fluid texts like social media. They argue that using social media is usually a pleasurable pursuit, so any critical practice needs to balance young people's interest with more serious pedagogical aims (Burnett & Merchant, 2011). Their approach treats young people's personal responses to digital forms as a type of 'resource' from which to explore the formation of their beliefs, values and responses. In this approach, critical literacy is thus linked to the process of shaping social identities.

Digital design literacies – the importance of making

Sitting alongside the corpus of work on critical engagement with digital media is a more recent perspective on how key issues of digital literacy can be addressed. The 'design turn' in literacy studies refers to the idea that unpacking and examining the processes of digital design in an educational setting leads young people towards a critical and practical knowledge of digital text production—a critical digital literacy. The New London Group (1996) introduced 'design' as a key component of literacy education in their work on multiliteracies to acknowledge, among other things, the changes in communication brought about by new technologies. In its original instantiation, design was seen as a key tool that young people might draw upon to devise their 'social futures' (p. 4). However, in recent years the idea of design has focused more specifically on the digital context and is becoming an increasingly popular method of digital literacy education. Variations on the design theme have arisen in the work of Sheridan and Rowsell (2010), Jenkins (2006), and Gauntlett (2011). Unlike the two approaches described earlier that originate from non-digital contexts, digital design literacies respond more specifically to the digital context and therefore represent a potential way forward for critical digital literacy. While this approach is focused on the outcomes of making, creating and producing, it provides an avenue for young people to express their ideas, values and beliefs and therefore mobilise personal or affective responses to digital texts.

In *Literacies in the New Media Age*, Kress (2003) argues that the 'world of communication is now constituted in ways that make it imperative to highlight the concept of design, rather than concepts such as acquisition, or competence, or

critique’ (pp. 36–37). This turn is not only connected to temporal changes in communication and production brought about by digital technology, but also the dominance of the visual mode on screen. Crucially, what design emphasises is the desire or interest of the text-maker, that provide a relative point of reference in a seemingly unstable and ‘chaotic’ social environment. According to Kress, traditional forms of ideological critique are less important as they were forged out of a particular time that relied on dynamic change to transform the system. While critique is ‘oriented backward and toward superior power’ (Kress, 2010, p. 6), design ‘shapes the future through deliberate deployment of representational resources in the designer’s interest’ (Kress 1997, p. 77). In a study of professional designers, Sheridan and Rowsell (2010) elaborate Kress’s notion of design to better understand the design and aesthetic structures that are brought to bear through the process of production. As they explain, becoming a ‘producer’ can help instil empowering literacy and intellectual practices in learners, by moving ‘beyond the typical schooling practices of restating and critique’ (Sheridan & Rowsell, 2010, p. 111). In this way, they argue that design literacies provide a useful way to build individual agency via an imminent, technical form of critique.

There is growing interest in new literacy models ‘based around’ the idea of design. While appealing, it is important to consider how the focus of literacy has shifted within this recent design turn. In a report for the MacArthur Foundation, *Confronting the Challenges of Participatory Culture*, Jenkins (2006) identifies 12 skills as characteristics of literacy in the digital environment. Much of what the report describes involves negotiation of the tools and texts encountered in digital contexts, so that young people are empowered and active contributors. Underpinning Jenkins’ notion of participatory culture is the understanding that ‘members believe their contributions matter and feel some degree of connection with one another’ (p. 3), thereby highlighting the social and cultural aspects of participation at the expense of any political aspects (Fuchs, 2014). Of the 12 skills outlined in Jenkins’ report only one of these – ‘Judgment’ – is explicitly concerned with what might be traditionally considered critical literacies. In this context, it appears critique is concerned with the credibility and reliability of information and not the more difficult questions of power, ideology and discourse. Jenkins’ 12 skills scaffold the individual to work within the current ‘system’ of digital media and technology, rather than to challenge, question or

critique it. Fuchs (2014) underscores this point when he describes the skills as ‘activities that can all work well in a company context’ (p. 56) and do not include any critical thinking.

Adopting a different version of the design framework, Gauntlett, (2011) argues that ‘real’ learning takes place when people make and create. Indeed, Gauntlett’s work is indicative of a wider ‘maker movement’ that will, according to some, transform learning through its hands on, DIY approach. The overarching focus of the maker movement is on the creation of ‘new’ things, while along the way learning skills of mastery and critique. In this context, critique is seen as an ability to imagine innovative and alternative creations and practices. It could be argued, however, that the design turn in digital literacy mitigates the political orientations of critique under the guise of ‘creativity’, which is, by nature, more social and aesthetic in orientation. Readman (2013) describes creativity as a ‘convenient cipher’ (p. 169) for critical engagement at a time when criticality is a ‘vital necessity’ (p. 161). While a digital design model of literacy celebrates notions of individual agency, in its current form this approach does not involve a critique of issues such as the ownership of digital media platforms or their governance – leaving the underlying ideology of the digital contexts largely unquestioned. Instead, in place of critique the object or creation of design is fetishised and the ‘critical dimension is muted’ (Wark, 2013, p. 302). Prioritising the ‘products’ or outcomes of learning in this way certainly fits with the demands of a ‘knowledge economy’ (Readman, 2013). However, if critical thinking is to remain within the digital literacy paradigm then an important question to consider is how digital design can use creativity to move beyond the personal to consider issues of a political and ethical nature.

3.3 Addressing the needs of the individual

While some of these models acknowledge elements of all three orientations discussed above —the ethical, the personal, and the maker—each orientation has a particular emphasis which, when adopted in pedagogy becomes even further accentuated. In the digital context, it therefore becomes difficult for any one of these models to account completely for the increasing complexity and diversity of digital practices. As Burnett and Merchant (2013) point out ‘the very process of locating literacy can imply a certain boundedness or fixity which is at odds with the more fluid, hybrid landscapes

and timescapes of the digital age' (p.37). As a result, it appears difficult for any of the models outlined to explore affective and creative responses to digital forms *and* critique broader concerns to do with discourse, ideology and power in a way that takes into account the complexity of the digital era. Crudely put, critical digital literacy has evolved to become largely positioned as an either/or proposition: where critique of the digital context is focused on either critical consumption or creative production; and builds either the technical skills of design or the more general, theoretical skills of critique. Such binary opposition has fragmented critical digital literacy along theoretical lines that ultimately prevent the framework from meeting the needs of its target audience – young people.

In order to advance the academic debate about critical digital literacy, it is necessary to take stock of the needs and practices of young people. Of course, individuals in everyday life do not divide their digital practices according to binary oppositions, but instead move fluidly between: the ethical and the personal; the objective and the subjective; the creative and the critical. Practices spread across digital contexts and include social, cultural and political elements. Seen in this light, any attempt to foster critical digital literacy with young people needs to reconcile these binaries. However, to improve the efficacy of critical digital literacy, it is important to examine the binaries upon which these academic approaches have been fragmented. In doing this, future conceptions of critical digital literacy might overcome these tensions to provide a framework that is more responsive to current contexts and practices. The tensions can be seen as existing in at least three different ways:

The 'ideological' and the 'personal'

A significant challenge lies in reconciling an ideological critique with individuals' personal and affective experiences of digital media. There are two strands to this challenge. First, how can critical digital literacy cultivate a dispassionate, critical disposition in a context that invests deeply in the personal and affective. Second, how might a more nuanced understanding of power and ideology within the digital medium be developed? Reconciling these priorities might begin by recognising that ideology is intrinsic to the personal and affective experiences of texts. Misson and Morgan (2006) explain that 'it is often the coherence that ideology provides that is the very source of emotional power' (p. 88). Indeed, digital texts provoke emotion

because they reference or reflect a reality shaped by ideology that has particular meaning to the individual. Understanding how ideology is made affective and personal could become a powerful method of critique in the digital context. Individuals become the axial point, however, their personal experiences might be a ‘portal’ through which to explore the deeper ideologies that structure the reality of the digital context.

While digital practices have been married to broader social and political concerns (see Tate, 2011), a more difficult prospect lies in understanding the ideological ‘architecture’ of the digital, which by nature is more complex and opaque. If critical digital literacy is to transform digital practices then developing an understanding of these concepts is necessary. An ideological critique might involve developing an awareness of the dominant ideologies that underpin digital technology, the way ideology and the political economy intersect to create power asymmetries in the digital context, and how these processes are applied through targeted advertising and consumer culture.

‘Collective concerns’ and ‘individual practices’

Another tension lies in reconciling collective concerns around social and educational inequalities with the more individualised practices that have been encouraged by digital media. In many ways the word ‘user’ reflects the libertarian and neoliberal ideologies that underpin contemporary technology (Selwyn, 2014), positioning individuals as users or consumers of resources rather than active, engaged citizens. As Lovink and Rossiter (2005) assert, the ‘user’ is the ‘identity par excellence of capital’ and ties to the collective are so ‘loose’ online that they are at ‘the point of breaking up’ (n.p.). This might, in part, explain the increasing interest in design literacies in which the agency of the individual is prioritised. However, it is important to remember that using technology is not in and of itself beneficial or transformational. Meaningful use of digital technology requires ongoing analysis and interpretation to not only ensure that digital experiences are advantageous to the individual, but that practices are ethical and avoid the exploitation or manipulation of others. To be transformative to the individual *and* society, critical digital literacy should provide opportunities to examine broader issues associated with digital media use. It might include examining how digital technologies and systems reinforce issues of social

class, race and gender and what might be done to challenge and overturn exploitation and inequality. This might involve thinking about where the digital technologies are made and the working conditions of employees. Or why women have experienced more harassment and victimisation on the internet than men (Wihbey & Kille, 2015).

‘Technical mastery’ and a ‘critical disposition’

Given that digital media are part of a techno-social system, then digital literacy has to encompass much more than a set of technical skills (Fuchs, 2014). Participation within a techno-social system involves technical mastery *and* inquiry, analysis and critique. However, a critical disposition is not often equated with productive and successful behaviour in the digital context. As Lovink and Rossiter (2005) explain: ‘It takes effort to reflect on distrust as a productive principle’ (n.p.). Perhaps this explains why school based digital literacy programs are showing a clear preference for a technical, design approach to digital literacy. In 2014, the UK national curriculum for computing aims to teach students coding from Stage 1 (ages 5–7 years),²³ and in Australia, the Australian Curriculum will introduce two new compulsory subjects for all students in primary and secondary school which seek to develop ‘design thinking’ and the ability to ‘define, design and implement digital solutions’.²⁴ Indeed, learning to code is considered by some as not only important to ‘individuals’ future career prospects’ but also to their ‘countries’ economic competitiveness’ and technological future (Gardiner, 2014).

While learning how to use and manipulate digital technology is important, without an understanding of the role humans need to play in questioning, challenging and therefore shaping this techno-social system, then the scope of digital literacy is limited. A reconceptualised critical digital literacy might provide opportunities to consider and critique the broader social, political and economic issues, alongside programs that seek to develop technical mastery. Rather than contextually bound notions of skills and practices, a critical disposition would be transferrable across digital contexts and consequently more relevant to the fast paced realities of everyday

²³ See: <https://www.gov.uk/government/publications/national-curriculum-in-england-computing-programmes-of-study/national-curriculum-in-england-computing-programmes-of-study>

²⁴ See: <http://consultation.australiancurriculum.edu.au/Static/docs/Technologies/Draft%20Australian%20Curriculum%20Technologies%20-%20February%202013.pdf>

digital contexts and digital practices. A critical disposition might encompass a form of curatorship, but would encourage individuals to include a degree of skepticism or even 'radical skepticism' (Green, 1991) in their approach so that the culture that created such tools and practices might also be critically evaluated (Honn, 2013). This prevents digital practices and tools from appearing as a series of 'natural', inevitable processes which become uncritically inscribed into daily life. The challenge for critical digital literacy, however, lies in encouraging the young person to move between these mindsets (i.e. critical and technical) as part of their digital practices.

3.4 Critical digital design – towards a framework for digital literacy

This chapter concludes by sketching out the beginnings of a framework that might go some way towards addressing the issues identified—what might be called 'critical digital design'. It does this by building on the earlier models and approaches outlined in this chapter. In addition, to concerns of 'design', critical digital design can be thought of as a deliberately political model of digital literacy in which complex and detailed understandings of discourse, ideology and power in the digital context are scaffolded. It aims to analyse the specific multimodal features of digital texts, as well as the general architecture of digital technology and the internet, so that a more comprehensive and nuanced understanding of these concepts are developed in the learner. In comparison to digital design models, critical digital design focuses more on how this architecture manifests and maintains systems of power and privilege, however, unlike more traditional models of critique it aims to 'launch' this from a more personal position so that an individual's beliefs and emotions might be used to guide the analysis. While critique begins with the individual there are opportunities for collectivism not only through group reflection, but also in considering concerns around social and educational inequalities. This collective approach 'speaks back' to the more individualised practices that typically characterise digital technology use.

The practices that distinguish critical digital design from other digital literacy models involve practical attempts to reconcile the binary oppositions evident in critical digital literacy and digital design literacies. While any approach is likely to involve a range of practices, the aim here is to explain the techniques that are new in this context and that might therefore offer a reconceptualisation of critical digital literacy. Rather than

focusing on specific technologies, these practices aim to explore and expand on the human, interpretative process associated with digital media use. These include:

Transcendental critique

Fundamental to critical digital design is the reinstatement of a transcendental critique or a critical distance from digital networks (Taylor, 2006), in which social and political issues related to digital media might be examined. The speed and ephemerality of information in the digital era has caused many theorists to argue that the ‘separate space’ from which to launch critical analysis has been lost; critique must be immanent and take place from inside of the information order’ (Lash, 2002, p. 176). Like others (e.g. Kress, 2010), Lash equates critique with the ability to exert control from *within* by refashioning and reappropriating digital media to suit needs and desires, marking what some call a decidedly affirmative version of critique (Taylor & Ruiz, 2007). There are intrinsic difficulties associated with critique in the digital era, however, a transcendental perspective enables a different kind of analysis. Cultivating a transcendental position *external* to digital media might encourage the examination of social and political issues related to digital media use, and provoke critical reflection on personal digital practices and identities. A transcendental critique might be achieved by creating a sense of ‘distance’ from digital media through a series of activities and provocations that decontextualise everyday use and thus encourage individuals to reassess, reflect and renew their engagement with it. Subsequent to this, technical skills might then be used to realise positive changes, not only to individuals’ digital practices, but society more broadly. Indeed, the success of each of the practices described below is reliant to some degree on the cultivation of a transcendental perspective.

Visualisation

Visualisation of digital networks might increase the cognitive tools with which the digital context might be conceived and approached. It would draw on digital aesthetics and data visualisation (Manovich, 2013) to decontextualise or defamiliarise digital texts, tools and practices with the goal of suspending or interrupting commonly held assumptions and views. This might lead to a clearer understanding of the architecture of the digital context and its ideological underpinnings, countering the ‘neo-symbolism’ (Galloway, 2011b, p.90) that has come to dominate thinking in and around the digital. At the same time, visualisation would expand the realm of

possibilities available for daily digital practices and re-design. As a practice, visualisation could also help to unpack and understand the metaphors that organise interactions with digital media and networks. As van den Boomen (2014) argues:

If metaphors structurally encapsulate digital practices we may wonder what they... do to our understanding of digital code, and what this means for digital code's far-reaching implications for culture and society. (p. 13)

The main purpose of visualisation would be to develop a more practical and in-depth understanding of digital networks, while at the same time questioning the conceptual tools that shape engagement. However, visualisation could also be used to chart reimagined and restructured digital networks.

Critical self-reflection

Critical self-reflection might be used to explore the relationship between personal, affective responses to digital texts and broader ideological concerns. Rather than seeing these two aspects of digital media as oppositional, through critical self-reflection the personal becomes a 'conduit' to the ideological. This practice might begin with analysis of personal digital practices, but through analysis, discovery and provocation these practices become, in a sense, 'objectified' and are therefore seen as symptomatic of the wider digital context. Exploring personal digital histories with particular focus on how these are shaped by particular digital discourses is one way in which dominant ideologies might be questioned. Such a process might also encourage individuals to see their identity as fluid thereby resisting the inclination to essentialise identity to any one community (Janks, 2010) or digital platform. Critical self-reflection becomes a way in which individuals can move between the personal and the ideological while exploring and analysing concepts that are embedded in digital technologies and networks. Such a process is not simply the cataloguing of digital practices, but involves some degree of discomfort, as broader social and political issues are drawn into the exploration and ultimately linked to individual practices. As Boler (1999) writes, without the critical dimension self-reflection can be 'reduced to a form of solipsism' (p. 178). While critical self-reflection involves 'discomfort', it has the potential to be genuinely transformative to the individual and society. Indeed, 'discomfort' might be the result of relating the personal to the ideological; nevertheless it is perhaps the only way in which critical digital design might be

genuinely transformative. Critical self-reflection encourages the individual to see personal digital practices as a form of political engagement.

Interpretation and re-articulation of digital concepts

Reconciling collective concerns with individual practices might also involve questioning the rhetoric that has come to shape the way digital media are thought about. To describe the ‘web 2.0’ era internet as a ‘participatory culture’ (Jenkins, 2006) and social media as a ‘networked public’ (Boyd, 2014) automatically associate these technologies with the concepts of freedom, democracy and civic engagement. Such descriptions develop positive connotations that ultimately conceal some of the more complex and confronting issues of digital media use (Fuchs, 2014). Examining this rhetoric to understand the reality of digital systems is an important part of developing a critical disposition toward digital media. In addition, questioning what concepts like *free, friend, link, like, community, share, collaboration* and *open* actually represent in the digital context might result in a more conscious and knowing mode of engagement. This practice would not only question assumed definitions, but also explore how and why these phrases have been re-defined in the digital context. A second step in this process would involve the re-articulation (Apple, 2013) of these concepts, where they might be applied in alternative ways that seek to counter hegemonic discourse.

3.5 Conclusions

While young people themselves also develop their own critical digital literacies, this chapter has outlined the dominant pedagogical approaches available to support them in this endeavour. In particular, it considers the repercussions of moving away from traditional forms of critical literacy toward more design-oriented approaches. Indeed, given the hyperbole surrounding coding in schools and the ‘maker’ movement, it is possible that research investigating social and political understandings of digital media will be deprioritised. A series of tensions therefore emerge in the field of researching and teaching critical digital literacies. This chapter has presented a speculative framework for critical digital design that attempts to address some of these tensions, however, it inevitably raises more questions than it answers. As such, part of this research tests visualisation, critical self-reflection and re-articulation as techniques to develop and research young people’s critical understandings of digital media.

Chapter 4: Research methods

4.1 Research aims

This study set out to understand how young people use digital media to represent and form their identities, socially interact with others and participate in society. It aimed to do this in a way that captured the complexity and interconnected nature of young people's use of digital media. The research method therefore explored the social, cultural and historical context of individuals' digital practices. It also aimed to identify the critical understandings young people draw on as they use digital media. The ever-changing digital landscape presents ongoing challenges to researchers and educators in developing models of critical literacy that are relevant and responsive to the needs of young people. Indeed, the rise of social media and collaborative digital platforms present new challenges to how interpretation and critique are understood. Part of this research project sought ways of bringing together the tensions outlined in Chapter 3 (see 3.3): the ideological and the personal; the individual and the collective; and the technical and the critical. As such, part of the research method involved developing a series of techniques that worked to overcome the tensions that currently exist in researching and teaching critical digital literacies.

4.2 Research questions

Against this background, the remainder of this thesis addresses the following research questions, which were introduced in Chapter 1.3:

- What role do digital media play in young people's lives? In particular, how do young people use digital media to represent and form their identity, communicate with others and participate in society?
- What are young people's critical understandings of digital media? How did they develop these understandings of digital media?

4.3 Comparative case study as research design

This research adopted a comparative case study design. As Campbell (2010) explains, comparative case study 'examines in rich detail the context and features of two or more instances of specific phenomena' (p.3). Like case studies, comparative case

studies generate detailed descriptions of each case to provide ‘readers with good raw material for their own generalising’ (Stake, 1995, p.102). However, a comparative case study also aims to ‘discover contrasts, similarities or patterns across the cases’ (Campbell, 2010, p.3).

In this study the unit of analysis was the individual participant (Yin, 2009). A number of research methods across the ‘qualitative continuum’ (Ellingson, 2009, p.8-9) were employed to collect data on each case. For example, data were generated through creative responses to activities that visualise or imagine concepts and processes; online observations of social media practices; group discussions and individual interviews. A comparative case study not only built a detailed picture of each case, but was a logical way of organising such a diverse set of data. In addition to what was particular to each case, there was also an examination of what was common across cases. As Campbell (2010) points out, comparative case studies tend toward an examination of the typical, rather than the outlier, as cases must be selected to enable enough commonality for comparison.

However, in conceiving of the individual as a case, a tension emerges in regard to the broader context of the research, that being the multidimensional, expansive nature of the digital context. It could be argued that the case study is too narrow a perspective from which to view such complex and interrelated practices. While the case study could be described as a delimited or bounded model (Stake, 1995), in this research the individual case study was conceived as a *lens* through which to view the complex and interconnected nature of digital texts. This can be contrasted with many other studies of people and technology that take the single digital platform to be the point of analysis (Banks, 2015). The present study sought to produce a more holistic view of digital media, rather than specific digital practices.

Denzin’s (1983) ‘interpretive interactionism’ is a helpful way of thinking about how to empirically develop an affective and embodied view of digital media. In his description of interpretive interactionism, Denzin (1983) argues that detailed, discursively drawn biographies are an instructive means of understanding a particular historical moment or social phenomenon. He writes:

The interpretivist attempts to bring the life world alive in full, vivid detail. The networks of social relationships, as ensembles that connect interactants into webs of meaningful experience and actualised structural practices, must be captured. The microrelations of power and knowledge that dominate and structure these practices also require presentation (p.145).

Denzin highlights that the effects of any social structure can only be adequately revealed and understood by careful examination of how they are embodied and experienced by individuals. For this reason, localised practices should be captured in 'everyday language in all its confusions and ambiguities' (Denzin, 1983, p.143). Using the individual as the unit of analysis in this study enabled multiple points of data to be collected, but perhaps most importantly, it was able to document the young people's lived experiences of digital media. This approach aimed to reveal the affective qualities of digital practices and negotiations and, as has been discussed throughout preceding chapters, represents an important consideration when working toward a more progressive and nuanced version of criticality.

Another tension in using a comparative case study approach is that the bounded nature of the case can make it more difficult to form connections or generalisations. Given that an aim of this research was to investigate broader questions to do with digital media use, this was an issue to consider. The comparative focus of the study design aimed to overcome this. As Schostak (2006) explains, mapping the relationships between cases helps to see 'the implication, imbrication or woven and knotted strands of relationship between people and things of the world as well as the boundaries they erect between each other and things' (p.22). He goes on to argue that it is impossible to see the case study as isolated as it has reference to others from which it is different, or to a whole to which it has some type of relation. Stake (1995) takes a more subtle approach arguing that rather than creating new generalisations, case studies typically modify or refine existing ones. He writes: 'Seldom is an entirely new understanding reached but a refinement of understanding is' (p.7). This was particularly important in the context of this research given the assumptions that are commonly made about young people and digital media, which tend to either celebrate the skills of the 'digital native' (Prensky, 2001a; 2001b) or panic over the evils of media (Buckingham & Jensen, 2012). Wyn (2015) argues that these types of

‘conceptual frameworks create truths and naturalise particular ways of thinking’ about children and young people (p.3). This research attempted to explore the validity of the dominant ‘conceptual frameworks’ that position young people in regard to their relationship with and use of digital technologies.

This study was temporal in design. It went beyond a static snapshot of identity like that obtained through a single survey or interview, which would be inadequate in capturing the complexity of the processes under investigation. The study aimed to develop a more dynamic, temporal picture of each case or participant’s digital practices over the period of a year. Apart from the added complexity and detail that a longitudinal approach affords there are other benefits. Court (2010) argues that ‘ongoing interactions with participants help to build participant-researcher trust, respect, and collaboration, and this in turn increases the possibility that rich, in-depth data will be generated for analysis’ (p.536). Given the personal and sometimes sensitive nature of digital media use, developing trust between researcher and participants is important in generating detailed descriptions of practices.

4.4 Provocation as a means of generating data

Within the case study approach the research adopted the method of provocation in order to collect data. The significance of the provocation to the research method represents a response to how the relationship between young people and digital media has been widely perceived. Indeed, both popular and academic discourse continue to characterise young people’s lives as entwined with, immersed in or permeated by the digital, highlighting a dependence on digital mediation in day-to-day activities. Ito et al. (2010) argue that digital media such as social networking sites, online games and video-sharing sites are now ‘fixtures’ of youth culture that ‘pervade’ their daily lives. Davies and Eynon (2013) describe technology as a ‘layer interwoven and bound up’ (p.9) with the experience of being a young person. They contend that in some contexts young people regard technology as important, but in others less so. It is important to unpack the reasoning behind these attributions as part of the critical epistemology of the research. While it is debatable whether this era is fundamentally different from the past, it does provide a different set of challenges that need to be carefully identified and understood. As Livingstone (2009a), argues, we need to explore how far digital media reconfigure ‘communities of practice’ (p.17) within

which young people experience themselves and the world. This research attempted to unpick some aspects of the ways in which young people's lives have become bound to or immersed in the digital so as to examine these communities of practice constructively. It aimed to do this through a series of provocations that disrupt or question the seemingly 'natural' connection between young people and digital media.

While a range of studies have described how young people use digital technology (Ito et al., 2010; Davies & Eynon, 2013; Boyd, 2008; 2014), this research aimed to provoke young people to think differently and critically about their use of digital media. In doing this, the study addresses the question of why young people use digital media in the ways they do. The Italian collective Ippolita (2013) argues that to critically examine our immersion in this technological world we need to be distanced from our digital objects: 'If we start from collective findings, we can derive individual conclusions, in a process of estrangement that starts from the inside out' (p.16). In this context a provocation is a way of 'estranging' or 'defamiliarising' digital concepts and tools that are so familiar they have become 'invisible'. In doing so, these concepts are re-presented afresh encouraging new insights and ideas to emerge.

The idea of defamiliarisation can be traced back to the work of Russian formalist Viktor Shklovsky (1917/1965), who wrote that art is a technique of thinking with images. A key goal of art, Shklovsky contends, should be to present familiar concepts in a new way. This is achieved by making forms difficult to recognise so that the process of perception²⁵ is prolonged. In this way, perception becomes an 'aesthetic end in itself', so that the object itself is less important than the *experiencing* of the 'artfulness of the object' (Shklovsky, 1917/1965, p.18). Shklovsky writes that humans are inclined to adopt an 'algebraic' method of thought in which perception becomes 'over-automatised' or reliant on recognition, as opposed to seeing things in their entirety. Indeed, such an argument seems prescient today as algorithms do, in some ways, direct digital practices and identities. By decontextualising or defamiliarising an object, as is common practice in art, the viewer might perceive things as they are, rather than as they are known or thought to be. This process attempts to resist an 'over-automatisation' of perception.

²⁵ In this context, the definition of perception is a sensory one in which the physical characteristics of the object – its colour, shape and size for example - are sensed by the eye.

Such an idea has broader application to how lives are lived and conceived. Quoting Jakubinsky (1916), Shklovsky (1917/1965) argues that to live an unexamined life is equivalent to not living at all: ‘if the whole complex lives of many people go on unconsciously, then such lives are as if they had never been’ (p.18)²⁶. Rather than examining social processes and practices as they are, algebraic methods of thought create a kind of shorthand resulting in what Shklovsky (1917/1965) calls an ‘economy of perceptive effort’ (p.17). What is lost through this economy, however, is careful examination and reflection on what these processes represent and how they manifest in everyday life. This research aimed to defamiliarise and make strange digital practices – to prolong perception, to disrupt common processes of recognition, to provoke alternative methods of thought – so that digital artefacts and human practices in and around them may be seen for what they are, and not for what they are commonly recognised or popularly known.

Provoking for critical self-reflection

A goal of this method of data collection was to provoke critical self-reflection in the participants in regard to how their digital practices represented and related to their sense of self. This was not to encourage the idea that there is a ‘correct’ way of using or engaging with digital media, but instead to scaffold participants towards deeper insights into their own practices. In many respects, this critical perspective is key to their becoming discerning participants of digital media. Boler (1999) argues that this process should be more than simple ‘self-reflection’ (p.177). Instead, Boler writes that while critical self-reflection involves ‘discomfort’, it has the potential to be genuinely transformative for the individual and society. Following the work of Pratt (1984), Boler outlines a process in which the ‘genealogies of self’ are traced, so that the individual begins to acknowledge and ‘honour’ the ‘genealogies of one’s own positionalities and emotional resistances’ (Boler, 1999, p.178). While Pratt and Boler’s work relates to anti-racism and feminism, their focus on exploring personal histories can be employed in the digital context to more explicitly identify the attributions young people make about their digital identities and practices. The provocations in this research were based around a similar process, whereby young people might consider how their identities and practices are shaped by a variety of

²⁶ This idea can be traced back even further to Socrates and his idea that an unexamined life is not worth living. See: Apology by Plato section 38a.

discourses – be they institutional, social, cultural or political. As Boler explains, this requires a willingness on the part of individuals to reconsider and evaluate their beliefs so that they might see their identities and practices as ‘bound up with self-images, investments and beliefs reiterated through the mass media, school textbooks and dominant cultural values’ (1999, p.178-179). The ultimate goal in doing this is for the participants to critically examine their digital identities and practices, and potentially transform them.

A link can be drawn to the work of Misson and Morgan (2006) and their quest to incorporate affective, emotional responses into the realms of critique. Their central concern – that critical literacy focuses on the deconstruction of the ideological at the expense of the audience’s personal response – takes on particular relevance in the digital context in which texts are more intricately linked with belief, affect and emotion through social media and the participatory nature of the medium. While British media theorists like Buckingham (2003) and Sefton-Green (1998) have drawn attention to young people’s everyday use of texts, marrying the ‘politics of pleasure’ (Alvermann, 2004) with an ideological critique remains a challenge. Through the provocations, this research locates the process of self-reflection in a broader social and political setting, where the personal and ideological are contingent. Through this process the participants investigated the genealogies of their digital selves. Self-reflection is thus moved beyond a type of ‘confession’ and into a process of inquiry where the central focus is to recognise the relationship between an ideological position and emotion. To Boler, this is a key point in the process of change as ‘emotions define how and what one chooses to see and conversely, not to see’ (Boler, 1999, p.177). While the provocations aim to prompt critical self-reflection the process is further augmented and noted through the one-on-one qualitative interviews that followed up the group work.

Another goal in using the provocations was to encourage the participants to see their digital identity as fluid and in constant change. This aimed to operationalise the theory of ‘becoming’ (Deleuze & Guattari, 1980/2013) so that individuals conceive of themselves as a body in motion, responding to the various discourses they encounter. In this way, participants began to notice ‘how one’s sense of self and perspectives are shifting and contingent’ (Boler, 1999, p.177). Further to this, by conducting the

research in a group setting there was potential for collective understandings and perspectives on this process, which, coupled with provocations that prompted creative and alternative ways of thinking about digital identities and practices, had the potential to shift the participants' positions and modes of thinking. In this way, alternative 'ambiguous selves' might be inhabited (Boler, 1999, p.195). To Misson (2012), exploring alternatives in this way involves imagination, which is an important component of critical literacy. He explains that 'development of the imagination is essential to good critique, particularly about the capacity to tell stories about how the future might shape itself out of present circumstances' (Misson, 2012, p.31). The provocations made the familiar strange so that the participants were encouraged to reflect on how their beliefs and perspectives were constructed and how these were, in turn, contingent and shifting. In prompting participants to examine how their beliefs, emotions and perspectives were constructed, it was hoped that the critique might marry the ideological and the personal.

Provoking to explore attributions, discourses and ideologies

This research sought to explore the attributions young people make in relation to digital media and other interrelated discourses in order to 'make' a social reality. In the context of this research, an attribution was taken to mean assigning an action or event to a particular cause. For example, a participant may explain that she altered her security settings after a lesson on cybersafety at school. Importantly, it is not simply about identifying a belief or action but exploring the social construction of these through discourse. The provocations, which might involve testing, agitating or questioning, sought to make visible the ideologies that explain or underpin the attributions the participants made in regard to digital media and their own digital practices so these might be examined and possibly transformed. In the previous example, for instance, the underpinning ideology might be to not trust strangers with personal information or more extremely that strangers are dangerous. Fuchs (2014) explains that ideologies are 'practices and modes of thought that present aspects of human existence that are historical and changeable as eternal and unchangeable' (p.17). Part of this research sought to demonstrate that ideologies are changeable and that the individual can in fact transform their perception and therefore engagement with them.

The axial point when using provocation as a research method is the acknowledgement of how and why the attributions were made in the first place, which is linked to a semiotic analysis. Indeed, semioticians adopted and adapted the term ‘denaturalisation’ from Shklovsky (1917/1965), which, in the semiotic context, describes a process where the underlying rules for encoding and decoding signs are made explicit. By making visible the ideologies represented or bound up in signs, a clearer understanding of digital practices might be achieved. In this way, the ideologies might be critically evaluated and subsequently changed. To apply the notion of provocations, the research drew on the processes of decontextualizing, translating and creating in order to make the familiar strange.

In the first instance, digital texts are *decontextualised* so that the underpinning ideology might be identified and then analysed. New Literacy Studies emphasises the point that any literacy practice is socially, politically and culturally situated (Lankshear & Knobel, 2003; Barton & Hamilton, 1998; Street, 1995). This research sought to disrupt the social, political and cultural positioning of the text to provoke a new way of thinking about it. To further this process, the text is then *translated* to a different medium or materiality (Hayles, 2003). Practically speaking, this might involve quite simple activities like verbalising or visualising a structure of the internet or printing out a hard copy of a social media page for analysis. In this way, digital artefacts and texts are also decontextualised from the discourse in which meaning is normally constructed. Finally, digital and analogue artefacts that subvert typical methods of representation were created. Artefacts spring from thought, but thought can spring from artefacts, so that there is a dynamic interplay between artefacts and cognition. By using different materials to access the same content the aim was to provoke new ideas and thoughts for reflection and analysis. While the provocations were an important component of the research, the reflection they prompted was vital to understanding how the participants made meaning of digital texts.

4.5 Research process

This research aimed to study a representative or typical sample to understand how young people were using digital media in their everyday lives. The participants come from a variety of socioeconomic backgrounds and three different geographic areas around Melbourne. Two of the research sites were school based and the third was a

non-school based youth arts centre. The study had roughly equal numbers of male and female participants (six males and seven females).

4.6 Access and recruitment

The schools and centres invited to participate in the study were chosen for a variety of reasons – their geographic location, the programs offered or the demographics of the young people attending the institution. The first point of contact was a phone call to the principal of the school or director of the arts centre to outline the details of the project. A time was made to visit the principal or director to explain the project in more detail. If they agreed for their institution to participate they were asked to confirm this in a signed letter, which was collected at the next visit. The principal at each school then identified a teacher they thought might be interested in participating. The researcher then made contact with the teacher and, with their consent, organised a time to address the participating class. In the case of the arts centre, the director identified a group of young people she thought would be interested in participating.

For potential participants in the school setting and at the youth arts centre, a 5-10 minute presentation on the study was delivered. The explanatory statement and consent forms were discussed and questions were sought and addressed. The participants were instructed to submit their completed consent forms to their teacher or researcher (whether in person or via university email) (see Appendix 1: Explanatory Statements and Consent Forms).

4.7 Participants

The participants were 13 young people aged 15-19 years at three different sites. The first school, Bankview College, is a government secondary school an hour south east of Melbourne. The six participants (two female and four male) at this setting were from a year 10 media class. The second school, City College, is a private secondary school in inner city Melbourne. The three participants (all female) at this setting were from a year 9 tutorial group. The youth arts centre, Williams Road Collective, is located in outer eastern Melbourne and attracts young people from 12-21 years of age. As well as offering a variety of visual arts programs for young people, it also provides a studio and space for them to practise their art in a supportive and stimulating environment. The four participants (two male and two female) were regular visitors to the studio. One participant at the youth arts centre completed the first provocation, but

then withdrew from the study. The 13 other participants remained for the duration of the research process.

4.8 Data collection

All phases of the research were trialed in a pilot study. Each phase of the pilot study took place between two and four weeks before the research phase, enabling time for reflection upon the process and fine tuning of the research ‘instruments’ (see Appendix 2: Notes from pilot study). For the research proper, data were collected in four phases. A visual artist was employed to help design the provocations and give advice on the materials and resources used. A table summarising what took place at each phase of the study, including the research instruments, data collected and method of analysis can be found in Appendix 3: Summary of the research process. Below is a more detailed description of what took place at each visit:

First phase

1. Online questionnaire with participants

The aim of the online questionnaire administered via the online ‘Qualtrics’ platform was to acquire background information on the participants regarding their use of digital media. It comprised a series of closed and open questions to gather a range of quantitative and qualitative points of data on participants’ digital media use. By establishing a basic picture of digital practices for each participant, later discussions and responses were better contextualised (see Appendix 4: Online questionnaire for participants).

- 2. Online observations:** The participants were asked to connect/friend a social media page set up for the research. This enabled ongoing contact as well as a more continuous picture of social media use. The most common social media site used by participants was observed which, at the time of the study, was Facebook.

3. Provocation 1 – *Mapping digital and non-digital experiences*

The aim of the first provocation was to encourage participants to visually represent their digital networks. This provocation was an individual activity that required participants to map the people they interacted with and the ‘real life’ places they visited in a typical week. They were asked to think about the

role digital mediation played in facilitating these relationships and experiences. They were also asked to trace the digital devices they used onto a transparent piece of paper laid over the map. Materialising their patterns of use in this way encouraged participants to think carefully about their everyday use of digital media (see Appendix 5: Instructions for Provocation 1).

Second phase

1. Provocation 2 – *Visualising the internet*

This provocation aimed to uncover participants' understanding of the structure and function of the internet and, most crucially, how humans fit into it. This involved visualising the structure of the internet and modeling it through analogue materials. At the conclusion of the first visit, participants were asked to suggest the materials they thought they could use for this task. This varied from site to site but typically participants suggested things like wire, pipe cleaners, plasticine, newspaper, paddle pop sticks, cotton wool, foil and other arts and craft materials. In groups of two or three the participants used the various arts and crafts materials to visualise the structure of the internet. Participants presented their models to the group (see Appendix 6: Instructions for Provocation 2).

2. Interview one with individual participants

In the first interview the basic digital practices of the participants were established. Screenshots that the researcher had previously collected from their Facebook pages were also discussed. For example, participants were asked about their profiles, including reasoning behind posts, images and other information. They were also asked about the social relationships and communicative events evident on the pages and links to other pages or groups they associated with. The aim was to develop an understanding of how social media facilitated social relationships, communication and participation.

Participants were also asked about the skills they draw on when using digital media and where they learnt or developed these. The interviews were semi-structured and involved a series of open questions. The reason for using open questions was to allow participants to answer on their own terms, as well as

allow for unforeseen or unexpected answers (Bryman, 2012). Each interview was recorded and transcribed (see Appendix 7: Interview one questions).

Third phase

1. Provocation 3 – *Timelining digital practices*

The aim of this provocation was to develop a temporal picture of participants' digital practices to explore how digital media had influenced their identity, communication and learning *across time*. It involved participants creating a timeline of the main websites and digital applications they had used since their first use of the internet. These were plotted on dot matrix paper with colored conté (hard chalk). They used a coloured line to represent each website and were encouraged to manipulate the line to represent something about their use. For example, if their use of a website greatly increased for a couple of years they might thicken the line through those years. Given the popularity of certain websites, one colour was used to represent these on their timelines (i.e Facebook – blue; Google – green; YouTube – red). This enabled participants to compare and contrast their timelines during the group discussion more easily. They were also asked to identify three moments of significant change on their timelines to do with their identity, learning or communication, which they marked with a black cross (see Appendix 8: Instructions for Provocation 3).

2. Interview two with individual participants

In preparation for this interview, the 'Wayback Machine'²⁷, an internet archive site, was used to collect a screenshot from one of the main websites participants used in their childhood (identified through their timeline). The aim was to use this archived website to take the participants back to their childhood, so they could consider how their digital practices and identities had changed or evolved since then. This activity, in combination with the timeline, aimed to explore the history of participants' digital practices.

²⁷ See: <http://archive.org/web/web.php>

The screenshots used in interview one were digitally filed and brought out for re-examination in interview two. The participants were asked to reflect on how their social media profiles, posts and photos from the last interview shaped their sense of self and social relationships across the intervening months. In this way, the influence of digital media on the process of becoming and participation was explored. As with the first interview, current screenshots from social media pages were also shown and discussed.

In addition, participants were asked what role the school played in developing their digital literacies and how it connected to their out- of school practices. These interview questions were adapted and refined to draw on particular areas of interest for participants (see Appendix 9: Interview two questions).

Fourth phase

1. Provocation 4 – *Re-articulating the icons of the internet*

The aim of this provocation was to explore the semiotics of the icons of the internet. This provocation focused on how meaning is made and re-made through digital symbols and texts. By re-designing these icons it also provoked an interpretive and critical response from participants. (see Appendix 10: Instructions for Provocation 4). Participants were presented with the most common icons of the internet (search, like, friend, link). In groups of two, participants were given some information on one of the icons in order to develop an alternative or critical perspective on it and the purpose it serves in digital networks (see Appendix 11: Information cards for re-articulation). The intention was to encourage participants to think more consciously about the role played by these icons in their everyday digital practices. Bearing their new perspective in mind, participants were asked to individually re-design and re-define the icon. The re-designed icons were presented back to the group for further discussion and analysis. This final group session also involved a collective de-briefing of the project and general research findings

2. Interview three with individual participants

This final interview followed the basic structure of interview two, asking questions about digital media use and identity. In addition, it de-briefed the

participants individually on the project and asked for constructive feedback on the research process. For example, participants were asked to consider the skills they had drawn on throughout the year, and whether the provocations had encouraged them to be more critical or mindful of their digital media use (see Appendix 12: Interview three questions).

3. Exhibition

At the conclusion of the data collection, the researcher spoke with the participants in regard to holding an exhibition of the creative work produced. Participants, principals and teachers received this idea positively so an additional consent form was sent to each participant (see Appendix 13: Consent form for exhibition). Twelve of the 13 young people participated in the exhibition, which was held in the Matheson Library at Monash University (see Appendix 14: Documentation of the exhibition).

4.9 Philosophy of research approach

In this section, the ontological, epistemological and critical underpinnings of the methodology are outlined to articulate the assumptions made about the nature of the social phenomena in question and how they influenced the research design and analysis of findings.

Ontological and epistemological concerns

The ontological framework of any piece of research can be thought of as the presuppositions the researcher has about the existence of, and relationship between, the social actors involved in the study and the cultural and social structures they engage with (Jupp, 2006). As explained in Chapter 1, this study researched the relationship between young people and digital media from a constructionist perspective, meaning that the participants were seen as constructing their social reality through negotiation with, and in response to, the social and cultural structures they encountered (Holstein & Gubrium, 2008; Gergen, 2009). This approach is often contrasted with an objectivist perspective in which external structures and facts are beyond individuals' influence and reach and therefore exist independent to or separate from the participants (Terre Blanche & Durrheim, 2006). A constructionist approach also meant the research was of a more exploratory and inductive nature, rather than seeking to confirm or deny the relevance of particular theories or ideas.

Allied to these ontological justifications, is the researcher's epistemological stance and how they will construct meaning or findings from the research process. As much of the research act is dependent upon the interpretations of the researcher, it is important to develop researcher reflexivity or 'an awareness of the identity, or self, of the researcher within the research process' (Elliot, 2005, p. 153). It is the researcher who is interpreting and constructing meaning through the data, which ultimately means their particular perspective and bias can never be fully erased. Sadler (2002) terms this 'value inertia' (p.125). He asserts this 'can be traced to a particular evaluator's background, knowledge, prior experience, emotional make up, or world view' (p. 125), and has the potential to affect how the data are collected and interpreted. To a large extent, value inertia is unavoidable because it is 'simply the natural characteristics of a person *as a person*' (p. 125). This does not call for an apology but simply an awareness and opportunities for critical reflexivity throughout the research process.

Becoming 'critical'

While the dominant epistemological framework for this research is interpretivist, it is important to note the associated emphasis on a critical approach. The study is concerned with the dialectical process involved in social constructions of experience, particularly in regard to young people and digital media. Given the study's context, there were two aims to this critical epistemology: first, to emphasise the value and agency of human experiences when engaging with digital media, which have been somewhat overshadowed by technological rationality; and second, to explore the linguistic and discursive constructions of power that underpin use (Kincheloe & MacLaren, 2000). In this way, the research aimed not only to identify the ideologies that might constrain or limit individual participants but also, through the research process, encourage a critical and reflexive element to their dialectical engagement with these linguistic and discursive constructions.

The first aspect of this critical approach is to provide a counterpoint to the technological rationalism that underpins society's use of digital media. To explain technological rationality, Feenberg (2010) draws on the notion of reification, which is a process that 'separates the rational form of social objects from their human contents'

(p.1). Objects are seen in light of their affordance or functionality rather than the humanistic or meaningful value they may bring. Technological rationalism becomes an important component of modern society where a key goal is to improve the ‘efficiency’ of systems. The problem, however, is that the impact of technology on human experience is neglected. While the effects of technological rationalism have been mitigated in recent years, it is unlikely to ever be abandoned given its prominent role in the workings of modern society (Feenberg, 2010). Indeed, a re-conceptualised view of critical theory still deems it ‘one of the most oppressive features of contemporary society’ (Kincheloe & MacLaren, 2000, p.282). Feenberg (2002) explains that through technological rationality, ideology and technique intersect to exert control:

The dominant form of technological rationality is neither an ideology (a discursive expression of class interest) nor is it a neutral reflection of natural laws. Rather it stands at the intersection between ideology and technique where the two come together to control human beings and resources in conformity through “technical codes” (p.15).

A critical approach to technology aims to decipher these codes to explore what sort of values and motivations are embedded within them. This thesis adopts a similar approach in that it aims to understand, beyond instrumental means, what kinds of ideas and beliefs young people hold in relation to the technology they use. In this way, the analytical ‘lens’ of the research is focused on the human experience of digital media, rather than on the technology. It considered the way the participants’ sense of self and others were limited, constrained or directed by digital media. This moved the research beyond questions of ‘how’ digital media were used, to the more complex questions of ‘why’ they were used.

The second aspect to this critical epistemology is to explore how ideology and power operate within digital media and other interrelated discourses. There are two important assumptions to make here. The first is that ideologies are neither monolithic nor easily identified in the digital era. Luke (2013, p. 137) describes a far more dynamic situation: ‘The control, ownership and ideological uses of these new [information] flows are volatile and dynamic’. Complicating this further is media

convergence. The densely interconnected nature of digital texts blur and meld boundaries between media making it difficult for individuals to identify whether they are acting as citizens or consumers (Papacharissi, 2010). To understand the way ideology is perpetuated requires grasping the fine detail and connecting it to the broader picture. The second assumption is that individuals are actively engaging and creating their reality through discourse, rather than being passively subject to ideology. Individuals' engagement with digital texts is complex and subject to emotion and affect, which makes rational interpretations more difficult or complicated to adopt (Misson & Morgan, 2006). Further, these emotions are also subject to manipulation in the interests of power. This research aimed to critically unpack the complexity of the individual participants' relationship with language and discourse so that the dominant ideologies might be exposed or uncovered.

This links the current research approach with critical views of language and discourse as not simply representations of the world, but also as serving to construct it (Foucault, 1966/2004; 1969/2002; van Leeuwen, 2005). A critical epistemology seeks to explore how reality is shaped by dominant ideological discourse and the manner in which this affects human experience. Important here is the fact that discourses are not simply 'tight canisters of language' (Misson & Morgan 2006, p.50), but constructs with flexible and permeable boundaries. In *The Archaeology of Knowledge* Foucault (1969/2002) identifies 'discursive fields', 'discursive formations' and 'discursive practices' all connected to a given discourse. This research is concerned with how discourse, through its various means, creates systems of knowledge and leads to discursive practices, or particular ways of engaging with the world (Foucault, 1969/2002). From this perspective, discursive practices can become powerful tools in regulating or dominating individuals due to the fact that they are unconsciously imbibed as a means of participating within that discourse. This study sought to disrupt this unconscious process by deliberately discussing and critiquing the discursive practices associated with digital media throughout the research process.

Adopting a critical approach to the research process helps to identify and analyse the limitations, constraints and concerns that emerge from young people's engagement with digital media. By focusing on how digital media are experienced by individuals in their daily lives, the research aimed to 'speak back' to the technological rationalism

that pervades the way technology is approached by society. Further, a critical epistemology aims to explore how discursive practices in and around digital media are complicit with power and, more importantly, how these structures are experienced and negotiated by young people. Identifying the tactics and strategies the participants drew on in their relationship with digital media not only identifies current critical understandings, but might point to where and how a critical disposition could be forged in the future. This might lead to a more nuanced and relevant critical digital literacy program that is responsive to the needs of young people. In this respect, the ultimate goal is to change or improve current critical digital literacy programs in schools and beyond.

4.10 Establishing credibility

In the present study the interpretations of the researcher were integral to the way meaning was made from the data. As Stake writes: ‘Ultimately, the interpretations of the researcher are likely to be emphasised more than the interpretations of those people studied, but the qualitative case researcher tries to preserve the multiple realities, the different and even contradictory views of what is happening’ (p.12). In a study of this kind data analysis is a complex process of synthesising and interpreting the artefacts and responses of participants, while also reflecting the unique nature of individual responses. Establishing the reliability and validity of these interpretations and understandings is therefore important in assessing the credibility and quality of the research. Lincoln and Guba (1985) propose two core criteria for qualitative research: trustworthiness and authenticity.

4.11 Trustworthiness

As Lincoln and Guba (1985) explain the basic concept of trustworthiness involves the researcher persuading ‘his or her audience (including self) that the findings of an inquiry are worth paying attention to’ or ‘worth taking account of’ (p.289). There are four main criteria used to establish trustworthiness in qualitative research. What follows is a discussion of how the present research addresses these criteria.

Credibility

While there are multiple perspectives on any social phenomena being researched, the insights generated through qualitative studies are essentially the result of researcher interpretation. The credibility of qualitative research is therefore established by

considering whether the researchers' account of the phenomena in question appear feasible to others. The present study achieved this in several ways. First, the research design spanned four stages and involved a year of ongoing contact with the participants. This relatively prolonged engagement enabled a more detailed understanding of individual participants and their digital practices to be constructed through the research process. As this study took a network perspective on young people's digital practices, there are particularities to how individual participants negotiated the various contexts, people and digital devices they encountered. Interpreting such a complex and emergent set of practices was aided with time. It also enabled a more multifaceted and realistic perspective of the research setting; including its culture and the range of people encountered.

With four phases to the research design, analysis of data began immediately after the first phases. Any questions, concerns or misunderstandings that emerged through analysis could therefore be clarified at the next phase of the data collection. In this way, 'member checks' (Lincoln & Guba, 1985, p.314), where participants were asked for feedback on the findings and interpretations of the research, occurred in an ongoing way throughout the data collection period. These clarifications and questions began each group session and also the one-on-one interviews. Finally, at the conclusion of the study there was a debriefing on the process where the results, insights and findings were presented back to participants for their appraisal. This was an opportune time to uncover biases and assumptions on the researcher's part, as well as test out emerging theories and findings.

Transferability

As qualitative research aims for a rich account of the social reality being studied, it tends to focus on the unique contextual factors that underpin the phenomena. This can make transferability of findings to other social settings difficult. As Lincoln and Guba (1985) explain, whether findings 'hold in some other context, or even in the same context at some other time, is an empirical issue' (p.316). Geertz's (1973) notion of 'thick descriptions' helps to contextualise and therefore better understand and interpret the social phenomena in question. As Geertz explains, 'culture is not a power', but 'interworked systems of construable signs' or 'something to which social events, behaviours, institutions, or processes can be causally attributed' (1973, p.13).

For this reason, social practices cannot be divorced from the culture in which they emerge.

Lincoln and Guba (1985) assert that Geertz's concept of thick description is a way of establishing the external validity of the research, as others can judge whether the interpretations and findings being made by the researcher are transferable to other social milieu. In the present study, the digital practices of each individual participant were historically and socially contextualised through the different phases and provocations involved in data collection. Not only were the artefacts created by participants collected and analysed, but the group discussions and one-on-one interviews were also transcribed and examined. Detailed notes were also taken at each stage of the data collection. These notes were consulted during analysis in order to help integrate and understand the various perspectives and interpretations generated. This process culminated in a thick description of the digital practices of each individual participant or 'case' involved in the study.

Dependability

Dependability in qualitative research is similar to reliability in quantitative research, or 'the degree to which a concept is stable' (Bryman, 2012, p.715). Shenton (2004) argues that dependability can be difficult to achieve in qualitative research, as even with the same methods and participants the changing nature of social phenomena mean it is rare that the same results will be achieved. Lincoln and Guba (1985) provide a way forward by stressing the close ties between credibility and dependability, suggesting that in practice demonstrating the former helps in many ways to prove the latter. They argue that dependability can be achieved by using 'overlapping methods' (p.317), such as focus groups and individual interviews. If the same or similar insights are confirmed across methods then this strengthens the dependability of the findings. In the present study overlapping methods of group discussion and one-on-one interviews were used to correlate findings.

Confirmability

Confirmability can be thought of as the degree to which the results can be confirmed or corroborated by others. It is a way of reducing the effect of researcher bias (Shenton, 2004). Confirmability can be achieved in a number of ways including auditing and triangulation. Up to four different sources of data were used to cross

check or triangulate findings in the present study. The study also adopted the process of ‘crystallisation’ (Richardson & St. Pierre, 2005; Ellingson, 2009), which complements triangulation by building a multifaceted ‘picture’ of each participant. Each case study was ‘crystallised’ through multiple points of data and a variety of approaches. Unlike the more rigid structure of the triangle, crystals ‘grow change and alter’ and ‘reflect externalities and refract within themselves’ (Richardson & St. Pierre, 2005, p.934). For this reason, it is important that the research provides ‘more than one way of knowing’ about the phenomena, as well as more than one way of analysing and representing the data (Ellingson, 2009, p.11). In doing this, the research process acts like a crystal in which the multiple perspectives and interpretations are illuminated and refracted. In this way, the reality is always approached as multiple and partial. This research aimed to use a variety of research methods – from artistic and creative representations to semi-structured interviews – so that multiple perspectives on the phenomena in question were generated. Crystallisation offers ‘deep, thickly described, complexly rendered interpretations of meanings about a phenomenon’ (Ellingson, 2009, p.10) and as such fits within a social constructionist approach.

4.12 Authenticity

In addition to trustworthiness, Lincoln and Guba (1985) also put forward the criteria of authenticity to draw attention to the broader impact of the research. Authenticity is concerned with the potential for the research to better the participants’ understanding of their social milieu and, if necessary, engage in steps to change it. The present study draws on Patti Lather’s (1991) notion of ‘catalytic validity’ to develop authenticity. Lather argues that catalytic validity should be an important goal of qualitative research, so that through their participation in the study, the individual participants might better understand how the social and cultural discourses they engage with are constructed, with a view to transforming their future practice. Given the provocative and creative dimension of this research, the study not only aimed to scaffold the critical perspectives of participants, but also model how practices might be transformed through the creation and (re)design of contemporary symbols and artefacts. In addition, with participants’ consent their creative contributions to the research were celebrated through a public exhibition of their artefacts at the researcher’s university. Not only did this acknowledge their contribution to the

research, but it also brought the issues uncovered throughout the study and represented and explored in the creative works, to the attention of the wider public.

4.13 Analysis of data

The aim in analysing the data was twofold. First, it sought to build a ‘picture’ of the digital practices of each participant involved in the study. In particular, it focused on the role digital media played in participants’ identity representation and formation; their communication and relationships with others; and their participation. Second, it sought to explore the critical understandings participants drew on when using digital media, including: their disposition toward digital technologies; their critical capabilities and where these were acquired; and the type of approach participants considered effective in building these capabilities. Particular attention was directed toward the context in which digital practices took place to understand how these related to their wider digital networks. To capture the complexity of each case and to enable comparisons to be drawn across cases, two techniques were employed to analyse the data: narrative analysis and thematic analysis.

Narrative analysis

Narrative analysis is the elicitation and analysis of data that focuses on temporal changes in the participants’ experiences (Elliot, 2005) – in this instance, in their engagement with digital media. In this way, a more detailed, temporal picture of each participant’s digital engagement was identified and developed through repeated analysis of the data. In addition, Provocation 3 – *Timelining digital practices* explored the history of participants’ digital practices from the time of first internet use. This better contextualised the digital practices observed throughout the research period and, for the participants, interrupted the immediacy and continuous flow of their digital media use. Throughout the study, the participants were asked and provoked to tell a story about their relationship to digital media – how they had shaped it and how it had shaped them. Riessman (2008) argues that there are particular types of questions that encourage the individual to story tell. For example, a question like ‘tell me what happened?’ might elicit a storied type of reflection as opposed to ‘when did X happen?’ This type of approach was helpful when encouraging analysis and self-reflection on digital practices, as well as the identification of significant moments in their digital past. As Riessman (2004) explains the benefit of a narrative is that they ‘do not mirror the past, they refract it’, meaning ‘storytellers interpret the past rather

than reproduce it as it was' (p.9). The analysis therefore focused on identifying patterns in how the past and the present were reconstructed and interpreted through the research process.

An analysis of narrative also encourages a broad range of methods for interpreting data were included in the development of the narrative. As Riessman (2008, p. 11) writes: 'Narrative analysis refers to a family of methods for interpreting texts that have in common a storied form'. However, narrative analysis should not be seen as a direct representation of the past. The outcome of the narrative analysis is consolidated through a detailed, written 'picture' of each individual participant in the study. These drew on the participants' responses to the first three provocations, online observations, transcripts from group discussions and one-on-one interviews, and other contextual information collected throughout the research process (see Appendix 15: Sample narrative analysis). These were summarised into a digital biography for each participant, which are presented as results in Chapter 5.

Thematic analysis

To identify patterns and trends across the 13 cases, a thematic analysis of data was also necessary. A thematic analysis is essentially based on coding the data, with a particular interest in identifying themes that relate to the research focus and questions. In the present study, a thematic analysis allowed for more general findings related to young people and their digital practices and literacies. Ryan and Bernard (2003) recommend looking for the following key linguistic and stylistic features during thematic analysis:

- Repetitions or topics that occur again and again
- Indigenous typologies or local expression that are either unfamiliar or used in an unfamiliar way
- Metaphors and analogies or how thoughts and ideas are presented
- Transitions or the way topics shift across transcripts and other materials
- Similarities and differences between the way participants discuss or refer to particular topics

- Linguistic connectors which indicate causal relationships between concepts
- Missing data or what is not mentioned or referred to throughout the research
- Theory related material or using theoretical concepts as a link to the themes that emerge.

(Adapted from Ryan and Bernard 2003, p. 88-94)

A significant aim of the study was to make broader theoretical claims in response to young people, digital media and their critical practices. A thematic analysis adjusted the focus of the study to the ‘bigger’ picture to identify the dominant discourses, texts and artefacts that underpin young people’s digital practices.

The group discussions and one-on-one interviews were transcribed and coded using NVivo. At the first stage of analysis this was carried out in an exploratory way, taking into consideration the emerging themes, research questions and the theoretical framework of the thesis. The analysis then went to a second stage. This followed an iterative process including joint analysis of the creative works and other multimedia data (screenshots, photos etc.) and written text (Pink, 2007). Different combinations of themes and subthemes were trialed to ensure the codes were effective. All artefacts, screenshots and other contextual data were analysed in light of these codes (see Appendix 16: Evidence of coding for thematic analysis). The thematic coding and the narrative analysis formed the basis of results Chapters 6-8.

4.14 Ethical considerations

Prior to commencing, the project was considered by the Monash University Human Research Ethics Committee. The Committee was satisfied that the research design met the requirements of the *National Statement on Ethical Conduct in Human Research* and granted approval (see Appendix 17: Monash University Human Ethics Certificate of Approval). This official approval notwithstanding, there are three further ethical considerations that pertain to the present study. The first is the issue of informed consent. When researching young people gaining voluntary informed consent presents a particular set of challenges for researchers to consider. This was of

significance to the present study as 12 of the participants were under 18 years of age. The second involves ensuring that the research design minimises harm for all participants. The third is ensuring the confidentiality of all participants. Given that digital contexts make the boundaries between public and private increasingly permeable the privacy and confidentiality of participants needed to be managed carefully throughout the research process. What follows is a discussion of these ethical considerations and how these informed the research design.

Gaining informed consent

The British Education Research Association defines voluntary informed consent to be ‘the condition in which participants understand and agree to their participation without any duress, prior to the research getting underway’ (BERA, 2011, p.5). Gaining informed consent is a critical stage in the research process and as Heath, Brooks, Cleaver and Ireland (2009) note, a key strand of ethical research practice across the social sciences. However, given that social research typically takes place in a real-world, non-laboratory setting there are a range of contextual factors that can influence the research outcomes. For this reason Heath et al. (2009) argue that ‘it is questionable whether a researcher is ever able to *genuinely* secure fully informed consent given the difficulties of explaining the exact nature of the research process’ (p.24). This is particularly relevant to the present study given the extended duration of the data generation period, which could potentially increased the contextual factors that could have shaped the research process. To account for this Heath et al. (2009) suggest a method of ‘process consent’, which approaches consent as ‘an ongoing concern within the research process’ (p.25). This means asking participants whether they seek to continue in the study at regular intervals throughout the research. In preparation for each phase of the research in the present study, emails were sent out to each of the participants to confirm whether they wanted to participate in the next phase of the research. The director of the arts centre and the participating teachers were also consulted before each phase of the research. Incorporating this step into the research process meant one participant was able to withdraw from the study after the first provocation without issue.

While each participant completed a consent form, it is difficult to ensure whether they were fully cognisant of what the research involved. This is an issue typically

associated with researching children and young people. Given that all participants were in their mid to late teenage years and were provided with numerous opportunities to question or contribute their thoughts to the research process throughout the study, it can only be assumed that they held a clear understanding of what was involved. In addition, at the conclusion of the group discussions and each interview the next phase of the research was explained carefully. This enabled participants to clarify any confusion or ask questions to ensure they clearly understood the research process.

Another issue in regard to gaining informed consent was whether the young people felt pressured to participate. While there were no incentives offered for participating in the research, the teachers at the two schools and the director at the arts centre were involved in recruitment. The fact that these adults were authority figures to the young people might have meant they felt obliged to participate. To minimise this influence the teachers and director were explicitly reminded not to place any undue pressure on the young people to participate. It was also explained that whether they chose to participate or not had no bearing on their assessment for the subject. This was reiterated numerous times throughout the study.

Minimising harm

In the context of educational research, minimising harm typically relates to managing the risks associated with the study. The Australian Association for Research in Education *Code of Ethics* explains that ‘the risks occurring in the course of the research’ should be ‘no greater than the risks of everyday life’²⁸. The harms that needed to be considered in the present study related to adverse social or psychological consequences that might have arisen from participation. As The Australian Sociological Association explains, researchers ‘should attempt to anticipate and avoid any adverse effects their research may have on participants’²⁹. Given the focus of the study, there is the possibility that sensitive, embarrassing or personal issues might be raised for discussion in the group activities and the one-on-one interviews. This is particularly the case with social media, which is inherently bound up with identity and social relationships. To ensure that these topics were avoided, at the beginning of each

²⁸ See: <http://www.aare.edu.au/pages/aare-code-of-ethics.html>

²⁹ See: https://www.tasa.org.au/wp-content/uploads/2008/12/Ethical-Guidelines_August-2015.pdf

group activity it was made clear that issues of a personal or sensitive nature should be avoided during discussion. The explanatory statements also clearly stated that these issues were not the focus of the study. However, if such issues were raised, the conversation was re-directed or, if necessary, the session stopped. The same precautions applied to the one-on-one interviews.

An important goal of this research was to provoke critical self-reflection amongst the participants in regard to how their digital practices represented and related to their sense of self. Critical self-reflection involves a certain degree of ‘discomfort’ as it requires individuals to consider and analyse their values and beliefs, including how they came to form these in the first place. However, critical self-reflection can become genuinely transformative for the individual and society. While personal, sensitive or embarrassing issues were avoided the activities might have involved a degree of discomfort as the participants were prompted to self-reflect and scrutinise their own digital practices. The discomfort necessary for this transformation carried with it some degree of risk, however, with careful management of group discussion, there was no reason for this to be a *greater* risk than that experienced in everyday life.

The Australian Association for Research in Education also lists ‘missing part of the curriculum’³⁰ as a harm that should be minimised. This has particular relevance in the school-based settings and was addressed in the following ways. At City College the research took place in tutorial, which was a time for doing homework at the end of the day. No new curriculum was delivered in tutorials. At Bankview College, the researcher communicated with the class teacher prior to the visit to ensure that the data collection took place in a class where no new material was delivered. At the arts centre, Williams Road Collective, data collection took place during studio time.

Confidentiality

BERA's ethical guidelines for educational research state that ‘confidential and anonymous treatment of participants’ data is considered the norm’ (BERA, 2011, p.7). As such, researchers should recognise participants’ entitlement to privacy and confidentiality. To account for this, all social media pages, digital artefacts and documents collected throughout the research materials were kept securely in a locked

³⁰ See: <http://www.aare.edu.au/pages/aare-code-of-ethics.html>

filing cabinet in the Education Faculty at Monash University. Each participant was given a pseudonym that was used whenever they were discussed or written about. Pseudonyms were also used for the schools and the youth arts centre. Any details that might identify the research setting have not been revealed.

However, social media presents a 'setting' for research different to face-to-face contexts and introduces new and emerging ethical considerations. As Henderson, Johnson and Auld (2013) explain, social media posts are searchable, meaning despite the use of pseudonyms, quotations that are used in writing up the research can be traced to the individual. There are no easy solutions to this problem, as preserving the integrity of the quotation are essential to accurately interpreting it. In addition, participants themselves are often unsure how to manage the privacy settings of their social media pages, which means their posts are often set to public by default. Bearing these points in mind, when screenshots from social media include photographs of people, faces have been blurred with a 'paint brush' effect and any names or identifying text have been covered. However, as the study aimed for a clear and accurate understanding of digital practices, all posts and quotations are reported in their original form.

The following four chapters present the research findings. The quotes, screenshots and photos presented in these chapters have been chosen because they represent something significant about a participant or because they are indicative or typical to the study group. Given there were over 120,000 words of transcription, the quotes presented are a small but telling sample of the entire words spoken throughout the data generation period.

Chapter 5: Young people's digital biographies

5.1 Introduction

While the idea of the 'digital native' has gained popularity in policy and practice, it has been increasingly dismissed in academic theory. More recent research has demonstrated that young people's digital practices are in fact diverse and divergent (Corrin, Bennett & Lockyer, 2013), as was described in Chapter 2 (see section 2.3). Moreover, it is acknowledged that the experiences that motivate and shape these digital practices are not necessarily made sense of without detailed understandings of individual background and life circumstance. With this need for personal contextualisation in mind, the present chapter explores the digital biographies of the 13 participants, paying particular attention to their socialisation into the digital context and the historical patterns of their engagement. In doing so, the motivations and attitudes that underpin their current digital practices are revealed. Indeed, how digital media are encountered across different contexts, namely home and school, illustrates the digital connections and disconnections in the participants' lives.

The participants in this study came from a range of socio-economic backgrounds and educational experiences. Despite this, certain trends emerged across the group. For example, the early digital experiences of all participants established patterns that played out in their digital practices. As Livingstone, Haddon, Gorzig and Olafsson (2011) found, early experiences with digital media can directly impact how young people are positioned to climb the 'ladder of opportunities' offered by digital technologies. Further, my initial interviews and conversations quickly found participants to be using digital media unevenly across the different aspects of their life (i.e. educational, social and recreational). The motivations and attitudes that underpinned these decisions and practices were analysed to provide a detailed portrait of the divergent levels of digital engagement and attainment in the group.

Organisation of findings and discussion

The chapter is organised into three main sections based on the settings where the research took place: a government secondary school in outer Melbourne; a private secondary school in the centre of Melbourne; and a youth arts centre in outer Melbourne. Collating and analysing the various forms of data enabled the production of a detailed portrait of each participant's digital practices to be drawn. Particular

attention was given to the third of the research provocations – *Timelining digital practices* – to understand and contextualise their practices in terms of the history of their digital lives. The portraits explore the participant’s socialisation into the digital context from an early age, the history of their digital experiences and their digital practices at the time of the study. Some participants reported particular digital experiences as having a significant impact on their attitudes and motivations. These are given greater focus in the portraits.

5.2 Bankview College - a government secondary school in outer Melbourne

Stacey, 15 years

Stacey was introduced to the internet at age nine and started using it at home and school to support her learning. She identified four main websites that she regularly visited in these early years, all of which involved her acquiring information and/or learning. These websites were: Play School; Mathletics; ‘websites of cool maths games’; and Wikipedia. For a basic description of each website mentioned see Appendix 18: List of websites and digital programs. She identified the Play School website as having a particular effect on her learning in that it made her realise she could do things independently: ‘it helped me try and figure out instead of asking people, trying to learn how to do it’ and ‘learn processes’.



Figure 3: Screenshot of the Play School website circa 2007

Not only did Stacey use the Play School website at home, but also at school during recess and lunch. It seemed the website not only helped Stacey develop processes for working things out, but was also a refuge for her when she was being bullied:

At the time I was being bullied quite a bit. For some reason I was always still smiling, my teachers would say and my parents said. I think it was because of that [the Play School website] I always found something to be happy about.

When asked whether she had any of these personality traits today, she answered:

I've always been quite independent from a very young age because it used to be just me and my dad, my mum had to go into the city to work and so it was me taking care of my little brother.

While Stacey had some support from family, friends and teachers in dealing with the bullying, the Play School website helped her to cope and develop strategies to deal with these issues independently. She identified as a very independent learner, who should 'learn to depend on others a bit'.

At the age of 13 Stacey started using Facebook initially to communicate with family. However, 'friending' someone from outside the family was an important moment for Stacey and was marked on her timeline of digital practices: 'Well, when I got Facebook I only had family on it, so when my first friend sent me a Facebook request I was really happy because then I could communicate with others outside of school'. Despite the positive experiences early on in Stacey's use of Facebook, she now described it in a much less enthusiastic way. She saw it as a 'chore' to check Facebook and, was quite dismissive of the type of communication it involved: 'people don't need to be knowing what I'm doing every second of the day, like others'. Stacey discussed being bullied both online and offline a number of times throughout the study, indicating that these events had quite an effect on her. Not surprisingly, Stacey reported feeling no sense of 'belonging' to any of the social media that she used. These experiences appear to have shaped the way Stacey felt about the internet more broadly, as she now claimed: 'I don't see why I really need it'.

Despite this, Stacey's past and current digital practices also included aspects of play and creation. She still regularly played Fashion Design World on Facebook. She also liked to create anime and had downloaded an app through iTunes onto her iPad called

Anime Girl. Indeed these websites along with those focused on education and research were where she derived most pleasure and, perhaps more importantly, were a safe place to retreat to at the first sign of bullying. As she explained, when one of her friends was 'being mean' and 'started going' at her she said, 'I just disappear. Ok let's play Fashion World. I'm not going to listen to you. I'll come back later. I'll just play Fashion World'.

In this way, Stacey might associate her digital practices with both attracting and resisting the peer harassment she had experienced. More positively, Stacey saw herself as 'hardworking' and 'independent'; her use of the internet both reflected and encouraged the development of these qualities.

Simon, 15 years

From his first use of the internet at age six, Simon showed a strong interest in games. The first website that he identified as bringing about significant change in his life was Miniclip, which was introduced to him by his grandfather when he and his sister went to stay with him: 'every time we'd go to his house we'd be playing on the computer and we'd be like what was the name of the game site and search it up'. While his grandfather would not play the games with them, Simon recognised that playing Miniclip was something that he and his sister could do together harmoniously. He explained: 'this would be the only time when we'd *actually* get along'. For Simon these early digital experiences were associated with co-operating with others to have fun. When asked whether he thought his life would be different if he had not found Miniclip, Simon replied, 'Yeah I think my life would have been different. I think maybe I wouldn't be in to many online based games...I just think it would have changed my interests in the kinds of games I play'.

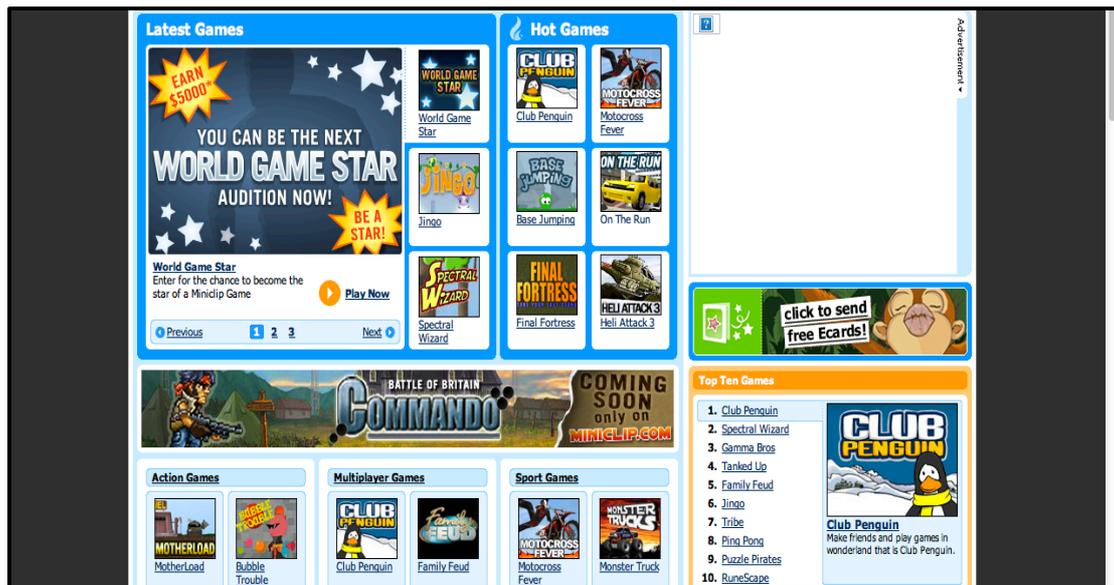


Figure 4: Screenshot of Miniclip homepage circa 2006

Another significant person in Simon’s digital socialisation was an older male cousin. Not only did his cousin introduce him to the gaming platform Steam, but they also ‘played several online games together’ and as Simon explained he can ‘go over and see him more often now’. In this way gaming has been a source of social bonding with family and friends. Simon’s parents, on the other hand, appeared to have had little to do with his digital practices, mainly because as he explained: ‘I’m the only one in my [immediate] family who uses a computer for video games’. However, significantly Simon’s parents did not allow him to use Facebook. This had not really been an issue for Simon given that the majority of his online social practices also took place through Steam.

Unlike other participant responses to provocation number three, Simon represented his use of websites in a graphical form, where the line lifting to the top of the page represented a more intense level of use:

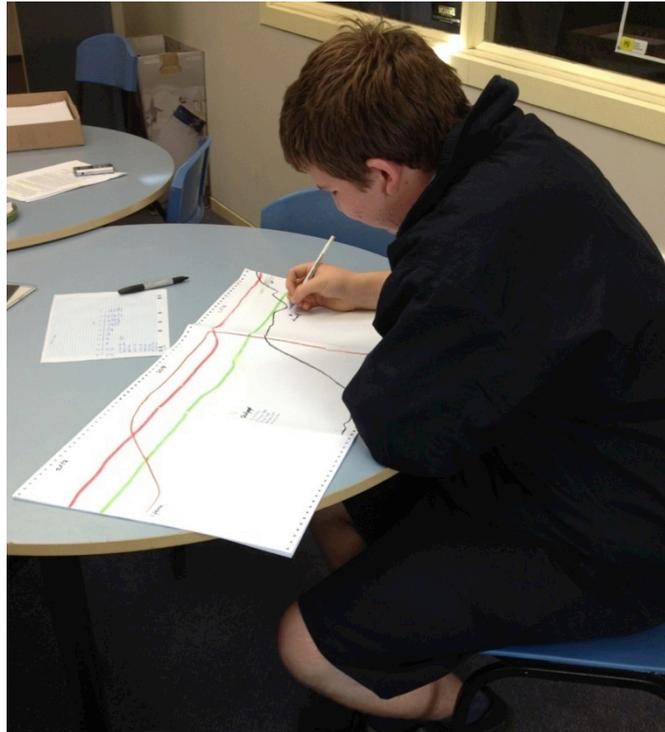


Figure 5: Simon working on his timeline of digital practices

Conversely, the line dropping or dipping represented a decline in use. This visual depiction was a clear representation of the pattern of his digital practices in that when his ‘interests changed’ or he had exhausted the options on a game he started playing another one. In this way, he tended to concentrate his digital practices on one game at a time. For example, Simon played Minecraft consistently for about six months, before moving onto Agame, an online games platform, which focused more strongly on racing and action games. At the beginning of 2013 he started using the gaming platform Steam, which was where the majority of his gaming practices during the data generation period took place. Indeed, Simon’s digital practices were characterised by a series of steps from one gaming website to another, which simultaneously refined and reinforced his interest in games.

Also important to Simon’s more recent digital practices were websites based on videos, like YouTube and Stick Page, a flash animation website where viewers can watch videos, play games and talk to others. While Stick Page used stick figures, the videos often entail violent content and swearing. For Simon however Stick Page became a framework through which he could explore other online and offline experiences: ‘I’d be doing homework or I’d be watching a video, I’d go “I betcha there’s something about this on Stick Page”’. This sentiment was reflected on his

timeline and in his description of Stick Page as the ‘invisible white line that demolishes whatever it goes through’, meaning that the humorous or ironic take presented on Stick Page redefined the way he experienced things in life. Simon’s digital practices followed an ‘all or nothing’ pattern of engagement, where games or sites were visited and played with increasing frequency until he exhausted his options or another site piqued his interest.

Ben, 16 years

Ben was first introduced to the internet at age five by his uncle, who was living with his family at the time:

I was really young when I first got onto the internet because of my uncle. We used to all live in a big house with my grandmother and grandfather because of some issues we’d been having and our uncle was a big tech geek. So yeah he usually had all top of the line computer stuff.

Not only did Ben’s uncle show him the internet and his ‘top of the line’ equipment, but he also made him more aware of critical and technical issues, such as not clicking on online advertisements. Indeed, having a tech ‘expert’ socialise him into the digital context in this way appeared to have influenced Ben’s use of digital media and his self-perception of this. For example, his Steam user name was ‘Maestro’, which not only reflected his musical inclinations, but also expressed a certain confidence in digital spaces.

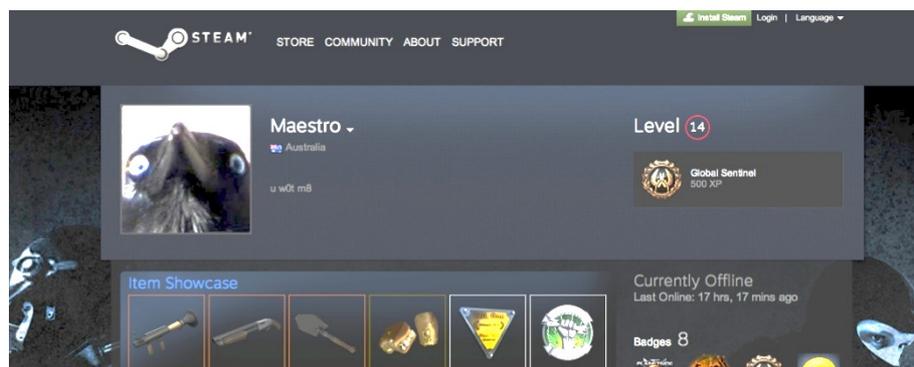


Figure 6: Ben's Steam profile 2014

A striking element of Ben’s timeline produced for the research provocation was the number of lines stretching across several years, suggesting that he was quite consistent and committed in his digital practices. Of the 12 sites represented on his

timeline, six of these were regularly used for more than four years, which, when compared with other participants, was a sustained period of engagement. Most notable were the websites he still used at the time of the study including YouTube, Facebook, Minecraft and Google. Ben felt there were few limitations to what he could do with digital technology particularly when it came to fostering his own creativity:

When I discovered YouTube I saw these people making all these different short clips and I thought I want to do that just for fun. And I've been planning out some different videos that I want to make in the future, so it's getting me a lot more creative.

Ben started using Facebook at the age of 11, but the majority of his posts and activity related to games that he played on the platform like World at War, Halo and Dots. Indeed, Ben did not feel compelled to socialise on Facebook and was not concerned with updating his profile photo: 'I don't really find it a big part of my life to change my Facebook page. I feel like if I wanted to tell something I'd feel better to tell them in person'. He also presented himself as resistant to the social pressures of the platform. For example, when the topic of attention and popularity came up he said:

I think I've got a little bit more confidence I believe than a lot of other people when they go onto social media websites...I don't have a lot of enemies I guess, so if I got onto a social media website, people will be like "Hey you're an idiot!" I don't get that at all. And I've never really gotten that.

Like Simon, Ben used Steam socially, as well as to play games. When playing he used an application called Mumble, an open source voice chat software, which enabled him to communicate with his friends, sometimes socially, but mainly in regard to the game being played.

While Ben did not communicate regularly with his mother and stepfather through social media, he did talk to them about the issues he had encountered. Indeed, Ben needed to be on social media because Facebook was the 'only' way he communicated with his father who lived in the Philippines. Ben's socialisation into the digital context gave him an air of confidence and determination when it came to discussing his digital practices. These were often explained in terms of achieving or working

toward practical goals, such as becoming a film director or communicating with his father.

Rachel, 15 years

Rachel's first experiences of the internet began when she was eight with Club Penguin. Early on her digital practices were guided by her interest in gaming and play, as well as a growing sense of individual creativity. For example, in primary school, Rachel enjoyed 'dress up game' websites where she explained you choose a character and then dress them in clothes and accessories. Like participants Trent and Ben, she occasionally revisited sites that she used in her childhood, but this was more for nostalgic reasons, and not taken seriously: 'It's really silly, it's like a guilty pleasure. I just do it when I'm bored'. Play therefore persisted to some degree in Rachel's digital practices. She occasionally played games online, however, several Facebook posts around the lack of female characters in games suggested she felt marginalised by the overwhelming masculinity of popular games today. Perhaps a more lasting effect of a site like Club Penguin on Rachel's digital practices was that it introduced her to the basics of socialising online.

The bulk of Rachel's digital practices during the data generation period took place on social media sites, namely Facebook and Snapchat. Throughout the study Rachel mentioned several times that she saw the internet and social media as the main way to communicate with people outside school. This was because her mother did not allow her to go out of the house much, so the internet was key to socialising and communicating with her boyfriend and friends. Another benefit to social media was that it was free. As she explained she had often run out of credit on her phone so text messaging her boyfriend was a less dependable form of communication than Facebook. While Facebook was marked on her timeline of digital practices as a significant moment in the development of her social identity, she persisted with this in ambivalent (if not problematic) terms. In 2012 and 2013, Rachel described being 'very into' having 'all these friends and stuff'. However, two years later, Rachel appeared to be more reflective and responsive as to how particular websites and experiences made her feel about herself. In the past she had closed her Tumblr account because she was following too many 'depressing blogs'. Rachel described the

situation as getting ‘out of hand’ to the point where she would ‘feel upset’ and ‘influenced by it’.

Some of Rachel’s most significant digital experiences involved writing websites, most notably Wattpad. She found out about Wattpad through a friend:

I had a friend on Tumblr and he liked to write and he’s like “Do you write online?” Because I had sent him a message and he’s like, “But do you write online?” And I’m like “No I don’t”. He’s like “Well try out Wattpad and see”.

On Wattpad Rachel would upload her writing and then receive feedback and ideas on it from other users. In this way, Rachel saw the internet as expanding her social networks to communicate with people who might have had similar interests. These exchanges were important to Rachel and, at particular times in her life, formed a significant part of her online communication. While the use of these sites had tapered away towards the end of data generation period, in the past she had clearly seen the internet as a key tool in developing her writing skills.



Figure 7: Screenshot of Wattpad homepage circa 2010

Digital media, particularly social media, appeared central to Rachel’s life and identity. As she explained in interview, it not only enabled her to expand the people she communicated with and the topics she was interested in, but also to become a slightly different person from the one people met face-to-face. She explained:

I don't know on social media I'm kind of like very ummm I feel like I'm different...I don't know how to explain it, like I'm very honest and open on social media and kind of am in person as well but...I don't know I never get real opportunities to be honest and open in real life as I am on social media.

How Rachel represented herself online appeared to shape how she came to see herself more broadly. She would like to see herself as a writer, with connections to the wider world and digital media had helped her achieve that. Indeed, for Rachel the internet provided opportunities for her to develop new social and creative identities.

Trent, 16 years

Trent was initiated onto the internet by his father, however, he recalled this as a rather uncomfortable experience: 'I was about eight and I was trying to go onto the Nickleodeon website and my dad misspelt Nickleodeon and it went into this inappropriate website'. Despite this awkward start, Trent's digital practices revolved around gaming. In these early years, he visited several websites quite regularly, including Nickelodeon, Pokemon and Club Penguin. Perhaps the most significant of these early sites was Pokemon, which was introduced to Trent by his cousins. As he explained, 'It was pretty much the start of games for me'. Trent explained that he was 'obsessed' with the Pokemon site and wanted 'to learn about the majority of the Pokemon in there'. Indeed, at the time of data collection gaming still figured strongly in Trent's digital practices. He also liked to revisit the gaming sites he used as a child as he told the group: 'on the weekend they were having this Ninjitsu tournament on Club Penguin'. As Trent explained this was not only because he was 'bored', but also 'to get those pretty good memories back'. These early sites developed a pattern for Trent's digital practices; in his words they 'made me a gamer'.

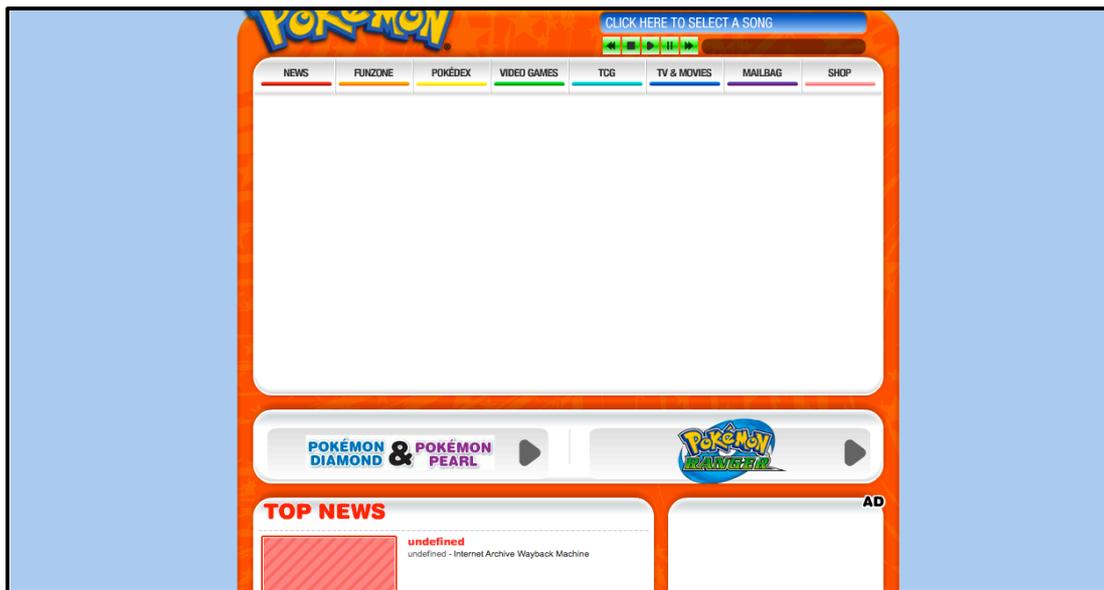


Figure 8: Screenshot of Pokemon homepage circa 2006

Trent first opened a Facebook account in 2010, when he was 12, however, his use had been somewhat problematic over the years. As he explained numerous times in interview and in group discussion, he was bullied frequently in his younger years. Rather than being an escape from such experiences, social media, particularly Facebook, was another context where the bullying took place. While he started using Facebook midway through 2010, he deactivated his account in 2012 for over a year. In 2013 he reactivated his account and found that the bullying had stopped. He marked his ‘return’ to Facebook as a significant moment on his timeline of digital practices. However, these earlier experiences shaped his social media and digital media practices in notable ways. For example, his presence on Facebook could best be described as an onlooker as he liked to ‘sit back and watch things happen’, saying that he could ‘appear and disappear’ when necessary. In many respects, Trent’s ambivalence toward Facebook was evident in his sporadic and hesitant use of the site.

Indeed, Trent appeared to be quite skeptical about the quality of digital relationships and this may well have stemmed from his early Facebook experiences. In reference to Provocation 1 – *Mapping digital and non-digital experiences*, he said: ‘It made me realise how much I kind of use technology and well it made me want to actually kind of...actually talk to people more face to face’. In this quotation, as with other comments made throughout the study, he intimated that online relationships were inherently inferior to those conducted face-to-face. Perhaps compounding this perspective was the fact that until recently Trent had received little guidance on how

to use the internet effectively or even how it worked meaning his digital practices were fairly limited. As he explained: 'I didn't know the internet existed until two years ago. I thought that computers had that built in. I thought they had a little string that's hanging out the window'. At school he had recently taken an elective subject called Information Technology (IT), which, among other things, involved researching social media sites. As a result, he felt that he was becoming more knowledgeable about the way digital media worked.

Aside from Facebook, the majority of Trent's digital practices took place on Steam. In this context he felt anonymous in that only 'friends that did not bully' were aware of his physical identity. Being 'safe' from bullying was perhaps why Trent regularly revisited the gaming sites of his childhood. He was also a frequent visitor to the Reach Foundation website, which is a community organisation dedicated to improving the 'well-being of young people so they can be healthy and resilient' based in Melbourne. Through the 'Reach' website Trent became aware of upcoming events and workshops that appeared to act as a kind of a 'lifeline' for him. This was reflected in his rather infrequent Facebook posts, which were largely to do with activities that he had participated in through Reach. Trent's current digital practices could therefore be characterised as having both protective and personally redemptive qualities.

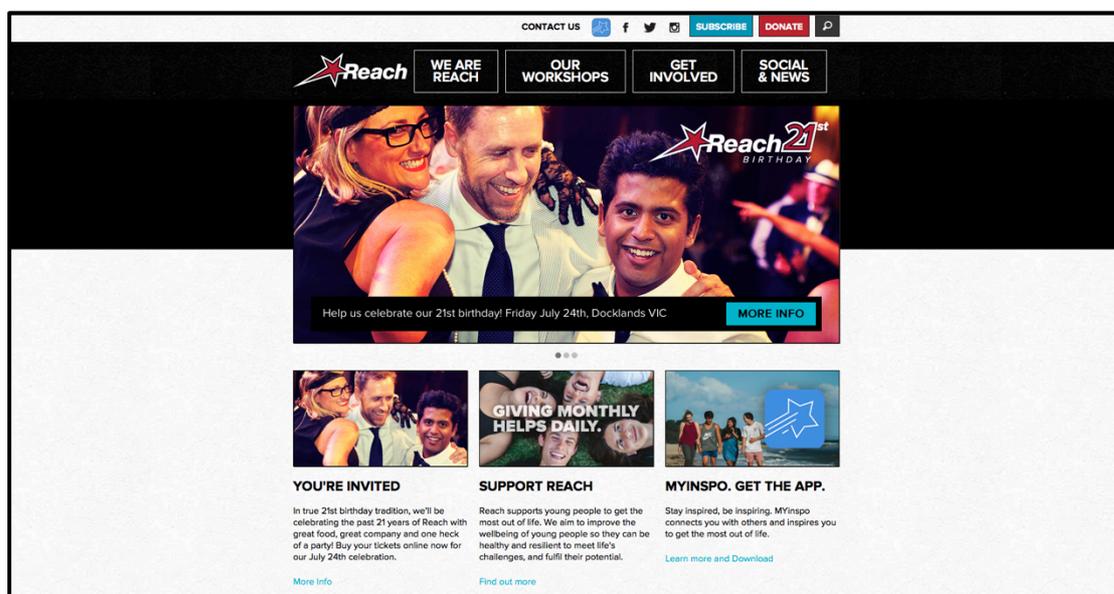


Figure 9: Screenshot of Reach website homepage 2015

Mark, 16 years

Mark first started using the internet in 2005 when he was seven. However, because his family did not have the internet at home, his use was limited to two sites, which he

accessed at school: Google and Wikipedia. Despite the limited range of websites Mark had to choose from, he saw Wikipedia shaping his attitude toward learning and knowledge in a particular way. For example, when asked how Wikipedia benefitted him he said:

I think it's benefitted me in a way where I have the attitude that if I don't know something I have the power to find it myself I don't have to rely on others. So with Wikipedia around I know the bare minimum I can go there and look at things for myself and find out facts that way.

Being able to access information was clearly important to Mark's identity as he came across as an intelligent, independent and highly opinionated person.

The most striking thing about Mark's timeline of digital practices, however, was the burst of colour, almost rainbow like, at the start of 2014. This represented the point at which Mark got full internet access at home, which was clearly an important moment for him: 'ever since 2014 when I had access to all this stuff it was basically like a whole new world for me'. As he explained he 'knew all this stuff existed' but had never had the opportunity to try it out for himself. When it came to his digital skills, Mark saw himself as 'behind' his peers and was attempting to make up for lost time: 'so now it's just trying to like get as much experience as I can and try and catch up while I can'. This means he is online a lot, as he reported 'probably every hour that I'm home...aside from sleeping'. While Mark clearly viewed this in a positive way, he acknowledged, 'my mum would say otherwise'.



Figure 10: Mark working on his timeline of digital practices

Having limited experience of the internet until recently gave Mark a unique perspective on it. As well as being much older than most participants when he started using popular social networking sites like Facebook, his socialisation into the digital space was less gradual than others. Most of the participants first socialised online while playing Club Penguin, before moving across to Facebook. Mark, however, went straight to Facebook. His use of YouTube followed a similar pattern in that he went from infrequent to frequent use in a short time. This pattern of rapid habituation, coupled with his analytical disposition, gave Mark great clarity when it came to assessing the pros and cons of various websites. In regard to Facebook he said:

I thought like well look everyone's got Facebook so I may as well get it. But it's actually, to me it's actually a boring site, it isn't really, there's nothing really major going on with it. It's just... like someone will post something and you'll like it and that's it.

On the other hand he was very fond of YouTube and Google describing them as 'the two powerhouses of the internet'. YouTube was important to Mark not only because he could share videos he had created on the site, but also because it is 'an open community where everyone is allowed to have an opinion and anyone can watch anything basically'.

Indeed, a defining characteristic of Mark's personality was his strong opinions. He had clear and definite ideas of how people should behave and interact on the internet, which he often shared in group discussion. For example, he thought it fine to be anonymous online but it 'depends on what you're doing'. He went on to explain: 'If you're actively commenting on something it should be you'. Mark believed that problems emerge when people 'get confused' with how to behave online and offline, as he said: 'it's hard to translate the two'. This led people to assume that the person had 'changed'. However, Mark might have explained this as not reading the digital context correctly, which he believed was 'structured in a specific way, for specific reasons'. Mark had a very clear and precise way to explain how to behave online, which for many other participants was difficult to articulate.

Mark's digital practices were practically oriented: each act was described as producing tangible outcomes. For example, he used YouTube to upload the videos he and his friends made about video games, he searched on Google to find information and he used the gaming platform Steam for entertainment and if the chance arose, to socialise with friends and strangers. His use of Facebook was far less regular – perhaps because there was not a direct purpose or need for it and he did not seem to be interested in 'surfing' the wider web. This may, in part, have been due to his early socialisation to the digital context, which was somewhat constrained. However, given his practical and direct way of engaging with the world this might also have been an inherent disposition.

5.3 City College – a co-educational private school in Melbourne

Grace, 15 years

Grace first started using the internet when she was five. One of the earliest websites she remembered using was Club Penguin, introduced to her by an older cousin who was 10. Grace's most striking memory of Club Penguin was trying to convince her mum to pay for her to be a 'special member'. Whether or not Grace received a 'special' membership was 'behavior based' and determined by the number of stars she had accrued on a chart. Being a 'special member' lasted for a month at a time and enabled Grace to 'buy more things in the different shops on the website, like little pets and things and outfits'. Grace recounted that she was on the site 'quite regularly and a lot, for long periods of time and for like a good couple of years'. Like many of the

other people with whom Grace was ‘friends’ on Club Penguin, the relationship with her cousin continued onto other social media websites as they outgrew Club Penguin.



Figure 11: Screenshot of Club Penguin homepage circa 2007

Grace recognised Club Penguin as not only shaping her interest and confidence in online communication, but also helping her to develop norms around her use. For example, when asked what she enjoyed most about the site, Grace replied: ‘probably like going on it and talking to other people that I knew, so we’d plan a time to meet up in one of the worlds or something on it’. At the same time it helped her to develop a set of norms around online communication in a safe and supportive environment:

Well I suppose it kind of teaches you how to speak to people online, not that you don’t know, but it has words, like you can’t say certain things on it. So it sort of stops you from doing things and then I don’t know it teaches you that’s not an ok thing to say to someone.

Club Penguin also developed Grace’s interest in costuming and clothes, as she said: ‘I always enjoyed the costumes and stuff...I enjoy dressing myself now rather than the penguin’. In this way Grace’s early digital practices shaped the interests that she pursued in the offline world, as well as the patterns of digital engagement observed during the data generation period.

Grace’s digital practices at the time of data collection were directed toward learning and social networking. Of the 10 websites depicted on her timeline of digital practices

six were social in nature and four of for learning. Grace still used four of the social media platforms represented including: Instagram, which she first started using in 2010; Facebook from 2011; Tumblr from 2013; and Snapchat from the start of 2011. Once she signed up to these sites there was a fairly consistent level of use, most of which involved a presentation of self to peers.

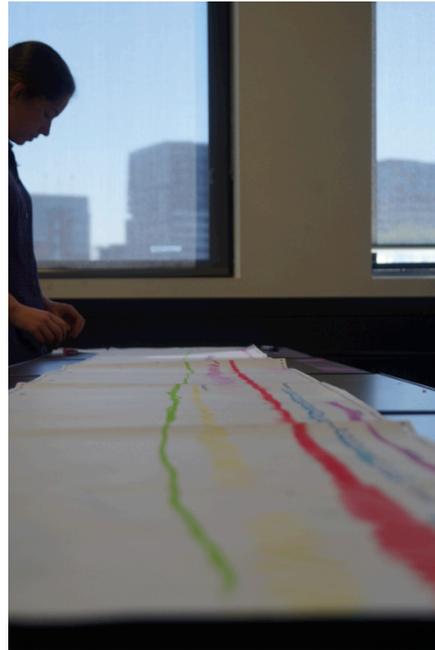


Figure 12: Grace working on her timeline of digital practices

While Grace continued to play online english and maths games, she identified the introduction of school email in year seven as a significant moment in her education. She felt email gave her greater agency and control over her learning by improving communication between teacher and student: ‘it lets our teachers let us know if they’re not going to be there and what to do and give us Powerpoints and stuff so we can revise, and the homework and the worksheets and stuff on our laptops, so it’s kind of helpful’. Despite the high number of social media platforms on her timeline, two of the three significant moments Grace identified were to do with learning. For Grace, as with other participants, school was a domain in which she was introduced to various websites and digital practices, either socially through friends or academically through teachers. As such, a significant proportion of her digital practices were directed toward educational outcomes.

Penny, 15 years

Penny was introduced to the internet when she was four years old. She was so young at the time that she could not remember the name of the first website she used only that she called it 'Tut Tut'. In the early years Penny's digital practices were mainly to do with playing games online. Like several other participants, one of the first websites Penny consistently used was Club Penguin. While Club Penguin gave Penny 'something to do' it also taught her to make decisions around buying clothes and decorations:

You had to decide what you wanted to buy and then you got to play the little mini games and you could talk to people, you could dress up. I liked dressing up my penguin and decorating.

Penny identified clear links between these early digital practices and what she liked doing as she said: 'I like interior design and I *loved* decorating my igloo and making it look good'. In this way the website both informed and developed her interests. In a similar way to Grace, Club Penguin also introduced her to the norms of online communication. In the beginning her mum had placed a parental lock on the social functions of the site, however, 'after a while' she was allowed to have it in 'talking' mode. As Penny explained she could then organise to meet up inside the virtual world: 'I would talk to my friends and be like "Hey let's go play ninjajitsu" or whatever it's called and then we'd go play each other'.

Another significant moment in Penny's digital socialisation was playing FarmVille, a farming simulation social networking game. She found out about FarmVille through friends and quickly wanted to join in: 'I think everyone was probably playing it and I would have been like, "Yeah, I'm going to play that too!"' Penny's game playing soon developed a social aspect, so that her digital practices began to overlap with her face-to-face relationships:

It's like FarmVille, you can visit your neighbour farms and you're like "How'd you do this?"... So we'd call each other and be like "Let's go on FarmVille" or whatever and we'd log on at the same time.

Penny identified a similarity between the social networking practices established through FarmVille and what takes place on Facebook, as she said: ‘They’re not *that* different...like you can talk to people like we talked to them and you can go play different games, so I guess it’s quite similar’.



Figure 13: Screenshot of Farmville website circa 2009

Penny’s early experiences playing simulation and social networking games formed a pattern that continued. During the data generation period the bulk of her digital practices took place on social media. These early experiences meant that the transition to ‘grown up’ social networking sites like Facebook was simply the next step in her digital life. Indeed, the processes and practices of Facebook did not seem unfamiliar to her even though she was only 10 when she signed up. As with Club Penguin, she had experienced a gradual introduction to the social aspects of the site. Initially, Penny’s engagement with Facebook involved playing games and communicating with family members who lived interstate. However, Penny’s social media practices continued to increase over time. At the time of the study she was on four social media platforms: Facebook; Instagram; Tumblr and Snapchat.

Education-related practices formed only a small feature of Penny’s digital biography. She used the Mathletics website for about four years and had more recently turned to the Khan Academy to view lectures on topics that she was having difficulty understanding. Beyond researching and emailing teachers, her digital practices were mainly to do with socialising rather than learning. This was reflected in the use of her

many digital devices, which included an iPhone, iPad, iPad mini, iPod, school issued laptop, Macbook and a home computer. As she explained, her most trusted device was her iPhone, which she had on 'all the time'. Despite the multitude of screens to choose from she mainly used her school issued laptop for schoolwork, while 'watching TV shows or Facebook or *anything* I use the Mac rather than the school laptop'. The main education related to digital media Penny had experienced was in regard to cybersafety, so there was little encouragement to expand her skills beyond those that she already practised. While Penny's digital socialisation occurred from an early age, her practices have not ventured far beyond social media; she described herself as a 'consumer' of digital content rather than a creator.

Maddy, 15 years

Maddy was introduced to the internet at school when she was around eight to play english and maths games. However, she quickly developed her own interests, which were, in part, informed by her friends' digital practices. For example, one of the first websites that Maddy chose to use was Club Penguin, which was introduced to her by one of her friends. While Maddy would mainly play Club Penguin at home, she was allowed to play at school 'now and then' or if she had 'free time'. Maddy did not attribute much learning to the Club Penguin site, suggesting her participation was 'purely fun'. Like other participants the social aspect of the site was the most attractive feature and meant that she could 'hang out' with friends when at home. As she explained, 'when you get home you go on it and then it's like if you're on it [you would say] just go to the igloo or something'. In these early years Maddy also played Moshi Monsters, a website where users adopt and care for a monster.



Figure 14: Screenshot of Moshi Monsters homepage circa 2009

While gaming was predominant in Maddy’s early digital practices, this was steadily usurped by social networking. However, Maddy’s path into social media, like Penny, was through gaming. She first signed up to Facebook when she was nine to play games and communicate with her family who lived interstate. However, for her to join she had to have her parents as Facebook friends. In more recent years, Maddy no longer playing games and at the second interview said that she would much rather socialise on Facebook than anything else. As with other City College participants, Maddy was on four ‘standard’ social media platforms: Facebook; Instagram; Tumblr; and Snapchat. However, despite her commitment to social networking there was some uncertainty about her practices. She said that she used to post a lot more comments before when she ‘didn’t know [how to do it]’, but when her brother, who was four years older than her, told her ‘you post too much on Facebook’, she limited her posts.

Maddy appeared underwhelmed by the opportunities for digital learning she had encountered throughout her education. In primary school, after learning how to play maths and english games she said that it was ‘just the same kind of thing just over and over again on different sites’. When it came to researching she said that she had picked up little in her secondary school apart from ‘don’t use Wikipedia...if you use it, find other resources as well’. While she did identify school email as a significant

support to her learning, the main thing she had learnt at school in regard to her use of digital media was cybersafety. However, Maddy found this aspect of school technology negative and repetitive: ‘They kind of just say what not to do, like bad things and then they don’t say anything else’. While Maddy had been using the internet for a significant amount of time, she had had few opportunities to expand her range of digital skills. For this reason her digital practices were motivated by the same reasons and achieved similar outcomes as they did when she was a child.

5.4 Williams Road Collective – a youth arts centre in outer eastern Melbourne

Sean, 19 years

Sean first started using the internet when he was eight. At this time he did not have the internet at home, so it was at school that he first learnt how to search things online: ‘originally it was school ... looking up things that I didn’t know and stuff like that’. Also at school he was introduced to online games. In maths, for example, online games were used as a reward if students finished their work early. This was an effective incentive as Sean explained: ‘It just made me finish really quickly so I could play maths games!’ When Sean did get the internet at home it was a dial up connection so ‘we didn’t really do anything’, however, he was able to play free ‘flash’ games as they did not require large downloads to play. His parents have had little to do with Sean’s internet use. As he described it he was ‘fairly free to do what I wanted’. As such, Sean quickly became ‘more internet savvy and more computer savvy’ than his parents.

As with many other participants, Sean’s early digital experiences initiated a pattern that became indicative of his practices at the time of the study. When asked whether he had expanded his range of digital practices, he answered: ‘I think it’s expanded, but it still follows the same general principle, like I’m looking up things I want to know about’. For example, in his early use of the internet, Sean developed his interest in visual art by looking up drawing videos on YouTube or a ‘website that talks about techniques’. In Sean’s case, technology enabled him to develop his painting and drawing skills, which he reflected upon when creating his timeline of digital practices. He took an interpretive approach to this research provocation and drew a series of

interconnected coloured ‘vines’ (red to represent YouTube, blue to represent Facebook and green to represent Google). On the vines he drew ‘bumpy bits’ that in Sean’s words represented the ‘fruits of my searches’. As he explained the ‘fruit’ represented things he had ‘really liked and they’ve developed into a “keep” sort of’. In this way, Sean’s digital practices cultivated a ‘fruit’ in the form of his painting and drawing skills.

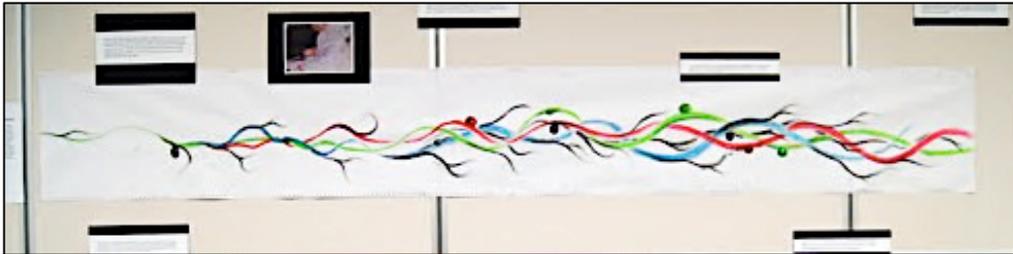


Figure 15: Sean's timeline of digital practices in the 'Becoming Digital' exhibition

Sean’s experiences of digital media at school were mixed. While primary school was important in introducing him to searching skills and gaming, the first secondary school he attended offered little beyond learning how to use Powerpoint. As he explained, ‘it was very basic’. When he left for an arts school in year 10 he was shown how to use Photoshop, a photo editing software program, as part of the elective subject Media. At the same school cybersafety classes were optional. Sean saw little need for classes on digital media or the internet because at his new school ‘everyone seemed to know everything’ already.

Sean started using social media at 13 when he signed up to Facebook. Describing himself as shy, Sean was drawn to the physical and temporal distance of social media, however, over the course of the study, the attraction of social media, particularly Facebook, had worn off. During the initial research meetings Sean described social media as ‘very important’ because the friends that he made at high school were ‘so far away’, making it difficult to see them in person. Yet by the end of the study his use of Facebook had decreased significantly. He described this in positive terms saying that life was ‘less stressful’, even though he acknowledged that ‘he missed invitations for things or emails’. Sean appeared to be far more critical of social media toward the end of the study, actively resisting the pressure to be online all the time. That said, Sean was already a fairly critical user of digital media having installed Adblock, a virus

protection system and other security measures on his computer. However, during the study he had begun to view the upkeep of social media as an unnecessary demand on his time and, as such, was becoming an increasingly discerning user. Sean's digital practices could be characterised as oriented toward achieving tangible and practical outcomes, rather than simply 'hanging out' online.

Dylan, 16 years

Dylan started using the internet in 2006 when he was eight. From a young age he was fascinated by what the internet was and asked his parents about it:

I was asking what is this thing that I am looking at right now, it's very exciting to me. And there was a whole bunch of other stuff there – it's got games and search bars and stuff like that. How are all these linked together?

Dylan's parents explained some of the basic principles and then he 'slowly started searching things out'. Of all the participants Dylan seemed the most inclined to search for things beyond his immediate frame of reference, particularly after a couple of years of internet use. By the age of 12, with 'a little understanding of how the internet goes', Dylan would think to himself 'I'll check out what's cool in here' and explore various websites.

Early in his digital experiences, his parents introduced him to Club Penguin, which he used consistently for about two years. Like Grace, Dylan also pressured his mum to buy him a membership. As he explained, the membership meant he could afford to dress up his penguin: 'I was rocking the pink bat and the blue baseball caps'. Dylan explained that the games and objectives on the site helped him to develop his 'motor skills'. However, like other participants, Club Penguin also introduced him to the basics of online communication. This certainly figures as a key moment for Dylan because he displayed a well-developed social media literacy. He had over 4000 friends on Instagram and well over 1000 friends on Facebook. However, he identified Club Penguin as where these practices started: 'On Club Penguin that's when you first start and then you just slowly kind of figure out how to talk to someone online'.

Dylan did not often use email and had few experiences with digital media at school to speak of. He received emails from only one of his teachers, an environmental studies

teacher, who would email him ‘presentations and word documents that she’d created’. The only time his digital media practices really intersected with school learning was when he tried to use more formal language when making an ‘opinionated’ status on Facebook to ‘dress it up’ and appear more credible. Even though Dylan used Photoshop at school he was never taught formally how to use it. As he explained: ‘if I wanted to know something [about Photoshop] I would go back onto YouTube and discover more stuff about it’. In fact, YouTube appeared to be the main way he used digital media to support his learning. ‘If I want to find formulas, or math equations, or history stuff that interests me I just go on YouTube and type it up and it’s there’.

The majority of Dylan’s digital practices during the data generation period took place on social media. However, his social media practices were often to do with planning and organising his non-digital experiences, which might involve a social outing or a trip to a particular place to take photographs. This was reflected in Dylan’s map of digital and non-digital practices created for research provocation one, which captured the way his digital and non-digital tools were used to facilitate his interests and hobbies. Of the non-digital side he said: ‘I’ve got my camera, my bag and my Myki’ (travel card) which he used when he was ‘outside’ and ‘journeying’. While it could be argued that several of the devices on the non-digital side had digital components (i.e. camera and Myki card), it was significant that Dylan did not think about them in this way. To Dylan, a digital device enabled access to the internet. Dylan’s non-digital experiences were related to physical movement, discovery and creative documentation through photography. On the digital side he thought of himself ‘planning what I’m doing...so I’ve drawn a laptop bag’. As he explained, his main use of Facebook was to ‘communicate events and stuff’ so it was used ‘for weekends’ and to find out venues for gigs and other parties and events. Using computers was also a way of connecting with friends online as well as face-to-face: ‘I take my laptop with me and we all sit down and do online stuff there, so it’s kind of like a connection, but it’s also a case of friend connections’. Online Dylan came across as quite extroverted. This contrasted with the shy and softly spoken way Dylan presented in person.



Figure 16: Dylan's map of digital and non-digital experiences

Chantelle, 16 years

Chantelle first started using the internet at age nine. Given her intermittent use of digital media across the years it would be fair to characterise these as a series of episodes, rather than a set of practices. This was perhaps due to the fact that Chantelle's use of the internet tended to be purpose driven. Unlike other participants, who described themselves as influenced by what their peers were doing, Chantelle's choice to use a particular website was determined by how it would help her to learn or present her work in a better way. The first significant website she recalled using was Google Images. While her school friends introduced her to the website, it was the quality of the images that convinced Chantelle to start using it herself: 'Seeing the quality of work that they were giving out and the visualness of it and it was like...I want to step up a little'. While she did try other websites targeted at developing early literacy and numeracy skills, like Club Penguin and Mathletics, she explained these were not 'very big for me' so they were not represented on her timeline of digital practices for research provocation number three. Indeed, it was the possibility of what Google Images offered Chantelle and the ease of access that drew her to it: 'It was easy access to images from anything. If I needed just some obscure image of something I didn't have to go travelling half way around the planet to get a picture of it...there it was'. As she identified as a visual learner her use of Google Images helped her to develop this aspect of her identity.

An influential person in Chantelle's use of digital media was her father, a web designer. Contrary to what might be assumed, however, her dad was skeptical of most

digital media, which meant that he kept a close eye on Chantelle's online activities. As with most of her digital encounters Chantelle needed approval from him before using Google Images and for this to occur there needed to be a legitimate reason for her use: 'I remember saying to my dad something about not being able to just cut pictures out of books that I sort of needed to do it. He was like "OK yeah"'. But as with many of the other participants these early experience set a pattern for her future use of digital media. For instance, several years ago her father prevented her from using Facebook, but by the time she was allowed to use it she was no longer interested: 'when I was younger it was, "Oh no, you're not getting on Facebook!" Now I have the option and it's just I don't want to'. Indeed, she chose not to join any social media platforms and her digital experiences all had a functional quality to them, like Wikipedia, Microsoft Office, Photoshop and email. She had learnt how to use several of these at school. For example, she regularly used Photoshop in the elective subject Studio Arts.

Given Chantelle's habituation into digital media it was perhaps not surprising that there were few social aspects to her use. She only sent emails to communicate with others and this was primarily for work and school-related issues and not to communicate with friends. In one of the later interviews, when I asked her whether any of her digital practices had changed since I had last seen her she replied, 'I emailed a friend once cos I couldn't get in touch with him over the phone'. Even adults around her were encouraging her to start using the internet to communicate with others more frequently: 'And my parents are pushing me to use it for contacting my grandparents as well, so I'll probably be starting to do that.' However, Chantelle did not appear to be intrinsically motivated to use the internet for any social purpose.

Chantelle had a negative opinion of the effect that social media had on her friends' social lives. While she admitted that she missed out on things because she was not on Facebook, she believed that she was 'a lot happier than a lot of my friends because there are a lot of dramas that are also referenced to Facebook'. However, making this decision was not without a social 'cost'. Chantelle recalls being asked: "'What kind of life do you have? You don't have Facebook?'" However, she felt she was more engaged with the world, when she described a typical school excursion:

It's like we'll be going on a school excursion to the middle of nowhere and they're all (mimics staring at a phone)...doing that. Well I'm looking outside, seeing what it's like and it's just you know...It's like life!

Chantelle appeared confident in her choice not to use social media, however, she acknowledged that in the future she might need to change things. She wanted to work in the performing arts and believed that having some kind of social media presence would be necessary to achieving this goal. Following the pattern of digital media, it seemed reasonable to assume that any changes to her practices would be carefully considered and crafted to fulfill a particular purpose.

Heidi, 16 years

Heidi was introduced to the internet at age nine, with most of the early websites she used introduced to her at school. Indeed, Heidi acknowledged that school 'opened up' the internet for her and was significant in shaping her early practices. As a child her time at home was spent 'out and, you know, in the street'; in this way she 'didn't spend a lot of time on computers until I got to high school'. In this way, her practices showed a steady progression across time that coincided with, and perhaps helped facilitate, the various aspects of her adolescent life – including education, entertainment and socialising with friends. This was reflected in her timeline of digital practices, which revealed that the range of websites used, along with the time spent online steadily increased. She admitted she was so 'reliant' on the internet that if she were to go without it for a few days she would 'really suffer'.

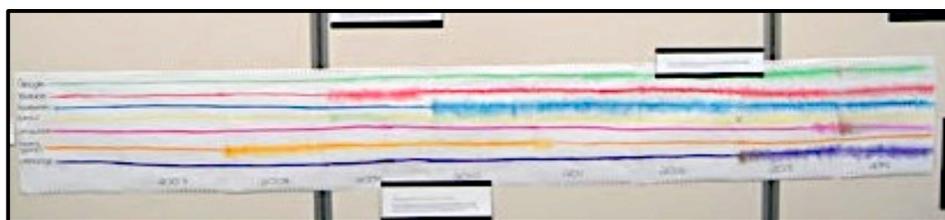


Figure 17: Heidi's timeline of digital practices in the 'Becoming Digital' exhibition

At the 'end of primary school' she played online maths games, which were introduced to her at school. This was when they had 'free time' after finishing work: [so you would] 'see people playing the game and you'd go, "Oh where'd you get that from?"' She would then play the same games at home where she would 'really go into it

more'. Heidi described these early maths games as 'really addictive', with everyone 'trying to compete to get the highest one'. However, they had 'nothing to do with maths', as the attraction was a particular games section on the site. She described her use of these websites as more about joining in with friends than anything that was personally significant or purposeful: 'That's what I would go onto the internet to do, but it wasn't necessarily quite significant'. At this early age it appeared that she did not actively pursue particular digital experiences but was instead influenced by seeing what those around her were doing. These early experiences were indicative of the way Heidi's later practices were adopted in an almost 'contagious' way through friends. For instance, later in the group discussion when asked what factors might cause her digital practices to change, Heidi answered: 'Friends cos like if your friends all got something then you're going to get it too to talk to them'.

It is perhaps not surprising that the bulk of Heidi's digital practices during the research period had the purpose of socialising with others. Of the six main websites she identified on her timeline of digital practices four were socially oriented and included Snapchat, Facebook and iMessage. Indeed, once Heidi signed up for a particular site her use stayed fairly constant over time. After she started using Snapchat she said: 'I've just constantly used it since', so that a critical point in her use of any website was simply access. Facebook provided Heidi with a time and place to meet up with friends:

It's kind of like a downtime thing of having a laugh...it's like a recess sort of thing. So you go out and you have a laugh with your mates you talk about this you talk about that and that's exactly what I do on Facebook.

She tried to avoid the 'bitchy side of Facebook' and remain disconnected from the 'whole negative side' of it. Her main purpose in using Facebook was 'to have a laugh and talk to people and catch up yeah and keep in contact'.

Apart from her social practices, Heidi saw digital media as a support for her learning. In particular, she used school email to facilitate her learning and education. She explained:

When I started doing year 10 and VCE stuff ... I used it every single day. It's how I get work to teachers and they give it to me ... if it wasn't around I don't know what I would actually do.

Despite relying on computers to support certain aspects of her learning, in some instances she believed traditional processes and tools were more effective. When someone suggested that in the future education might be online, she said that she would not like it because there were benefits of classes: 'You're not talking to a computer, it's like you're talking to an actual human'. She also chose to handwrite rather than type notes: 'It's like I find people are doing everything on computers now, I still like writing things down in books'. The way in which Heidi used digital media to support her learning was very specific, due to both her personal choice and the few opportunities offered at school.

5.5 Conclusions

In introducing these young people a number of recurring influences and issues emerge that merit more detailed analyses. First, many participants' digital biographies involved socialisation into three broad areas of practice: information and content seeking; communication; and presentation of self. These areas of practice intersected and overlapped in the variety of digital contexts participants experienced. In addition they were often rehearsed and developed alongside other digital practices, such as gaming or watching YouTube clips. Exploring participants' digital biographies also demonstrated the lasting influence of early practices in establishing future patterns of engagement. For many participants the first websites they used were like an initial stepping stone on a 'path' of websites that developed similar digital practices (i.e. Club Penguin to Facebook). Adding to this set of practices often required the influence of a significant other or an educational intervention. The process of socialisation also took place across a variety of sites.

School was a significant site in introducing participants to several digital practices. For two participants, classroom teachers had used computer games as a reward for finishing work. In other instances, participants saw their friends playing computer games at school and wanted to do the same. School was also where many participants were introduced to the practice of information and content seeking. In their early years, Wikipedia was an important site for most participants to find out about the

world, however by secondary school Wikipedia was discouraged or simply used as a starting point for finding more credible sources. With digital practices already fairly well established, three participants reported secondary school programs as doing little to expand or further develop their skill set. Cybersafety education was the main form of digital media education that took place in these years. As the most frequently used sites were banned at school (i.e. Facebook and YouTube), most participants had come to see the school site as digitally disconnected or at least different from other sites encountered in their everyday life.

Digital socialisation also took place at home most typically when a significant other introduced or, in the case of parents, allowed a new digital practice. Six participants were introduced to social networking at home before the age of 10 through the Club Penguin website. With restrictions and protocols on language use and behaviour, parents possibly felt that Club Penguin was a safe site for children to use unsupervised. Once habituated, these early digital practices shaped participants' patterns of digital engagement. Indeed, many websites were common across the group, suggesting that there were similarities in the ways participants were socialised into the digital context. Four of the six boys came to online communication via gaming platforms, in particular Miniclip, Nickelodeon and Pokemon. Girls often learnt about online communication through sites like Club Penguin and Farmville, however, for Penny, Maddy and Rachel social networking quickly superseded any gaming practices that might have taken place on these sites. Nevertheless, these early sites played a significant role in participant's digital socialisation, which explains why three participants returned to visit the websites of their childhood quite regularly.

Also figuring prominently in participants' digital biographies was the role of significant others, such as siblings and extended family members, and, to a lesser extent, parents. For Trent, Grace, Penny, Simon and Maddy, older cousins were influential in that they either introduced them to a website (i.e. Steam or Club Penguin) or encouraged them to communicate with them on social media (i.e. Facebook). These seemingly everyday instances were shown to expand participants' digital practices and help them develop confidence in the digital context. Older male relatives were also significant in showing participants how to do the 'right thing' online. Maddy changed the way she presented herself on social media when her

brother told her she posted too much on Facebook. Ben's uncle was also influential in shaping not only his information and content seeking practices, but also the way Ben saw and described himself in relation to digital technologies (i.e. as a savvy or critical user). Parents figured less prominently in participants' digital biographies, but for several, particularly Chantelle, Grace, Maddy and Penny, the parental role was one of gatekeeping or overseeing, to ensure their child was 'safe' online.

Chapter 6: Young people's digital dispositions

6.1 Introduction

Having discussed the participants' digital biographies, the aim of this chapter is to identify and explore what these young people knew and believed about the internet and digital media and how they came to these digital dispositions. This chapter focuses on the tendency for individuals to think about and engage with digital media in particular, sometimes pre-determined, ways. The data showed that participants usually held clear, well-established understandings that guided their practices of identity representation, communication and civic participation. These understandings also shaped their ways of making meaning in, and of, digital media.

Their dispositions were formed through engagement and interaction with a range of resources. When it came to online safety and privacy, school-based programs were clearly influential. However, norms around online behavior and communication were acquired in a rather *ad hoc* manner, often picked up through friends and peers or by trial and error. Similarly, when participants were asked about how the internet was structured or more critical aspects of digital media use, their knowledge was often derived from popular media or, in the case of one participant, learnt through using the internet itself. Analysing the visual data demonstrated perhaps not surprisingly that participants relied heavily on metaphors – sometimes involving nature or magic – to conceptualise the internet, while more technical or formal knowledge was absent. Despite the rather eclectic way these general digital dispositions were cultivated, in some instances participants held quite complex and critical readings of specific digital texts.

Organisation of findings and discussion

The first section of this chapter examines how the participants positioned themselves in relation to 'the digital'. Despite demonstrating a diverse array of practices, the 'digital native' (Prensky 2001a; 2001b) was a self-defining concept adopted by many participants. Indeed, the idea of the 'digital native' shaped participants' characterisation of others, namely adults, as both outsiders and novices when it came to digital media. The second section explores norms around use, including the often unspoken personal protocols that directed individual practices. Associated with this was the ongoing tension between risk and safety that participants worked through

when using digital technologies. This is discussed in the third section of the chapter. Participants drew on the cybersafety discourse to negotiate and shape this disposition, playing off commonly recognised ‘safe’ digital practices with the need to be seen and remembered on social media. The final section looks at the participants’ understandings of the architecture of the internet and issues of governance and provenance. It examines where their understandings came from and how these influenced their dispositions.

6.2 Young people and the label of the ‘digital native’

In explaining their digital practices or how they arrived at particular understandings, participants would often invoke the idea of the ‘digital native’ (Prensky 2001a; 2001b). They used the concept in two connected, but slightly different ways. The first was that having been around technology since they were born meant they had an inherent or intuitive understanding of it. As Ben put it: ‘We were born into it’, while Sean explained: ‘Generally most people that I know and most young people are very much adept at computers from a very young age, because they were raised around them’. The second was an extension of the first, contending that their ‘generation’ was more inclined to experiment and adapt to digital technologies, because they were more confident in their use. As Trent said: ‘It’s our generation too – we adapt’, while in Grace’s view, young people’s disposition towards digital technology means they are more inclined to try things out:

I think the problem with older people, who don’t know how to use it, is they don’t want to try things, because they think they’re going to break it. Whereas we would just click things and work it out ourselves.

Echoing Prensky’s (2001a; 2001b) argument more directly, Mark explained that the issue is visible in education, where teachers are just not as accomplished at using technology as young people and therefore struggle to teach them:

I think if they actually got – no offence to schoolteachers – but if they actually got some people that do spend a considerable amount of time on the internet and know how to navigate around it like young people do, it would be a lot easier to teach younger audiences.

In analysing the layers to this argument it becomes obvious that the participants identified as highly skilled users of digital media, leading to a discernible confidence in their disposition and, for some, willingness to experiment with it.

At the same time, however, six of the participants described the relationship that humans have with digital technology in skeptical, sometimes quite negative ways. This led to tensions and complications in the way they felt about and described their *own* digital practices. On the one hand participants appeared to have adopted the idea that they were 'digital natives'; however, on the other, they idealised non-digital or face-to-face communication, believing it to be more meaningful or real. This privileging of non-digital communication was sometimes justified in surprisingly conservative ways. This was particularly evident in some of the rather dystopian futures predicted by the participants. However, these opinions might have been more influenced by dominant tropes in popular culture than their experiences *per se*.

Despite their investment in the 'digital native' argument, six participants believed that online communication was weaker and less 'emotional' than that which takes place face-to-face, or, in certain cases, that online communication was a waste of time. In some respects, this idea might have been highlighted due to the steps involved in Provocation 1 – *Mapping digital and non-digital experiences*, however, the purpose of the task was also to find intersections and continuance between their online and offline experiences. In some instances, technology and nature were represented as a binary, where technology was often seen replacing or encroaching on face-to-face experiences. This was exemplified in Sean's map – a type of family tree – that replaced the tree, roots and branches with cables and wires:



Figure 18: Sean's map of digital and non-digital experiences

Sean saw digital media as ‘an artificial way of connecting people’ but explained that it’s ‘still a way of connecting people’. He went on to say that ‘the digital side is a bit less...it’s a bit faded, so it’s not as strong but its still there’. When completing the map three participants described the relationships they had with people on the digital ‘side’ as faded or inferior. Trent felt that his relationships online were ‘fading’ and ‘less intense online cos there’s no emotion...there’s no emotion online’. Perhaps the most extreme position was Chantelle’s who depicted technology as a ‘dark...enveloping cloud that is sort of sweeping over humanity’. In the middle of her map she wrote ‘family’, ‘safe’, ‘life’ and ‘friends’. As she explained, her map depicted ‘family units’ as ‘cheerful and bright’, but then there was this ‘cloud sort of internet connection’ that was ‘destroying that’.

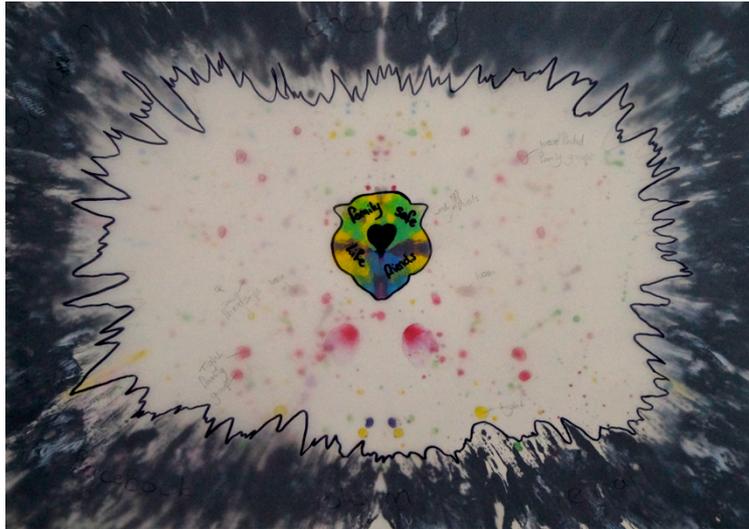


Figure 19: Chantelle's map of digital and non-digital experiences

Two participants also predicted a dystopian technological future for society. Stacey believed that ‘people, teenagers and parents are spending too much time on new advanced technology’ and that this will lead to an existence like that proposed in the movie *Wall E*:

If we keep going I believe that’s how we are going to be. We are not going to see the beauty of what we actually have. We’re just going to be stuck to our screens 24/7. There’ll be no break cos like we sleep, wake up straight on.

In a similar way, Trent drew on the *Terminator* movies to explain that ‘eventually we’ll lose control of it [digital technology] – it will become such an intelligence that we won’t have *any* control over it...like a “Skynet” reality’.

There was a more general sense amongst the participants that being on the internet was a ‘waste’ of time. As Dylan explained: ‘I don’t want to waste a whole Saturday that I could have gone outside and found something very exciting or I could have made time with my friends to build a social connection’. In a similar way, Ben thought that people should limit the time spent on digital media, suggesting one could never be quite as productive online as offline: ‘I think you need to understand that you know, you can turn it off, there are other things to do besides waste...or well spend your time on the internet’. Such remarks complicate the popular image of young people as ‘digital natives’ addicted to their devices. While the participants accepted and identified with the labeling of their generation as somehow different or perhaps

more exotic because of their relationship with technology, the reality of their practices and opinions revealed clear tensions in the beliefs they held. Given the widespread use of terms like ‘net generation’, ‘digital native’ and ‘cyberkids’ in various formal and informal discourses, the participants were left little choice but to identify with these labels. Thus for many participants there was a tension between their beliefs, experiences and practices and the stereotype they were labeled with.

6.3 Tacit understandings

Participants had acquired certain tacit understandings around behaviour and etiquette that governed their use of digital media. These were predominately to do with how they approached and engaged with others online. At one level, participants had opinions on the generalised behaviors they had seen and heard about on the internet, while at a personal level, they had developed understandings, sometimes in response to the former. Others’ online behaviours were described in generalised, often unsavoury terms. Perhaps the most vociferous in this regard was Mark, who likened people’s online behavior to ‘kind of like a bandwagon...and it’s kind of like if you’re in the bandwagon that’s cool; if you’re not then you’ve really got nothing to talk about’. Indeed, participants perceived most other people’s online behavior to be governed by the need for attention and popularity. As Rachel claimed, ‘a lot of people crave popularity over the internet, they’ll do stupid things’. While participants described others as doing these things, they were also influenced by the drive for popularity. This is described in more detail in Chapter 7 – *Young people's digital identities* (see 7.2).

Although popular thinking contends that young people make little differentiation between online and offline worlds, the way participants talked about and interacted with these contexts suggested that a more multilayered understanding was at play. Participants were acutely aware of the fact that their online actions had repercussions in the real world. However, they still spoke about ‘getting on the internet’, suggesting that they approached it as a distinct context. In Mark’s words, there is ‘real life’ and ‘the internet’, suggesting that he still made distinctions between the online and the offline. This was particularly the case for participants whose use of digital technologies was limited due to financial constraints. In this way, there were traces of a binary differentiation between the online and offline in participants’ disposition –

digital experiences were described as lacking emotion while face-to-face relationships were 'embodied' and expressive. However, even though participants did not readily acknowledge bodily or affective responses when using digital media, Trent's description of using the internet suggests otherwise: 'It feels like chaos half the time...it's like popups everywhere, it feels like your heart is beating at a million miles an hour and the world is in slow motion or something'. Such a description points to the kinetic and emergent nature of digital networks. It suggests that bodily reactions to digital media, while only occasionally rising to consciousness, can powerfully inflect these experiences.

Many of the young people in this study saw digital networks as lacking human emotion or 'spirit'. For example, Mark said 'people stop showing emotions online because they don't have to. It's just text on a screen'. According to several participants, people become less responsive to and respectful of others' emotions when using digital media, which led them to the assumption that digital networks were devoid of emotion more generally. For four participants it appeared that emotions were associated with the corporeal; without seeing an embodied reaction, emotions did not consciously 'register' with others. For this reason it was often difficult for participants to discuss how and why they did particular things on digital media, as the majority of these were motivated by emotions and affect.

Rachel, for example, uploaded a cover photograph of herself visiting her grandmother when she was sick in hospital. When asked why she chose to use this particular photograph, she answered, 'I don't know'. There was a range of motivations directing Rachel's actions that were unknown even to her. These might have involved the emotions of happiness and sadness however it is reasonable to surmise that there were other forces at play. The Facebook photograph was the culmination of sensations: the love and care she has for her grandmother; the sadness she felt over her sickness; the pressures from Facebook to document important events in life; and the expectations friends have of Rachel as a person and Facebook friend. Presenting the event on Facebook increased the 'stickiness' of it for both Rachel and her 'friends'. In this way, Rachel's actions were also about the affective relationships she had with people *other* than her grandmother. The affective qualities of this experience and digital event sat just beneath the surface of consciousness and were difficult for

Rachel to articulate. Furthermore, these sensations did not always come together in seamless ways. For example, that this cover photo was quite quickly changed suggested that maybe there was some discomfort in revealing such an intimate moment to Facebook ‘friends’.

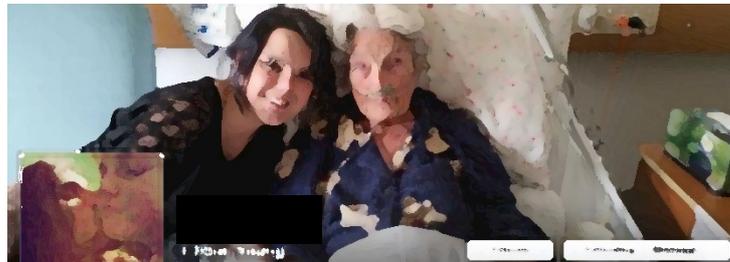


Figure 20: Rachel's Facebook cover photo July 2014

Throughout the study, participants described moving seamlessly between online and offline space (i.e. they slipped in and out of the currents), however, it was clear that they viewed each context as operating in distinct ways. The participants articulated a different set of rules around acceptability and appropriateness, suggesting that the online space was not necessarily continuous with the offline but, in fact, quite distinct. In this way, their disposition toward themselves and others was different in the digital context. A common refrain from participants was that people are different online. As Simon explained, ‘In my personal opinion and some experience I reckon people can change online’. In a similar way, Rachel said, ‘Like there’s a person I know...yeah like they’re all positive but then when you see them offline they’re all like the opposite’. Trent noted that the different context could be both good and bad ‘because you can like really get to know people because they will say more things online than face to face’. The digital space allowed for different types of relationships and identities to emerge, and participants imagined and approached it in this way. Penny had ‘some really good friends’ on Facebook, but when she saw them at school they ‘barely talk[ed]’. These comments highlight that participants needed to make interpretive leaps to mentally integrate the variations in others’ identities.

Developing these understandings took place in a rather *ad hoc* way, often through trial and error or observing friends online. Two participants reported that they spoke to their parents about some of the things that happen on social media, but this was

only in response to particular situations. As Ben observed, ‘If somebody were to talk to me negatively on Facebook or something, I’d go up to my parents and be like “Oh yeah, this is a problem that I’m having” and then they’d try and help me’. Stacey’s parents reinforced what was appropriate behaviour on social media in an informal way; after she showed them something on Facebook they would say things like: ‘I can’t believe she put something up like that, what was she thinking?’ For the other nine participants, two received strict warnings from parents before signing up to Facebook, and Maddy was required to be friends with her Mum, ‘so they know what I’m doing and I’m not going to do anything bad’. Penny was also friends with her parents on Facebook. But parental support to establish and negotiate this was, at best, minimal. Trent summed it up when he said, ‘I’ve shown *them* how to use digital media!’

6.4 Issues of risk and safety

When it came to issues of risk and safety, the cybersafety discourse was clearly influential in shaping participants’ disposition. At a basic level, it guided their practices in regard to privacy and security, the use of anonymity and the circulation of content. Participants often repeated these principles, however, whether they were actually practised was another matter. For several participants there were competing motivations at play. Risky digital practices like ‘friending’ strangers or lowering privacy settings to become more publicly visible, potentially led to greater attention or popularity, but also contravened the cybersafety message. Cybersafety lessons were most commonly taught in schools across several years, however, older participants found them less relevant. That said, at the most rudimentary level the cybersafety message was clearly an important discourse participants drew on to shape and guide their digital practices. This section describes and analyses the dispositions that participants acquired as a result of the cybersafety discourse and then discusses participants’ thoughts toward these school-based programs.

When it came to questions of privacy and security, most participants answered in terms of social media. Of the 11 participants on Facebook, only Dylan had what might be considered low privacy settings, where anyone on Facebook could see his profile, posts and status updates. This might be explained by his rather extroverted social media identity: Dylan had cultivated a distinct social media persona that, unlike

other participants, purposefully aspired to gaining the attention of others. Keeping privacy settings low no doubt helped him to attract and ‘friend’ ever increasing numbers of people. The other 10, however, all had strict privacy settings, meaning that only the people that they were ‘friends’ with on Facebook could see their page. This discussion was not driven by concerns over privacy, but being able to control where their content and information went and what others might do with it. As Stacey said: ‘I only want my information to go out to certain people’. Maddy also considered what might be done with that information: ‘Well I make sure everything’s on private and then like no one can access it’. But for Rachel, privacy also meant keeping certain posts private from particular ‘friends’ and family. ‘Friending’ her mother on Facebook was a case in point:

I’ve got my mum on Facebook and stuff but I kind of, this is going to sound kind of bad, but I don’t block her, but I make sure she doesn’t see some of my posts. Not that they’re that bad but I don’t know.

While the majority of participants kept their information on Facebook private, Rachel and Mark both communicated regularly with ‘strangers’ online through other websites. The significance of these forms of communication was represented prominently on their map of digital and non-digital experiences:



Figure 21: Rachel's map of digital and non-digital experiences



Figure 22: Mark's map of digital and non-digital experiences

While 'strangers' and 'anonymous people' on the internet were clearly significant to Rachel and Mark's use of digital media, both were aware that communicating with strangers could be viewed as risky behavior. As Rachel explained, she painted strangers red because 'like stranger danger...you should never really trust them'. Similarly, Mark painted this group black because to him that was 'the unknown, the anonymous side of the Internet', which suggested some kind of danger in conversing with strangers.

Another tension that emerged in regard to risk and safety was deciding when to become 'friends' with someone online. For Penny, who had over 1200 friends on Facebook, the number of mutual friends people had with another friend was a deciding factor: 'If I have enough mutuals I just add them'. Penny explained that this 'rule' about 'friending' came from a policeman who visited her school in year eight to talk about these issues:

He was talking about as long as you know they're a real person, and they're either friends or friends with people you know...He's like it doesn't matter how many friends you have as long as you've met them at least once before so you know they're a real person.

When asked whether this was a rule that they followed, all three participants at City College said yes, but added that they 'kind of followed it already'. However, this was

not a failsafe technique. As Penny explained, sometimes Facebook ‘friends’ become ‘creepy’: ‘You block them if they’re like creeping you out and you don’t want to talk to them’. However, when it came to forming an online relationship knowing someone face-to-face first was considered to be the socially responsible course of action, even if it meant using a long chain of ‘mutuals’ to do so.

While Dylan might not have been concerned with his privacy settings on Facebook and other social media sites, like Simon, he related the issue of privacy to banking and other more formal practices conducted online. Both boys saw themselves as ‘safe’ because they did not yet have a bank account and were therefore not disclosing that information in the digital context. In this way, Simon and Dylan equated safety with being robbed or losing money, as Simon explained:

I don’t think it’s an issue [privacy] because I think I’m relatively safe in that regard. Like I don’t think I’m at risk of having my details stolen, because I don’t go onto Facebook and post all like location and bank account details and I don’t do online banking or online shopping.

Both Sean and Chantelle saw privacy in more technical terms, demonstrating an awareness of the complex ways information can be accessed and used. Sean explained that he was ‘fairly careful’ online and had a ‘virus protection program’ to ensure that would not ‘get key logged or anything like that’. Chantelle considered the issue of privacy in terms of ‘data mining and all that’, however, her father ‘puts a lot of anti-hacking’ software onto their computers so she feels somewhat protected.

Apart from Chantelle, whose father oversaw her online privacy and security practices, the other participants learnt these practices at school or in Sean’s case through friends. When asked about the most important information they had received in regard to the internet, three participants answered that it was around privacy and security. For Mark this information was learned at school: ‘I just guess all the safety assemblies we’ve had, how to like use the privacy and not to put too much information on there about yourself’. For Heidi the most important information she had learned was in regard to ‘being able to control’ where information went and only ‘allowing access to certain people’. In more general terms, Trent reported that being told to ‘always read the

terms and conditions' was most important for him. Interestingly, for the other participants they could not think of *any* information they had learned or picked up over the years that was valuable when using the internet.

Outside of what took place on Facebook, it was not within the scope of this research to confirm whether participants actually practised what they reported. However, what their words indicate was a rather proactive disposition when it came to privacy and security and, despite the muddiness of broader laws and conventions on these issues, participants deemed this to be the sole responsibility of the individual user. As Heidi explained, individuals were responsible for what they put online, so others could not be held accountable when things went wrong. When asked whether she would be concerned if an advertising company used her unsolicited photos in a campaign, Heidi reasoned: 'I did put it up there so...if you send someone something and then you think, "Oh I wish they didn't have it now because *you* did it, so..."'. It was clear that underpinning much of the discussion around privacy and security was an individualised sense of responsibility.

Despite the proactive stance participants assumed towards online privacy and security, two participants were keenly aware of the fact that this could only ever be thought of as a false sense of security. Mark likened privacy to a fake security camera: 'I guess I see Facebook privacy as one of those fake cameras you put up that don't actually work, but it makes people think you've got a camera on your house'. In a similar way, Rachel saw her privacy online as completely permeable and potentially under threat: 'I kind of feel...well someone's probably reading all my messages right now, not that they would be but that's what I think'. These comments demonstrate a burgeoning criticality, which was further developed through Provocation 3 – *Re-articulation of the icons of the internet*. What emerged from these initial discussions was a tension between the need for individuals to protect themselves online, however, also an acknowledgment that the security settings and tools they had to do this with were largely inadequate.

Several male participants expressed the idea that being 'anonymous' online offered more safety and protection. This notion appeared to come from the school-based

cybersafety discourse. For example, when I asked Simon whether he drew on any skills or knowledge learnt at school he replied:

Yes...that would be like being anonymous, as you've progressed into high school that's when they expect kids to have Facebook and Twitter and Tumblr and all that stuff, so don't give out *all* your information. And that's why...the only information that is displayed for me is my username, which usually *isn't* Simon Cooper.

Simon was not in fact describing anonymity in the true sense of the word. On the gaming platform Steam he used an avatar 'Agent North', however, this identity was still known to his friends. Trent also described his identity on Steam as 'anonymous', however, he explained the benefit was privacy from peers who engaged in bullying behaviour: 'Nobody knows who you are...they just know what your strategies are in the game'. Like Simon his identity was also known to close friends on Steam. On the other hand, Mark saw anonymity as more of a default position to the way he represented his identity online: 'I was just like I don't really want to have my face on the internet because it isn't necessary, so I'll just have this anonymous person on there'. Despite participants' descriptions these were, at best, 'anonymous-like practices', as Mark's closer friends and family could easily identify his online identities. These explanations uncovered the participants' underlying belief that being anonymous led to greater safety and security online.

Unlike privacy settings on social media, which appeared to follow an 'all or nothing' pattern for the participants, anonymity, or the pretense of it, was used in a more nuanced way to reflect and reinforce levels of social intimacy as well as develop skills more covertly. Simon and Trent's close friends were aware of their identities on Steam, however, other game players, with whom they may well have been friends on Facebook, did not. In a similar way, Rachel disclosed her 'true' identity to the friend who introduced her to the writing website Wattpad, but apart from that was anonymous on the site. In this sense, anonymity became less about privacy and more about freedom to experiment and develop other versions of self, free from the gaze of more critical others. But this was a benefit that participants almost stumbled upon, as the main reason they adopted 'anonymous practices' was as a result of the cybersafety programs at school.

Another disposition toward using the internet that participants acquired as a result of the cybersafety discourse was in regard to the circulation of content. This was, in a sense, an extension of the individualised responsibility participants spoke of in that individual ‘control’ over personal content only exists *before* it goes online; after that it was thought of as available and, in a sense free, for anyone to use. Five participants expressed this idea, often in an unprovoked or unrelated context. As Maddy said: ‘I don’t really put anything up that’s not, I wouldn’t care if they used it, it wouldn’t be a big deal’. While Sean explained, ‘I don’t really put anything up that I wouldn’t want to happen’, meaning that a pre-requisite for deciding what to put online was whether he would be happy for *anything* to happen to that content (i.e. spread widely or manipulated). Grace simply said: ‘Don’t post things that you don’t want *everyone* to see’. In analysing these descriptions, participants approached their personal digital content as though it acquired a life of its own once online. It was therefore the responsibility of individuals to think carefully about what they posted. This message translated into a conservative disposition in which participants like Grace claimed they didn’t ‘post much stuff on the internet’. At the same time, when asked about their digital footprint (the trail or traces people leave behind them when online), three participants at one school reported that they didn’t think about it, because they posted very little online. A way of explaining this might be that the cybersafety message had, in a sense, been so deeply interwoven into their practices that it was not thought of as a conscious consideration.

Given that the participants had been subject to cybersafety programs from upper primary school, it was perhaps not surprising that this discourse shaped their disposition toward digital media more than any other. According to participants, these programs were not only about safety online, but also included information on cyberbullying. Often these programs were in response to a particular incident as Dylan explained: ‘I think we had a class in like my primary school about cyberbullying, because it was a big issue then because some kids were like bullying kids’. Although at a different school, Rachel described a similar pattern in which the school did not do it ‘regularly’, but only if it was ‘relevant’: ‘if something happens at the school, like if there’s a big cyberbully thing going on at the school, they actually get police in and they do it then’. Coming from England, Heidi explained that the

cybersafety message was ‘drilled’ into students there ‘since we were maybe 10’. Mark also used the term ‘drilled’ to describe the school-based cybersafety programs he had encountered: ‘I’ve just had all this internet stuff drilled into my head before I’ve even had it [the internet], so it’s just not really something that I talk about’.

At City College and Bankview College cybersafety ‘lessons’ occurred a ‘few’ times. At one of these schools, a general discourse around cybersafety was achieved through various approaches, as Penny and Maddy discussed:

Penny: We get these people to come in and talk about cyberbullying.

Maddy: Yeah there’s people who act things out and like tell you serious things

Penny: And other weird people.

While these lessons often involved a similar message, as Grace explained, there were subtle differences to the content: ‘In year seven it was more like cyberbullying and don’t put your information out there...in year eight they explained why and like what can go wrong and things like that’. At the same two schools, the frequency of the cybersafety lessons had decreased in years nine and ten. However, Trent explained that at his school the content had become ‘a bit more frightening the older we get’. In his opinion these lessons worked because the bullying he was experiencing online and offline stopped after students completed the program. According to Trent, one of the reasons these programs were effective was that they made ‘bullies’ aware of what they were doing: ‘School does a big thing about bullying and cyberbullying is one of the main things and some people do it without realising. But people do it purposely and so I think it...knocked some sense into people’.

Apart from those who had chosen to study media or IT, cybersafety was the main education participants had at school in regard to digital media and the internet. As such, the overriding criticism participants had of the cybersafety programs they had encountered was that they were repetitive. Indeed, all participants described them in this way, however, Heidi was perhaps the most detailed in her criticism, saying that it was ‘the same message over and over again’. As she explained, the problem was that the program was out of step with what young people were actually doing online. When asked whether she thought it helped them in any way she said:

It depends. In the younger years, year six, year five it really does help but by the time you get to year 7 and 8 kids already know more than what you're telling them and that they've heard it before over and over again on the actual internet.

In a similar way, Maddy said, 'I think you already like know most of it...like when we were younger you would find it like wow but now it's just like...' Grace summed it up when she said the message had 'always really been the same'. When it came to formal education on digital media and the internet, the cybersafety discourse was clearly important in shaping participants' disposition. Indeed, there were benefits to what was learnt through these programs, however, the repetitive and, at times irrelevant, negative message that was propagated could also been seen as counteractive to encouraging critical and agentic digital practices.

6.5 Architecture of the internet

The final two sections of this chapter draw on the second provocation, *Visualising the internet*, where participants were asked to model its structure and function.

Participants' models demonstrated great variety in the way the internet was imagined, from psychedelic spiritual beings to roads of information that take the user on a journey. While the line of inquiry explored in the second provocation might appear to be overly abstract, all participants were quick to articulate how they imagined the internet, suggesting that they had latent schemas around its structure and function that underpinned and guided their practices. However, what the models represented was not the internet, but more specifically the world wide web, which was not surprising given this was where their digital practices took place. However, this provocation showed that there was little understanding of the technical structure and function of the internet.

Two models depicted the internet as a vertical or hierarchical structure to represent the idea that particular people and websites were more privileged and powerful than others. Stacey and Rachel's model comprised streamers that represented websites 'twisting together' to form the internet, symbolised by a glittering 'I' at the top of the structure. In this model people are depicted as climbing (or using) the sites on the internet, represented here as streamers, to get to the top of the internet. Chantelle's model was structured in a similar way, however, the streamers took on a different

meaning. As she explained, the streamers represented the ‘infinite amount of information’ available on the internet, with each a journey of discovery or research. However, the placement of these streamers showed that there was an almost circuitous pattern to seeking information: ‘each road you go on takes you to a different road takes you to another, takes you to another one and then eventually you wind up back at the thing you were originally looking at’. In this model humans are at the bottom because, as Chantelle explains, ‘they made it [the internet]’.



Figure 23: Stacey and Rachel's model of the internet



Figure 24: Chantelle's model of the internet

In these models, the participants imagined the internet as a place rather than an object, with individuals embarking on some kind of quest or journey when using it. Each model used a vertical structure to represent different aspects of the internet – one to show increasing levels of popularity and control, the other to show networks of information. In some respects, these models showed threads of critical understandings that contradict commonly held beliefs about the internet. Neither of these models were anything like the ‘map’ that dominates more common ways of visualising the internet. Galloway (2011b) describes this map as of the ‘hub-and-spoke cloud aesthetic’ with ‘minuscule branching structures’ that cluster together to form ‘intricate three-dimensional spaces’ (p. 90). Galloway goes on to argue that mapping information in this way cannot visualise or represent the ‘social totality’ of the information age and that this leads to an overall decline in perspicuity of the social forces at play. He argues that what is not communicated, visualised or represented

remains beyond contemplation. While these models were created in a rather spontaneous way, the participants began to explore and visualise some of these social forces thereby exposing and critiquing the underlying ideology.

Another feature of participants' visualisations was the representation of the idea that some websites were somehow core or essential to their practices. Mark and Simon's visualisation of the internet took the basic features of a bullseye, with concentric circles emanating from a central target. As they explained, YouTube and Google are placed in the centre because they are 'core internet features'. Not only do they consider these the most popular sites, but if the bullseye analogy is followed, Google and YouTube are what users should also aim for or target. In the second 'ring' from the centre, the boys placed Facebook and video games represented by a blue streamer and brown streamer respectively. In the final, outer ring are blogs, represented by an orange streamer, online shops represented by a pink streamer and 'sharing sites' like Tumblr, which are represented by a yellow streamer. Mark explained that 'the centre is the more popular areas and then as we branch out we go into vaster areas where there are less people'. In this way the visualisation is both a representation of their practices and what they perceived others did online.



Figure 25: Mark and Simon's model of the internet

While Mark and Simon depicted the structure of the internet as flat, the most important, popular or useful websites were represented at the centre of the target, indicating that they privileged some sources of information over others. Indeed, the popularity of particular sites and the information flow on these sites shaped the content that many participants interacted with and the digital practices they engaged

in. At the same time, Mark explained an individual's 'movement... depends on where you want to go on the internet', suggesting he saw little impediment to accessing particular sites or completing tasks online. While the bulk of their regular practices might have taken place on 'core' sites, Mark acknowledged that the less frequently visited areas could yield more unique, and perhaps more valuable, digital 'resources': 'Like me and my friend have a running joke where if we find a weird video on YouTube we say we've gone to the outside of YouTube, like the border'. This is an almost geographical or topographical account of the way YouTube is structured, where the most popular videos are at the centre and the less viewed ones are on the outer edges. Unlike the more vertically oriented models, Mark and Simon perceived few challenges to their digital practices. This disposition motivated them to create a YouTube channel – they wanted to do it, so they did: 'We originally had an idea, me and Mark and a few other friends, we had an idea that we'd start this YouTube page and that's what we've done'.

Other participants also represented the idea of the internet having core websites when they completed the third research provocation – *Timelining digital practices*. For example, at the centre of Sean's timeline were three intertwined branches coloured green, blue and red to depict the websites Google, Facebook and YouTube respectively. Sean described these sites as having 'been very core' to his digital practices from the very beginning. He went on to explain that he believed 'most people as well' would consider them 'core things'. Sean saw Google as the 'lionhead of internet search history', but described it, Facebook and YouTube as 'similar sorts of platforms' in that they 'interconnect in... what they do'. All but three participants depicted Google, Facebook and YouTube as the main websites they used. When asked why this was the case Rachel answered 'because they're of their own kind... there are like other websites... but not as good'. Penny used a circuitous, but relevant argument that these websites are core to most people's practices 'because that's where everyone is'. On the other hand, Mark believed it was a matter of originality: 'For instance with Google and YouTube, they're completely original... they were there basically since the beginning so they've had all this time to build up a reputation'. Putting the accuracy of this statement aside, the latter part of his argument tied in with Penny's in that the popularity of these websites were self-

perpetuating. In this way, some websites acquire a status in the participants' minds, shaping their digital dispositions and practices in particular ways.



Figure 26: Sean working on his timeline of digital practices

What the participants depicted in their models and timelines was a fairly accurate chronology of the mainstream emergence of the internet in the contemporary era – the bulk of people's practices take place on only two to three platforms which are owned by even fewer corporations. Google bought YouTube in 2006 for US \$1.65 billion dollars³¹, highlighted in Mark and Simon's 'core' – that the internet is owned by just one company. Lovink (2011) explains that this core is the result of 'power patterns', which are well known patterns of practices that encourage people toward particular sites: 'ordinary users do not want to look uncool and cannot afford to be left out in this informal reputation economy; this is why they feel forced to follow the herd' (p.15). Mark also used the herd metaphor to describe people's online behavior describing them as 'a flock of sheep...and they all flock to whatever's the new thing'. Following this logic, digital practices become linked to an in-group, out-group mentality in which feelings of belonging, status and self-esteem become entangled with particular websites and platforms.

While the participants were well aware of the fact that few companies monopolise the internet, only Sean saw this as a problem. Not only did he describe it as the

³¹ See: http://www.nbcnews.com/id/15196982/ns/business-us_business/t/google-buys-youtube-billion/#.VV5FStqqqko

‘commercialisation of the internet’, but he believed it would be difficult to establish any alternatives to these core websites:

I was wondering if as these things become more established, is there any room for different things to overtake them? Like Google’s ingrained in our culture, it’s what we use, like everyone uses Google, even if they don’t use the same explorer.

To Sean the internet was actually becoming smaller as the search engines and platforms that help to make sense of the vast amounts of information actually mean users encounter less information; as he explains all information ‘will all reign into large companies’. As the oldest of the participants, having used the internet for the longest period of time, Sean’s descriptions were both detailed and critical. While the other participants had the same awareness of the issue, they seemed less concerned by it.

When asked whether they perceived the monopoly of the internet by one or two major companies as a problem the participants at Bankview College argued that more variety would be ‘creating conflict’. As Ben explained: ‘Somebody would have this reliable website and be like, “Hey, check this out!” And then somebody else would go, “Oh nah I like this website better” and then yeah [Stacey: ‘conflict’] creating conflict’. Using another line of argument, Mark contended that we would not know a lot of famous people if it were not for YouTube: ‘Like a lot of people that are famous on YouTube, if there wasn’t a place that’s really as famous as YouTube they wouldn’t be recognised, we wouldn’t know about them’. Heidi described the future of the internet in terms of technological convergence, where different digital platforms would evolve to perform or enable similar tasks and actions: ‘I think things like Soundcloud, YouTube and Snapchat will all become one...It’s like these were once separate things’. That the notions of convergence and monopoly underpinned the thinking of the majority of participants suggested that these concepts were perceived as simply part of the internet and something that will only continue into the future. While the provocations did help to create awareness of these digital media monopolies, acting on these newfound beliefs is another matter entirely. Clearly these sites were bound up with identity and belonging, which meant search and social networking involved particular, almost pre-determined, practices. When asked

whether they had tried an alternative search engine to Google, Chantelle replied that she had tried Dogpile, and several had also used Bing, but they found them to be inferior services. Heidi best summed up the discussion when she said that ‘the most common thing searched on Bing is Google’.

The participants’ descriptions and representations highlight the fact that the majority of their practices took place on digital ‘platforms’, as opposed to websites, webpages or other digital media. As Gillespie (2010) argues companies like YouTube, Facebook and other intermediaries are increasingly describing their services as platforms. Drawing on computational, political, architectural and figurative uses of the term platform, Gillespie suggests that the word ‘emerges not simply as indicating functional shape’, but also ‘suggests a progressive and egalitarian arrangement promising to support those who stand upon it’ (p.350). The individual user therefore comes to think of these ‘platforms’ as a neutral tool that can help them achieve their goals and aspirations. However, as Gillespie (2010) notes the discursive positioning of the platform serves an important purpose for technology companies: ‘Whatever possible tension there is between being a ‘platform’ for empowering individual users and being a robust marketing ‘platform’ and being a platform for major studio content is elided in the versatility of the term and the powerful appeal of the idea behind it’ (p.358). When seen as a platform, the more complex workings of these platforms are brushed over thereby impeding critical understandings.

Bearing this in mind, it is significant that the participants described these platforms as ‘core’ to their digital practices. The participants in the study did not appear to approach the internet as a series of interconnected ‘texts’, but as a core of digital platforms. The role of these digital platforms in strongly shaping participants’ digital practices points to quite different understandings and use of the internet than what was imagined at the start of this thesis. For example, a conceptual tool driving the study was that digital media could have ‘interpretive flexibility’ (Grint & Woolgar 1992; 1997, p. 37). However, in light of these findings and the strongly structuring nature of digital platforms, the poststructural framework for understanding of digital texts and identity should be revised. The experiences of the young people in this study might be better understood by theories that analyse the interplay between structure and agency.

Given the varying degrees of knowledge on the structure and function of the internet it is perhaps not surprising that only two participants, Mark and Trent, had any formal education around the technical elements of the internet. This was because they had chosen to study the elective subject Information Technology (IT) at school. As Mark explained, IT students learnt 'how websites are made and why they use specific things in specific ways', but this did not include a more generalised study of how the internet is structured or other associated technical processes. Only Sean had learnt how the internet was structured, and this was because he had done some research about it on the internet itself. In fact, Sean appeared to be more socially and politically motivated than most, which was evident in his earlier discussion of media monopolies. In addition, his peer group, which was engaged in various social and political discourses and activities, encouraged Sean's inclination toward critique. For the rest of the participants, understandings about the structure and function of the internet were picked up as they used it and also, presumably, through advertising and popular media.

6.6 Internet provenance and governance

When considering the structure and function of the internet, participants also reflected upon where the internet came from and how it was governed. At this point, discussions often took a more playful tone, as with little formal knowledge to draw upon, participants used their imagination to explain these more complex issues. 'Imagining' rather than 'knowing' these things meant the participants' more optimistic, almost intuitive, beliefs around the power of the internet to enhance and improve their life were brought to the fore. In research Provocation 2 – *Visualising the internet*, metaphors became an important 'conceptual tool' that enabled participants to explore and 'understand abstract concepts in terms of more familiar and concrete ones' (Puschmann & Burgess 2014, p. 1695). Following this logic, the metaphors and iconography employed by participants revealed something of how they conceptualised and imagined the internet, which in turn revealed something of their digital disposition.

One group of two boys at Bankview College and another group of three girls at City College conceived of the internet as a type of object or phenomenon that came from

space. This was evident in the iconography they used in their models, which likened the internet to a source or power that humans could receive. Trent and Ben imagined the internet as ‘coming from a satellite on the moon’ or more specifically as Trent clarified from a ‘hole in the moon; that’s the theory’. As they explained ‘we have all the internet browsers coming towards Earth to give Earth its internet goodness’ but Telstra and Optus ‘take this internet and make us pay for it’. Following this logic the internet is imbued with positive, almost magical qualities. There was something ambiguous however about the ‘hole’ on the moon that the internet comes from, perhaps implying that it is a resource that can be mined.

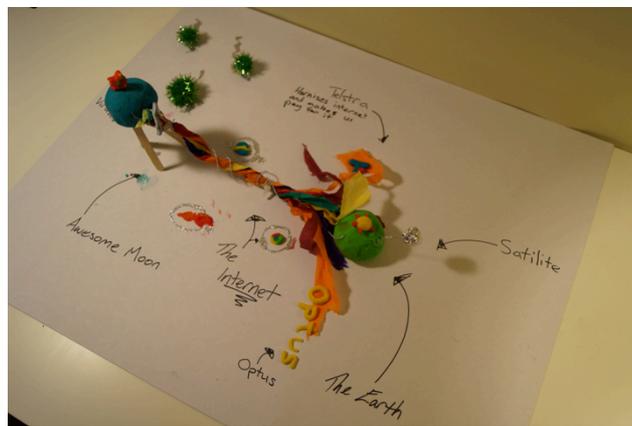


Figure 27: Trent and Ben's model of the internet

In another model, Penny, Maddy and Grace personified the internet as a wizard in the sky called ‘Albert’. ‘Albert’ was chosen as the name because it ‘sounds smart’, alluding perhaps to Albert Einstein. Albert was surrounded by cotton wool to represent the clouds – the ‘Apple iCloud’ – which was referred to as a ‘magical place’. As Grace explained, part of its magic was due to the fact that ‘we don’t really hear about it’, highlighting the unseen and unknown nature of the digital context. In the girls’ words, Albert is the ‘giver and receiver of all information’; he is a genius or wizard who ‘projects all the information from his heart’. The figures that can be seen along the bottom are the people on the internet. While they look rather passive by comparison to the god-like Albert, they were also ‘sending’ and ‘receiving’ information.



Figure 28: Grace, Penny and Maddy's model of the internet

In both models, the internet was imagined as a 'thing', rather than a place. Indeed, these models were quite different from early metaphors of the internet which imagined it as a place, rather than an object - one of the earliest and most popular of these being 'Cyberspace' introduced in William Gibson's novel *Neuromancer* (1984). However, in both models humans receive 'goodness' or magic presumably through the form of information, implying that the acquisition of information was a form of divine intervention. Moreover, in the girls' model the internet was 'everywhere' making the distinctions between online and offline more or less obsolete. With fewer financial constraints and an array of digital devices to choose from these middle class girls could be online whenever and wherever they liked and this was represented in their model. Their disposition could be contrasted to other participants who, due to financial 'barriers', differentiated more clearly between online and offline worlds.

While the participants were well aware of the abstract nature of their models, close analysis revealed some critical understandings about the structure and function of the internet. Take the role that Telstra and Optus are given in Trent and Ben's model – they 'take' the 'internet goodness' and 'make us pay for it'. Mark clarified and endorsed the more critical dimensions of their theory:

Mark: Can I just get an understanding of this? The cats are beaming the internet down to the earth and the big corporations are taking that internet and selling it to us for high prices.

Ben and Trent: Yes

Mark: That makes more sense than you would probably know.

In this sense, their model could be seen to depict the loss of the hope once held for the internet, in which the potential for freedom and democracy (i.e. ‘goodness’) is corrupted by companies trying to make a profit. In a similar way, the girls’ model placed Albert, imagined as a benevolent giver and receiver of information, in the Apple corporation’s iCloud. Both models depict the internet as something that is inherently good, but that is used by companies to make money. Such a reading demonstrates an emergent criticality. Like Penny, Maddy and Grace, Sean also used personification in his model. Dubbing it ‘old man internet’, Sean imagined the internet as a wise old man, not only because of the information it provided, but also to show that it’s ‘a human network as well’:



Figure 29: Sean's model of 'old man' internet

However, unlike the other models devised by participants humans do not just *receive* the information or goodness, but need to be active agents in negotiating it. As Sean explained: ‘I was talking about how [my model] was depicting the contradiction

between arming ourselves with information and trying to protect ourselves from information we don't want to necessarily see because there's no barrier on the internet'. To represent this overabundance of information he used pages of newspaper wrapped around the central figure. However, to represent some form of 'protection' from it he placed a tin foil hat on the head of the figure. Sean did not say whether this was a reference to the conspiracy theory that tin foil hats can repel electromagnetic radiation and mind control, however, it clearly represented the need for individuals to protect themselves when online. To Sean the internet was a source of information and communication, but it also included 'gross stuff or awful stuff' to which he believed there was 'no barrier'. Like Albert, Sean's model personified the internet, imagining it as an intelligent, wise being. Built into Sean's model however was an awareness that the potential of the internet is largely what humans make of it – it is neither inherently good or bad.

Much can be gleaned from analysing these metaphors not only in regard to the participants' digital dispositions, but also in regard to how critical digital practices might be scaffolded. Donath explains metaphors are a primary framework through which digital practices are enacted: 'Information is fairly formless so almost everything we do online we do with some kind of metaphor' (Donath in Dzieza, 2014, n.p.). These models therefore *materialise* not only the metaphors that underpinned participants' imaginings of the internet, but also provide some kind of window onto their practices. They indicate that these six participants saw the potential of the internet to participate, learn and communicate in society. However, in their own way, each model hints at the more complex issues associated with internet use. They confirm Misson's (2012) argument that imagination is key to critique as the alternative opportunities explored through this process could be scaffolded into more complex and critical digital practices. As Wyatt (2004) writes, consciously or not these metaphors actually become interwoven into daily practices: 'the future has to be discussed in terms of the imaginary, in terms of metaphors, but sometimes today's imaginary becomes tomorrow's lived reality'. These burgeoning criticalities could therefore be developed into transformative practices that shape participants' future realities.

6.7 Conclusions

In closely analysing the participants' digital dispositions several key points emerge that warrant further consideration. First, contrary to popular belief a proportion of the young people did not see the online and offline as integrated. This was evident in the way the participants described people as 'different' online and by the fact that many of the participants had tacit understandings that were specific to the digital context. This demonstrates that many participants did not see the online as continuous or embedded in the offline, but instead viewed it as a separate, almost autonomous space. While some participants could see that their online behaviours 'spilt over' into the offline, most saw digital identities as different and somehow removed from other offline identities. While most participants could move seamlessly between the online and the offline, the online world was described as operating under a set of different social conventions. Further, if participants had greater 'barriers' to getting online (i.e. they could not move 'seamlessly' between the two) then the difference between the online and the offline was even greater. In the case of at least two participants, whose access to the internet had been limited either in the past or present, the digital context was seen and described as another world.

Binary terms were used to describe aspects of digital technology and digital media use. At least four participants described the technological future in dystopian terms, while another two saw online communication as inferior or 'a waste of time'. This complicates the idea of young people as 'digital natives'. Perhaps more importantly this becomes a tension with which young people must contend with as they negotiate digital spaces. Due to the way society has positioned them, young people have little choice but to identify as 'digital natives', however, things can become confusing and problematic when their own digital experiences and practices do not live up to expectations. Several participants held competing ideas in their mind: that the digital context is essentially where they should feel most at 'home'; but that their 'home' is a separate and perhaps inferior world to the non-digital.

Related to this point was the fact that the participants believed they were solely responsible for their online behaviours and, more significantly, how others interpreted and acted upon them. This was evident when participants discussed the processes around uploading content. The overriding rule participants followed was that if they

were not happy with content being spread publicly by others, then it had no place online. This idea comes from the cybersafety discourse and in many respects it does make young people mindful of what they share online. However, it also leads to the idea that individuals have little, if any, control over what happens to content or the digital self online. Given the various pressures on young people to both promote *and* protect themselves on digital platforms it is perhaps not surprising that three participants described sitting on the digital ‘sidelines’, too anxious to post something in case it led to social recriminations. As Sean, explained, protecting yourself from all the ‘gross stuff’ online was the responsibility of the individual. For the participants if something went wrong or they saw content that was illegal or offensive online it was their fault and not the result of greater forces at play.

A final point is that many of the participants imagined the internet as something which is hierarchically organised, most notably by popularity and status. Popularity and status were not only concepts by which participants understood the structure of the internet and flows of information within it, but the drive for popularity and status also motivated and shaped the kinds of digital practices they and others engaged in. These were detailed, critical and complex understandings that had been acquired and cultivated within the digital milieu. With little formal and technical knowledge to draw on participants appeared to focus more strongly on the social processes that it facilitated, rather than considering how the architecture of platforms encouraged and constrained particular practices.

Chapter 7: Young people's digital identities

7.1 Introduction

The notion of identity is both ubiquitous and elusive in academic discussions of contemporary society. Back (2012, p.26) argues that as 'everything has become an issue of "identity" the notion is increasingly loosely defined and diffuse. Identity has become a zombie concept that is "little more than portentous incoherence" (Gleason 1983, p.931)'. This might appear a counterintuitive way of framing a discussion of how young people are using digital media to form and represent their identity. Yet Back's dismissal does in fact provide a useful framework through which many of the emerging issues from this study might be understood. As most social networking sites are constructed first and foremost around an individual profile, i.e. an online representation of identity through which all social interactions on the network are mediated. On social media, 'identity' becomes attributed not only to visual representations, but also to posts, social interactions and associations. Through social media, identity has become not only more 'visible' and prevalent in daily life, but also more diffusely embedded and difficult to define and discern.

Notwithstanding this 'incoherence', 'identity' is traditionally understood in specific ways. Donath (2014) suggests that 'identity' refers to two different, but related phenomena. One is 'individual identity', or 'who you are as opposed to any other person'. The other is 'social identity', or 'the type of person you are and your role in society' (p.228). As she explains, a social identity is 'how people make sense of you – how they understand what sort of person you are, what type of relationship they might have with you, what behaviours they can expect from you, and how they should act toward you' (p.228). This chapter focuses on how participants used social media to enact a series of identity practices. These identity practices are a significant part of how young people (re)form and (re)present their identity and are therefore interwoven into conceptions of self. While these processes are intertwined with individual identity, it is social identity that young people are representing when they use digital media. In particular, social media acts to explicitly increase the focus on identity, serving as a kind of 'lens' through which users are impelled to interpret and experience this context.

The creative work produced through the research provocations, individual interviews, group discussions and online observations revealed a range of factors that shaped how the young people used digital media to form and represent their identities. Not only did social media help to support visual representations of peers, friendship groups and wider social networks but it was also used to share an accomplishment, reveal a different side of identity or catalyse the process of 'becoming'. Despite these findings, identity was found to be less fluid across digital contexts and over time than many discussions of social media might suggest. While 'fluidity' suggests that individuals move between identities easily, experimenting and changing at will, the findings from this research point to a slightly different set of processes. In this study participants most often appeared to be tethered to 'real' embodied identities. This stasis resulted in *replications* of self across online and offline contexts. In this way, tethering worked to limit the degree to which individuals in the study explored and exhibited different aspects of their identity. This is not to imply uniform stability of identity across all participants and all online contexts. One individual in particular was able to negotiate the process of tethering better than the others, suggesting a form of social media literacy was at work that enabled greater freedom to become a range of different identities in these contexts. This suggests a need for further discussion and deliberation on the role that digital media play in the way young people represent and form their identities.

Organisation of findings and discussion

This chapter begins by outlining the most common techniques of identity representation on social media that were evident among the participants in the study. In particular, it looks at the importance of photographs and the part that social media played in strengthening bonds between friends, family and romantic relationships through the construction and circulation of photographs. It argues that behind these techniques of representation was often the desire to attract attention and, for some, to acquire popularity. The first section focuses on Facebook – the social media platform that formed the basis of the online observations. For all participants on social media, Facebook was the first and primary platform they used, meaning it played a significant role in developing and establishing behaviours around the online presentation of identity. This section also pays attention to the use of profile and cover photos. These were not only integral elements of the participant's representations and

interpretations of identity, but also a central element of how Facebook is configured to display content.

The chapter then discusses how participants engagement with digital media led to different 'becomings' (Deleuze & Guattari, 1980/2013). Here digital media were found to work in an aspirational way – not only helping the individuals to develop skills, but also to ensure friends and followers recognised aspects of their identity. In some ways, public recognition of this change was almost as important as the change itself, with social media an integral tool in the processes of becoming. However, as Fuller (2005) argues there are limitations to what people can 'become' and these are often set by the social conditions that surrounds digital technologies. In this sense, many participants expressed the belief that representations of identity on social media should be 'truthful' to embodied identity. Their digital 'performances' were calibrated against audience expectations of who people were and how they should behave. Among other things, the chapter explores how tethering comes about and how this influences the ways in which identities are represented on social media.

7.2 Identity representation

The role of photos

Given the visual nature of social media it is not surprising that photos are an important element of how identity is represented. As the participants in this study explained, photos were a principal way of understanding or comprehending another's identity. For example, in interview Mark said: 'I guess you can judge a lot from their profile picture...depending on what it is'. When asked to identify the most important aspect of a Facebook page, Sean replied: 'I think definitely the profile picture or their photos...you can gauge what kind of person they are'. The cues that participants used to understand identity were often visual in nature, which might have been related to an inherent ability to predict behaviour from expressive gestures. In a study that explored how expressive gestures are used to understand behavior and identity, Ambady and Rosenthal (1992) found that individuals only needed 30 seconds to accurately assess personality about 70 per cent of the time. While the participants in Ambady and Rosenthal's study used 'facial expressions, posture and speech' (p. 256) to predict personality, such a finding demonstrates that humans rely heavily on visual cues, expressed in either real time or via photos, to understand identity. This helps

explain the participants' reliance on photos in the context of the study. Given the absence of other expressive cues on social media, photos take on particular significance as they become a kind of short cut to understanding another's identity. While this is a rather simplistic way to understand and represent identity, the structure of many social media platforms strengthens the reliance on this mode. Even though participants might have been aware of this, the dominance of the visual mode became a constraint to identity representation that the participants had to negotiate.

Participants used photographs in a range of ways to present their identity on social media. In some instances this offered telling insights into their socioeconomic status. Two of the female participants from a private school used photos of themselves at the Melbourne Races. In Australia, the Melbourne Cup Carnival is a popular event, dubbed the 'Playground of Racing Royalty'. While the races are open to the general public, many of the spaces are only available to a privileged few, with the infamous 'Birdcage' described as a 'Premium Marquee Enclosure'. Not only were both girls in formal dress, with make-up and hair done, but they appear to be in an exclusive area of the track:



Figure 30: Maddy's Facebook profile November 2014



Figure 31: Penny's Facebook profile November 2014

Other participants used more playful photos for their profile pictures. For strangers this might have provided less insight into their personalities, but for those they knew it might have signaled something quite typical about their character. For example, Ben used a photo in which his face was difficult to see:



Figure 32: Ben's Facebook profile January 2014

As he explained the choice of profile photo was something that happened by default:

In performing arts last year... we were messing around backstage and we were lined up in a group and we just jumped in the air. And one of my friends sent me a message saying, "Oh could you use this as your profile pic?" So I thought oh yeah it looks hilarious, so I did it.

In interview Ben appeared indifferent to how his identity was represented on social media, however, this nonchalant position was in fact carefully constructed (and also communicated numerous times throughout the study) and thus an important part of how he represented himself on social media.

For most participants the motivation to change profile or cover photos was justified in terms of coming across another, often better photo of themselves. The girls in

particular were very careful about what photos to upload, as Heidi explained: ‘I’m really selective of the photos that go on there’. Indeed, changing profile photos was an important event and described as a way of attracting attention or as Stacey said ‘[giving] people something to look at’. Of the six girls in the study, five changed their profile on Facebook at least once over a six month period, with three of them more than three times each. This appeared to be a more common technique used by girls, as of the five boys in the study on Facebook, only one changed his profile photo more than once. However, as Rachel explained changing a profile picture could bring about a certain anxiety:

I usually take a few photos of myself and then I wonder how many “likes” will this get. I feel kind of guilty for wanting likes and stuff, but I feel like it’s kind of normal to crave a little bit of attention over social media.

Indeed, Rachel’s confessional tone resonated with the group with Stacey adding: ‘Who doesn’t want attention?’ Amongst the girls, there seemed to be greater uncertainty about their social identity, which encouraged participants to seek affirmation from their friends. Rachel was able to explore this idea when creating her inkblot. While her painting appeared vibrant, with the digital side a chaotic array of exchanges and interactions, she chose to represent herself as a tiny, faint, black rectangle just visible in the centre of the painting (see Figure 21). She explained: ‘I don’t know, I feel like I’m a black rectangle (laughs)...cos black always reminds me of like emptiness, I don’t feel empty, but I just don’t know who I am’.

In contrast, when the question of social belonging and identity on social media was raised in group discussion in one setting, Ben asserted that he did not have that ‘need for social belonging’ and Mark claimed to feel ‘the same way’ because he ‘made it 2014 without all that stuff [so] I can go without it all’. As with their earlier explanations, the participants projected an indifferent position toward social media, as if they could take it or leave it. However, whether this was due to a genuine critical distance from the platform or they were complying with expectations around boys’ use of social media is difficult to determine. Evident however was the marked difference in the way the boys and girls engaged with social media and the manner in which these processes and practices were described and expressed in front of others.

In her analysis of gender and social media, Marwick (2013) asserts that in some environments ‘certain behaviour in women is encouraged while the same behavior in men is discouraged’ (p.63). Uploading attractive photographs was a normalised, if not expected, visual representation of identity on Facebook for the girls in the study. However, it appeared that the boys were unlikely to engage in similar digital practices. Marwick (2013) explains that in her study the ‘normative judgment on technology practices was determined by the social context of the creators’ (p. 70), meaning that the intentions, processes and behaviours of the creators become inscribed in the way the platform is structured. While it has certainly evolved over time, the fact that ‘Facemash’, Facebook’s predecessor, was built as a type of game in which creator Mark Zuckerberg and friends rated photographs (often of females) as to whether they were ‘hot or not’ sets a precedence for how the site is used³². It is therefore not surprising that users, females in particular, feel pressure to display or exhibit their attractiveness on Facebook.

For several participants, photographs were not only seen as the key to attracting attention, but also for expanding a network of friends and increasing social interactions. Telling someone they ‘looked good’ was a typical comment Penny made on friends’ photos. It not only made someone more socially visible, but it encouraged Penny to initiate conversation if she hadn’t seen them in a while: ‘Like some of my friends that I have on there [Facebook] I haven’t seen in ages, but when I scroll through and I’m like “They’re looking good lately, I should go see them, I haven’t seen them in ages”’. It is not surprising that this made choosing a photo as a profile picture quite a complex process, as Grace explains:

There’s a lot of stuff with having a new profile picture, like how many likes you get on it and stuff like that. So it’s kind of like it would have to be a *really* good photo if I was to change it, because now it’s a lot more important. So it’s probably a reason why I haven’t changed it because there hasn’t been a photo that I thought that this is a good picture

³² Carlson, N., ‘At last – The full story of how Facebook was founded’, Business Insider, March 5 2010. why a footnote and not a reference?

Despite the pressures that surround the use of photos, uploading and commenting on them was described as the most common activity for the majority of girls in the study. The 'Like' button was integral, as it was the most common form of feedback and, for many participants, the key to popularity and social success. As Rachel said: 'You can tell someone who's popular if they have heaps of likes on their photos and stuff cos then they'll have heaps of friends on Facebook'. For Rachel and many of the other participants, photos and likes became a web of signifiers central to understanding someone's social standing and identity.

But whether clicking the 'Like' button actually meant someone *liked* the content was another matter. In research Provocation 4 – *Re-articulating the icons of the internet*, where the participants redesigned the icons of the internet, Grace drew a pair of eyes as one of her sketches for the 'Like' button. As she explained: 'I think the "Like" button is mainly just to say you've seen it sort of, other people's photos and stuff'. In the end she designed a two-thumbed hand, because liking is more an acknowledgement that you have seen the content and not that you actually like it.

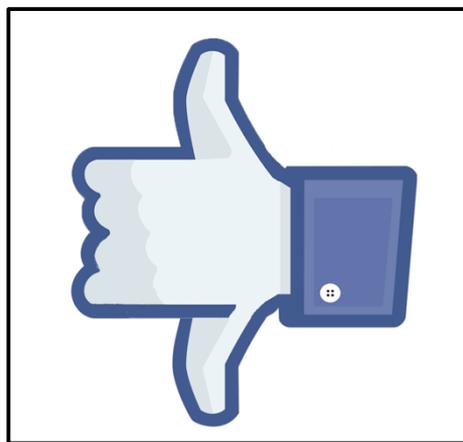


Figure 33: Grace's re-designed 'like' icon

Maddy described opening up her Instagram account and scrolling down clicking indiscriminately on her friends' content - 'like, like, like'. In this way liking something had become almost an unconscious process that was both integral to social media use, but also somewhat meaningless. As Maddy explained, with close friends you are obliged to like their photos: 'If it is one of your close friends, if they put something in their profile photo and it's really ugly and you don't like it, it's like I'm kind of obligated to like it. So I just like it anyway'.

All of the participants were aware of the significance of gaining attention and popularity associated with social media use, which accords with Goldhaber's (1997) notion of the 'attention economy'. According to Goldhaber, in the digital context information is in abundance, while attention is the scarce 'commodity'. The participants demonstrated an understanding of the dynamics of this economy as digital practices were often read and designed in terms of seeking and acquiring attention. The provocations, group discussions and individual interviews were able to draw out their tacit understandings so that the machinations of the processes and social pressures were articulated in greater detail. Mark was perhaps clearest in his analysis when he claimed: 'I see popularity online as a currency. It's just something that you use to become more popular and have more power over things'. Indeed, having popularity seemed to be equated with having greater control and agency in the digital context. This theme was represented in Rachel and Stacey's response to research Provocation 2 – *Visualising the internet*. Rachel and Stacey imagined the internet as a vertical structure with getting to the top associated with having greater control:



Figure 34: Stacey and Rachel's model of the internet

As Stacey explained: ‘People are trying to get to the top and control everything...and try and control others so they know that they’re the top dog’. By using the central pole they conceptualised the internet as hierarchical, suggesting that it is not easy to make it to the ‘top’. The ‘bodies’ strewn around the base ‘successively failing’ at climbing the structure were a testament to this.

The importance of ‘friends’

For many participants, social media ‘friends’ – whether they were platonic, romantic or familial – were an important means of representing identity. For the participants, who they were photographed and ‘friends’ with were important indicators not only of who they were (i.e. family situation, where you go to school), but also what sort of person they might be (i.e. personality, social grouping). As explained in Chapter 6 – *Young people’s digital dispositions*, mutual friends were also used as a kind of gauge to determine the character of a potential friend and thereby establish whether it was worthwhile ‘friending’ them. For other participants, developing a ‘list’ of friends with whom you could socialise without relying on family and outside school time signaled a newfound independence.

Most commonly ‘friends’ were used in profile or cover photos to reveal various aspects of identity. All the participants in a romantic relationship displayed profile photos that included their partner. For two of the participants the same photo was used throughout the duration of the study:



Figure 35: Trent's Facebook profile June 2014

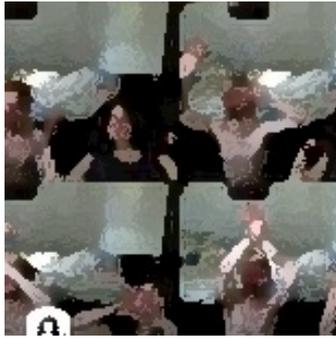


Figure 36: Sean's Facebook profile June 2014

However, Rachel changed her profile photo regularly to reflect the evolving nature of her relationship:



Figure 37: Rachel's Facebook profiles June - December 2014

Displaying the various facets of the relationship in this way served not only to build the relationship, but also encouraged friends and family to acknowledge the relationship. This worked as a kind of public validation for them as a couple, and for Rachel as well in her choice to be with him. With each new photo came a stream of likes from friends and family and, most notably, words of affection from her boyfriend. This bordered on the extreme with an exchange ending in another participant, Mark, posting: ‘Alright guys we get it!’ In a similar way, Rachel’s boyfriend included her in his profile photos, however, if he did not it could be seen as a kind of betrayal, as she explained:

His friend took a photo of him and it doesn’t have me in it and he made it his profile picture and Chris’s is all like panicking it doesn’t have you in it and I’m freaking out. And I’m like it’s ok. So I kind of have all my photos of him because he is an important person to me as well, but like you know.

Friendships were also cemented through photos, perhaps most conspicuously in a profile or cover photo. However, for two girls in the study, friends also helped to choose the best profile picture to upload, so that they were essentially ‘co-curating’ their identity with close friends, as Penny outlines:

I’m like "I don’t know which photo to use" and then I send them through because there would have been three or four photos from that night or another photo I had that I liked and I wanted to change my profile picture. So I’ll send it through and go "Maddy, which photo should I use?" And she’ll go "I like that one".

This worked as a kind of insurance against negative feedback, and perhaps ameliorated some of the anxiety associated with posting a profile picture, as they were testing the representation (and those of friends) prior to uploading.

Public displays of friendships or communication were a common way of signaling belonging to a particular social group. This was commonly achieved through cover photos:



Figure 38: Maddy’s Facebook cover photo October 2014



Figure 39: Grace’s Facebook cover photo October 2014



Figure 40: Sean Facebook cover photo June 2014



Figure 41: Penny's Facebook cover photo November 2014

As Grace explained, who to include in the photos was important because it signaled to those in the photo how important they were to you, while to others it told something of associations and identity: ‘So like the people in the photos are probably like my closest friends, so Mia is in both of them, she’s probably like my closest friend’. Another way of signaling group membership was to only post information to a particular group of people. For Dylan, using Snapchat made him realise that he could continuously share what he was doing with a particular group of people:

Snapchat has the X on 2013 because that’s when I kind of first started using it and documenting my days with all my friends. And I kind of came up to the idea that I have like at least 100 friends I can talk to on Snapchat or just show them what I’m doing

In Dylan’s case, membership of this group increased the audience with which he could share his thoughts and ideas. No doubt this was a significant realisation for him probably because it increased his confidence in his social identity. For Sean being a part of the Facebook group ‘The Marauders’ enabled him to identify more strongly as an artist, as it was composed of people he went to art school with and was where he could ‘put his artwork and that sort of stuff up’. To add to the exclusivity and

significance of being in this group, Sean explained that it was ‘a secret page that just my friends are in’.

Friends played a pivotal role on social media, helping participants to explore and represent various aspects of their identity. In relation to identity, a friend’s list might be used to gauge personality or social standing, meaning that for many of the participants, friends’ lists were carefully curated. Profile and cover photos were a common way of signifying belonging to a particular social group or to indicate that they were in a relationship. The visibility of these relationships, made possible through social media, made this a significant observation. As demonstrated through Rachel, Sean and Trent’s Facebook page, a romantic relationship was formalised and validated through profile pictures in such a way that it became a more obvious part of identity, perhaps providing others with a short cut to understanding who they were. For several of the participants friends might also be used to co-curate identity, perhaps alleviating some of the anxiety around representing themselves on social media.

However, on another level friends and followers became a type of resource in the digital context. There is a clear connection here to the earlier section on attention and popularity on social media, as it seemed that friends, ‘likes’, attention and popularity were caught up in a positive feedback system, where increases in any one of these elements led to overall gains. This was explored as part of research Provocation 4 – *Re-articulating the icons of the internet* when some participants were able to re-design the friend icon. When prompted to critically consider the icon, Sean multiplied the figures in it and placed question marks on their faces. This design aimed to demonstrate the pressure to have a lot of friends, even though many people did not know who their Facebook friends were:

I think it’s definitely strategic [to have lots of friends] because people can brag about how many friends they have and it’s sort of a competition to some people. I think people feel better about themselves if they have a thousand friends.

In a similar way, Trent redesigned the icon into a series of stars, because as he explained: ‘I’ve got the stars, lots of stars, symbolising populars trying to become popular’.



Figure 42: Sean's re-designed Facebook 'friend' icon



Figure 43: Trent's re-designed Facebook 'friend' icon

7.3 Identity formation – a series of becomings

As young people of a particular age, a significant part of the participants’ digital practices were associated with exploring and experimenting with various identities and aspects of identity. These might be collectively understood through the concept of ‘becoming’ (Deleuze & Guattari 1980/2013): an ongoing process whereby one component of a digital network, be it living or non-living, is influenced by another, changing its value in some way and bringing about a new entity or unity. Following Fuller (2005), a holistic perspective on digital networks might include the individual, the people they encountered within, or associated with, in the digital context, the digital platforms they engaged with and the devices that mediated these practices. As part of digital mediation, various elements of their digital networks were brought into contact and in some instances shaped and changed elements of each other. In this way the individuals embodied a series of becomings as they interacted with the world around them. Becoming emerged as a recurring theme in the study as participants

articulated the range of ways that digital media had shaped and influenced them. For Stacey digital media worked in an aspirational way by encouraging her to develop certain qualities and beliefs, such as working hard and setting goals in life. It also facilitated changes in social and vocational identities for a further five participants by helping them to develop particular skills or facilitating specific practices. It enabled them to exhibit these new identities to various ‘audiences’ helping to validate or formalise these becomings through public acknowledgement and recognition. In some instances the changes were unconscious processes that occurred simply because of new unities and associations brought about through their digital networks. But, at other times, practices were carefully considered and planned to signal conscious and deliberate changes in identity.

Vocational becomings

Digital media sometimes worked in an aspirational way for participants, encouraging them to aim for a particular vocation in life. As all the participants were teenagers, using digital media and the internet provided a ‘window’ to a wider world; one that was bigger than school and home and within which you could become a myriad of things. For some participants, coming across a new idea or source of inspiration ‘planted a seed’ for what they might become; this ‘aspirational’ self might also be woven into representations of identity to reinforce the changes that were taking place. A large part of Simon’s digital practices involved gaming. On Steam he went by the name ‘Agent North’ and as he explained this character exhibited traits that Simon aspired to as a gamer:

He’s one of my favourite characters cos he’s a very, very smart person. You can try to hide something from him, but he’ll be like “What are you trying to keep secret?” He’s also not very strict either, he’s smart and laid back, but when the time comes, he’ll get the job done.



Figure 44: Simon's Steam profile October 2014

Simon was not on any social media but spent a lot of time on Steam and marked finding the 'EB Games' store online as a significant moment for him on his timeline of digital practices. As he explained, 'seeing the games that were out there and then going in depth on those games', as well as seeing the 'community' built around them, was the 'start of his ambition to become a professional gamer'. Not only did this provide Simon with a sense of belonging but as he described he began to feel less constrained and more empowered by these experiences: 'I feel I can do something on these things because it's not restricting me to what I can do *now*'.

Digital media also provided opportunities for participants to develop their skills, enabling them to cultivate an identity associated with a particular vocation or interest. These practices signified a more intense commitment to a professional identity and involved a more active pursuit of their aspirations. As a budding writer, Rachel did not have many opportunities offline to explore this aspect of her identity and better her skills. Internet sites like Wattpad and Quotev provided her with that space: 'I wasn't overly open about what I wrote, I always kept it a secret, but then if I'd never found Wattpad I'd still be really secretive about my writing and stuff'. Beyond providing a space to practise these skills, Wattpad was about 'becoming' a writer, which was an important, but underdeveloped aspect of her identity: 'I can find myself with writing cos I can connect with all the writers and that makes me feel a bit more like myself'. While her visits to the site had more recently declined, she clearly viewed these interactions as a large and valuable part of her digital practices.

Two of the boys in the study were hoping to work in the film industry when they left school and both used YouTube as a way of developing their skills. On his timeline

Ben marked discovering YouTube as a significant moment, because through this medium he could work toward his goal of 'becoming' a director: 'I've been planning out some different videos that I want to make in the future... I guess I want to put it out there so people can see it and get inspired themselves, cos I want to be a director when I grow up'. In this way, his digital networks, including his devices, collaborators and audience, provided him with a process and space in which he could develop his skills and 'become' the filmmaker he aspired to be. In a similar way, Mark had a YouTube channel where he and his friends made and uploaded films based around gaming called 'Screencheats':

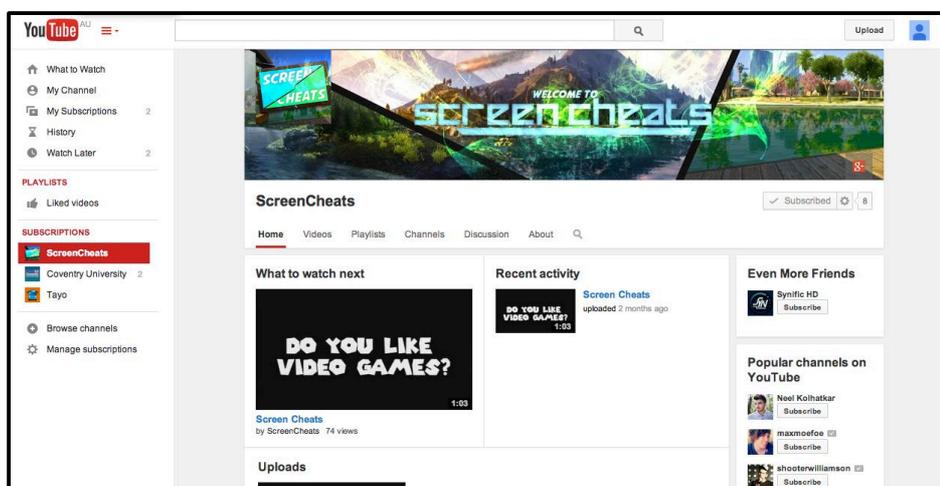


Figure 45: Screenshot of Mark and friends' YouTube channel 'Screencheats'

In talking about Screencheats Mark said: 'It's just a good feeling that people want to watch your content and like what you're doing. It kind of gives you a sense of purpose'. In both instances important identity work was taking place through the development of skills and the public recognition of this.

As well as skill development, social media was perceived as a way of promoting personal qualities that might lead to a professional or vocational identity. Artist Sean explained that digital media were 'pretty important' in generating his artistic identity, as he found 'some kind of media' necessary to 'projecting your stuff outside your social bubble'. He had a Tumblr account that he could link his Facebook friends to:

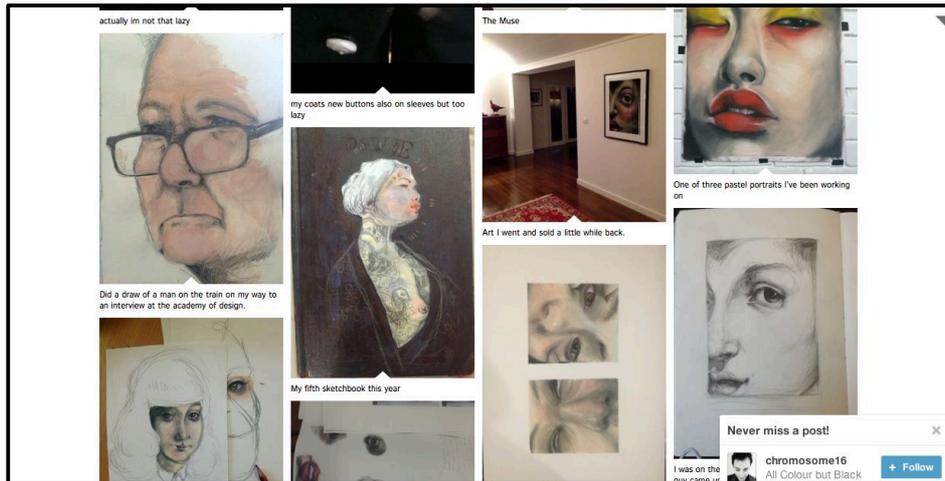


Figure 46: Sean's Tumblr page June 2014

Important to both his and photographer Dylan's vocational 'becoming' was the feedback friends and followers could leave on social media, helping them to refine their techniques. While Dylan started using Flickr in 2012, in 2013 his use really 'blew up', as he explained: 'I got my camera and I got really into photography. It's kind of accelerated more and more as I got into photography'. Flickr had provided an important space for him to experiment and improve his photography skills:

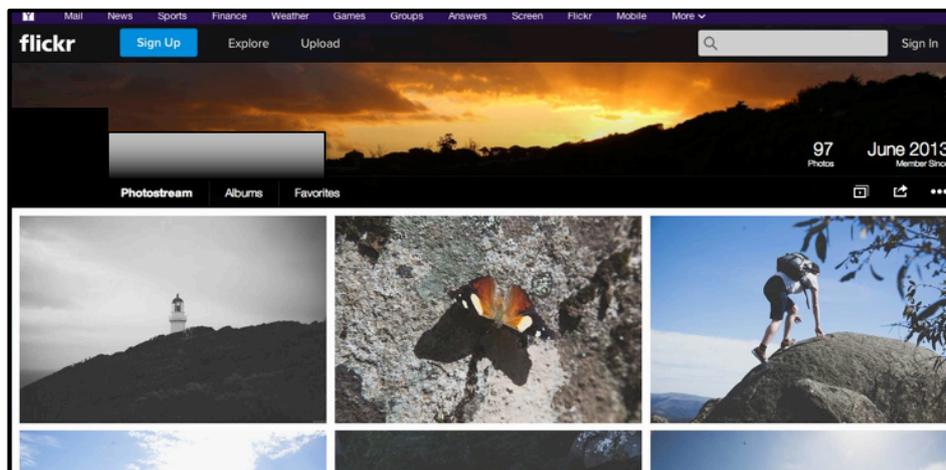


Figure 47: Dylan's Flickr page September 2014

In interview, he described the process:

I used to post stuff, like just photos of flowers and things like that...it was just really bad shots, like amateur shots. I deleted those...and now I have some experience of working on it and putting out photos and a nice portfolio type thing for my photography. And so if someone wants to see I can just link them, instead of sending them my photos.

It appeared that Dylan was not only developing his photography skills, but also beginning to see his skills in a more professional light.

Social becomings

In addition to vocational becomings, digital media were also important in facilitating social changes for the participants. In some instances these becomings were marked by conscious practices designed to show a different aspect to an individual's personality or to signal to others a sense of independence from the family unit.

However, many participants spoke about the unconscious changes taking place as part of their digital practices, which they had only become aware of recently, sometimes as a result of the provocations and group discussions involved in the study. In some cases social media became a testing ground in which they could work out how to deal with particular types of people and negative exchanges. Given the temporal and physical space afforded by digital media, participants felt better placed to work through these complicated situations, giving them more confidence when handling these situations in the non-digital world.

Stacey began watching episodes of the anime 'Uta no Prince-sama' online in 2009. As well as introducing her to 'many new words and cultures' it also modeled the idea that you 'need to work hard to get where you want to go'. She marked finding 'Uta no Prince-sama' as a significant moment on her timeline mainly because it demonstrated to her that anything is possible if you work at it. This message, and the aesthetics associated with it, had resonated strongly with her, as anime has become a significant part of how Stacey represented herself online. For example, she was part of the 'Uta no Prince-sama' Group on Facebook, and also clearly 'liked' Japanese popular culture:



Figure 48: Stacey's Facebook page of 'groups' and 'likes'

Stacey had also used anime to explore and represent her identity, so that she was in some respects 'becoming' an anime version of herself:



May 2014

July 2014

September 2014

December 2014

Figure 49: Stacey's Facebook profile pictures 2014

This interest in anime, primarily inspired by 'Uta no Prince-sama', also encouraged the acquisition of new digital practices leading her to create an anime version of herself as seen in the September 2014 profile picture. She was able to share this skill with her class as she explained: 'There's a little app called Anime Girl and you can download it onto iPads and like iPods. And so I used it, last year, I used it to create a whole bunch and try to make it look like all the students in my class'. Despite the effort that Stacey had put into the pictures of herself and her classmates, she said in reference to her posts on social media: 'I don't usually get feedback, but it's fun to try

and show'. While the most recent profile picture was clearly influenced by anime, it was a less overt expression than the prior one (September 2014). This signaled a smoother, more believable incorporation of this identity (and its aesthetics) into her visual representations.

It should also be noted that these experimentations with identity were primarily enabled through digital media opening up new perspectives on the individuals to be explored. These could then be 'put to work' by the inspiration or motivation they encouraged, changing how participants viewed themselves and their futures both in the digital and the non-digital world. Stacey's Facebook cover photo was of a New York street, taken while visiting there earlier in the year. As she explained she wanted to 'show a couple of people' the photo, 'cos it's also a dream to go back there and do a bit of studying'. Through the set-up of the Facebook page she was actually doing just that and 'placing' herself in New York, creating some kind of association in both her own and her audience's mind:

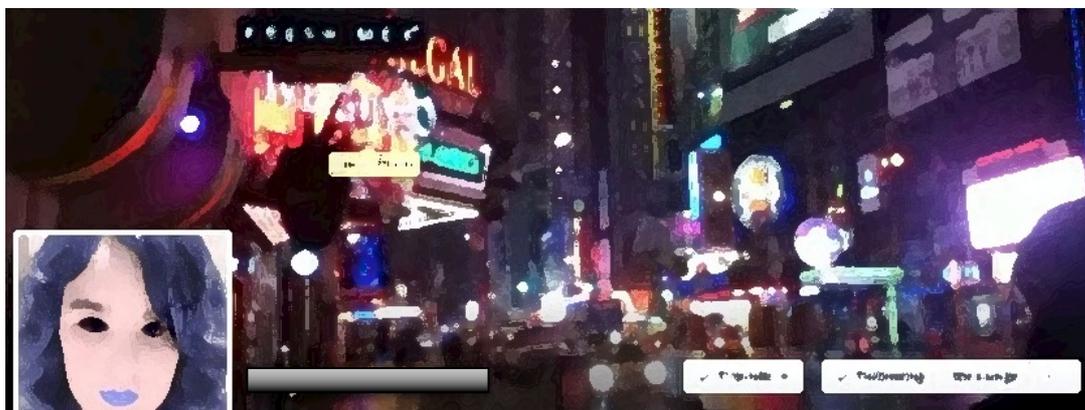


Figure 50: Stacey's Facebook cover photo December 2014

For three younger female participants, digital media were key in their 'becoming' social. In fact, none (all aged 15 years) used digital media to develop skills or interests aside from those associated with schoolwork. For these girls, social media was essential in becoming socially visible, particularly as their school was exceptionally big. In fact, it was the largest school in Australia by enrolments (Hodgson & Willows, 2010). All three girls were on four social media platforms: Facebook, Instagram, Snapchat and Tumblr. Across the four phases of the research the fear of missing out on an invitation was cited repeatedly as an important reason for being on social

media. As Penny explained: ‘I also find that people that don’t have Facebook, not that this is a life ruiner, but you wouldn’t get invited to as many things and you don’t see friends as much because the conversations you have with your friends they start and then you’re like “I’m bored, let’s do something”’. ‘Finding’ Facebook was a key moment for each of these participants and was indicated as such on their timelines of digital practices. Grace said that using Facebook helped her ‘catch up with people a lot more regularly’. While Penny explained that the cross on her timeline represented just how new and important Facebook was to her:

I think that kind of changed how I did everything... Yeah so 2010 I started talking to my friends more and I organised ‘playdates’ as we’d call them for myself and I was more talking to my friends rather than my parents calling their parents and saying this date, this date.

In fact this was a common thread for most participants; their use of Facebook coincided with greater freedom to communicate, socialise and organise events with friends outside school without relying on parents. It was viewed as a kind of contemporary debutante for participants signaling their social emergence or becoming.

However, several participants noted that using some digital platforms inadvertently encouraged them to ‘toughen up’ so they could handle some of the more negative people they encountered. The solution was not as simple as leaving the platform. In a similar way, Stacey noticed that her brother became more ‘gangster’ and ‘hostile’ when playing ‘Grand Theft Auto’: ‘I’ve noticed with my brother when he started playing video games he started changing as well... They’re watching something and they’re trying to manipulate it and they start reflecting it’.

While these experiences might have been confronting, pushing individuals to display characteristics they otherwise would not have displayed, for some young people working through these negative exchanges online was good practice for how they might handle these experiences offline. On his timeline Sean indicated playing ‘World of Warcraft’ as a significant moment and this was because it helped him learn how to handle ‘difficult’ people: ‘People are kind of nasty online because of that

mask of anonymity and it sort of helps me with tougher people, which I would say was a catalysing point'. This was a recurring issue for Sean. Using Facebook was another important moment on his timeline mainly because he was shy and the platform afforded him the ability to hide or exit from interactions when he felt uncomfortable: 'I was a fairly shy person and it helped me talk to people better...It was sort of a safe way to talk to people with not actually having to be there, and you could sort of say I have to go'. However, for others the experience was less positive as it was more difficult to identify and resist the overtly negative influences of the digital context. In Rachel's case she had to quit her Tumblr blog, but that was not before she felt herself becoming upset and depressed by the content.

As already discussed, digital media provided a range of opportunities for the young people to explore and experiment with their identities. This sometimes involved the emergence of a more social and public persona or the cultivation of a vocational identity; either way these were all significant moments of becoming for the participants. The digital context might therefore appear to have presented them with a fairly open 'canvas' from which myriad becomings emerged. However, the situation was more complicated than that. Indeed, on many occasions participants intimated there were contextual factors that also shaped their practices. A close examination of these influences suggests that negotiating identity in the digital context was a play-off between individuals' desired identities, the structure of digital platforms and the social and educational discourses that frame these practices

7.4 Tethered identities

This final section examines how various contextual factors also influenced and shaped participants' becomings. It became clear that the participants were directed to particular identity practices, which suggested that identity is less fluid and free online than what has been previously theorised in the literature. Indeed, despite the poststructural framing of identity set out in the early chapters of the thesis, the findings point to more restrained and structural set of identity practices. In analysing the data from the study it appeared that in the digital context identity was actually 'tethered' in a number of different ways. The first way was through the structure of social media platforms, like Facebook, which promoted particular forms of identity representation. Also contributing was the participants' increasing use of social buttons

external to the Facebook site, meaning that a wide range of internet practices become tethered to their Facebook identities. A second way was by tethering digital identities to an idealised notion of a 'real' self. In this way, the participants tended to interpret digital identities by comparing or calibrating them to their supposedly 'real' or 'authentic' identities, which they intimated were limiting. The emergence of these practices may have been due to the push by social media platforms like Facebook to present a real or truthful version of identity. The cybersafety message also played into this discussion as many participants recounted the idea that it was important to know people face-to-face before becoming friends with them on social media. Inadvertently, this established some kind of 'a priori' identity by which future representations were compared.

Turkle's (2006) notion of the 'tethered self' is quite different to the way in which 'tethered identities' are explored here. Turkle is concerned with the way 'tethering technologies' shift understandings of the physical self, arguing they move individuals into a liminal space that 'reinvents intimacy and solitude' (Turkle, 2011b, p. 28). As a point of departure, 'tethered identities' in this research is used as a way of conceptualising the *limitations* to identity play and becoming in the digital context, arguing that identity is not as fluid and free as what might have been originally thought. Indeed, the 'utopian argument' that online spaces offer freedom from the corporeal body and 'limitless space for constructing new identities' (Ringrose, 2011a, p.601) is questioned through these findings. Unlike Turkle, who centralises the physical identity (which she argues is becoming diluted and diminished by technology), this research sees digital and embodied identities as part of an interconnected network that has multiple axial points and prisms for various identities to emerge, circulate, intensify and dissolve.

How identities are tethered

To use social media individuals enter information about their identity into a structure that is predetermined by the platform. On Facebook the user completes a profile (with information like date of birth, hometown, relationship status, also including profile and cover photos etc.) and is then encouraged to enter 'Statuses' with the prompt question, 'What's on your mind?' Feedback is given via the Like/Share/Comment buttons that appear at the bottom of posts. Facebook then 'curates' these posts into a

'Timeline' based on the popularity of each post; a post with few comments or likes could therefore 'slip' off the 'Timeline'. Down the left hand side of the 'Home' page there is information about popular stories that are 'Trending', 'Suggested Groups' (based on what groups friends are in) and photos of 'People you may know' (based on friends' friend list). There are also buttons to 'Find Friends' and 'Find Groups', which prompt individuals to keep expanding their social networks. The structure of the site therefore promotes a particular type of identity - one with lots of friends, 'interesting' experiences and a liking for popular culture and 'interest' groups. Much of this is determined by the individual's friends and interests, however, the use of notifications give continual feedback and information that in a sense 'binds' people to this particular identity.

In order to 'fit' into the structure of social media sites individuals are required to present themselves in particular ways, meaning they become tethered to the identity 'type' encouraged by the platform. One participant in particular, Rachel, was candid about the influence of her Facebook practices on her sense of self:

Rachel: Yeah I start to get notifications on Facebook, I'm like people *actually like* me and then when I get nothing, I'm like *ok*.

Luci: So it's good when you're popular but then when you're not?

Rachel: Yeah it's kind of silly but that what's it's like...I feel like cos you know I'm a teenager and just sometimes I want attention and I think it's bad to say that, but I'm being really honest now.

This 'need' to receive notifications and validation is no doubt a fairly common experience for social media users, particularly for those in their teenage years. It was intimated at various times throughout the study, as explained earlier in the section on the importance of friends. This need, combined with Facebook's constant suggestions and tips on increasing the number of friends, works to inculcate particular practices and encouraged Rachel to add friends indiscriminately. However, this was not an identity that Rachel felt comfortable with. She eventually changed these practices, as she explained: 'Like in 2013 and 12, I just added [friends] you know, I knew them but I didn't know them, I just added them cos I knew that I needed to have them. I started

getting a lot of friends and then I'm like "Wait! I don't need this". At this point she realised she did not need 'all those friends' on Facebook to feel 'loved'.

However, her solution was not to review her list of Facebook friends and practices and pay less attention to notifications, but instead to start a new Facebook page under a different name. Rachel's new Facebook page had just 327 friends compared to the first one that had over a thousand. However, she still maintained the old page because as she said, there are 'still people and things on there that I talk to'. It may well have been socially 'costly' to get rid of it altogether. Rachel found it easier to start a new page under a different name rather than undoing or contradicting the practices that Facebook promotes. Despite this, starting the new page made her realise just how tethered her identity was to her first Facebook page; severing that tie in some way made her happy: 'When I realised about Facebook and stuff I became a little bit more happier than I was. I found a little bit of myself, it sounds a little bit lame'. However, to safeguard against any negative feedback, Rachel continued with the first Facebook page as a 'lite version of her life on Facebook' (Marwick & Boyd, 2014, p.10), but posted more regularly to the second one. While Rachel was clearly happier with the new situation, it showed just how influential Facebook was to her identity, tethering her to versions of herself that she was no longer comfortable with, but felt obliged to maintain. Stacey summed it up in the following way: 'Most people hide who they actually are to be popular or to fit in, instead of being who they really are'. However, given the way in which social media platforms structure identity representation and the accompanying social pressures, it was hard for the participants to present an identity other than what was expected.

Indeed, the Facebook 'identity' was not only integral to maintaining their social relationships, but was increasingly 'mediating' how they experienced sites external to the platform. The rise of Facebook Connect, for example, and the placement of 'Like' buttons on external websites prompted continual sharing with Facebook networks, meaning participants like Rachel became tethered to this identity whenever they were on the internet. As van Dijck (2013a) argues, this aligns with Facebook's commercial goal to tie its data to many sites across the internet through these social buttons. The upshot of this is that individuals link a 'diverse set of online practices back to the singular identity crafted on their Facebook page' (van der Nagel & Frith, 2015, n.p.).

It is therefore not surprising that participants felt pressure to present and maintain their Facebook identity. As Sean explained: ‘You feel the need to be online at all times doing like texting, messaging, like all that sort of stuff constantly’. The study revealed that the participants’ digital identities were strongly shaped by particular social media platforms.

Another form of tethering participants demonstrated was when interpretations of their digital identities were understood via their embodied selves. In this way, participants’ offline identities ‘followed’ them into the digital space, as if they were somehow tethered to them. As Trent explained, he had been bullied a lot throughout his life: ‘I’ve been bullied like my whole life really. It just recently stopped near the end of last year’. The bullying continued in the digital context and was ‘a reason to *not* go online...big time’. This response was indicated on his timeline where he limited his digital practices and deactivated his Facebook account in 2012. Trent intimated there was a sense of control when this occurred as deactivation meant his digital identity was ‘untouchable’: ‘Then you can never message me...and when I started it up I had nothing bad on there so you couldn’t do anything on my Facebook’. Another strategy Trent used to deal with this problem was limiting the circle of people that he interacted with online and using a more covert identity: ‘The only thing I went on was Steam and that’s where like people didn’t know me and the few friends I had on Steam were really just friends that weren’t bullying’. While digital media might have offered an array of opportunities and experiences for Trent to explore, his digital practices and representations of identity were limited. For Trent, digital media were not neutral spaces to explore and exhibit *any* desired identity, but were instead shaped by the external social context, which influenced how he experienced himself and others in the online space. Others perceived Trent’s digital identities through the ‘prism’ of his embodied identity, thereby tethering him to his social experiences offline.

One significant moment of change marked on Trent’s timeline was when he ‘jumped back onto Facebook’ and realised he was ‘no longer being cyberbullied’. On reflection, he acknowledged that his use of a rather ‘serious’ cover photo might have helped:



Figure 51: Trent's Facebook cover photo June 2014

The character featured in the cover photo was from 'Borderlines', a game based on the legend of Pandora's Box. According to Trent, the character 'is a psycho' who just 'runs at people'. As he explained, the cover photo indicated to his network of friends that he wanted to be taken more seriously: 'People don't see me as a serious person in most friend groups, so they see me as a bit of a joke. Even when I'm trying to be serious they tend to laugh at it'. While the quote itself was an attempt to appear unaffected by these negative experiences, the image signified the emergence of a more serious, almost threatening character which appeared to have had some effect: 'They see that profile and they're just like he must be serious or something'. The use of this cover photo was a 'breakaway' practice, in which he made an attempt to sever ties to his embodied or original identity. There was an active decision to distance himself from previous social experiences and the bullied and victimised identity he was tethered to. Indeed, Trent acknowledged that it helped him to become a stronger, more serious person in real life.

Despite overt attempts to become a new or different identity online, Stacey was also tethered to her embodied self. As discussed earlier her profile pictures demonstrated the evolution of an anime self – an identity that appeared more empowered and assertive. Despite the positive rhetoric, Stacey stated a number of times that she had been judged harshly or received negative feedback while on social media. When asked how she felt about the comments that other people had put up on her page, she replied, 'I see some people put positive [comments up], but then others have put quite negative ones up and I just tend to ignore those or block them due to the fact that I don't want to be knowing that stuff'. Similarly, when asked what cues she would use to understand her Facebook friends, she replied you 'can't tell' if they're being

‘sarcastic or something’, suggesting some uncertainty as to how her actions and posts might be perceived by others. As a result, or perhaps as a defense mechanism, Stacey said that she found social media a ‘chore’ and ‘boring’. Instead she preferred ‘social interactions with actual people’, but not because these offered different or richer experiences, but because she could ‘actually see if they’re having a go at me or they’re not’.

One reason Stacey might have attracted more negative attention on social media than any of the other participants was because she portrayed a version of herself that was quite different to the one encountered face- to-face. Indeed, her motivation to present an anime version of herself was to counter the perception of others that she was ‘really shy’ and ‘hard studying’ and instead showed her as having a ‘fun side’. However, whether her ‘friends’ would accept this new identity was another matter. This may have been a source of consternation for Stacey because according to Gee (2000) recognition is an important analytical tool in understanding identity; without the recognition of others these changes might be seen as ineffectual. Indeed, the negative feedback and commentary that Stacey often described suggested that many of her ‘friends’ found her new identity somewhat unrealistic. When compared with her physical identity a dissonance emerged between Stacey and her digital identities, which might, in part, explain the negative reactions she experienced.

For both Trent and Stacey digital identities were a negotiation between the possibilities enabled by their use of digital media, the identity desired by the individual and the social milieu in which they were embedded. Ringrose (2011b) argues that because social media networks are composed of students from a ‘real’ school community the embodied identity ‘intrudes upon the possibilities of...virtual self-representation’ (p.107). While this might mean the identities are more ‘honest’ when compared to a ‘real’ or embodied self, they can also limit becoming and change as the individual is tethered to an embodied identity that is, at times, just as arbitrarily attributed as any other ‘experimental’ identity enabled through digital media. To avoid negative feedback individuals are encouraged to align digital representations of identity with a ‘real’ or ‘authentic’ identity, meaning there are replications of self across online and offline contexts.

There was also evidence of replications of identity across different digital contexts. Participants like Mark used the same profile photo across a variety of digital contexts:



Figure 52: Mark's Steam profile June 2014

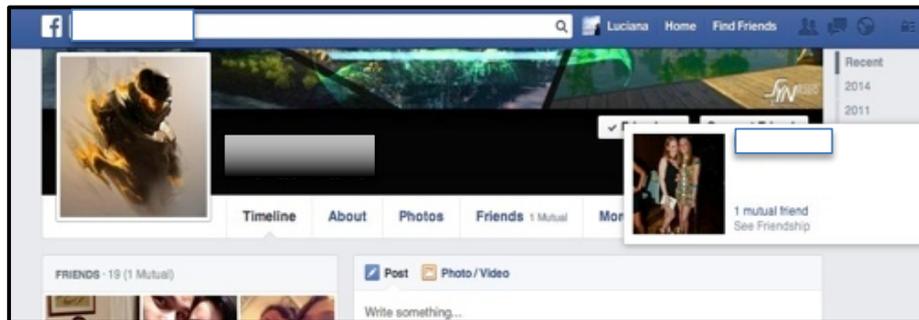


Figure 53: Mark's Facebook profile June 2014

As Mark explained, 'It's a picture I use universally for most of my stuff. I'm kind of fond of it, so I just use that'. For Mark this might have been a matter of convenience and perhaps safety, however, for others the same photos regularly appeared across different social media platforms:

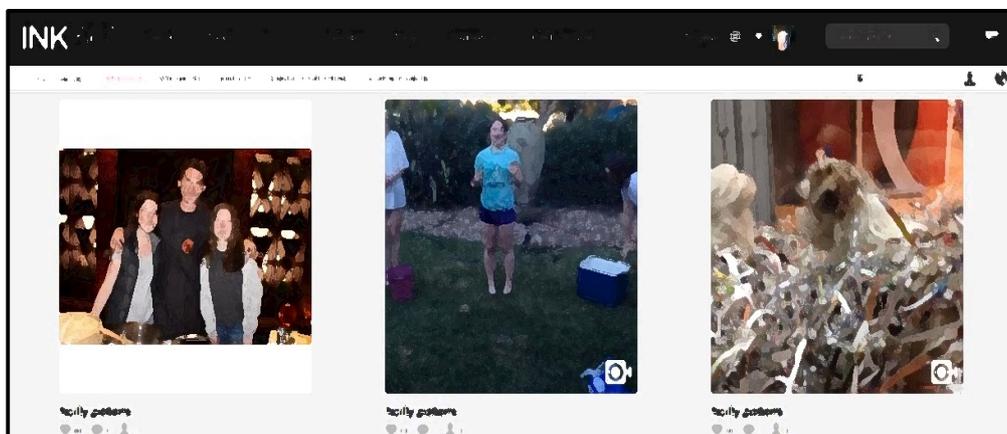


Figure 54: Grace's Instagram page September 2014



Figure 55: Grace's Facebook post September 2014

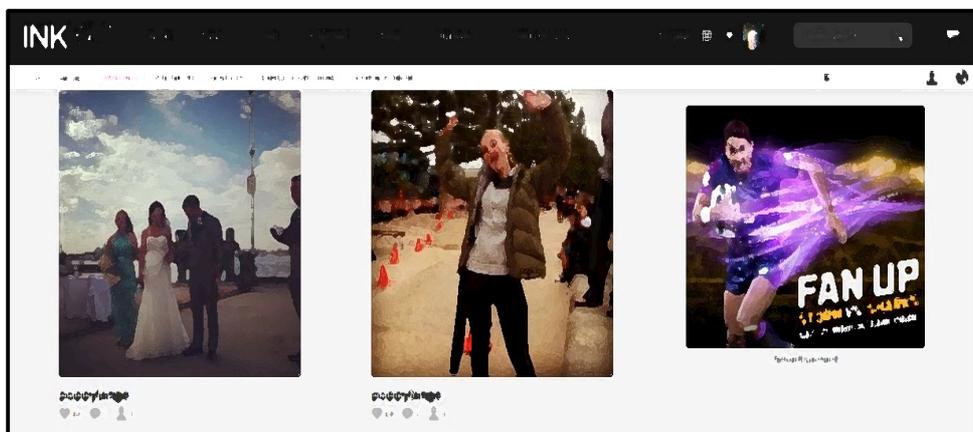


Figure 56: Penny's Instagram page September 2014



Figure 57: Penny's Facebook post September 2014

While these photos appeared in slightly different sequences and sometimes with different comments, essentially the 'same' identity was being displayed. Further, for many participants their friends' list was composed of the same people, meaning the audience for both social media platforms was often very similar. If these platforms

were not offering the participants another perspective on their identity to explore and represent, then it begs the question: How do individuals benefit from being on a variety of social media sites? One explanation is simply to keep up with their social groups. As one participant explained it is most likely that each person in the year group would be on four different platforms – Facebook, Instagram, Tumblr and Snapchat. It therefore became essential to be on these platforms in order to stay ‘in the loop’. This meant replicating one’s identity across social media platforms, to a similar, if not the same audience. In light of this discussion, forming and representing digital identities becomes a negotiation between a variety of factors. These include: an identity that the individual desires or aspires to; the type of identity enabled and promoted by the structure of the digital platform; and how digital representations align with embodied identities and the practices of your social group. While the digital space enables some opportunities for exploring and exhibiting a variety of different identities, these possibilities are tethered by various contextual factors. To cultivate ‘successful’ digital identities therefore requires sophisticated social media literacies.

7.5 Conclusions

This chapter has analysed the opportunities for forming and representing identity across the young people’s use of digital media. While some of the participants were using an array of digital media, social media platforms were the primary sites for identity work to take place. Boyd (2010) points out that a social media profile becomes the ‘locus of interaction’ (p. 42), meaning conversations happen on and through these visual representations of identity. In many respects the participants’ Facebook identities worked to condense and authenticate the other identities explored and displayed within the various aspects of their digital networks. This was a complicated process for the participants to negotiate with several issues warranting further consideration. First is the complex array of pressures associated with visual representations of identity on social media. While simplistic photographs were key to representing identity on social media, yet they were also subject to the most judgment, particularly through the ‘Like’ button and direct comments. In this way, the amount of ‘likes’ a photo or post received was somehow indicative of its worth. All of the participants were aware of the importance of attention and popularity on social media; for those less sure of their social identity this took on greater significance. Despite the

significance of the 'Like' button, its actual meaning was more ambiguous. Although 'likes' might be a type of 'currency' on social media, for many of the participants clicking on the 'Like' button had become an almost unconscious action. In this way, the number of 'friends' the participants had could be positively correlated with the number of 'likes' they received on photos and posts.

On social media, the six girls in the study felt these pressures more acutely. They brought up popularity, attention and judgment as topics for discussion more often than the boys and also explored these themes more explicitly in their responses to the research provocations. This could be traced back to the way in which many of the social media platforms were originally configured. Indeed the prominence of photos on platforms like Facebook and Instagram, reinforce just how important visual appearance are to understanding social identities. Three of these girls said they felt anxiety over choosing the 'right' photographs to post and therefore rarely posted anything. By contrast, three boys projected a critical distance from these pressures, however, this might have been more an expression of the expectations around boys and social media than how they genuinely felt. Either way, when using social media both gender groups had to negotiate the competing pressures of the peer group, societal expectations of appropriate behavior *and* the structure of the platforms.

While participants' digital networks allowed opportunities for vocational and social becomings, recognising and understanding others' identities followed a far more prosaic set of processes. Digital identities were most often understood or calibrated against embodied identities, so that digital representations were often judged by others for truthfulness or authenticity. Reinforcing this idea was the fact that Facebook, the most common social media platform for participants, required all users to have one 'authentic' identity. Participants explained any dissonances between identities with the idea that people are 'different' online. Identity was not fluid in the digital context, but tethered to embodied or offline identities. This fits with earlier findings of this study that showed that the participants did not see the online as confluent or embedded with the offline. Indeed, approached as distinct the digital context brought forth a *different identity* rather than *different aspects* of the same identity. The notion of tethering simultaneously worked to lessen that difference, but also limited the possibilities of what people might become in the digital context.

Chapter 8: Young people's digital connections

8.1 Introduction

Due to ongoing technological development and innovation, the understandings around digital communication and sociality are constantly in flux. Van Dijck (2013b) argues that 'sociality is not simply "rendered technological" by moving to an online space; rather coded structures are profoundly altering the nature of our connections, creations and interactions' (p.20). This chapter explores how the participants negotiate the architecture and functions of digital platforms to connect with others. In particular, it presents a detailed exploration of the specific qualities that these digital platforms introduced into the participants' communication practices and the impact these qualities had on patterns of sociality and behaviour. Referring to these as digital *connections* rather than *communication* underscores the fact that these practices did not always involve the exchanging of information, but sometimes just the acknowledgement or promotion of an online presence. Participants' digital communication could be thought of as a 'series' of digital connections with varying levels of intensity and intimacy. In this way, communicative strategies ranged from one-way projections of information to more involved interactions with others. Underpinning each, however, was the goal of connecting with others. The nature of these digital connections was strongly shaped by the goals of the platform used, as well as the social milieu in which they were embedded. During the research period the majority of digital connections took place on the social media sites Facebook, Instagram and Snapchat. However, school email and several notable affinity spaces also offered opportunities for interacting and communicating online.

Organisation of findings and discussion

This chapter is divided into five sections with each exploring the specific communication strategy encouraged by each digital platform. Five types of digital connection emerged through detailed analysis and coding of interview transcripts, as well as observations and recordings of digital events and practices from the online ethnography, primarily of Facebook and Instagram. Each section gives a brief overview of the digital platform and how participants negotiated these features to connect with the particular audience and particular purpose in mind. With some of the larger platforms different types of digital connection were possible. For all

participants the audience and purpose of their Facebook Newsfeed was quite different to that on Facebook Chat. For this reason the two functions (i.e. Newsfeed and Chat) shaped two different forms of digital connection. All but one participant, displayed different types of digital connections, so there was much movement and ‘bleeding’ between the five sections outlined.

The first section analyses young people’s use of Facebook and Instagram and conceives of these engagements as ‘projecting’ the self into the digital space. Given the focus of participants on these two ‘core’ platforms of social media, as well as the fact that Facebook was the site chosen for the online observations, this section forms a large part of this chapter’s discussion. In the second section, the more synchronous and private structure of Facebook Chat, text message and Skype messenger are described as more of a dialogue based around ‘interacting’ with others, perhaps, in part, because these media facilitate types of connection that are closest to face-to-face discussion. The third section concentrates on the gaming platform Steam, and to a lesser extent other online affinity spaces (Gee, 2004) that are based around shared interests, and involve ‘cooperating’ with others to improve skills or achieve common goals. Often these cooperative forms of communication spilled into social interactions as participants organised events and ‘occasions’, which involved ‘hanging out’ together online (Ito et al., 2010). The fourth section discusses the young people’s more formal uses of email in which the participants were ‘communicating’ with teachers and employees to exchange information, seek further assistance or submit assignments. In the fifth section, media like Snapchat and Qooh.me are analysed and shown to facilitate more ephemeral, honest and risqué engagements, where the individuals were ‘testing’ more tacit aspects of their personality to trigger discussion and elicit more personal information from others.

8.2 Projecting the self – Facebook Newsfeed and Instagram

The most popular social media site used by participants was Facebook. Eleven of the 13 young people in the study were on Facebook, and for many this was the first social media site they signed up to. Simon and Chantelle were the only two participants not on Facebook or any other social media. However, Chantelle admitted that if she were to use social media, Facebook was the platform she would start on. These findings suggest that Facebook is an initial, formative step in the social media ‘ladder’ for

most young people with other platforms ‘added on’. Further, the majority of participants reported that they were users of Facebook before email. Sean, the oldest of the participants at 19, explains that by the time he was ready to start communicating online, Facebook had superseded email, as it was easy to access and more immediate: ‘I feel like it [email] was slightly earlier than most of the internet use that I did, so I never kind of caught on because we had Facebook as an alternative, cos it’s instant’. This sentiment was echoed by a number of participants who identified email as a significant moment in their school-related learning rather than their social interactions, as Facebook already facilitated this type of engagement.

Participants reported a varied audience on Facebook – from immediate and distant family to close friends and acquaintances. Many of the participants had at least 200 friends on Facebook, with two having well over 1000 friends each. To put this in context, a Pew Research Centre report on ‘Teens, Social Media and Technology’ (Lenhart et al., 2015a) undertaken at the same time as the study’s data collection, found that the average number of Facebook friends for US teens was 145, suggesting that even those in the study with the least friends (i.e. 198) were above the Pew data. By comparison, five out of the 13 participants were on Instagram, however, many had more followers on this platform (at the lower end approximately 500 and the upper end close to 5000). Again this was well above the Pew data, which reported US teens as averaging 150 followers on Instagram. As distinct from Facebook, Instagram ‘followers’ were typically friends and acquaintances of the participants in this study, but not family.

Family played a distinct role on Facebook for the participants, but these engagements only formed a relatively small proportion of those that took place. For Penny and Grace, Facebook was a way of staying in contact with cousins who lived interstate or in the country. As Penny explained: ‘I often talk to my aunties or I see things and I comment on the photos of my little cousins and then I’ll show it to my mum cos she doesn’t have Facebook but I’ll be like, “Mum look what our cousins are doing”’. As described previously, for Ben Facebook was the ‘only way’ he could contact his father, who lived in the Philippines. On the other hand, Stacey described her parents acting like supervisors, ensuring she did the ‘right’ thing online: ‘My parents have all access to my internet accounts, so they can see what I’m doing. And that also helps

cos that means I know I can't do anything wrong, even though I wouldn't actually'. Most of the other participants did not communicate with family on Facebook and if they did it was quite cursory. As Mark said, his sister will 'put something on Facebook and I'm like "Like!"'

The digital connections that took place through Facebook were mainly directed toward friends, so they facilitated both strong and weak ties in the participants' social networks (Granovetter, 1973). As Wellman and Haythornthwaite (2002) point out, frequent contact on the internet often reflects frequent contact via other means. One purpose behind Facebook, for example, was to help smooth transitions as life changed for participants. Three participants started using Facebook when they began secondary school at age 12. This enabled them to stay in contact with primary school friends and helped them cope with the transition. As Dylan explained: 'Getting it in grade six was a good idea after you drifted off to different schools, and you still remain in contact basically on Facebook'. In this way, keeping in touch was like a kind of 'safety blanket' for the young people as they made these transitions in life. However, as the participants eased into this change and gained new friends they became less reliant on Facebook for this purpose. Ben explored this theme as part of his map of digital and non-digital experiences when he included his primary school friends, or 'ex-friends' as he called them, on his painting. He also drew a pair of scissors cutting the line connecting him to this group. As he explained, he was 'slowly losing connection with them'.

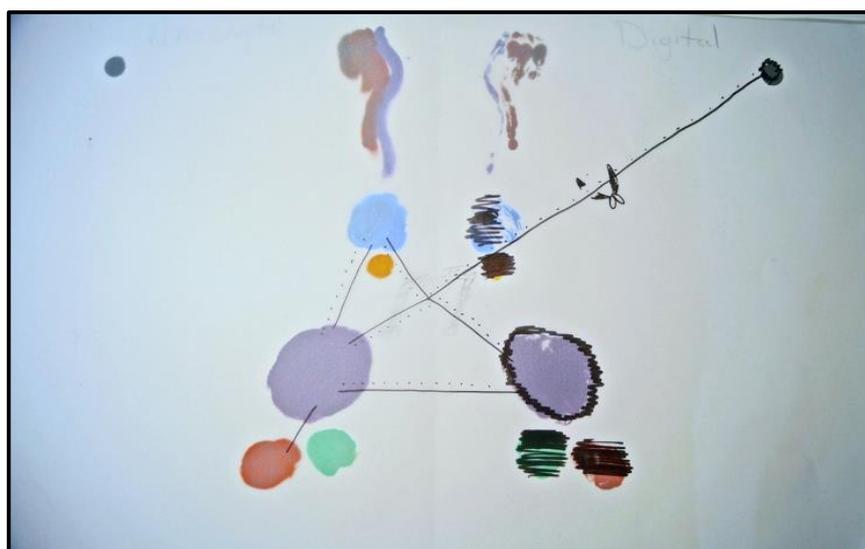


Figure 58: Ben's map of digital and non-digital experiences

Like Dylan, Heidi found Facebook helped her make the transition to new and different situations. She explained that one of the ‘meanings’ of having Facebook was continuing to ‘communicate’ with old friends as she has attended seven different schools. Most importantly, Facebook was described as helping her when arriving in a new country where she knew few people:

When I moved countries...I felt very alone and I felt it was all different and it was the only thing that stayed normal, cos it [Facebook] hadn't changed. So I was like if I go on here it's like you look for stuff that's very familiar, that hasn't changed. So that's the one thing, for the first year I was very like...I relied on it a lot, and then afterwards, after you get your own friends, it came back normally.

Participants also identified the convenience of Facebook as a factor that increased their use of the medium. As Sean explains email has a more convoluted login process: ‘I need to go on the internet I need to Google “Gmail” and then I have to login...whereas I click a tab and I've got Facebook straightaway and it'll tell me if I've got notifications or messages’. The simplicity of ‘checking’ Facebook made it easy for the participants to form habitual digital practices, which as several participants explained can become hard to break. When Heidi started her senior years of high school she thought about taking a break from Facebook to concentrate on her studies, but as she explained ‘it's not worth it’ because she felt the ‘need to know stuff’. This was not surprising given that a major part of the business model of technology companies such as Facebook is to create habits that encourage the user to keep returning to the site as often as possible (Greenwald, 2015). This compulsion to check and be aware of others’ affairs is established not only through the continual notifications users receive on Facebook, but through the type of information that is shared, so that you start, in Mark’s words, ‘tracking real life friends’. As Heidi explained, the information typically shared gives a sense of omniscience and control in that users know what everyone else is doing, which can become addictive:

Well you become more sociable and you know more about lots of people cos you're constantly seeing it – it's being fed to you all the time. You're in everybody's little business, which isn't always great, but you always know what's happening over there, happening over there, happening over there. Like in a school you'll have

certain groups and you know what's happening in that group even though you've probably never spoken to them.

This extended to broader digital networks. For some of the participants Facebook was key in maintaining awareness of what was happening with celebrities and the entertainment industry. As Penny explained: 'You kind of feel in the loop as well because even when stuff happens like with celebrities and stuff, I've liked Fox FM and they're often posting and you can read articles and things about what's going on in the world'. By contrast, Chantelle, who was not on Facebook, felt like she missed out on things with her peers because, as she explained, 'a lot of the conversation is you know what was funny with YouTube, what was the conversation on Facebook'. In this way, being a Facebook user was important to offline conversations as well. Before getting the internet at home Mark felt 'out of the loop', but with the internet now connected he felt he could 'actually start a conversation about something on the internet and be able to be involved in that process'.

All participants said that the main reason they were on Facebook was to stay informed about what was happening in friends', family's and celebrities' lives. As this was seen as a primary purpose of Facebook, participants shaped their posts to suit the expectations of their audience. Heidi's posts on Facebook, for example, were designed to 'let people know what you're *actually* up to'. In a similar way, when I asked Dylan what he used social media for, he answered to 'communicate events and stuff...it's much easier to show stuff I guess'. Digital connections facilitated through the Facebook Newsfeed were composed of photos and posts of events and news so that the individual participants were *projecting* the self into the digital space. Typically this was the participants' 'best' self – doing something exciting with family and friends:

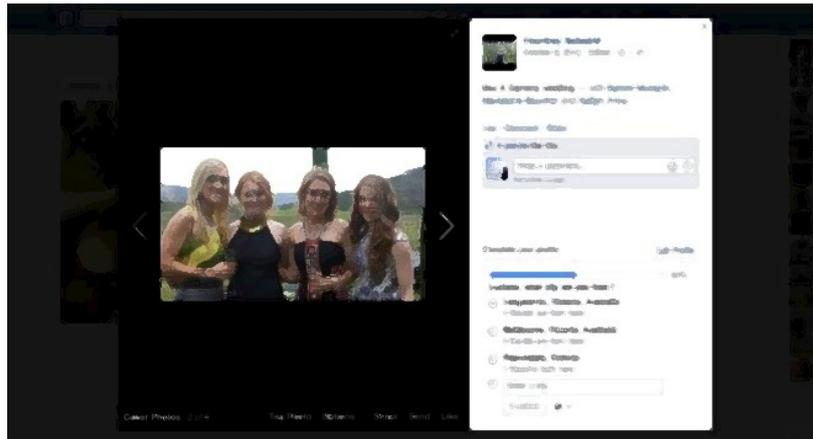


Figure 59: Maddy at the wedding, Facebook post November 2014

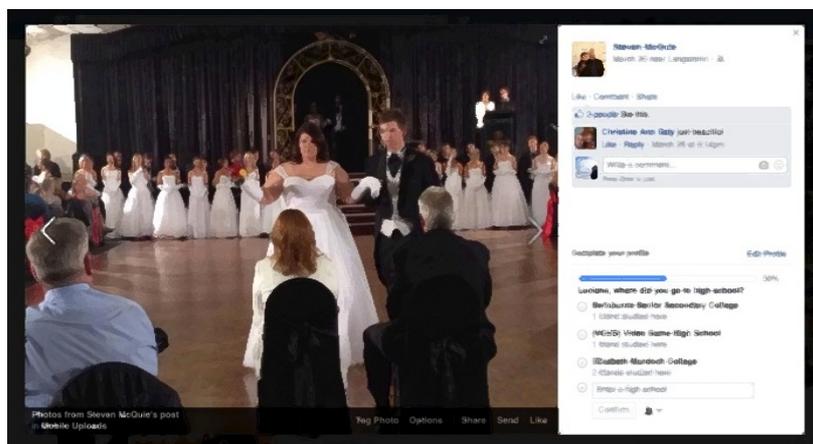


Figure 60: Stacey at the debutante ball, Facebook post October 2014

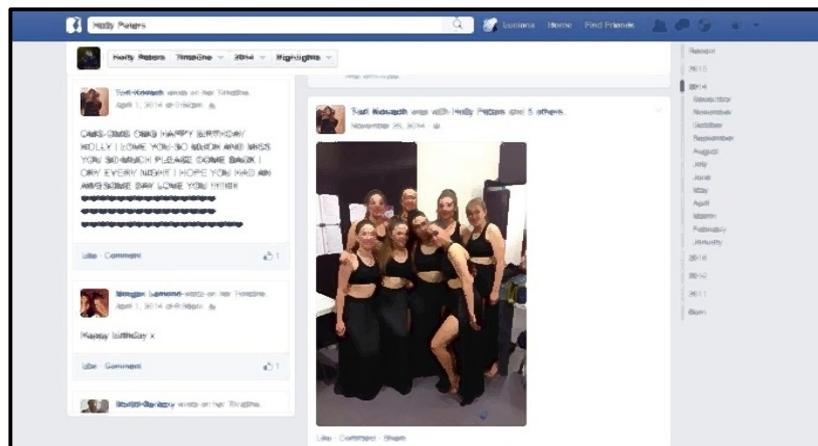


Figure 61: Grace at the dance competition, Facebook post July 2014

Projecting the self was also about seeking the affirmation of others. While this could be a positive process, it also involved peer judgment, which five participants felt nervous about. Three of the five participants posted very little on social media and

reported that they did not do much apart from looking and liking others' posts. As Grace explained: 'I don't post that much. I don't know, I just like looking through what other people post, that sounds kind of weird...there's just not a lot to write about'. In a similar way, Penny put up very few posts, so that her use of Facebook often involved projecting herself via photos and commenting and liking other people's photos, as she said, 'I don't write that many posts or statuses'.

Four participants described their use of Facebook as fairly passive, meaning they were rarely actively engaged in creating and uploading content or communicating with others. For example, for research Provocation 4 – *Re-articulating the icons of the internet*, Heidi chose to represent a Facebook friend as a link in a chain because as she explains 'they're more like a communication link or a link to someone else':

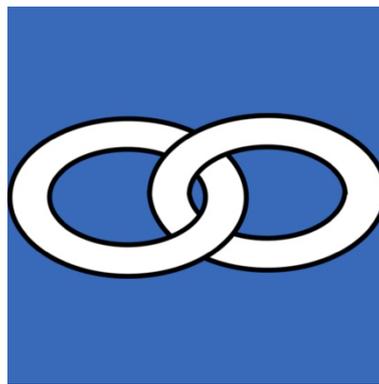


Figure 62: Heidi's re-designed Facebook 'friend' icon

She went on to explain that often when you add a friend on Facebook, 'you never communicate, you never chat with them'. In this sense, friends were not viewed as interlocutors or people to share a discourse with. Implicit in this statement is the idea that information simply passes through individuals often with little opportunity or inclination to respond, engage or amend it. In this way, Facebook friends were seen as transmitters of information. This idea was reinforced when participants were asked about the number of friends on Facebook they communicated with on a regular basis. For all of the participants this was well under 10 per cent of their 'friends'. Penny had 1200 friends on Facebook, but reported regular communication with only 20 of them; Dylan also had 1200 friends but only communicated, on average, with about 14 of them. Another way of looking at this might be to see that the architecture of Facebook

helped reify the varying levels of friendships in the participants' lives, from close to distant.

While many participants only directly engaged with a small percentage of their Facebook friends, a post on the Newsfeed function of Facebook could be seen by *all* friends, which increased the pressures associated with uploading content. This made some participants reluctant to add content. Sean had stopped posting comments or status updates because, as he explained, 'I have so many people on Facebook I don't really want to send them stuff that I don't want them to see'. Sean was a member of a Facebook group started by one of his friends called 'United Against Abbott' which shared political and satirical critiques of the then Australian Prime Minister Tony Abbott:



Figure 63: Sean's membership to the Facebook group 'United against Abbott'

Sean described his membership to this group as difficult to negotiate given that anything that he posted or commented on was visible to his family and family friends, who may have been offended by the more controversial content. Sean had stopped posting onto the Newsfeed and instead communicated with friends by text, which he found 'easier' to manage.

This helped Sean to manage the context collapse (Boyd, 2011) that takes place on Facebook as a result of having such a diverse audience. At another point in the group discussion, Sean described the social media sites Facebook and Tumblr as 'less

private' because 'anything you say can be seen by another, any person who can see your profile or whatever'. He likened these types of platforms to a room: 'So instead of talking to one person you're shouting to one person in a room full of thousands of people'. Highlighted in Sean's description is that Facebook and Tumblr are a type of 'networked public' (Boyd, 2007, p.42), which can become difficult to negotiate due to context collapse. For example, Sean highlighted the difficulty in developing a dialogue with someone in this space, as the structure of the platform means that people can see any interactions that take place through the Newsfeed. As a result, the participants' posts on Facebook tended to be controlled, 'safe', one-way projections of self, rarely becoming more interactive and spontaneous. In fact, Sean had decreased his use of social media and cited the difficulties in negotiating context collapse as a reason for this.

Both Facebook and Instagram are designed for socialising and 'sharing' with peers, and several participants did say they felt a sense of belonging when using social media, however, three participants felt otherwise. As Stacey explained using Facebook was just like 'browsing' not conversing or interacting with others: 'I don't join in with many of the conversations people have so it's like you don't really feel like you belong on it'. In a similar way, Trent and Ben described Facebook in more negative terms, explaining that they felt more connected to the gaming website Steam. In a group discussion, Trent, Ben, Simon and Stacey described Facebook as a 'food chain', with the 'popular' people taking the place of the tertiary predators at the top of the chain:

Luci: ...So you're saying that by putting people down they become popular?

Trent: They go up the food chain

Stacey: Yeah, very much

Ben: Yeah

Simon: If someone's ahead of you, you make them stand down and you move up

Luci: Right you...

Stacey: It's like basically a food chain

Ben: So if you're down here and someone's up here (gesturing vertically) you have to get through all these people to be this popular.

Luci: And how do you do that?

Trent: Well you know you bully them, put them down

Stacey: You lower the people behind, under you...

Trent: Make them self-conscious

Stacey: You make the one's under you feel uncomfortable and you befriend the ones, slowly befriend the ones that are going higher.

This discussion was revealing not only because of the hostile behavior described, but because all the participants concurred with the depiction of Facebook as a 'food chain'. Implicit to this hierarchical description of social relationships is the idea that those at the top of the chain have more power and control. Unlike the study by Merten (1997), which found that hierarchised social networks are more common in girls, in the present study both boys and girls had experienced cyberbullying. Nilan et al. (2015) describe these patterns of behaviour as 'linked fields of struggle' (p.6), where social and cultural capital is often expressed through forms of harassment. This way, online 'peer teasing' is a 'means of building social capital with friends and classmates' (p.7). As explained in Chapter 7 – *Young people's digital identities*, popularity is also linked to 'likes' and therefore the number of friends people have. Underpinning this system, however, is the currency itself - the 'image' or the projected identity of the individual, which becomes a kind of commodity to be cultivated and condensed through the platform. It is perhaps not surprising, then, that some participants described little sense of belonging or connection to Facebook as they often felt less like a thinking and feeling person and more like an object for appraisal and affirmation.

In her essay 'A thing like you and me', Steyerl (2012) explores the struggle for representation through the image. Steyerl argues that through the 'layering' and 'multiplication' of the image, the individual represented becomes 'an image and nothing but an image' (p.49). Problems arise however when individuals are rendered object-like through this process of representation. Objects, argues Steyerl, are typically seen as 'dumb matter'; they do not have feelings they are an 'it' rather than an 'I' (p.51). Given the importance of the image in the digital engagements on Facebook it could be argued that for many participants projecting an identity became a process of objectification; turning oneself, one's feelings, one's ideas and thoughts into images or objects to be commented on by others. As the participants explained and intimated, posts on the Facebook Newsfeed were not designed to interact with

others, but instead to project or show the self and keep up to date with others. This may in part explain the ‘food chain’ metaphor; ‘friends’ are treated as objects rather than individuals with thoughts and feelings – they become an ‘it’ rather than an ‘I’. The individual becomes, in a sense, commodified as an object with social value.

Some experienced this sense of depersonalisation more acutely and more often than others. As discussed earlier, Trent revealed in interview and group discussion that he had been bullied a lot throughout his life and when he was asked to represent himself with a symbol on his map of digital and non-digital experiences, he chose the Pac-Man ghost. As he explained, this was not only because he saw himself as a ‘bit of a gamer’, but also because he tended to ‘appear and disappear out of friend groups around the school’ so, he reasoned, a ‘ghost’ represented him well:



Figure 64: Trent's map of digital and non-digital experiences

In the Pac-Man game the ghost is positioned as the enemy and roams the maze trying to catch Pac-Man. As soon as a ghost touches Pac-Man he withers and dies. Despite the Pac-Man ghost's power in the context of the game it was telling that Trent has chosen to represent himself with something that had no corporeal presence and that could ‘appear and disappear’ when necessary. Indeed, ‘disappearing’ had been described as a defense mechanism that Trent had employed over the years to deal with the bullying he had endured. As he explained he had deactivated his Facebook account in the past to stop the negative feedback, essentially disappearing from view.

From another perspective a ghost is also dead – a ‘disappeared’ human, there but not there and reduced to an exterior only. While there were no doubt other factors that contributed to the way Trent felt about himself, Facebook appeared to play a significant role as he became quite vitriolic when asked about it, stating ‘I hate Facebook’.

It is interesting to consider why some participants still used Facebook when their experiences had been negative. For Ben it was because Facebook was the only way to communicate with his father, and for Stacey, like Penny and Grace, it was to ‘talk’ to cousins and ‘see what they’re doing’. Several participants also mentioned financial considerations, as Facebook is free while making calls and texts cost money. For Rachel, Facebook is the only way she could talk to her boyfriend out of school because her phone was often ‘dead’ and had ‘no credit’. But it seemed the participants’ use of this ‘core’ social media platform was a social expectation amongst their immediate peer group and therefore largely unquestioned. For five participants this created a sense of consternation in which they felt compelled to be on it, often with little enjoyment. While Mark did not ‘hate’ Facebook in the same way that Trent did, he demonstrated little affection for it, describing it as ‘boring’, logging in once a month at the most. Despite this, he had no intention of deactivating his account. Three participants from a private school experienced a term without Facebook while on a school ‘camp’ in the country, and described this as ‘a good thing to experience’ and ‘kind of nice’ to be away from. Indeed, others mentioned the benefits of being forced to have a break from Facebook while in class. The fact that school sanctioned this time away from Facebook was significant for these participants, as they had an official excuse for why they were not using it. The three girls explained that it would be much harder to do this in their normal lives in the city, not only because they would feel out of the loop, but also because there was a social expectation to be ‘on’ Facebook.

8.3 Interacting with others – Facebook Chat, text message and Skype messenger

Distinct from the type of digital connections forged through the Newsfeed, Facebook also facilitates messaging through its Chat service, a real time messaging service, which seemed to fill a similar role to that of text messaging and Skype messenger for

the participants. For many of them, Chat was reported as a useful way to interact with friends and family on Facebook and was more private and ongoing. In some instances, participants reported using Facebook Chat to organise events and complete group assignments for school via the creation of a 'Group Chat'. Text messaging and Skype messenger were also common ways for participants to interact with others, and again there was often quite a functional purpose behind these interactions. Analysing the audience, purpose and context of Facebook Chat demonstrated that for the participants in the study it actually played a similar role to other instant messaging services.

Digital interactions via these forms of media appeared to involve a more intimate group of people, typically friends and family of participants. Text message was often used to communicate with parents, in particular to organise being picked up. As Grace explained: 'I would use like text messages and stuff quite a lot like to get picked up and let mum and dad know where I am and stuff and what I'm doing. But no social media'. Ling and Yttri (2002) call this type of communication 'micro-coordination' in which the mobile phone is used to impart 'functional and instrumental' information. Despite her parents having access to all her internet accounts, Stacey used her phone only to interact with her parents. Three participants shared a mobile phone with their siblings and in these cases the main purpose for using the phone was to communicate with parents about the time and location of being picked up.

Text messaging was also an important way to interact with friends. Sometimes this had a functional purpose, to find out about homework or as Grace explained to find out 'what you answered for certain questions'. But typically interactions with friends via text message were social in nature. Sean used text message to communicate directly with friends rather than social media because he 'always' had his phone on him. For Heidi, the iMessage service on her iPhone actually encouraged more frequent interactions with her peers. In her timeline of digital practices 'getting iMessage' was marked as a significant event in her social life mainly due to the fact that it was always available and free, as she explains: 'it was available all the time, so as soon as I bought an iPhone we got iMessage and I was using it all the time, and well a heap of people have iPhones and are sending free messages to you so it's an easy way, cheap way. I think it was purely money based.' In this instance iMessage

appeared to expand Heidi's social networks, however, for several participants text messaging was a way to interact with close friends, as Rachel explained she 'doesn't really talk to a lot of them [her friends] on social media' she would prefer to 'call them or text them'. For other participants, like Dylan who was a confident, assured user of social media, texting was seen as unnecessary because he thought it 'easier' to communicate online.

Participants often described Facebook Chat as 'talking' to people on social media so that it was described by participants as replicating face-to-face discussion. Rachel described 'normal friends' as people she would 'talk' to online *and* offline; to be *only* offline or *only* online friends with someone did not cement the friendship in the same way. If friends were only offline or only online Rachel conceives of them as 'not always there', so they were not sharing the full range of her life experiences. Important to Rachel in establishing intimate relationships was what Archer (2007) calls 'contextual continuity', where 'communality of landmarks together with experiential overlap facilitates the sharing of internal conversations' (p.84). In addition to knowing peers face-to-face, an essential step in developing intimacy is being on the same social media platforms or present with them across contexts. Unlike text messaging, however, Facebook Chat can be used to interact with more than one person. Maddy explained that once her friends reached 13 and were able to sign up to Facebook, they 'migrated' from MSN messenger to Facebook and Facebook Chat: 'And then before you know it everyone's on Facebook and everyone who was using messenger used Facebook so you could talk to them.'

For the girls in the study, Facebook Chat was used for a variety of purposes: to organise events; complete group projects or to simply hang out online. For example, Penny would often organise school projects over Facebook: 'If I'm in a group presentation then maybe if everyone has Facebook, I'll go "OK guys I'm doing this" and whatever. And then [organise a] group chat'. As she explained, this was easier than using email because 'you have to reply to the latest [email] rather than the other ones'. The interaction that took place as part of a group project – involving negotiation and back and forth discussion – appeared to be better facilitated through the Chat service. Organising events and gatherings was also made easier through Facebook Chat. As Grace explained: 'We talk a lot on social media like on Facebook

we use the messenger a lot to talk, because then you can like have a big group conversation about something if you want to meet up somewhere or something like that'. But Rachel was the exception amongst the female participants, as she explained that the 'massive' group Chat was a passing fad that 'just died down' after a while.

While few of the participants in the study reported using Skype to message friends and family, Penny explained that the 'younger generation' (her younger sister and her friends) used Skype, but she clarified they 'don't really call they just use the messages'. Penny's observation illustrated the socially situated nature of digital media use for the young people in the study; if friends were not using a particular platform then there was no point in being on it. As she explained, 'if you were on something like My Space, no one is on My Space so you are not going to be able to do what it's meant for.' Awareness of what peers were doing shaped not only which social media platforms individuals used, but also how they used it. Over the course of the study Stacey started using Skype more frequently, not only because it bonded her more closely to her friends, but because it was instant and she could surreptitiously use it while at school:

I always use Skype just to communicate with friends in other classes from school, to ask for help or if they need help they can talk to me. If they had some problems and they are not able to get out of class and they need to get it off their chest, they're able to talk to me about it.

Skype messenger enabled Stacey to let her friends know she was there for them, so, as she explained: 'If someone needs me it'll pop up and I'll quietly send them a message and all that'. While Stacey had quite a complicated relationship with other social media like Facebook, Skype messenger allowed her to interact in a more direct way with close friends when it came to issues that were more intimate and personal. When using this particular social media platform she appeared to feel more in control of her digital connections.

Despite this somewhat more controlled and direct method of interacting with others, participants still reported negotiating complex issues when using these chat and messaging forms of social media. Stacey still preferred 'social interactions with actual

people instead of online' because as she explained 'I can actually tell their expressions and normally I don't misunderstand any of it'. Facial expressions and body language helped her comprehend the intention of others as she said when online, 'I misunderstand a lot of things'. This was a recurring theme in the group discussions, with several participants like Mark suggesting that misunderstandings take place because people tend to show less emotion when communicating online: 'People stop showing emotions cos they don't have to, it's just text on a screen'. Dylan also reported online interactions as having a specific set of challenges, as he explained that sometimes 'the tone seems off' and people can sound 'blunt and angry'. To temper this, he used emoticons to sound 'nicer' and 'less robotic'. Sean also identified the difficulty in communicating tone, and like Dylan saw the benefit in using emoticons so that people could more easily 'convey how they feel'. Indeed, a study by Fullwood and Martico (2007) supports the idea that using emoticons in online interactions conveys greater socio-emotional information, thereby alleviating 'some of the constraints associated with cue-restricted communication' (n.p.). But emoticons could also be used to disguise a spiteful message, making it more difficult for the recipient to decipher the purpose of the message. As Chantelle explained someone can be 'brutal' and then just put 'a smiley face to make it seem lighter [so] you've no idea what they're actually doing'.

Aside from the challenges in communicating the tone of a message, digital connections of this kind appeared to afford the participants a more private and controlled method of interacting with others and therefore a greater level of intimacy. These media were often used for functional or organisational purposes to communicate with people whom the participant saw in person regularly, (e.g. parents or school friends), but also to 'chat' with peers online. Of all the social media platforms explored in this chapter, this type of communication is perhaps closest to the spoken word in that it is usually synchronous and spontaneous. At the same time, without the gestural and expressive cues to accompany the written word, participants explained that misunderstandings easily took place. While the social group might often influence which types of digital media participants engaged with, the platform structure clearly shaped the frequency, audience and content of the digital engagements that actually took place. Analysed in this way some platforms like

Facebook Chat and Skype encouraged participants to connect with others in a more detailed and continuous way.

8.4 Co-operating with others – Steam, YouTube and Wattpad

The most popular gaming website used by participants was Steam. This is an internet based multiplayer gaming and social networking platform developed by Valve Corporation and launched in 2002. Of the participants five boys were frequent users of Steam, while one girl, Rachel, also played, but not regularly. For Mark, Simon, Trent and Ben, Steam was the website they spent most time on, providing a platform for not only playing games, but also for socialising with others. Trent was on Steam about 15 hours a week. Sean was also a regular player on Steam. Other platforms that offered a similar context for co-operation and dialogue were Wattpad and Quotev; websites where budding writers might give each other feedback. YouTube was also cited as offering opportunities for dialogue and co-operation with friends and strangers. While research by Thelwall, Sud and Vis (2012) shows that on YouTube ‘35 per cent of comments contain some kind of negativity’ (p.626) this was not mentioned by participants in the study. In fact, YouTube was not only seen as a positive space for discussion about the video content, but also as a site for collaboration. As already discussed, Mark and Simon worked with others to design and create their YouTube channel ‘Screencheats’. For many of the male participants it appeared easier to initiate digital connections, sometimes with strangers, through these sorts of platforms as not only was there a common interest, purpose or goal, but social exchanges appeared to emerge ‘organically’ as a result of ‘hanging out’ together online.

While the proportion of boys in this study who regularly played video games was in accordance with the Pew Research Centre data (Lenhart et al., 2015b), the fact that only one girl out of the seven in the study played video games fell well short of the reported 59 per cent of teenage girls reported by Pew. Interestingly, three girls Penny, Maddy and Grace used to play the Facebook games when they first joined up to the site, but as Maddy explained she would now ‘rather talk to someone on Facebook than play a game’. Aside from Stacey playing ‘Fashionworld’ and Rachel’s irregular use of Steam, gaming was not a regular digital practice for the girls in this study. One reason why fewer girls play games than boys suggested by Gorriz and Medina (2000)

is that games are predominately marketed at boys through the game narrative and characterisations. Indeed, Rachel posted about the lack of female role models in video games on Facebook:



Figure 65: Rachel's Facebook post June 2014

As Grimes (2003) points out 'the majority of video games seem to be designed with a male audience in mind, focusing on themes such as sports, war and competition' (p.1). While she also argues there has been a steady increase in female video game characters, according to data gathered by Electronic Entertainment Design and Research in 2012 there are still few video games with female lead characters. While this study represents a small sample, the female participants did not appear attracted to video games.

One of the findings from this study is that the digital connections that take place through these platforms were often more co-operative in nature, as individuals worked to build skills and knowledge about particular topics, while they also, at times, practised conflict management and resolution. On Steam digital practices were often about co-operating with others in order to win a game. As Mark explained: 'I play a lot of games online and when I do I'm constantly with people I don't know talking to them, telling them things like "This is how we should do this!"' Part of the appeal with Steam was that players are semi-anonymous so that only people chosen to be friends would know that they were online. Mark organised a group for his friends on Steam so that they could 'play games at specific times'. When not playing with friends, quite often participants did not know the other players in the game. For someone like Trent, who spoke often about being bullied, even a small degree of anonymity was liberating. In fact, when the bullying was at its worst the only website

Trent used was Steam because, as he explained, ‘that’s where people didn’t know me and the few friends I had on Steam were really just friends that weren’t bullying’. Another thing that made Steam appealing was that it was a place to find like-minded people, because, according to Trent, gamers are often teased by others: ‘I can just get into a group of people that like playing games like me because these days people are always playing sport and things and just bagging out stuff like that [video games]’.

Indeed, on platforms like Steam and YouTube some participants found it easier to talk to others. Mark felt more comfortable initiating conversation with people online because, as he explained, in real life he felt like he needed a more explicit purpose:

When...it’s someone like you actually know online it’s easier to be like “Hi, how’re you doing?” but in real life you kind of need to have something to talk to, like to talk about with them.

That said, others like Ben felt that it was easier to initiate conversation in person as you could ‘read’ their ‘body language’ to determine whether you should approach them or not. Despite this, participants Mark and Simon reported that having a ready-made topic that could be shared and discussed made it easier to initiate conversation in the digital context, as Mark explained:

If I watch a YouTube video then I’m there to watch the YouTube video and so is everyone else. So if I comment on the video then I’m not going to be like “Hey, have you seen this?” And they’re like “No”. They’re going to be like “Yeah what did you think?” And then it’s going to be a lot easier to talk to those specific people.

As Mark explained, platforms like YouTube, Wattpad and Steam ‘broaden the amount of people you can talk to about a specific thing’, and for some teenagers like Mark and Rachel, this was clearly viewed as advantageous. While Mark and Rachel viewed these people as ‘strangers’, they still valued the digital connections that were forged. In Rachel’s case, receiving feedback and co-operating with people on the writing website Wattpad was a way of connecting with people beyond school and home who could help her develop her writing skills.

Both Simon and Trent used Steam as a way of socialising with others. Initially Simon's parents did not allow him to have Facebook, but he no longer saw a use for it because he and his friends 'socialised' through Steam. Similarly, while Trent was on Facebook he said 'I spend a lot of time on Steam rather than Facebook'. When a friend comes online a player receives an alert and from there they can begin a dialogue. As Simon explained:

That's the way we connect. It'd be like we're sitting there Friday afternoon and I'd see if anyone's online and I'd start a conversation saying "Do you want to hang over the weekend ... or if you can't do anything on Saturday, do you want to do something on Sunday?"

For this group of boys Steam was the main way they facilitated digital connections with others. As Mark said, 'all of my close friends that I have, I have on Steam...it's basically where I talk to people really online.' He explained that the content of these types of discussions might be about the game or 'anything really... like something that happened in the day or something in the game'.

However, Sean and Simon had both had negative experiences on these platforms which, while unpleasant, were described as helping them to develop skills to negotiate and manage conflict. When playing against unpleasant people on Steam leaving the platform was not a solution as Simon explained: 'Sometimes with this one game on Steam...you play with lots of people, sometimes it's just like they're really mean people [and] do you become bad back? It's like if I leave the group it's ruining my own fun'. While these experiences might have been confronting, pushing individuals to display characteristics that they otherwise would not have displayed, for two participants working through these negative exchanges online was good practice for how to handle such experiences offline. On his timeline of digital practices Sean indicated playing 'World of Warcraft' as a significant moment because it helped him learn how to respond to 'difficult' people. The skills learnt and practised through these platforms might then be applied to real life contexts. However, those observing the person playing the game did not always have the same opinion. Stacey, for example, noticed that her brother became more 'gangster' and 'hostile' when playing 'Grand Theft Auto'. While the main form of communication that took place on these

co-operative platforms was through a chat system similar to that of Facebook Chat and Skype messenger, having a common interest or affinity shaped these digital connections so participants were essentially ‘co-operating’ and conversing with others.

8.5 Communicating more formally - Email

Given that the iconography, language and structure of email is based on the old fashioned postal letter (i.e. ‘send’, ‘address’, envelope symbol) it is not surprising that participants typically used this to communicate more formally with an adult audience. The main purpose behind sending an email reported by participants was often to either find out information or to send documents. For three students at the same school, starting a school email account was marked on each of their timelines of digital history as a significant moment. It was described as improving communication with teachers so that it was more direct and needs based. Prior to year 7 Grace never used email to ‘contact people’, however, she now found it a ‘helpful’ support to her ‘learning’. Maddy described it as ‘a new way of learning with teachers and stuff’. At another school, four students regularly used email to submit work to teachers, but not to seek clarification or missed work. Mark explained: ‘Every time I need to hand something in I’ll email them with the work’. Ben suggested that emailing assignments helped teachers as well because ‘if they lose it they can just re-enter their emails and get it’. Both schools had learning management systems (‘Compass’ at one and ‘SEQTA’ at another), however, email was the preferred way of contacting teachers for the participants in this study.

The two participants who were not on any social media used email in a similar way, while also engaging in occasional social uses. Simon explained that if he could not contact someone through Steam he will email the person, as a back up to his preferred mode of digital communication. Chantelle used email for ‘school’, work’ and ‘uni applications’, and sometimes to contact friends (once in the last month). Her parents were also encouraging her to email her grandparents in Canada. For the other 11 participants, however, email was not used socially; as Grace explained she would ‘never’ use it on the weekends. In Maddy’s view it was the limited audience and asynchronous way of communicating that made email unappealing for social interactions:

You can't like talk because they only have limited people there and not all your friends are there and you want to talk to them. Facebook is instant, because email is going to take a while to get through, or it just takes too long using an email, so you might want to go on Facebook and message

While participants viewed email as an important mode of digital communication particularly for school-related learning, it was, in the main, used for a formal audience, with a particular purpose in mind.

8.6 Testing provisional aspects of self – Snapchat and Qooh.me

A final type of digital connection used by participants was more ephemeral and fragmentary in nature and for this reason encouraged the transmission of more risky content. Six of the 13 participants were regular users of Snapchat, a photo messaging application established in 2011 that had gained widespread popularity at the time of the study. Snapchat enables users to send photos or 'Snaps' to 'friends' who can then view the photos for between one and 10 seconds, after which time the photos are hidden from view and deleted from Snapchat servers. Three female participants and two male participants had also used Qooh.me, a service that allows users to ask one another questions anonymously, however, only Rachel was still a regular user. Both these services purposefully omit elements of communication – either the identity of the speaker in the case of Qooh.me, or the content itself after a designated time with Snapchat – encouraging a digital connection that tested more hidden and risqué aspects of self through the photos sent or the questions asked. This section explores how these less traditional modes of communication encouraged exchanges that 'tested' the boundaries of identity representation and communication between friends.

While Dylan used Snapchat for 'documenting his days with all his friends', the ephemerality of these digital connections often led him, like many of the other participants, to sharing more playful or risqué content with others. In both types of engagements, however, communication was designed to strengthen bonds with others even if it was, at times, 'testing' what was appropriate content for communication. Dylan explained that he would often reference 'a little inside joke' or 'take a picture of it' for his Snaps and send it to his friends. However, sometimes he would send more risky Snaps like a 'really ugly double chin selfie' but only to 'certain people'.

As Heidi explained the risk was not only how Snaps would be received, but also the fact that recipients ‘screenshot’ and ‘post a lot of them’, which could be ‘embarrassing’. Heidi, like Grace and Penny, follows a particular rule to protect herself against social embarrassment, as she explained: ‘You’ve just got to be careful. I would never send anything out [that] if they did screenshot I wouldn’t mind it being on the internet’. Implicit in this statement is the idea that the individual is solely responsible for any mishaps or embarrassments that might take place as a result of engaging with digital media, even though texts and photographs were circulated to others and therefore beyond their control. However, due to the more intimate nature of the content shared, Snapchat can be used to cement or further develop social relationships as participants disclosed more intimate details about themselves through this messaging service. In a sense the participants were testing how these exchanges – and this version of self – would be received by friends.

At the time of the study Snapchat enabled users to make some posts visible on their timeline for up to 24 hours. As Dylan explained he put ‘Snaps’ that he was proud of onto his ‘story’:

If it’s not joking around and you’re just like showing off something or you’re serious about or like you’re proud of something just like put it up on your story which you can for like 24 hours view it.

In this way there was a relationship between audience and content, so the more risky the content the more intimate the audience. This content was not necessarily sexual in nature, but as Dylan explained it might be ‘embarrassing’ or ‘something you want to keep as a joke or private’. Despite common misconceptions, a survey of 5475 Snapchat users aged 18-29 years by Kelly (2013) in the US found only 13.1 per cent of respondents said they used it for sexting. However, the short ‘life span’ of a Snap encourages users to take risks in how they communicate with others. Perhaps a more fitting explanation for the riskier content is that given by Pielot and Oliver (2014) who argue that ephemerality not only adds ‘excitement’, but also ‘removes a need for perfection’ (n.p.). In this way Snapchat offers a distinctly different experience from other forms of social media where the dominant mode of engagement is projecting predominately positive and perfected versions of self for affirmation and commentary.

Another service that offered a less traditional form of communication was Qooh.me, where users could ask each other questions anonymously. Vincent Mabuza, founder of Qooh.me, says that the service ‘makes it easier for people to get to know more about each other, beyond the information they post on their social media profiles’³³. In most cases the participants embedded a link to Qooh.me on their Facebook Newsfeed with a caption encouraging friends to ask them questions. Participants appeared to use Qooh.me for a range of reasons, but the captions below reveal that it had much to do with alleviating boredom and loneliness:

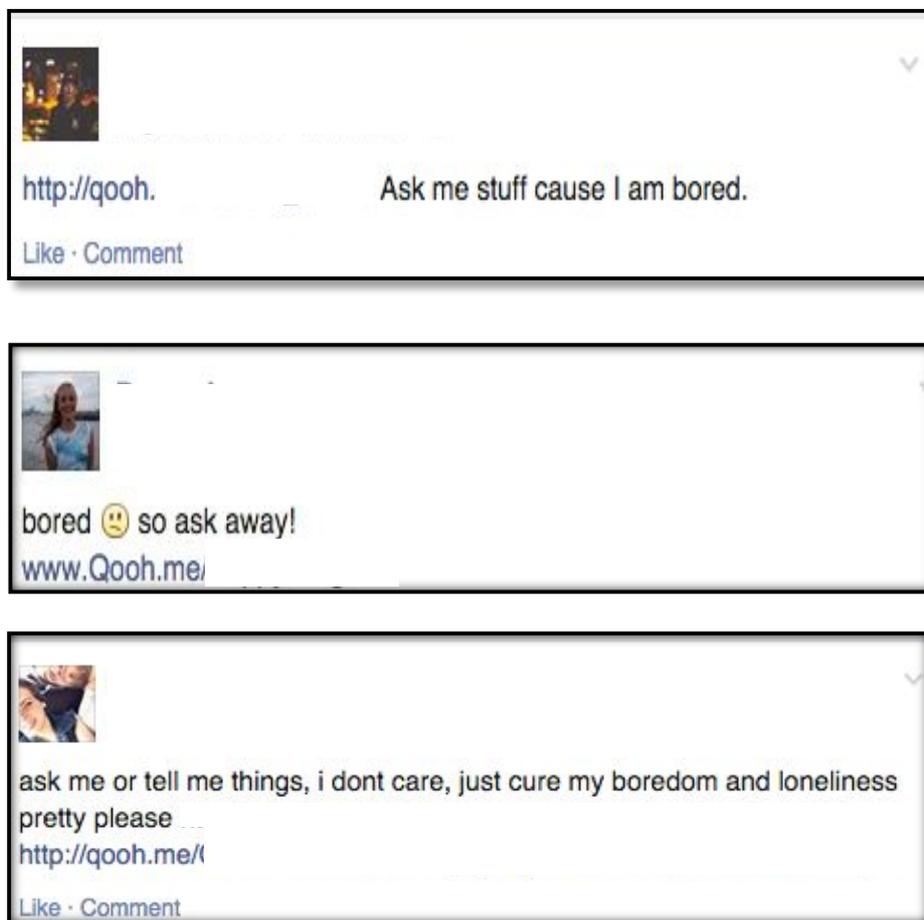


Figure 66: Qooh.me posts from Dylan, Penny and Rachel

But sometimes the caption became more provocative, perhaps priming the questioner to ask more sensational or challenging questions:

³³ As reported by Craig Wilson in TechCentral 2011, <http://www.techcentral.co.za/sa-social-network-qooh-me-takes-flight/25638/>

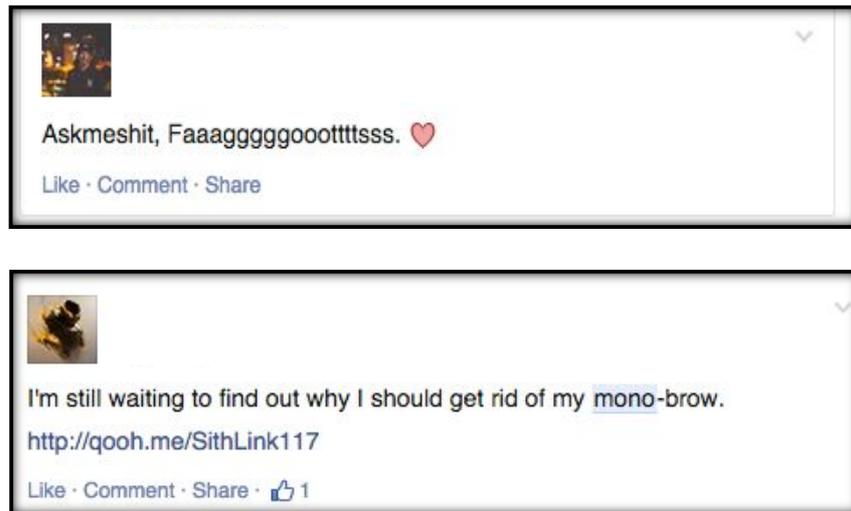


Figure 67: Qooh.me posts from Dylan and Mark

Indeed, Qooh.me only works if users find the individual is interesting enough to ask questions of. Revealed in these captions was a deliberate (and often awkward) ambiguity between appealing to others without trying to appear desperate or needy, hence the more creative or belligerent approaches.

As Maddy explained people often used Qooh.me to ‘test’ whether a relationship might become romantic:

Anyone who asks something is anonymous so no one can know so you always get asked like, teenage kind of things like ‘Who do you like?’ And then that could be the person that likes you, hoping you would say their name.

Indeed, following the link to the Qooh.me site revealed that some of the questions asked focused on romantic relationships (the posts at the bottom are the oldest):

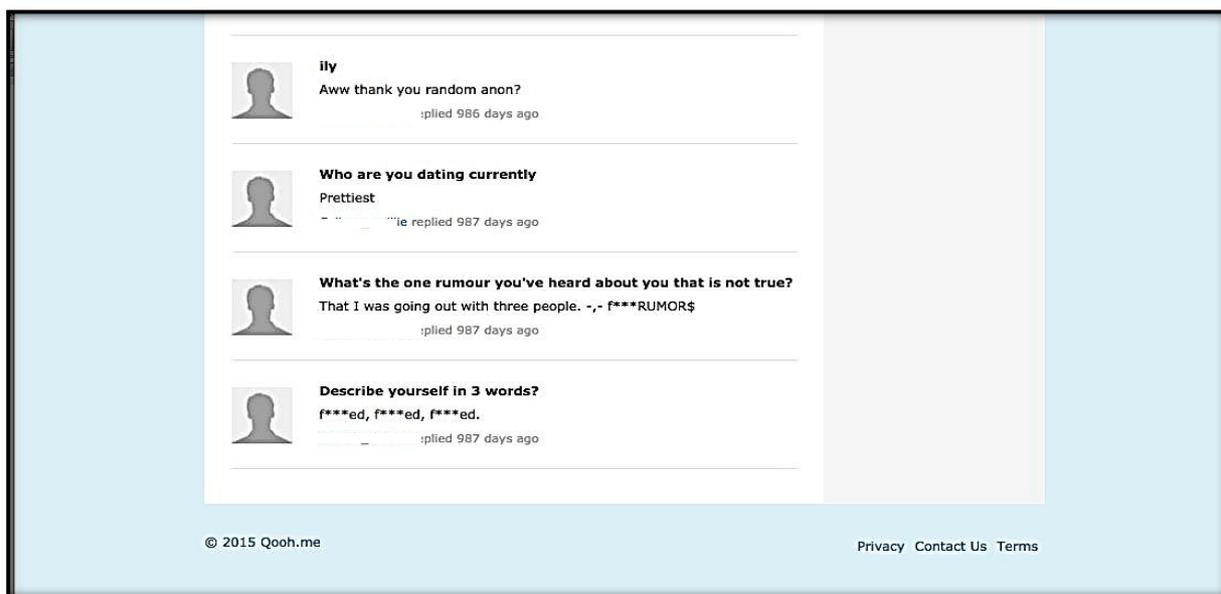


Figure 68: Qooh.me dialogue between Dylan and anonymous

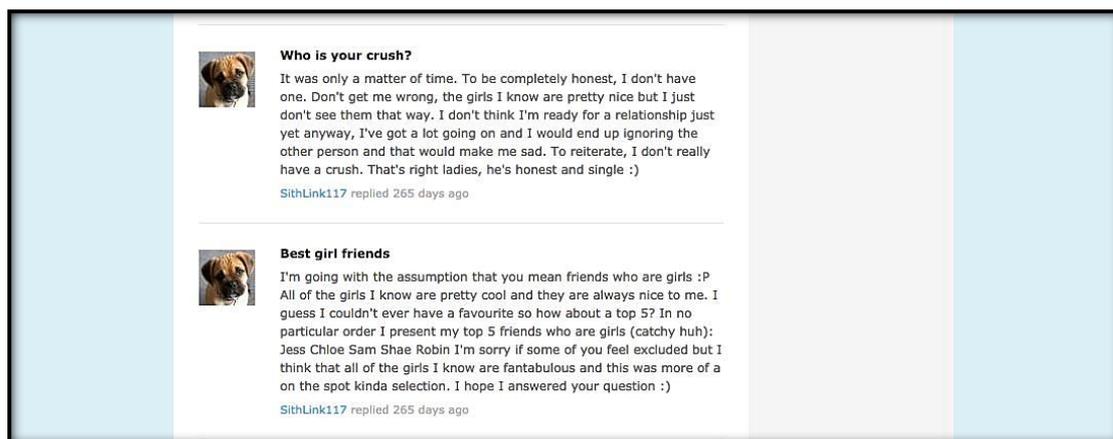


Figure 69: Qooh.me dialogue between Mark and anonymous

Maddy explained that these kinds of exchanges could lead to awkward and uncomfortable questions, particularly if a parent happened to see it:

Someone asked me a question and my dad had clicked on it and it was so awkward, cos it was not a good question that they should have asked. And I didn't answer it...I handled it well, but it was just like, really?

Indeed Maddy, Penny and Grace had all stopped using Qooh.me; Penny decided it was just ‘not interesting’ and stopped doing it because ‘people just ask stupid questions and some of them are really rude’.

While most participants treated Qooh.me in a cautiously playful manner, Rachel and Mark engaged more enthusiastically and earnestly with the service and as a result were asked more controversial, risky or challenging topics. In some instances they played the role of counsellor or confidant to the questioner, but at other times roles were reversed and they were expected to give honest, truthful answers to questions posed:

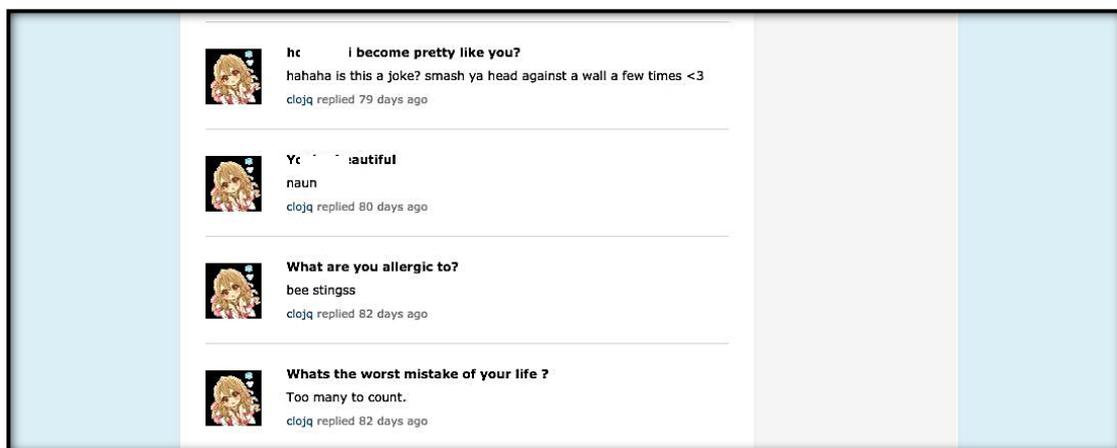


Figure 70: Qooh.me dialogue between Rachel and anonymous

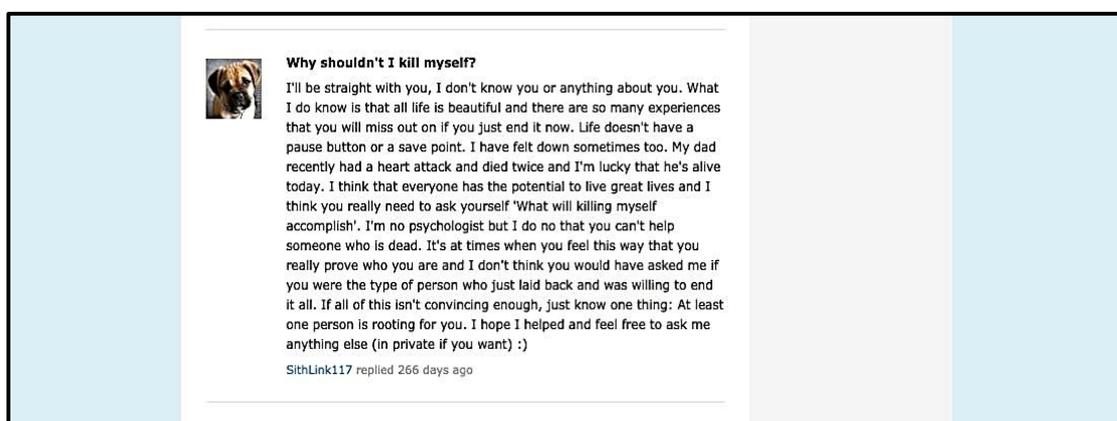


Figure 71: Qooh.me dialogue between Mark and anonymous

In these exchanges Qooh.me had become like a confessional in which the anonymous user or the respondent ‘offloaded’ their troubles while at the same time testing how another might respond to their innermost thoughts and feelings. If participants gave some consideration to the questions posed, these digital engagements quickly became more intimate, personal and detailed. Other topics mentioned involved taking medication, issues of self-esteem and thoughts on people at school. Answers were often carefully delivered, just in case the person asking was the actual subject they were referring to. Interestingly, at times people would ask questions with their identity visible, yet these questions were still of a sensitive or personal nature, suggesting that the structure of the medium also promoted particular forms of engagement, and temporary intimacy:

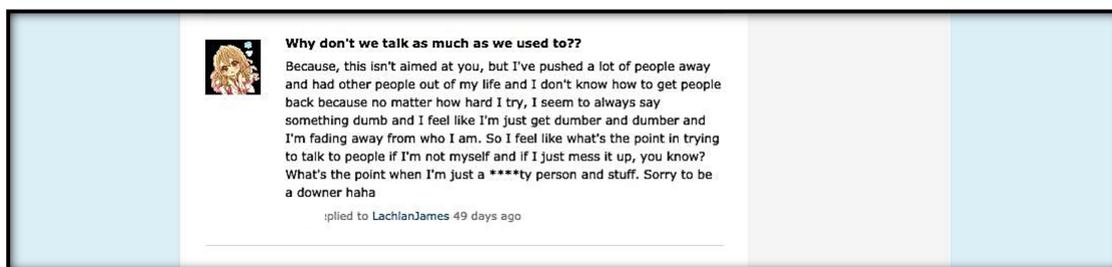


Figure 72: Qooh.me dialogue between Rachel and 'Lachlan James'

While the use of these less popular forms of social media was short-lived for some participants, the enthusiasm for services like Snapchat and Qooh.me suggested they afforded something that mainstream social media like Facebook and Instagram did not. Rather than projecting their ‘best’ identity, these services enabled a protected way to test covert, controversial or risqué behavior. In more sustained instances, dialogue on Qooh.me could be described as confessional in tone and style. In an era where all types of digital engagements can be logged, saved and traced, exchanges that were in some way obscure or ephemeral appeared liberating, and in some instances on Qooh.me, even redemptive.

8.7 Conclusions

Driving the culture of online communication was a need to connect – with people, concepts and content. While each participant initiated a range of communicative strategies, this chapter has demonstrated that there were five typical patterns to their use: *projecting* the self via Facebook and Instagram; *interacting* with others through

synchronous text messaging and Chat services; *co-operating* with others through Steam and other affinity websites; *communicating* more formally through email; and *testing* provisional aspects of self via unconventional social media platforms, like Snapchat and Qooh.me. This is not to deny the existence of other digital connections, but to show that despite differences in the age, education and socioeconomic background of participants there were still obvious trends in the way these young people used digital media to connect with others. Simply using a site like Qooh.me encouraged a particular form of communication and disposition in the participants, which often led them to reveal provisional aspects of self. In a similar way, communicating through Facebook often encouraged the projection of their 'best' self in what might be thought of as a kind of contemporary, adult form of 'show and tell'. Beneito-Montagut (2015) arrived at similar findings in her online ethnography. While the participants in her study were older, she describes a 'ritual set' based around language, topics, gestures and, crucially, the 'applications' affordances' that establish 'rules of performance in an implicit way' (p.24). As she goes on to explain 'once these rules are fixed by the use of a particular social web application or system, there is a set of ritualised procedures for pointing out deviance and correcting deviant acts' (pp.24-25).

While the structure of the platform shaped the type of communicative strategies that were established, these findings also point to the socially embedded nature of these interactions. Participants were accomplished at initiating digital connections to reflect and reinforce varying levels of friendship, however, the platform played an important role in steering how these relationships were experienced. Digital media opened up new methods of communicating with others but these were often in quite particular and sometimes constrained ways. This was a source of reticence and anxiety for some. Digital connections that involved projecting the self, made several participants feel vulnerable, mainly because of the fear of being judged negatively or simply rebuffed. Complicating this was the need to be on certain core social media platforms, like Facebook and Instagram, regardless of how participants felt about or experienced them. Digital connections that were somehow more 'protected' from the milieu, either through the anonymity or ephemerality of the medium or through a shared goal or interest, reduced the effect of these social pressures.

These findings suggest the importance of a more critical consideration of the role that digital platforms play in shaping communication and discourse. The prevailing academic conceptualisation of social media sites as ‘networked publics’ or ‘publics that are restructured by networked technologies’ (Boyd, 2007, p.42), leads to the assumption that these are neutral spaces for people to congregate. However, it could be argued that the primary function of the digital platforms explored here was not to *collect* but to *connect*, and to connect in ways that were strongly directed by architecture of the technology. A term like ‘networked publics’ with its connotations of community, participation and interaction, does not account for the quite particular and constraining ways some of the platforms the participants used structured connections. Indeed, for many of the participants the dominant practice on Facebook and Instagram was projecting the self, which suggests that these platforms were more like a ‘networked stage’ than a ‘networked public’. This indicates that these terms need to be reconsidered if people are to benefit more fully from online communication.

Chapter 9: Discussion of findings

9.1 Introduction

This research set out to explore the complex relationship the young people in this study had with digital media. It used a variety of techniques to identify how digital technologies were woven into the texture of their lived experiences, including how they informed the construction of identities and influenced interactions with others. A significant focus of the study was to reveal the resources and understandings the young people drew on when using digital technologies and how these were interpreted and integrated into their everyday digital practices. This chapter brings together the findings from the previous four chapters and discusses how the issues, tensions and possibilities identified articulate with broader concerns. To do this, the chapter is presented in two parts. The first returns to and addresses each of the research questions that underpinned the investigations. The second draws out overarching themes emerging from the study and considers how these contribute to ongoing debates and theorisations of young people, digital media and contemporary literacies.

9.2 The role that digital media play in the young people's lives

It was clear that digital media played a significant role in the life of each of the 13 young people who participated in the study. Penny, for example, started using the internet at age four, owned six digital devices, and was on four social media platforms. Like her friends, Maddy and Grace, Penny felt like she was missing out on something fundamental if she was made to go without digital technology. By contrast, some participants felt they had to defend their decision *not* to use digital media, highlighting the significance of digital media even when absent. Chantelle defined herself by the lack of digital media in her life, seeing herself as somehow more liberated and engaged in day-to-day living. She did not use social media and would send an email on average once a month. To Chantelle, digital technologies were a 'dark cloud' encroaching upon her family and friendships. Despite the varying levels of engagement, in both cases digital media were a defining aspect of these young people's lives.

Identity representation and formation

The study found that digital media were clearly influential in shaping these young people's identity representation and formation. While this influence varied across the study group, certain trends emerged, particularly with the 11 participants who used social media. Indeed, social media appeared to be the main sites for these young people's identity work to take place. Their first step in substantively engaging with most social media sites was the creation of a profile – i.e. a representation of the individual user's identity. Facebook was by far the most popular platform for these young people and was the first 'grown up' social networking site they were introduced to. As such, Facebook had a particular ongoing significance for the participants. Even when they explored and experimented with different aspects of their identities through other digital platforms, these were most often reported back through Facebook.

One notable finding was the way in which online identities were (re)formed and (re)presented by the preformatted structures and coded architecture of the platforms that the participants used. As described in Chapter 7 – *Young people's digital identities*, lists of friends and personal photographs were a primary means of self-representation on social media – largely due to the prominence given to these signifiers on sites like Facebook. Relying on a narrow range of cues to make sense of individuals' social identity meant that certain aspects of their social media presence (i.e. photos and the number of friends) took on a heightened value. There were often several competing pressures at play when the young people engaged with this platform. Participants spoke of anticipating not only the value judgments of peer groups when posting content, but also the societal expectations associated with their use of social media and the technological functions and constraints of the site, such as the 'Like' button. While participants such as Dylan displayed a relatively nuanced approach to social media that enabled him to negotiate these competing pressures effectively, three of the female participants were more reticent about posting photos and comments, thereby restricting their digital practices to viewing others' content. Alongside self-regulation/self-censorship, another coping strategy that two participants used to safeguard against unfavourable peer judgment was co-curating their social media identity with friends. This involved sending a selection of

photographs to friends and asking them to help choose which ones should be used as a profile picture.

Becoming

Digital media enabled and encouraged participants to explore and develop various aspects of their identity, and/or mark particular changes in their life. For most participants the act of signing up to Facebook signaled a form of social emergence or marker of independence, as well as experimenting with various aspects of their identity. Several participants engaged in practices that led to vocational and aspirational becomings, as they found a wider range of resources and opportunities online. Further, the relative ‘anonymity’ afforded by comparatively niche sites (i.e. Steam and Wattpad) meant Rachel, Mark and Trent in particular could experiment with these becomings with fewer social repercussions. These non-mainstream representations of identity often contrasted with the supposedly ‘authentic’ or ‘real’ identities that were displayed on Facebook and offered them a greater freedom to experiment with their sense of who they were.

However, there were limitations to what participants could ‘become’ within the structure of any online site and the social milieu in which these were embedded. For example, participants often compared and calibrated these more transitory or experimental becomings with offline corporeal forms of identity. Stacey and Trent provided key examples of this. Stacey in particular used Facebook to experiment with more adventurous or alternative versions of herself, however, an incongruity with a corporeal identity resulted in the negative feedback of others. While it may be expected that individuals could, would or should be different online, there were also limits to how different or experimental they could be, which were implicitly or explicitly reinforced by peers. In this way, becomings were tethered to corporeal identities and an ‘original’ Facebook profile, which in tandem created an authentic version of ‘self’. In this way, the experimental becomings explored through digital media were often subordinated to embodied identities. However, whether these becomings develop into more consistent and lasting aspects of self is yet to be proven.

While the study set out to understand identity through a poststructural paradigm, namely becoming, the findings point to a more conservative and structuring set of

circumstances. Despite the differences in each young person's experiences, there were dominant values and social relations implicated in their digital practices – and these most often reproduced the dominant offline values and power relations. While digital media could provide opportunities for becoming experimental or transitory versions of self, for these young people it was more often experienced as a conservative, conformist environment.

Communication

While there was a wide range of digital media that participants could use to communicate with others, most of their online interactions took place on social media sites, particularly Facebook, Instagram and Snapchat. Which social media platforms participants used was strongly influenced by their peers, and communication was often shaped to demonstrate that they belonged to a particular group. However, the fact that each platform was essentially 'walled off' from other platforms meant that participants often felt obliged to follow their peers to particular social media sites. Failure to do so led to an acute sense of missing out on social activities, invitations and information. In this way, having a profile on the social media platforms where your friends were became an essential element of being socially visible. Aside from social media, only a couple of other platforms and affinity spaces were found to be significant to the participants' online communication. The gaming platform Steam was used by all the boys in the study not only as a source of entertainment, but also to communicate with others. Like other similar affinity spaces (i.e. Wattpad, YouTube), the appeal of Steam was that communication was felt to occur in a more spontaneous, organic way. This appeared to lessen the social pressures associated with online communication as dialogue was based around shared goals or interests. The findings showed that the structure of these digital media platforms strongly shaped communication practices. On some social media sites the primary form of communication was the presentation of self, while on others (Snapchat) it was to test whether aspects of self warranted further development and public self-display. Distinct types of interaction were propagated by each digital platform, some of which were decidedly new and different to older forms of communication like letter writing or talking face to face, resulting in what might be best described as a series of digital connections.

Civic participation

While the existing literature on young people and digital media foregrounds civic participation, there was little evidence to suggest that participants used digital media for this purpose. The fleeting engagement with civic issues that was evident in the study group took place on social media, mainly through online petitions. Rachel and Dylan signed various petitions, but Rachel, in particular, described this in a dismissive way, indicating that she saw this type of engagement or ‘clicktivism’ as futile. Sean was the most politically active participant having signed up to a ‘United Against Abbott’ Facebook page, and had attended various protests in person organised through the site. His peer group was more politically motivated and this meant participation was tied up with a sense of social belonging and a collective group identity. While participants would have studied and researched global issues through the school curriculum, not one mentioned *ongoing* digital practices that focused on national or international news and current affairs (i.e. membership to an online group or regular visits to a website). Sometimes ‘spectacular’ news events or political issues were the topic of discussion on social media. Mark had discussed recent aeroplane disasters on Facebook. Dylan said that he had talked about the controversial issue of coal seam gas on Facebook with ‘friends’. However, in digital spaces the other 10 participants appeared to be apolitical, as they reported that their social networks did not share information on politics, community or news. Beyond digital practices directed at socialising or entertaining, few other forms were noted in the study group.

9.3 Young people’s critical understandings of digital media

Despite their use of digital media, many of the young people in this study did not demonstrate a well-developed critical disposition toward the technologies they used. This is not to suggest that they were unwilling to critique, but rather that they had few opportunities to cultivate these sorts of critical understandings. In school, the main education in regard to digital media came through cybersafety programs. While there were important lessons in this discourse, Trent explained that in more recent years it had used shock to convey the message. More agentic and transformative critique built on the kind of technical, cultural and economic knowledge of digital networks outlined in chapter 3 had not been taught at any of the schools that the young people in the study attended. If participants *did* display these understandings they had been acquired in an informal way, through conversations with relatives or friends. Five

participants did show some awareness of corporate ownership of content, technological convergence and media monopolies on the internet. However, having neither the technical knowledge nor an understanding of how or why these issues were significant meant most participants saw this as simply *part* of the internet, and an advantageous one at that. The most common and prominent form of critique these young people engaged with related to the social currency of digital practices and the hierarchies of digital platforms.

Social hierarchies of digital platforms

One type of critical understanding demonstrated by all participants was directed at the social hierarchies of digital platforms. These critical understandings were primarily developed in relation to social media, and often in an *ad hoc* manner through first hand experience or witnessing interactions online. Participants recalled feelings of social isolation if a photo or comment attracted no comments or ‘likes’, which subsequently shaped them to post content of a different nature. These critical understandings were developed through observations and trial and error so that over time most participants’ understandings around these processes were finely tuned to become complex and nuanced readings of the social value of digital practices. Indeed, the semiotics of these digital texts and practices were most typically interpreted in reference to the immediate and physical social discourse and not wider educational or cultural discourses. A case in point was the group at Bankview College who agreed collectively on the description of Facebook as a ‘food chain’, where the ‘populars’ have bullied their way to the ‘top’. At the same time critiquing how their own digital practices replicated or resisted these social pressures and hierarchies appeared to be more difficult – requiring a critical self-reflexivity on the part of individuals that was neither associated with nor encouraged by social media platforms. Rachel was the only participant who reflected on her own practices in this way prior to the study. While participants felt able to identify the motivations and drivers behind others’ digital practices, when asked during the research activities why they did particular things themselves on social media the answer was typically an awkward ‘I don’t know’. In fact this question yielded so few insights that it became redundant and uncomfortable to ask. In this way, it could be argued that digital connections were often part of a subconscious set of practices that were shaped by the structure of digital platforms and the social currents that underpinned the peer groups.

Cybersafety and security

Another type of critical understanding demonstrated by participants related to issues around cybersafety and security. These understandings were related to social media and involved three key messages: ‘knowing’ someone face-to-face before becoming friends with them online; remaining ‘anonymous’ when online; and only uploading onto social media photographs they felt comfortable to be spread widely and publicly. These understandings were developed at school in special cybersafety classes that were conducted by external organisations, usually charities or the police. All participants recalled cybersafety classes from upper primary school onwards and, for many, such classes were still an annual event in the school curriculum. In interviews and group discussion participants drew on these cybersafety discourses to frame their digital practices. However, occasionally participants willfully re-interpreted the cybersafety message to ensure their online behaviours were not restricted in any way. For example, at City College participants interpreted ‘knowing’ someone as simply sharing many ‘mutuals’ on social media. By doing this they could continue to extend their list of friends while paying lip service to the cybersafety message. In this way participants were continually negotiating issues of risk and safety associated with their digital practices.

All participants considered themselves ‘cybersafe’, describing social media practices such as strict privacy settings, carefully chosen photos and a list of ‘known’ social media ‘friends’. As such, they saw themselves as doing the ‘right thing’ online. However, two participants acknowledged that this alone could not protect them from large corporations and/or hackers who could still access their personal information. Having strict privacy settings could therefore be seen more as an insurance policy in helping the individual avoid blame if something went wrong online. At the root of the cybersafety message was an individualised responsibility for socially appropriate and responsible behaviours, as well as personal safety and security measures in digital spaces.

The role of significant others

Peers, parents and other relatives played a minor role in helping young people develop their critical digital literacies. One notable exception was Ben. Living with his tech ‘expert’ uncle meant that Ben was scaffolded into more complex and critical

use of digital technologies from the outset. The fact that Ben shared his knowledge and understanding of digital media confidently and regularly in group discussions, suggests this kind of one-on-one ‘mentorship’ can be influential in shaping future practices and dispositions. Further, *others* acknowledged Ben’s more ‘expert’ reading of digital media, as when Stacey reported talking to him about some of the issues she faced. Despite this, it was surprising how little the participants spoke to peers about their experiences with digital media. While they regularly discussed the content, topics and trends that featured on digital platforms, there was little conversation around the social dynamics that contextualised and directed the flow of such content. Aside from offering counsel and comfort on the trials and tribulations of social media, few participants spoke to their parents about their digital experiences. More typically, participants reported that the main role played by parents was to reinforce and maintain their safety and security in digital spaces. In this way, parents were more like gatekeepers than guides when it came to cultivating critical use of digital media. Indeed, the enthusiasm and willingness of participants to partake in the reflective and critical discussions instigated by this research project might be due to the fact that there was a general lack of these conversations in young people’s lives.

9.4 Broader implications, insights and interpretations

Having addressed the research questions, it is now possible to consider how the patterns of digital practices identified articulate with broader theoretical concerns developed from the outset of the thesis. Adopting a constructionist approach to the thesis means that the data generates new theoretical ideas or helps to modify already existing theories or uncover, in more detail, the dimensions of a phenomenon. Indeed, an overarching finding of the research was that the participants’ engagement with digital media was more structuring and conservative in character than anticipated by the poststructural framing of the project.

For this reason the discussion draws on a range of scholarship, from software studies to sociology and philosophy. Notwithstanding theories that can help make sense of the findings, it is important to reiterate that this research found young people’s ‘lifeworlds’ to be fluid and complex, defying categorisation and universalisation. The discussion uses the participants’ *individual* experiences to challenge and extend the literature on young people and digital technology. The section is organised into five

parts. The first counters the notion that digital identities are fluid and multiple, arguing that they are bound by several factors that influence the representation and formation of identity in notable ways. The second challenges the assumption of young people as unproblematically empowered by their use of digital technology, instead examining how the coded architecture of social media platforms strongly structured the participants' representation of identities and interactions with others. The final three sections of the discussion are interrelated – each problematising the gaps that exist between young people's experiences of digital media, academic theorisations of the relationship between young people and digital media, and educational approaches that aim to address popular media panics.

Bounded identities

One significant finding of this study is that the young people's digital identities were not as fluid and multiple as considered in the early chapters of the thesis. Digital identities are bound by several factors, including a tethering to embodied identities and an interpellation (Althusser, 1971) into the role of the 'digital native'. Binding identity at both the personal and collective level becomes a significant constraint to how these young people represented and formed their digital identities. This also meant that there were competing discourses and complex social dynamics for these young people to negotiate when using digital media. While limitations to the theory of becoming are outlined below, as already discussed (see 7.4 and 9.2), this section focuses on the influence of the generational label of the 'digital native'.

While becoming was a helpful conceptual tool for exploring the possibilities for identity practices, it could not account for the influence of offline values and power structures, as well as the structuring nature of digital platforms (this latter point is explored in more detail in the next subsection). Like more traditional approaches to understanding identity, becoming is also socially constructed, meaning that the feedback of peers was an important consideration when engaging in identity practices. Fuller (2005) introduces this idea in his discussion of becoming, suggesting that the social, political and cultural architectures surrounding digital media are what limit possibilities. The findings of this research confirm this point, particularly for the participants in the present study whose audiences on social media were those they saw each day in school. However, it also highlights that with limited ways of interpreting

and integrating the digital practices of others, the external contextual factors take on greater prominence, and sometimes in ways that were constraining.

While the idea of 'generations' helps to identify the social conditions that form the backdrop to young people's lives, tethering their collective identity to the 'digital native' had an effect not only on how they saw themselves, but also on how adults perceived them. The idea of 'digital natives' as a 'homogenous generation' speaking and learning 'differently to preceding generations of students' (Thomas, 2011, p.4) has been critiqued in this study and in many others, however, a significant finding from this research was that many of the young people *themselves* used this idea to define their generation and explain their practices. In many respects such a paradox might be expected given how prevalent and pervasive the discourse and labeling has been. Livingstone (2009b) argues that the notion of the 'digital native' is 'promoted by two constituencies' – the first is educators and the second is those who make and direct content and marketing at children and youth. Indeed developing more complex understandings of young people's experiences requires an examination of the purpose and effect of these descriptors.

Generational or collective labels like 'digital native', 'net generation' and 'millennials' serve a range of purposes; one of which is to control. As Selwyn (2009b) explains: 'the notion of the "digital native" should be seen more as a discursive than descriptive device, employed by those seeking to exert some form of power and control over the shaping of the digital (near)future' (p.371). At the same time, this sort of generational thinking simultaneously 'exoticises' (Herring, 2008) and 'belittles' young people's digital experiences, by assuming that they 'spontaneously know everything they need to know about technology' (Buckingham, 2011, p.x). This has the further effect of reducing adult responsibility for guiding and educating critical and creative digital practices. Examining the notion of the 'digital native' through the lens of Althusser's (1971) 'interpellation' not only explains why this discourse is restrictive and reductive to both young people and adults, but also provides insight into how the effects of this generational thinking might be countered.

In his landmark essay 'Ideology and ideological state apparatuses' (1971), Althusser theorises a process whereby ideology 'hails or interpellates concrete individuals as

concrete subjects'. As Althusser explains this process relies on an imaginary misrecognition on the part of the subject in which 'ideology "acts" or "functions" in such a way that it "recruits" subjects among the individuals (it recruits them all) or "transforms" the individual into subjects (it transforms them all) by that very precise operation'. He calls this *interpellation* or *hailing* and uses the example of the 'commonplace everyday police' calling out to an individual "Hey, you there!" To which the 'hailed individual will turn around'. This imaginary misrecognition is what Althusser calls 'interpellation'. Elliot (2010) writes that interpellation not only creates subjects, but also assigns identity: 'It is in and through ideology that society "interpellates" the individual as a "subject", at once conferring identity and subjecting the individual to that subject position' (p.66). Through interpellation, then, individuals begin to recognise and value themselves within social and cultural frameworks. Althusser contends that it is ideological state apparatuses, including schools, institutions and mass media, which assign signification.

Despite the array of digital experiences observed in the study, all but one participant drew on the discourse of the 'digital native' to explain and describe their practices. In doing so the participants not only assumed a generational identity, but also sidestepped the need to explain and understand their practices in a more detailed and critical manner – they do particular things in particular ways simply *because* they are 'digital natives'. While individuals have the choice to accept their subjection, Choi (2012) writes that this is a 'forced choice' (p. 29), as there are consequences for denying signification. This was evident with one participant, Chantelle. She openly disavowed technology, however, she recounted several occasions in which both adults and same-age friends made her feel like an oddity. Given how pervasive the discourse of the 'digital native' is in society, participants were frequently hailed into this subject position by parents, educators and popular media more broadly. In this way, it became a 'forced choice' for participants to accept their role as 'digital natives', which influenced the way they approached and engaged with technology. Key in this process, and in Althusser's theory of interpellation, was that participants saw this as a 'free choice'. The disadvantages of this label were therefore not acknowledged.

Regardless of how the participants used technology, being interpellated into the position of 'digital natives' meant they often overlooked the actual experiences and

emotions evoked by their digital practices. This would explain the sense of consternation that several participants felt when using social media. There was a sense that they needed to be on particular platforms to be visible to their peers, even though their experiences might have been unpleasant and, at times, negative. In this way, the rhetoric of the 'digital native' restricted the ways participants could think about and use digital technologies. Further, identifying as 'digital natives' meant they were less inclined to listen to or take on board what adults – or digital immigrants (Prensky, 2001a; 2001b) – had to say about digital technologies. It is important to acknowledge that adults have played a major role in the creation of this mindset. It was adults who came up with the discourses around these generational differences. Furthermore, the 'digital native' rhetoric inadvertently lessens the responsibility that adults have in educating young people in creative and critical digital practices. This leads educators and adults to believe they do not need to learn how to use digital technologies in innovative ways, as young people will always be more advanced. Many of these generalisations and binaries need to be deconstructed if young people are to make the most of their digital experiences and practices, particularly when it comes to developing new and innovative digital skills.

The structuring nature of digital platforms

A less anticipated finding from the study was the influential role that digital platforms had on structuring the young people's communicative practices. Rather than involving a wide array of practices across a number of different digital texts, the participant's online communication could be categorised into a series of digital connections or communicative strategies – including one-way projections of self to more intimate and lasting interactions with others. These largely took place through what participants described as a 'core' of digital platforms. This is not to deny the depth and intensity of these digital connections, but to suggest that the nature, tone and style of these exchanges were largely determined by the platform itself, rather than the content or context of the event. Take for example the 'affirmative atmosphere' (Fuchs, 2014, p.160) of Facebook, which is largely propagated through the 'Like' button. While some posts observed throughout the study might have conflicted with this atmosphere, the majority played to this mood and many participants spoke about the pressure of posting content that attracted 'likes'. While peers had a role in introducing and habituating individuals to digital platforms, the findings showed that

technology companies also have a significant influence over how the young people used digital media to communicate with others. In fact, the functions of these sites are purposefully connected to markers of sociality (i.e. friending, sharing, liking), so that feelings of belonging and self-worth 'knit' users to the platform.

Underpinning the digital communication that took place on these platforms was a culture of connectivity built upon sharing and liking (van Dijck, 2013b). This not only means sharing content with 'friends' and 'followers', but also with corporations. Writing almost 10 years ago, Tapscott and Williams' (2006) argument that relationships 'are the one thing you cannot commoditise' (p.44) now appears idealistic, if not naïve. The boon for technology companies like Google and Facebook came through commoditising the connections users have with others, which was made possible through the architecture and functions of digital media platforms. Several scholars argue that communication technologies have now commoditised feelings and affect (Dean, 2005; Karppi, 2015). It is not my intention to analyse the political economy of digital media platforms here, but rather to highlight the influence these platforms have on young people's communication practices. In doing so, the dominant ideologies of these digital platforms and the impact they have on the way young people see themselves and others might be revealed. The digital practices explored in Chapter 7 – *Young people's digital identities* and Chapter 8 – *Young people's digital connections* point to what has become the prevailing culture and ideology of the digital context, but it is perhaps most clearly outlined by van Dijck (2013b): 'Platform tactics such as the popularity principle and ranking mechanisms hardly involve contingent technological structures; instead they are firmly rooted in an ideology that values *hierarchy, competition, and a winner-takes-all mindset*' (p. 21, emphasis added). In light of this, the prioritising and privileging of particular digital practices by these young people – including the focus on photos, increasing the number of 'friends' and attracting 'likes' – are seen *not* as acts of narcissism and self-indulgence, but instead as responses to this ideology.

Software studies (Manovich, 2001; 2013; Berry, 2011; Kitchin & Dodge, 2011), which focuses on the social and cultural effects of software systems, helps explain how the ideologies of technology companies take hold amongst users of their sites.

Facebook's EdgeRank algorithm is a case in point, as it mediates the imperatives of the corporation *and* the individual users' practices through the platform interface. On Facebook, the EdgeRank algorithm processes each digital practice (posts, comments, likes, photos) as an 'edge'. What appears in users' News Feed is determined by three things: how connected they are to the edge (affinity score); the types of stories Facebook thinks the user will find interesting (edge weight); and when the edge appeared (time decay).³⁴ Bucher (2012) reasons that there is a circular logic embedded in the EdgeRank algorithm in that an affinity score is determined by your interactivity with the Edge 'creator'. However, as she explains, 'for you to Like or Comment on a friends' photo or status update, they have to be visible to you in the first place' (p.1169); a low affinity score means the user and their posts will not be seen. Through the EdgeRank algorithm the functions and buttons on Facebook are hierarchised, thereby prioritising particular people and posts into users' News Feed. This creates social hierarchies and explains how some people become more visible on these platforms than others. In doing so, it is these functions and the EdgeRank algorithm that create the fear of social invisibility that the young people spoke about so regularly. To remain 'visible' these young people have little choice but to follow 'a certain platform logic embedded in the architecture of Facebook' (Bucher, 2012, p.1171). Not only does this encourage users to keep posting, but the more they share, comment and 'like' on the platform the more personal data they generate, which Facebook can then sell on to third parties.

Manovich (2013) argues we are now living in a 'software society', and indeed the kind of impact software had on these participants' daily experiences was evident in the data. A software studies approach draws attention to the way in which digital media shape young people's identity, communication and participation in society. It helps to understand participants' digital practices than the poststructural or anti-essentialist approaches outlined at the beginning of this thesis. In many respects, these theoretical approaches are based on a more optimistic portrayal of individuals drawing on a wider range of sign systems, discourses and practices to negotiate digital media. This in itself reflects how influential technology companies were in shaping this group of young people's digital practices through the coded architecture of the

³⁴ See: <http://edgerank.net/>

sites. This is due to the specific nature of the software that structures these digital texts. Manovich argues that software is different from other technologies in three important ways: first, software is always in ‘Beta stage’ so that it is never ‘officially completed’ (p.1); second, software as a ‘theoretical category’ is still invisible to ‘most academics, artists, and cultural professionals’ (p.9); and third is that software plays a ‘central role’ in ‘shaping both the material elements and many of the immaterial structures that together make up “culture”’ (p.33).

Each of these points has significance when considering how young people use digital media to communicate with others. Not only does it point to the fact that through software culture is perpetually changing, but that from an academic perspective its effects have been under-theorised. As an example, the concept of remediation (Bolter & Grusin, 2000) has been useful in understanding how digital media remediate or incorporate old technologies, however, it also obfuscates the specific processes and qualities brought about by this new media. Like Manovich (2013), Berry (2013) argues that there are ‘specific forms of sociality’ (p.34) brought about by software that are new. Even though old media may ‘haunt’ the new (i.e. the analogue camera icon on the smart phone), these *are* new forms of media that bring about new social and cultural processes. For example, the photo taken on a smart phone can now be instantly shared on social media. In fact, it is perhaps this continuity with old forms of media that make new media appear more banal than they actually are. Berry (2013) puts forth the notion of ‘enmediation’ to explain that even though the previous medium might be represented in the new it is neither the ‘same’ nor is it ‘contained’ by it (p.33). Enmediation points to the emergent nature of digital networks, as new media resonate and shape social experiences and processes in unforeseen ways.

While much has been made of young people’s reliance on digital media, what is often forgotten is that this reliance is in and of itself a product of the architecture and functions of the platforms. Young people are not inherently narcissistic and self-indulgent in the way that some scholars have suggested (see Twenge & Campbell, 2009; Twenge, 2006), but certainly they are seeking to connect with others in an increasingly fragmented and risk-conscious world. Digital platforms, like Facebook, are a way to connect with others from the safety of home, however, this involves embracing, in some way, the ideologies embedded in these platforms (i.e. promoting

the self to be ‘visible’ to others). The lure of conviviality and friendship offered through these platforms encourages young people to share their thoughts, feelings and emotions, not only with their ‘friends’ and ‘followers’, but also with the corporations that own these platforms. While young people may not see this as a problem, the fact that technology has become indispensable to their social experiences, often in quite insidious and underhanded ways, *is* a problem. In this way, technologies held significant power when it came to shaping discourse and ideology around social practices and behaviours. This kind of dependence was not promoted by all platforms. It must be remembered, that many participants learnt important skills of communication through their use of digital media, particularly when on more niche sites. However, it is important that academics and educators develop theories to help understand and conceptualise the new forms of sociality that are initiated through software. As Dobson and Ringrose (2015) argue this also means more focused discussion around the new norms established by the digital context. As they explain something that might appear normal and legitimate online can appear inappropriate in other contexts (i.e. school). Redressing the issues outlined here should not be seen as the sole responsibility of young people. Moreover, technology companies also have a responsibility to their users to be more transparent about the way these platforms work.

Young people’s affective experiences of digital media

The young people in this study were not always consciously aware of the emotions involved in and evoked by their use of digital media. In many respects this idea relates to the finding that these young people found it difficult to integrate and make sense of their experiences across digital media. Instead, digital experiences remained a separate and distinct aspect of life. However, these young people were clearly *moved* to do particular things online, even if certain practices were difficult to rationalise in a logical way. All of the participants understood that a Facebook friend was not a ‘real’ friend, yet many were still driven toward accumulating more ‘friends’. An important aspect to the study was the reactive and affective nature of the behaviors prompted by using digital media. In this way, affect emerged as an underlying force that shaped the young people’s digital practices. While affect has been applied in a number of contexts, this discussion focuses on social scientific

applications of the theory (Massumi, 2002; 2015; Gregg & Seigworth, 2010; Hillis, Paasonen & Petit, 2015).

Affect explains why the young people in this study were subconsciously driven to particular dispositions, movements and behaviors across digital spaces in ways that were difficult to understand and identify. These subliminal *forces* were distributed and defy categorisation into typical emotions, such as happiness and sadness.

McGilchrist (2009) differentiates affect from emotion by arguing that emotion is only *one* aspect of it. Affect, he argues, involves ‘something much broader’. It is ‘a way of attending to the world (or not attending to it), a way of relating to the world (or not relating to it), a stance, a disposition...ultimately “a way of being” in the world’ (p.184). As described in Chapter 6 – *Young people's digital dispositions*, the young people in this study approached their use of digital technology in particular ways. They assumed dispositions that appeared self-evident however when asked to explain they often found them inexplicable or, sometimes, even irrational. Understood through affect theory every behavior, practice or language event comes about through conscious dimensions of experience *as well as* through subconscious, embodied reactions. In this sense the body and the brain work together to produce what Massumi (2015) calls ‘body knowledge’ (p.210). He explains that affect theory ‘does not reduce the mind to the body in the narrow physical sense’, but instead ‘asserts that bodies think as they feel, on a level with their movements’ (p.211).

Indeed, the notions of movement and dynamism are key to affect, as in its most simple form, it is the ‘capacities to act and be acted upon’ (Seigworth & Gregg, 2010, p.3). While the actual labels may vary, the driving force behind these actions involved something ‘vital’. Seigworth and Gregg (2010) describe it as a ‘vital force’ (p.3), while Munster (2013) calls it ‘vitality affect’ (p.104). Munster goes on to explain that ‘vitality affects...are not expressions of emotion but rather are generalised affect-sensory movements that, ontogenetically, precede the capacity to categorically express "a" feeling’ (p.104). In digital networks ‘vitality affects’ emerge, condense and dissipate across human and non-human components in a multitude of ways. Not only are these forces kinetic and non-specific, in digital networks they are also distributed and diffuse, which explains the participants’ difficulty in identifying them.

When more specifically applied to digital networks, affect explains ‘how individual, collective, discursive, and networked bodies, both human and machine, affect and are modified by one another’ (Paasonen, Hillis & Petit 2015, p.3).

The kinds of texts that young people often upload onto social networks – photographs of memories, expressions of opinion, declarations of care and affection for others – highlight the importance of affect in digital networks. In this way, feelings, sensations and emotions are the very foundation of the social networking experience. Further to this, the structure of social media helps to develop what Ahmed (2010) calls the ‘stickiness’ of affect. Affect is sticky, Ahmed writes, because it ‘sustains or preserves the connection between ideas, values and objects’ (p.29). Social media platforms like Facebook are structured to promote ‘stickiness’. Even inconsequential events or objects can become ‘sticky’ as they are uploaded onto a timeline, tagged with a caption and identified as a significant event in a person’s life. Structured in this way these objects help to forge a web of affective relationships with others and increase individuals’ connection to particular websites and digital tools. For marketers, stickiness is now a measure of value as it positively correlates with the amount of time one will spend on a website (Pybus, 2015). Beneito-Montagut (2015) argues that the ‘emotion culture’ that emerges through online relationships remains ‘under-theorised’ (p.4). Exactly how affect circulates on social networking sites is difficult to trace. The networked nature of affect across digital media adds another layer of complexity for individuals to negotiate.

Affect might explain why four of the participants in the study regularly returned to the websites they used in their childhood. Whatever their reasons for doing this, a technological affordance of social networks is that they are essentially ‘archives of feeling’ that can be easily stored and accessed by large numbers of people (Pybus, 2013). These archives enable the individuals to imagine and re-imagine the communities they have participated in, hence Trent’s return to Club Penguin to bring about the happy feelings of the past. Sometimes, however, affective reactions emerged in unpredictable ways across digital networks. Ben assumed indifference toward his profile photo saying that his friend had asked him to use it, as he himself did not spend much time deliberating over such things. However, in interview it was clear that bound up in this photo were happy memories of participating in the school

musical and the positive relationships formed throughout rehearsals. While societal expectations might have positioned him to adopt a nonchalant attitude toward his profile picture, on another level this photograph imbricated a series of significant memories and feelings for Ben that he referred to a number of times throughout the study.

Given the role of affect in driving and shaping digital practices it is a significant finding that the young people in this study saw the behaviours on digital networks as lacking emotion. Yet in one way or another affect underpinned much of their online behavior. The very fact that the young people went online to spend time with people they knew and cared for suggests that these networks were significant *because* of the affective relationships they developed. Affect helps understand how young people compose and engage their digital identities and behaviours at both a conscious *and* subconscious level, using both brain and body. It accounts for actions and behaviours that might appear irrational or inexplicable to others, but seem intuitive or right to the individual. There is merit in prompting young people to consider how affect shapes their digital practices and their digital becoming. Identifying and naming these subliminal drivers is the first step in exerting some kind of control and agency over how these might be channeled through social media platforms and other digital texts. It is also important for parents, adults and educators to realise that rational or logical discourses around digital practices cannot account for affective experiences of digital media that are individualised, obscured and embodied.

The individualisation of digital responsibilities and risks

One of the purported virtues of the internet is the ease with which content can be accessed and uploaded. This provides opportunities for researching, communicating and learning, as demonstrated by the participants in this study, however, it also introduces new forms of risk. As Livingstone (2009a) points out, the structure and function of the internet mean that online opportunities are often inherently intertwined with risk:

To make a new friend online, one risks meeting someone ill-intentioned. To engage even with the children's BBC website, one must provide personal information online.

To search for advice about sexuality, one will encounter pornographic content also, since there is no consensual line between them (p.171).

While risk and opportunity are often thought to be mutually exclusive, a large scale study of young people's digital practices found that there was, in fact, a positive correlation between the two; the more risks one takes, the more opportunities they will encounter, and vice versa (Livingstone & Helsper, 2010). This helps to contextualise and understand the various practices observed across the study group. Dylan's relaxed privacy settings and willingness to communicate with strangers might be perceived as risky, however, this more open and willing disposition increased his opportunities to socialise with others. On the other hand, Chantelle, who was more risk averse, had experienced far fewer digital opportunities. Most other participants fell somewhere in between these two extreme cases; their digital practices involved negotiating the ongoing tensions between risk and opportunity. In this way, the participants' used digital media with a clear sense of the 'spectacles of intimacy' (Berriman & Thomson, 2015) outlined earlier in the thesis. Like the young people in Berriman and Thomson's study, these young people were also 'driven by a dual emotional imperative: seeking to navigate between the potential emotional pleasures derived through praise and recognition, whilst simultaneously attempting to avoid the anxiety and distress of being exposed to criticism and derision' (p.588). However, what enabled individuals to thrive in digital spaces was an ability to assess and manage these risks and opportunities effectively.

Risk, according to Beck (1992), is inextricably linked to contemporary society (a period he termed reflexive modernisation) in that it is 'a systematic way of dealing with hazards and insecurities induced and introduced by modernisation itself' (p.21). In modern society, risk is not abstract but instead fundamental to the institutions and innovations of everyday life. It is the perception and identification of risk within modern society that marks this era as different to those of the past. For the young people in this research risks and opportunities were encountered through their use of digital media. For example, participants spoke about the risk of identity theft, negative peer judgment and bullying, and the unwanted attention of strangers. However, these risks could eventuate from everyday digital practices – entering details onto a website or database, posting content and 'friending' or 'following' others online. In this way,

participants assumed the assessment and management of risk was *their* responsibility. Indeed, both the infrastructure of the internet and the superstructures that framed young people's digital practices encouraged the idea of an individualised responsibility and risk in online spaces.

Significantly, the young people in this research seemed to be voluntarily engaged with the self-monitoring that was required to manage the risks they faced online: they tried to remain anonymous in online spaces; they rigorously assessed the appropriateness of their photos or stopped posting altogether; and they used 'mutuals' to determine whether they should become friends with someone. As Sean explained, users of the internet needed a 'tin hat' to protect themselves from all the 'gross stuff' online. Insulating themselves against risk involved critically assessing the possibilities and problems of a particular situation, the credibility or trustworthiness of an individual and the fallibility of the platforms they used. Needless to say individuals *must* have proficient analytical skills if they are to prosper in digital spaces, as 'experts dump their contradictions and conflicts at the feet of the individual and leave him or her with the well intentioned invitation to judge all of this critically on the basis of his or her own notions' (Beck, 1992, p.137). Making these judgments can become an overwhelming and sometimes insurmountable task. Despite the difficulties involved individuals bear the 'full responsibility for the consequences of investing [their] trust in this rather than that example' (Bauman, 2001, p.105).

Closely associated with discourses of risk are discourses of individual empowerment and agency, which are together, 'curiously re-embedded within official establishment discourses as a means of rationalising the increasing exposure of the individual to the consequences of their own risk-related decisions' (Livingstone, 2009a, p. 178). In a risk society (Beck 1992), not only do the state and other social institutions retract from the responsibility of managing risk, but they also play a role in shifting the responsibility onto the individual. The prominence of the cybersafety discourse in school based digital media programs is indicative of this shift. It is a solution to the problem of the 'disempowered digital native', who is, according to this discursive construction, subject to a set of 'risks' and 'dangers' through their technology use (Selwyn, 2009b, p.368). Sanctioned by official institutions like schools and the police, the cybersafety discourse is typically centred on a zero tolerance of risk. However, in

minimising risk, opportunities are also minimised. In this way, the official story young people have been told about digital media are based around risk prevention and minimisation.

The need for critical digital literacies

The findings from this study demonstrate some of the challenges that young people experience when using digital media, underscoring the need for sophisticated critical digital literacies. These challenges might be less obvious to adults and educators, but were immediate and pressing for the young people in this study. These challenges could be summarised as negotiating the following: the complex and interrelated discourses associated with identity practices; the structuring nature of digital platforms; the often unconscious emotions evoked by using digital media; and the increasing individualisation of managing these challenges via the cybersafety discourse. While the findings from this study indicate the difficulty identifying and explaining the ways in which digital media shape lived experience, it was clear from the data that reflecting on this was not something participants had considered before and was far more difficult than first assumed.

Unlike other studies that suggest young people do not differentiate between the online and offline (Salaway & Caruso, 2008; Carrington, 2015), the participants in this study relied on more conventional and/or conservative terms to explain their experiences. Further, their explanations and discussion of digital technologies did not reflect the nuanced and complex interplay of digital media, as they were not seen as embedded in day-to-day life or as initiating emotive or embodied reactions. While it might appear idealistic to have expected otherwise, seeing the digital and non-digital as intertwined is key to developing critical digital literacies, particularly when considering the complexity of the digital context. Malpas (2009), for example, contends that the digital context ‘does not constitute an autonomous, independent or “closed” system, but is instead always dependent in a variety of ways, on the everyday world within which it is embedded’ (p.135). Much of what is affecting about the digital is the way it connects with and mobilises emotions and feelings. This is perhaps even more difficult for young people as these emotions and feelings are nascent. As Malpas argues, however, perceiving digital experiences as ‘non-autonomous’ to the everyday world leads to a ‘more complex and nuanced

conception' of the digital context, and 'its relation to the everyday, than is common in many discussions' (p.139). Developing understandings around the interplay between the online and offline should therefore be a goal of critical digital literacy models.

While the participants appeared to move 'seamlessly' between the online and the offline, converging technologies and identities through the digital platforms they used, it is significant that *they* did not see it as such. This perhaps points to a shortfall in language, rather than comprehension. Without the linguistic tools and literacy strategies to make sense of these processes they remained, in many respects, beyond identification and understanding. Developing a metalanguage through which to identify and make sense of the social processes that take place across the networks of digital texts might be one step in developing the critical digital literacies of young people. As Gee (1991) explains, powerful literacy 'is control of a secondary use of language used in a secondary discourse that can serve as a meta-discourse to critique the primary discourse or other secondary discourses, including dominant discourses' (p.8). As argued earlier in this chapter and in Chapter 8, the discourse of digital platforms could be considered dominant in structuring young people's experiences, so that increasing their power relative to these digital systems requires the development of a 'meta-discourse' specific to digital spaces. With few tools and resources to challenge the dominant discourse there are few options but to accept the structure and functions of these technologies without challenge. In light of this, it is not surprising that three participants expressed forms of technological determinism in their explanations and predictions throughout the study. This suggests that the young people did not have either the linguistic tools or the experience to help them 'mutually shape' the digital technologies to their purposes in the way that some scholars have hoped or proposed (Lievrouw & Livingstone, 2009; Boczkowski, 1999).

As outlined in Chapter 3, the aim of sociocultural approaches to digital literacy is to build on individuals' past experiences and knowledge, and scaffold them towards increasingly complex and critical understandings of the texts they encounter. This, however, is quite a different approach to the one that the young people described experiencing at school. While there is a body of literature theorising models and approaches to teaching digital literacies (Avila & Pandya, 2013; van Dijk & van Deursen, 2014; Gillen, 2014), it seems these more innovative methods have not

penetrated into the mainstream and remain niche. While the participants drew on the cybersafety discourse to discuss and explain their digital practices, the findings from this study demonstrate that it was limited in helping them to negotiate the series of complex and competing pressures brought about through use. This includes the structuring nature of social media platforms, the affective experiences of these digital networks and the popular media panics that shape societal expectations around use. Critically analysing the complex and interconnected nature of digital media requires information and guidance, as well as opportunities for both reflexivity and collectivity. The findings indicated that the reconceptualised approach to critical digital literacies trialed as part of the method shows promise in supporting young people to negotiate and make sense of the complex issues associated with their use of digital media. In light of this, the call for a critical digital literacy that connects meaningfully with young people's digital practices remains a priority.

Writing almost 20 years ago Negroponte predicted a post-digital future, in which 'being digital' would be 'noticed only by its absence, not its presence' (1998, n.p.). Implicit in Negroponte's description of 'being digital' was an inevitability that these changes would occur. He writes: 'We have a similar blindness today, because we just cannot imagine a world in which our sense of identity and community truly cohabitates the real and virtual realms' (Negroponte, 1998, n.p.). However, while the young people's lives *were* digital, they still struggled to integrate, explain and make sense of the distributed and emergent digital experiences that took place across digital media. In epistemological terms, the young people were still very much 'becoming digital'. While academic understandings and theories of digital processes account for the complexity and nuance of digital experiences, they may not match the actual lived digital experiences of many young people. Providing young people with the linguistic and theoretical tools to help them make sense of the new and diverse social experiences they encounter across their digital networks would be an important step in developing their critical digital literacies.

9.5 Conclusions

This chapter has linked the findings from this study to broader theoretical concerns relating to digital media and young people. In doing so, several key challenges emerge for those concerned with the development of critical digital literacies. The

first is a pressing need to increase young people's technical understanding of both the structure of digital networks *and* the coded architecture of the individual digital texts they use. Approaching digital media as 'texts', as opposed to 'platforms', would highlight their interpretive and flexible qualities, thereby increasing young people's inclination to shape them in ways they see fit. In conjunction with this, there is a need to increase technical knowledge of the way content and information flows across networks, to highlight the complex and intertextual ways of making meaning in digital spaces. This would not only increase technical understandings of the digital context, but also provide a basis upon which a more critical perspective might be forged. This critical perspective has a personal dimension, which relates to young people's affective experiences of digital media. A key challenge here is developing discourses that will enable young people to unpack and examine how affect circulates, condenses and dissolves across their networks.

While it is significant that young people believe that safe and secure digital practices are an individualised responsibility, it is perhaps not surprising given the rhetoric of the cybersafety message. The discourse of the 'digital native' plays into this, as young people come to see adults as 'digital immigrants' with little to offer when it comes to innovative use of technology. As a socially and culturally situated practice, digital literacies are intimately connected to young people's identities, communication practices and civic participation in society. It is therefore vital that they have support in developing and extending them.

Chapter 10: Reflections and implications

10.1 Introduction

This thesis has considered a wide range of issues that influence and shape young people's use of digital media. It has explored the contextual factors and discourses that inform their digital practices, thereby identifying the connections and disconnections that exist across the digital texts they engage with. As such, the research makes the following contributions to knowledge. First, it has developed a methodological approach that brings together social theory and creative practices to expand the ways of researching digital literacies beyond the typical frameworks of learning sciences and new literacies. Second, it has demonstrated that young people's digital identities are less fluid and more restrained than commonly presumed, and explored the social and technical reasons for this. Third, it has examined the strongly shaping nature of digital platforms, and the kinds of interactions between young people and the coded structures in their everyday lives. Fourth, it has identified the influence of particular resources, programs and significant others in developing young people's critical digital literacies. And finally, it has problematised the gaps that exist between young people's experiences of digital media, academic theorisations of this relationship and common educational approaches to digital literacies.

It is now possible to consider how these findings relate to practice and further research. This concluding chapter begins with a reflection on the research process and the author's own 'becoming' as a researcher. It then draws together the empirical and theoretical threads that emerge from this study by focusing on how the various groups who have a stake in young people's digital practices might work to improve the current situation. These groups include: academic researchers; schools and education officials; parents and families; technology companies; and of course young people themselves. The notion of critical digital literacies holds different meanings for each of these groups. However, an overarching conclusion that might be drawn from this thesis is that cultivating critical and agentive digital practices involves a more consistent approach that draws on a wider range of people and resources.

10.2 Reflections on the research process

Given the interpretive epistemology of this study, there are several factors that underpinned and influenced the research design which can now be reflected upon. These include: the conceptual assumptions with which the study began; how these shifted across the data generation period; and the influence of the relationship between myself the researcher and the participants. Carspecken (1996) contends that the preliminary stages of the research process should include an examination of researcher bias and the orientations of their values. However, considering that the position of the researcher is also shifting and changing opportunities for reflection *throughout* the data generation period also need to be made. In the present study, there was significant time for researcher reflexivity given the inclusion of a pilot study and the relatively extended period of the research design. This enabled me to reflect upon my becoming as a researcher as well as the opportunity to unpack the conceptual assumptions I had in regard to the study's theoretical underpinnings.

Prior to taking up my doctoral studies, I was an English teacher. For this reason, it took some time to overcome the inclination to adopt the former identity of teacher when in the school setting. However, as the research proceeded and my identity as a researcher grew, my perspective also shifted. As Lincoln and Guba (2000) explain, reflexivity can actually help the researcher come to terms with the research problem and the participants as well as 'the multiple identities that represent the fluid self in the research setting' (p.183). Incorporating time for researcher reflexivity helped me to avoid approaching these young people through the institutional discourse that positioned them as 'students'. Similarly, it was important to interrogate my newfound perspective as researcher to ensure that I was not simply documenting the vulnerabilities of these young participants, but reflecting a holistic view of their lived experiences with digital media.

Having completed research into young people's use of Facebook for my Master's degree, I started my doctoral studies with a particular perspective in mind. To understand the digital practices of the participants in my Masters' study I applied Foucault's theory of discursive formation to provide a new theoretical framework through which to analyse social media use (see Pangrazio, 2013). In the months

leading up to the present study this framework was revisited and evaluated through a broader, more detailed review of the literature on young people's digital literacies. In some respects my doctoral research confirmed these earlier findings, particularly in regard to the structuring nature of digital platforms. The present study extended this theoretical insight by developing a technical understanding of how the coded architecture of these platforms contributes to the discursive formation that is 'Facebook'. In other ways, however, the research challenged my earlier assumptions. While it was surprising to find the limited opportunities the young people in this study had to develop their critical digital literacies, they clearly had other forms of criticality, which questioned what I would define as 'critical literacy'. Reflexivity and revision of my conceptual assumptions therefore helped me to expand the frames of reference for this study.

10.3 Implications for academic researchers

This study sought to develop approaches to researching young people's critical literacies in ways that were responsive to the features of the digital context, including: the interconnected network of digital texts; the coded architecture of digital platforms; and the intertwining of affective and personal responses into meaning making processes. In Chapter 3 it was argued that current models of critical digital literacy have struggled to incorporate these features, leading to a series of unresolved and unproductive tensions. One aim of this research was to trial some techniques that worked to bridge these tensions by encouraging both personal and ideological responses to the issues emerging from using digital media; marrying collective concerns with individual practices; and improving technical understandings without displacing criticality. The present study explored critical self-reflection, visualisation and re-design and re-articulation as techniques for developing critical digital literacies. While these techniques do not represent an all-encompassing approach to digital literacies, they might resolve the tensions outlined and work to complement existing models of digital literacy. In the present research, creative processes were used as both a physical prompt and cognitive 'tool' to represent understandings and facilitate more critical perspectives. It is worthwhile highlighting the limitations and benefits of this research method for future approaches into young people's critical digital literacies.

There were several limitations to this study relating to sampling and study design. First, 13 participants is a relatively small group of young people. Second, while the participants were from geographically different areas of Melbourne and represented a range of socioeconomic backgrounds, in cultural terms, the group was quite homogenous, comprised of only European Australian participants. Third, while the study focused on how these young people were using digital media, it is important to note that their everyday literacies would have included a range of analogue components as well, including print based texts and other artefacts. This thesis has deliberately privileged the digital components of young people's literacy practices. Future research might take a more holistic approach to researching young people's everyday literacies and in doing so develop a more detailed understanding of how traditional literacy practices are reconfigured in the digital context. Finally, while this provocative approach to data collection might open up new insights for the participants, it can become difficult for the researcher to untangle the newly developed perspectives that emerge from the research process as distinct from pre-existing ones. However, given that all research is socially constructed then it will always be difficult to differentiate between researcher-led responses and the 'unadulterated' responses of the participant. In some respects a provocative and creative approach assists this situation in that the immediate focus is on the artefact made by a particular participant to a particular prompt, rather than the individuals themselves. In this way, the research involves the active, voluntary responses of participants, meaning they potentially have more control over what they report to the researcher as 'data'.

Pursuing a creative approach to researching critical digital literacies clearly has benefits in understanding the more complex practices and issues that emerge from young people's relationship with digital media. To translate digital practices across contexts and materials the individuals are encouraged to simplify or streamline these processes into a more straightforward set of propositions. This opens up new perspectives on these processes and encourages the individuals to identify how features like context and convergence can make translation (and therefore digital practices) all the more complex. In addition the physical movement involved in folding, painting, modeling and manipulating materials to represent digital ideas and issues prompts a physical response from individuals. Upon reflection this articulates

with affect theory, which asserts that ‘bodies think as they feel, on a level with their movements’ (Massumi, 2015, p.211). Brought together through the creative process, cognitive and physical responses were found to open up new ways of thinking about the digital context for the participants in this study.

The key (perhaps transformative) moment in this approach however was the discussions that took place around the creative process and the artefact produced. Indeed, speaking about the models and paintings, created a critical distance on these digital practices, which appeared to make it easier for participants to identify and analyse complex issues associated with their use. In this way, there was no underlying sense of right and wrong, as these were personal interpretations and responses to a provocation, rather than ‘textbook’ answers. For example, through making their models Rachel and Stacey were able to explore some of the ideologies that underpinned social media, like popularity and status, and then use personal examples to apply it to their own observations and practice. This was an effective way of bringing together the ideological and the personal in potentially transformative ways. Similarly, Sean’s timeline of digital practices depicted the history of his individual digital practices, however, in describing his timeline he began to discuss the more collective concern of media monopolies on the internet with the group. While there were limited opportunities to develop technical mastery in this study, participants’ enthusiasm for the re-design and re-articulation activity demonstrated that applying newfound knowledge to transform current symbols and icons was a useful way of scaffolding critique, which could be applied to other processes and practices. As Hodge and Kress (1988) write, texts reproduce and reconstitute ‘systems’ of thought and discourse. By questioning and challenging the system of signs that give digital texts their meaning, the broader discourse is also challenged. Coupled with re-design and re-articulation critique becomes an opportunity for change, rather than a lesson in right and wrong.

This creative approach to researching digital literacies also focused on materialising the immaterial. Exploring the history of the participants’ digital practices through the timeline of digital practices represented a good example of this. It provided a counterpoint to the speed and immediacy typically associated with the digital and encouraged a more reflective, temporal perspective on use. It also helped both

researcher and participants understand how and where digital practices noted during the data generation period fit into broader life patterns and histories. In this way the research had what Patti Lather (1991) calls ‘catalytic validity’ in that it helped participants to develop understandings of social phenomena in a way that was beneficial and potentially transformative to their lives. To further develop this approach, future research might increase the role of participants in the data generation process by asking them to co-design provocations that encourage critique around particular topics. While this thesis has benefitted from using analogue materials in settings removed from the digital context, future projects might seek to replicate similar approaches online. Such research would be provocative and creative however the tools would be digital. In many respects this research approach has thrown up more methodological opportunities and challenges than it has resolved, however, in pursuing these challenges new tools for researching literacy might also be uncovered.

10.4 Implications for schools and education officials

While this thesis set out to explore the significance of schools in young people’s digital lives, it was notably peripheral in many instances. For example, in responding to Provocation 1 - *Mapping digital and non-digital experiences*, it was significant that schools were typically represented as separate and removed, demonstrating that the young people did not see the school setting as connected to other aspects of their daily lives. Part of the problem appears to be that schools are taking young peoples’ computer skills for granted and not devoting enough time and resources to improving young peoples’ digital literacies. This observation was reflected by more general trends in Australia that show young peoples’ Information and Communication and Technology (ICT) literacies are actually decreasing. The National Assessment Program (NAP) ICT literacy report, for example, ‘shows a weakening in the average performance of year 6 and year 10 students in 2014’ (Donaghue, 2015, n.p.). Building on this and the findings from the present study there are at least two ways in which schools could better support the development of digital literacies. In particular, they are providing opportunities for critical self-reflection and building technical knowledge and understandings.

Given the school-based participants’ willingness to engage in critical reflection and discussion on their digital media use, there may be advantages to the fact that the

school *is* somewhat external to or segmented from the fast-paced, highly converged nature of young people's digital lives. The critical distance afforded by the school might be conducive to initiating a more self-reflexive approach to digital media use. As explained and demonstrated throughout this thesis, digital texts are complexly interconnected and shaped by underlying social and political forces. From the more segregated position of the school, young people might be given a different perspective on their use of digital media; one in which a more systematic approach to comprehending the nuances and connections might be facilitated. This resonates with Paul Taylor's (2006) call for a transcendental critique, discussed in Chapter 3 (see 3.4). In his debate with Scott Lash (2002; 2006), Taylor argues that the difficulties critiquing power structures in what he calls the 'new information order' point to the need for an 'elevated' or transcendental perspective on digital media networks. Part of Lash's argument against a transcendental critique is that the speed and ephemerality of information in the digital era mean that the space for critique is lost. While schools have been widely criticised for their lack of digital innovation this setting may provide a different set of opportunities for young people. From a perspective somewhat removed from digital networks such as the school, young people might be better positioned to unravel and understand the forces that constitute digital texts.

However, it is also important to consider what sort of learning environment would encourage this more critical and self-reflexive approach to digital media. In evaluating the school as a site for digital literacy programs, it is perhaps spaces beyond the classroom that hold the most promise. Research by Vickery (2012) and Hull and Pandya (2004) into out of school digital literacy programs demonstrated that it was not just the content of the program that was important to its success. The mindset of the students was different in the out of school space and this was, in part, due to the more supportive environment created. Given the sensitive and personal nature of digital practices establishing an environment of trust and respect is key to the success of the program. Considered in light of these findings, the more self-reflexive aspect to critical digital literacies might be better facilitated in spaces attached to the school, but separate from the classroom. These are essentially a 'third space' in which young people can draw on different discourses that are in-between other domains (Pahl & Rowsell, 2012; Gutierrez, 2011). This might be in afterschool programs, extracurricular activities or even in a multipurpose room or some other

kind of alternative space within the school setting. However, given the findings of this research there are specific skills and understandings that need to be targeted in these programs.

The findings from this research also demonstrate the need to increase young people's technical knowledge of digital technologies. Not only do young people need more information on the structure of the internet (i.e. what it is, where it comes from) but also, greater transparency and understanding of the coded architecture of digital platforms. One way a school-based curriculum might approach scaffolding critical digital literacies is by applying Gehl's (2014) notion of 'reverse engineering social media'. Focusing on the platform interface, Gehl argues that reverse engineering is a useful way to critique 'the final, implemented product...seeking clues as to why it was put together in the way it was and how it fits into an overall architecture' (p.10). He outlines three reasons why reverse engineering is a valuable process to engage in; all of which have relevance to the issues raised by participants in regard to their use of social media. First, in a system of 'closed code and proprietary formats' (p.10), reverse engineering looks to the interface and the artefacts visible seeing how these shape uses and, more fundamentally, users. This enables a more detailed understanding of 'why some uses are privileged while other technically and equally possible uses are denied' (p.11). Second, reverse engineering seeks to move back through time, attempting to uncover the links that contemporary technology and its metaphors have with 'prior technologies and practices' (p.11). In doing so, a more detailed understanding of the new forms of sociality might be generated for critical analysis. Finally, it also embraces positive design aspects in that it is 'a critical dissection of existing technology with the goal of building a better system' (p.12). This approach would encourage young people to consider what works well, but also what could work *better*. Whether or not the alternative social media platform is created is beside the point. By instigating critical insights, reverse engineering social media increases young people's power and agency relative to these social platforms.

In many respects, reverse engineering as a technique for developing young people's critical digital literacies applies the digital media as texts approach outlined in Chapter 1 of this thesis (see 1.5). In particular, reverse engineering social media develops an interpretive and instrumental response to digital texts that aligns with the

anti-essentialist theories (Woolgar, 1991) discussed. Bearing this in mind, there is no reason why Gehl's reverse engineering model could not be applied to other forms of digital media, including gaming platforms and music software. Not only would this approach build technical understandings of digital media, but it would also encourage young people to think about how the architecture of the site shapes users' practices. In doing so, an understanding of what Grint and Woolgar (1997) call the 'textual organisation' or 'the relationships made possible between entities within and beyond the text' (p.73) would be developed. This takes into account the coded architecture of the software that organises the digital text, as well as the influence of other users and the discourses that frame these digital practices. This approach would complement the protective interventions of the cybersafety discourse that appears to be the dominant method of media education in schools.

10.5 Implications for technology companies

In contrast to the marginal role played by schools, technology companies played a considerable role in shaping these young people's digital practices. These practices were not only functional (i.e. enabling access and navigation of a platform or site), but also behavioural, setting patterns and precedence for future digital practices (i.e. returning to the site to check notifications and feeling the need to stay abreast of what others were doing). When considering that technology companies also have an *economic* stake in the kinds of digital practices young people engage in this becomes a more controversial point. As explained in Chapter 9, binding participants to social media platforms are their affective responses, which circulate and condense through representations of identity and social relationships with others. Critiquing these digital platforms is therefore not as simple as deconstructing a digital 'text', due to the affective responses that are intertwined with everyday use. This was demonstrated throughout the study when participants expressed discontent with Facebook, yet still had no plan to act differently or close their account. While finding an alternative social media platform might appear the logical response, a few key platforms have become so firmly embedded in social practices that for many of the young people in this study using alternatives was not a viable option.

A more effective approach might be to lobby technology companies to acknowledge and work towards changing some of the more problematic aspects of the social media

platforms they own and manage. However, given the social, political and economic conditions these platforms contribute to and create, imagining how things might be different is not easy. As Simondon (1959/2010) has highlighted, understandings and conceptions of social processes and relationships have shifted alongside technological progress, which can make it hard to see these processes for what they are. This requires a separation of the social and the technical in order to understand how the design and structure of these platforms actually initiates and maintains particular forms of sociality. There are three principles that are reinforced by the architecture of social media platforms influencing how the user comes to see themselves and their relationships to others. These are: the emphasis that the platforms place on the individual; the ownership and archiving of users' content; and the centralisation of power and control.

As previously discussed, the first step in engaging with any mainstream social media is the creation of a profile, which is essentially an online representation of user identity. Despite the fact that the primary focus of social networking sites is connecting and communicating with *others*, the construction of individual identity can become a preoccupation. As Ludovico and Cirio (2014) argue social networks are 'based on the elusive sport (or perhaps urge) to position ourselves' and to answer the 'fundamental identity question "who am I?"' (p.255). Through user profiles, many mainstream social media platforms place the individual, rather than the network or collective, at the centre of the social networking experience. If the goal of social networks is to connect, share and communicate with others then it is worthwhile considering how these processes, as opposed to the representation of the individual, might be given greater focus on the platform. This might initiate a different set of digital practices, and perhaps greater experimentation and innovation due to less fear of personal judgment.

Other principles of social media platforms that shape young people's digital experiences are the corporate ownership of content and the centralised systems of control. As observed throughout the study, these principles are so deeply ingrained in the network that it was hard for these young people to see that this is not simply 'how it is', but instead a technique to raise profits for technology companies. Technology companies have an obligation to their users to be transparent in the way these

platforms operate. However, these principles, particularly those to do with collecting, archiving and selling users' information, are linked to the business model of many technology companies. It is therefore not surprising that attempts to challenge and change the policies and processes of platforms like Facebook have rarely been successful (van Dijck, 2013b). Nevertheless, there are still opportunities to lessen the influence technology companies have over young people's digital practices.

First, with greater transparency around the platforms' processes users might be more inclined to lobby large multinational companies like Google and Facebook to change these principles. There has been some recent success in this regard. Facebook, for example, has recently released six emoticons in addition to the 'Like' button after conducting a series of focus groups with users. On the surface it appears that Facebook was responding to user/consumer requests to communicate through a wider range of functions. However, the emoticons are also of benefit to Facebook and other third parties that do business with the company. The six new emoticons provide an additional source of personalised data to these companies to help them conduct what is known as sentiment analysis³⁵ – a process of computationally identifying opinions and emotive reactions to digital texts. Facebook's introduction of emoticons is indicative of the trade-offs involved in any change and highlight the slow, incremental nature of this process. However, Facebook *was* responding to user requests, which suggest this is a process by which change might be enacted. If young people were made more aware of some of the more insidious aspects of social media platforms this might encourage them to lobby technology companies for change.

Another option would be to put in place a set of governmental processes that encourage and enable smaller, alternative social media platforms to flourish. While there are some alternative social media sites and applications available (i.e. App.net³⁶, Lorea³⁷, GNU social³⁸, Diapsora³⁹) there needs to be many more. Gehl (2015) argues that 'corporate social media', like Google, Facebook and Twitter, have in fact

³⁵ See: <http://www.clickz.com/clickz/news/2430302/facebook-s-new-emoticons-the-good-the-bad-and-the-future>

³⁶ See: <https://app.net/>

³⁷ See: <http://p2pfoundation.net/Lorea>

³⁸ See: <http://www.gnu.org/software/social/>

³⁹ See: <https://diasporafoundation.org/>

‘intensified some of the problems of mass media power and anti-democratic communication’ (p.1), because of a for-profit model, which is hostile to alternative ideas and discourses. He argues that alternative social media, not corporate social media, ‘offer a more fitting suite of tools for people to both make media and shape media distribution infrastructures’ (p.2). This would enable young people to choose from a variety of social media platforms that represent a range of different principles and processes. Diaspora, for example, is based on three key philosophies – decentralisation, freedom and privacy. While Lorea, on the other hand, gives people or networks of people, the option to participate on any of the existent social networks, or create their own network. These platforms expand the range of ways one can communicate online, providing an alternative to the increasingly homogenous structure and function of mainstream social media platforms. Twitter, for example, has recently dispensed with the ‘Favourite’ button and replaced it with the ‘Like’ button, thereby aligning with Facebook’s social buttons and decreasing the range of expressive functions available on mainstream social media platforms⁴⁰. Given the dominance of platforms like Google and Facebook, the government needs to reinstate its role in regulating the media landscape. Policy frameworks that regulate and support a more diverse range of technology providers are needed to give smaller technology companies with a different business model (i.e. collective, decentralised) a greater chance of competing with the main players.

Finally, because their business model is dependent on the labour of everyday people, technology companies should also be required to give something back to citizens. As outlined in Chapter 2, Microsoft and Intel have developed digital literacy programs, however, there needs to be more programs of this kind. The extensive reach and resources of companies like Google and Facebook means they are well placed to improve the overall digital skills and literacies of citizens. Whether they do or not is dependent on regulation. Governments could put in place legislation that make doing business in their country contingent on the development of educational programs for citizens. This could be a series of digital tools or programs that help to build the digital literacies of young people. Alternatively, it could be workshops or mentoring programs that provide opportunities to develop innovative digital practices or even

⁴⁰ See: <http://www.theverge.com/2015/11/3/9661180/twitter-vine-favorite-fav-likes-hearts>

career pathways. There is great potential for governments, community groups and everyday citizens to work with these companies to improve their skills and digital literacies.

10.6 Implications for parents and families

The main role parents played in participants' digital literacies was facilitating and maintaining the safety and security of their children in digital spaces. Ben and Stacey reported that their parents occasionally counselled them in regard to the more controversial things that took place on social media, however, most other participants rarely spoke to their parents about these matters. Parents also played a role in monitoring the time their child spent on digital devices, as Mark and Stacey said. However, contrary to popular belief, most of the participants were mindful of trying to balance time spent online and offline. As these sporadic exchanges and interactions demonstrate parents played only a minor role when it came to developing these young people's digital literacies. One factor contributing to this situation was the life stage of these young people. Teenagers are in the process of individuating themselves from family, meaning there is a natural struggle between parental control and a growing sense of independence. A contributing factor is that many participants identified as 'digital natives', meaning they may not have seen their parents or older relatives as a source of information or guidance on digital technologies.

Developing the role played by parents would begin by countering some of the popular myths that have shaped the way adults have come to think about young people's relationship with digital media. Given the anthropological undertones of the 'digital native' argument, it is not surprising that adults believe they need to play a role in 'civilising' these young people, sometimes in a rather didactic way. Overturning this thinking would encourage parents to see that many young people, like adults, self-monitor their use of digital devices and are not as uniform or innovative in their practices as what might be thought. More useful would be for parents to initiate an ongoing dialogue with their children about their digital experiences. Most parents have familiarity with the various aspects of their children's lives, including home life, school, hobbies and extracurricular interests. Parents are therefore well placed to help young people make sense of how their digital practices crisscross these domains. This involves more than parents becoming Facebook friends with their child. Observing

online behaviour in this way might work to allay (or perhaps stir) parental fears, however, by itself this does little to help young people work through the challenges that emerge in their use of digital media. Furthermore, as Marwick and Boyd (2014) explain, social stenography (hiding in plain sight) is a technique commonly practiced by many teenagers that makes it easy to hide content and posts from parents on social media.

If parents are going to play a meaningful role in scaffolding their children's digital lives, a supportive dialogue needs to be initiated much earlier. In analysing these young people's socialisation into the digital context, it appears that the patterns for parental engagement were set early. However, the gatekeeping role played by parents in their use of digital media did not evolve to match their children's increasingly sophisticated and complex digital practices. If parents remain in the role of gatekeeper then they are more likely to be seen as a barrier than a support to young people's digital practices. This is exacerbated by the myth of the 'digital native', which reinforces the idea, to both parent and child, that adults have little to offer when it comes to developing digital practices. The mindset of both adults and young people needs to change if this relationship is going to be more supportive of young people's critical digital literacies.

One way forward is to provide parents and families with more support and resources. This would help them to better understand the challenges that young people face in their relationship with digital media and also provide the skills and resources required to support them. Much of the support available to parents today is directed at keeping children safe and therefore tends to frame the issues through shock and fear. It is clear that the timing, type and tone of the discussions that parents have with their children in regard to digital media need to change. The London School of Economics' resources and research on 'Parenting for a Digital Future'⁴¹ provide suggestions on how this might be achieved. However, far more programs of this kind need to be developed to help parents support their children in the digital challenges they face. These programs need to be grounded in a local or national context, as this research has found that young people's digital practices are given meaning through the social

⁴¹ See: <http://blogs.lse.ac.uk/parenting4digitalfuture/>

and cultural discourses in which they are embedded. In addition, increasing the number of community-based digital literacy programs might also help. While coding clubs are becoming more widespread there is room for these programs to include a critical dimension, as well as being more inclusive of parents and families.

10.7 Implications for young people

Peers were shown to influence which digital platforms the young people in this study were introduced to and how they came to use them. In this way, peers could be thought of as expanding and guiding, but also constraining the kinds of digital practices that participants engaged in. Despite seeing many of their peers each day at school and meeting them online through the various digital platforms they used, there was only a minimal amount of discussion amongst these young people about more *critical* interpretations of digital spaces and practices. Instead, participants' discussions of digital media could be typically traced along the lines of the platform (i.e. what was posted, what was trending) or the social dynamics of their peer group. In this way, peers were influential on digital practices, however, not in ways that challenged the status quo. The participants *did* demonstrate a latent desire to talk about the more critical and complex issues that took place on social media platforms, however, the challenge is how to make critical perspectives and practices an everyday topic of conversation *amongst* young people.

Making digital literacies a desired form of social capital is one way this might be achieved (Pinkard, 2015). In this context, social capital refers not only to the dispositions and skills of the individual, but also the conversations and insights that they can share with other young people. Digital mastery is often associated with the 'geek' or a socially isolated or decidedly 'uncool' person. While this image might be changing, making digital literacies a desired form of social capital would require breaking or reconfiguring some of these associations. Promoting inspirational role models and mentors for young people in digital technologies might be one way of doing this. While the young people in this study demonstrate a growing criticality, developing these dispositions requires they are more readily recognised and valued by peers and society.

Increasing the social capital associated with digital literacies might also be prompted by a series of digital tools and resources that promote more critical understandings of the way platforms and technology companies work. For example, a data tracking application is one way for young people to become aware of the personal information that is made available to technology companies and other third parties through their use of digital platforms. Another approach might be to create an online critical ‘tool shop’, where innovative digital resources that exist freely through websites like ‘github’⁴² are collected and presented as experimentations into more critical use of digital technology. The key would be for these kinds of tools to ‘catch on’ in much the same way that other mainstream digital platforms have. One means would be to harness the propensity for some digital content to ‘go viral’. Although Munster (2013) explains it is hard to predict why certain videos, memes or ideas go viral, initiating a series of online campaigns or promotions based around critical digital practices would be worth experimenting with. In doing so, a more general and collective criticality might be established through the building of skills. While these tools already exist it is about bringing them to the attention of young people and giving them the kind of caché that other mainstream digital media possess.

Related to this is the broader need to increase the conversations young people are engaged in with their peers in regard to the challenges they face when using digital media. One benefit of the conversational research method employed in this study was that through the group discussions participants came to realise that others were experiencing the same issues. Up until that point it appeared these issues were something that most participants worked through privately. It was thus revelatory for many of the participants to find that others had had similar experiences. As Archer (2007) writes ‘experiential overlap’ (p.84) across contexts is important to expanding the familiarity with others. Increasing the frequency of these types of discussions might therefore instil a more collective response that bonds young people and speaks back to the more individualised experiences of social media reported.

Indeed, it is up to all stakeholders to reinforce the idea that these private experiences are actually felt by many. This simple shift in thinking echoes the broader aspiration

⁴² See: <https://github.com/>

of turning private issues into a public concern. In many respects this has been a goal of the present research. As Mills (2000) writes the social scientist should try to make connections between the personal and ‘public issues of social structure’ (p.8). However, as has been discussed it is even more transformative for young people themselves to make those connections through everyday conversations and discussions. In this way they would ‘translate personal troubles into public issues, and public issues into the terms of their human meaning’ (Mills, 2000, p.187). In bringing these issues to a more general discussion we might be better placed to address them. There is not one single way of improving young people’s critical digital literacies - a whole range of resources, people and programs are required to facilitate discussions that respond to the current and emerging issues identified in this study.

10.8 Conclusion

This thesis has only scratched the surface when it comes to identifying and understanding the range of complex issues that emerge from young people’s use of digital media. While new and different directions in developing critical digital literacies have been explored, in many respects this thesis has raised more questions than it has answered. It joins a growing body of research in the area, underscoring the fact that the digital practices of young people should no longer be considered a novelty. Researchers need to develop questions, methods and interpretations of young people’s digital lives to help identify, understand and provide support to the challenges that emerge. These are issues that look set to have longevity in the study of young people; they demand ongoing exploration from a range of different groups and people. Regardless of technological innovation, young people should never be conceived as a homogenous group of ‘digital natives’. They will always be in a state of *Becoming Digital* – never having all the answers and struggling to make sense of the shifting nature of their practices. In light of this, academic research that takes a similarly exploratory and speculative approach is needed.

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Appendices

Appendix 1: Explanatory statements and consent forms



MONASH University

EXPLANATORY STATEMENT

School based participants

Project: Becoming digital – an exploration of digital media in young people’s lives

Chief Investigator:
Professor Ilana Snyder
Department of Education



Student Investigator:
Luci Pangrazio



Other Investigators:
Professor Neil Selwyn



You are invited to take part in this study. Please read this Explanatory Statement in full before deciding whether or not to participate in this research. If you would like further information regarding any aspect of this project, you are encouraged to contact the researchers via the phone numbers or email addresses listed above.

This research is being conducted as part of the Doctor of Philosophy degree for the student researcher, Luci Pangrazio.

What does the research involve?

Digital media plays an important role in the lives of young people. We aim to investigate how digital media shapes communication, identity representation and learning for young people today, as well as identifying the skills that are used in day-to-day digital activities. We also want to explore whether the school can support critical digital practices and, if so, what resources and curriculum would be relevant to the needs of young people. The study will involve a series of creative activities and interviews based on your experience and use of digital media. It will provide opportunities for you to think about and discuss your digital practices individually and in a group.

Your teacher has agreed to be part of this research. They will complete an online survey to identify the digital literacy programs and resources available at the school. There will be four visits to the school throughout the year. Your participation is likely to amount to one and a half hours per visit.

You do not have to agree to be involved in this research. If you do agree, you will be asked to participate in the following ways:

1. Complete an online questionnaire.
1. Participate in three group activities on three separate occasions throughout the year. These sessions will take place during class time in a space outside the classroom.

Each session will be recorded and the items or objects that are produced will be collected. Each session will take around 50 minutes

2. Four one-on-one interviews with the researcher throughout the year. These interviews will take place during class time in an open space outside the classroom and will be recorded. You will be asked to email a screen shot of a current social media page to each interview. Each session will be audio recorded.
3. Join a social media site set up for the research.

Why were you chosen for this research?

This school was chosen to participate because it is in Metropolitan Melbourne and teaches students from the ages of 14-16 years. This particular class was chosen because the research seeks to understand more about your digital literacy skills and to develop them further, which is in line with the English/Media curriculum at this school. Your teacher has also agreed to participate.

Consenting to participate in the project and withdrawing from the research

If you consent to participate in this research, both you and your parent or caregiver needs to sign the attached consent form. Please return it to [teacher's name]. You can change your mind and decide to withdraw from participation at any stage.

Possible benefits and risks to participants

This research seeks to better understand the relationship young people have with digital media and the role the school can play in supporting digital literacy practices. It is anticipated that this understanding will help teachers and administrators develop curriculum and resources that support a critical and reflective engagement with digital media. The activities and interviews will not focus on sensitive or personal information.

Confidentiality

When writing about this research, a pseudonym (a made-up name) will be used if the researchers want to describe something you said or did. Pseudonyms will also be used for teachers and for your school, so people reading the reports will not know which school, teachers or students it is about.

Storage of data

Any data, artefacts or photos collected will be stored securely in the Education Department at Monash University for five years, after which time it will be destroyed. Only the researchers will have access to the data.

Results

A report on the findings of the research will be given to the school. If want to, you can ask to see the reports. You can also request to see transcripts of your interviews.

Complaints

Should you have any concerns or complaints about the conduct of the project, you are welcome to contact the Executive Officer, Monash University Human Research Ethics (MUHREC):

Executive Officer

Monash University Human Research Ethics Committee (MUHREC)

Room 111, Building 3e

Research Office

Monash University VIC 3800

[REDACTED]
Fax: +61 3 9905 3831

[REDACTED]

Thank you,

[REDACTED]

Professor Ilana Snyder



EXPLANATORY STATEMENT

Non-school based participants

Project: Becoming digital – an exploration of digital media in young people’s lives

Chief Investigator:
Professor Ilana Snyder
Department of Education



Student Investigator:
Luci Pangrazio



Other Investigators:
Professor Neil Selwyn



You are invited to take part in this study. Please read this Explanatory Statement in full before deciding whether or not to participate in this research. If you would like further information regarding any aspect of this project, you are encouraged to contact the researchers via the phone numbers or email addresses listed above.

This research is being conducted as part of the Doctor of Philosophy degree for the student researcher, Luci Pangrazio.

What does the research involve?

Digital media plays an important role in the lives of young people. We aim to investigate how digital media shapes communication, identity representation and learning for young people today, as well as identifying the skills that are used in day-to-day digital activities. We also want to explore which spaces and sites are best placed to support critical digital practices and what resources would be most relevant to the needs of young people. The study will involve a series of creative activities and interviews based on your experience and use of digital media. It will provide opportunities for you to think about and discuss your digital practices individually and in a group.

This organisation has agreed to take part in this research. There will be four visits to the site throughout the year. Your participation is likely to amount to one and a half hours per visit.

You do not have to agree to be involved in this research. If you do agree, you will be asked to participate in the following ways:

1. Complete an online questionnaire.
2. Participate in three group activities on three separate occasions throughout the year. Each session will be recorded and the items or objects that are produced will be collected. Each session will take around 50 minutes
3. Four one-on-one interviews with the researcher throughout the year. You will be asked to email a current screen shot of a social media page to each interview. Each session will be audio recorded.
4. Join a social media site set up for the research.

Why were you chosen for this research?

Part of the study seeks to test whether the setting of the research has any influence on the way participants respond to the questionnaire, activities and interviews. To do this it will compare the responses of participants in a non-school based setting (insert youth art centre name) with two school based settings. Given (insert youth art centre name)'s focus on visual arts the research seeks to complement their program by using creative methods of analysis and reflection in relation to your use of digital media.

Consenting to participate in the project and withdrawing from the research

If you consent to participate in this research, both you and your parent or caregiver needs to sign the attached consent form. Please return it to [director/teacher's name]. You can change your mind and decide to withdraw from participation at any stage.

Possible benefits and risks to participants

This research seeks to better understand the relationship young people have with digital media and the role the school can play in supporting digital literacy practices. It is anticipated that this understanding will help teachers and administrators develop curriculum and resources that support a critical and reflective engagement with digital medial. The activities and interviews will not focus on sensitive or personal information.

Confidentiality

When writing about this research, a pseudonym (a made-up name) will be used if the researchers want to describe something you said or did. Pseudonyms will also be used for teachers and for your school, so people reading the reports will not know which school, teachers or students it is about.

Storage of data

Any data, artefacts or photos collected will be stored securely in the Education Department at Monash University for five years, after which time it will be destroyed. Only the researchers will have access to the data.

Results

A report on the findings of the research will be given to the school. If want to, you can ask to see the reports. You can also request to see transcripts of your interviews.

Complaints

Should you have any concerns or complaints about the conduct of the project, you are welcome to contact the Executive Officer, Monash University Human Research Ethics (MUHREC):

Executive Officer

Monash University Human Research Ethics Committee (MUHREC)

Room 111, Building 3e

Research Office

Monash University VIC 3800

[REDACTED]
Fax: +61 3 9905 3831

[REDACTED]

Thank you,

[REDACTED]

Professor Ilana Snyder



CONSENT FORM

Young people

Project: Becoming digital – an exploration of digital media in young people’s lives

Chief Investigator: Professor Ilana Snyder
 Student Investigator: Luci Pangrazio
 Other Investigator: Professor Neil Selwyn

I have been asked to take part in the Monash University research project specified above. I have read and understood the Explanatory Statement and I hereby consent to participate in this project.

I consent to the following:	Yes	No
Completing an online questionnaire	<input type="checkbox"/>	<input type="checkbox"/>
Participating in a series of activities exploring digital media	<input type="checkbox"/>	<input type="checkbox"/>
Being interviewed and audio recorded	<input type="checkbox"/>	<input type="checkbox"/>
Joining a social media page dedicated to the study	<input type="checkbox"/>	<input type="checkbox"/>

I understand the following:

- *that my participation is voluntary and that I can withdraw at any stage of the project without being penalised or disadvantaged in any way;*
- *any data that the researcher extracts from the questionnaire for use in reports or published findings will not, under any circumstances, contain names or identifying characteristics;*
- *I have four weeks to review my responses to the questionnaire, and transcripts from activities and interviews after which time responses cannot be amended or withdrawn;*
- *that data from the study will be kept in a secure storage and is accessible to the research team. I also understand that the data will be destroyed after a 5 year period unless I consent to it being used in future research.*

Name of Participant _____

Participant Signature _____ Date _____

Name of Participant’s Parent/Guardian _____

Parent/Guardian Signature _____ Date _____

Appendix 2: Notes from pilot study

1. Online questionnaire

Arrived for period 5. Second visit to the school after giving a brief speech a week ago. Only two consent forms had been returned today. However, all four girls completed the questionnaire on the proviso they return the forms next week. They still seemed to be unsure of the project and once I had told them a bit more about it they were more enthusiastic. In particular, when I emphasized that part of the research was about how to improve the use of technology in schools they seemed more impressed. They also seemed more engaged when I told them I would be asking for their feedback on the process; a sense of ownership or the fact that I would listen to what they had to say was a selling point.

First I took their email addresses. Perhaps it would be better to have a space on the consent form for email addresses so that I can email the questionnaire prior. And organize access to the schools

Questionnaire was a good way in. Non-confronting easy to complete, a feeling of having accomplished something already. They do seem to think that technology use in the school is poor so they want to help improve. This is what they said in front of others, however, the anonymous questionnaires tell a different story. Two of the four said they weren't bothered about being not connected that at school it would be 1/ a distraction and 2/ it was a relief. More on that later.

Went to the library with the group. They were keen to talk about digital media, school and behavior, trends. A bit of boasting about what social media they're on and for how long, etc. But the overriding mood was that they were keen to talk about the technology in their lives.

Internet was dropping out in certain areas. Moved position. Emailed (from librarians' access) the link to the questionnaire. It was easily accessed and the group began completing it. Three of the four finished in 10 mins (one in 25 but she didn't seem to want to go to the next class). They also seemed to talk a bit about the questions and in a bit of a rush in a group.

All complete the questionnaire. Only one suggestion 'Female/Male/ Other'. After reading responses there will be some tweaking done to questions, to draw attention to certain aspects or re-ordering to accentuate particular aspects.

Spoke with Mary afterwards in regard to Tuesday's visit. She had to really think about me taking Amanda in. Ultimately it's ok, but we did have a longer useful conversation about how schools might view conducting the research in a break away group apart from teacher. It was her thinking that schools might not be pleased with it. As a principal she would want someone in with the students if the researcher is a stranger. I asked if providing a list of questions/activities would help and she said not really. She is pedantic, but it will be interesting to see if this is how other sites feel. She also talked a little bit about research fatigue (a researcher approaching once a

week to conduct) and that they reject most. So do need to be prepared to have to fight for the govt school or go further afield

Change:

1. Need to give more detailed information to potential students to get them in, not good enough just the teacher, who would be vague unsure about selling the project.
2. Put space for email address on consent form.
3. Organise access to schools' network before first session.
4. Ask to do questionnaire privately, take your time (at home?)
5. Regional school?

Provocation 1 - Mapping

Had a double with the girls. All three had forms. We decided she could do the activity, but not the interview. Organised room beforehand with Belinda and brought in a tub of stuff. Task one we called a mapping task. Description went fairly well, but some things to change:

1. Don't explain the folding process at the beginning. Just keep it step by step. It makes it too complicated.
2. Need bigger cartridge paper than A3.
3. Tell them to spread out their blobs further (i.e. leave space in between the blobs)
4. After the folding process, need to draw more attention to the act of cutting out, shading rearranging (i.e. what do these actions represent).
5. Need to take photos at each stage (i.e. after first blobs and fold)
6. Can add to it. Might be good to suggest writing down what they plan to do before (i.e. cut half circle out on 'friends') while the hair drying is taking place.
7. Need thick black text
8. Encourage more writing on the map i.e. non digital / digital on either side and labeling of blobs
9. I think might be best just to do people and not places. Then can be more detailed and specific about relationships and digital mediation of that. And perhaps do it later in the session.
10. Get each person to explain their diagram to the group
11. Perhaps write up the key questions on the board:
 - Do you think your digital experiences mirror the non-digital ones or are they completely different types of relationships? How do you integrate the two? Which aspects do you ignore why? Which do you privilege (or take as 'important')?
 - Are you more guided by your digital or non-digital experiences of people in your life?
 - In which relationships do the digitally mediated experiences dominate? In which relationships do the non-digitally mediated experiences dominate? Why do you think this is the case?
 - Do relationships change when digitally mediated? Why?
 - Why do we spend more time on digital media in particular places and not others?

Provocation 2 - Visualisation

This went fairly well, but we were rushed and I need to add certain prompts to get more out of the exercise.

- Word association: “When you think of the internet what words spring to mind?” Write down individually.
- Four key questions on the board: 1) Structure: how is it structured? 2) Parts: what are the parts? 3) Humans: where do humans fit in?
- Add more critical questions at the end: 1) who owns the internet? 2) how does information circulate? 3) are we all on the same level or is it hierarchical?

One on one interview

Interviewed Caitlin in adjacent workroom. She brought in a number of screen shots, but difficult to get a real sense of what was on each one given how small the actual shot of the social media page was. Some other method? Some wording to change. Realise that many of the questions arise spontaneously so need to be really focused. Before interviewing Caitlin I managed to catch Jenny Looker in the hallway and asked if she would be interested in completing the study. She said yes. But she also said ‘You know that they aren’t digital natives at all, don’t you? ...They’re digital savages’

Change:

- 1) Some wording i.e. not update profile photo, but change.
- 2) Many social media pages (Caitlin was on FB/Tumblr/Twitter/Instagram). Draw out what each one is used for.
- 3) Bring in screen shots from main social media page used and perhaps 2-3 from that one and then main page (home page?) from each of the other sources. But for the remaining interviews follow just one social media page? Or continue doing the same for each?
- 4) Confusion in terminology of critical user of technology. Caitlin interpreted that as ‘superficial behaviours’ and went into a discussion of how dmedia is used for ‘serious situations’. Comes down to emphasizing what is meant by critical user.

Provocation 3 - Wayback machine

There were many good things about the visit – the willingness of the girls to talk, the intrigue of the way back machine and the way some of documentation techniques worked. However, overall this activity needs to be changed. The main reason for this is that I think the ‘Wayback Machine’ was too ‘in the world’ and too novel. No doubt they enjoyed playing around with it, but from this place it was difficult to get to any critical reflection. Ultimately I think there was a lack of ‘abstraction’ that mean they could never fully remove themselves from the digital context and get into a position where they could reflect upon it. Which is reassuring in another way, because it does lead me to think that there is something in the provocation technique and the framework that I am currently trying to lay down.

A critical disposition might be more easily achieved if there is a distance from the digital context (which there wasn't they were using digital technology), social phenomena is decontextualized; the ideas are materialized with another medium (almost were but not quite) and they are using peripheral vision to explore less frequently occupied perspectives. The 'Wayback Machine' was too all encompassing there was little space to critique from. And the focus became the websites and what they did on them and not on themselves and how they have changed across time. So need to re-establish a critical distance, decontextualize the ideas and materialize them with another medium and return the focus to the individual and their practices

So how to do this? I'm thinking of using the dot matrix paper. The idea would be to give them the same number of pages as years they have been on the internet. They would then write on the page the websites as a series of lines. So their first website might have Club Penguin this would be purple. They might have been on for two years so they draw a line spanning two years. I'm thinking of giving some websites designated colours (ie the websites that are most popular) so they can be compared across participants. So Google green, Facebook blue, Youtube red etc. It is like a visual map of their website use. They could then thicken the lines if they are used most often and make them thinner etc. I'm imagining at the end of the session we would be able to line them all up on the ground and get a visual for the websites most used. It could also look quite good (i.e. 2001 melba tunnel lines)

Analysis could happen individually and as a group if they lined them all up. I could ask questions like 'What are the dominant colours? What websites are these? Is there a problem with this? Are we as adventurous as we think? Why do you think if the internet has so much potential we spend so much time on the same websites?

Questions: too prescriptive? No modal choice? Does that mat? What about room for radical individualism? At the end suggest they visit wayback machine?

Provocation 4- Re-articulation of icons of the internet

This provocation seemed to work well. Managed to get to the school early and set up the computers and resources in plenty of time. One girl was late which was a bit disruptive as all the others had begun to read and talk to each other about the information. They did need some help with understanding the language so it might be worth trying to simplify it.

When they started to re-design they seemed to get stuck on trying to perfect their drawing. Amanda suggested that we include a time limit so they are less worried about perfection and just involved in creating different responses to the prompt.

At the end we asked each of the girls to show the group their re-designed icons. However, because a couple could not get passed the accuracy of their design they only managed to generate two re-articulated icons. This needs to be addressed as generating lots of ideas and thoughts is the aim of the provocation, not getting them right. What did work well was getting the rest of the group to help each person decide which one they should work on for their final icon. This meant the other participants really had to engage with the ideas their peers were putting forward. Re-defining the icons was bit difficult, but again the group helped as did Amanda and I. This was

possibly the most transformational provocation because the participants were given some new information. It was well received by the participants and just needs some further fine tuning.

Questions/ actions: Add time limit to initial sketches. Allow more time for re-defining the icons. Ask about exhibition.

Appendix 3: Summary of the research process

Below is a table summarising the activities completed at each visit, the data collect and the method by which it was analysed:

Visit	Aim	Research instrument	Research question addressed	Data for analysis	Method of analysis
First visit	Preliminary information	Questionnaire (participants)	1	Written answers (linguistic)	<ul style="list-style-type: none"> • Narrative • Thematic
	Provocation 1 – Mapping digital and non-digital experiences	Group discussion and presentation	1, 2	Audio recording and transcription (linguistic)	<ul style="list-style-type: none"> • Narrative • Thematic
		Painted map produced by each participant	1, 2	Artefacts produced: 12 x map of practices (multimodal)	<ul style="list-style-type: none"> • Narrative • Thematic
Second visit	Provocation 2 – Visualising the internet	Group discussion and presentation	1, 2	Audio recorded (linguistic)	<ul style="list-style-type: none"> • Narrative • Thematic
		Model of the internet by groups of 1-3 participants	1, 2	Artefacts produced: 7 x models of the internet (multimodal)	<ul style="list-style-type: none"> • Narrative • Thematic
	Interview one with participants	Interview	1	Audio recording and transcription (linguistic)	<ul style="list-style-type: none"> • Narrative • Thematic
		Screen shots social media pages	1.	Collect pages (multimodal)	<ul style="list-style-type: none"> • Narrative • Thematic • Multimodal social semiotic

Third visit	Provocation 3 – <i>Timelining of digital practices</i>	Group discussion and presentation	1, 2	Audio recorded (linguistic)	<ul style="list-style-type: none"> • Narrative • Thematic
		Annotated timeline from each participant	1	Artefact: 13 x timelines of digital practices (multimodal)	<ul style="list-style-type: none"> • Narrative • Thematic
	Interview two with participants	Interview	1	Audio recorded and transcribed	<ul style="list-style-type: none"> • Narrative • Thematic
		Screen shots social media pages	1	Collect pages (multimodal)	<ul style="list-style-type: none"> • Narrative • Thematic
Fourth visit	Provocation 4 – <i>Re-articulating the icons of the internet</i>	Group discussion and presentation	1, 2	Audio recorded (linguistic)	<ul style="list-style-type: none"> • Narrative • Thematic
		Information on the icons of the internet Re-designed icons of the internet	1, 2	Artefact: 13 x re-articulated icons of the internet (multimodal)	<ul style="list-style-type: none"> • Narrative • Thematic
	Interview three with participants	Interview	1, 2	Audio recorded and transcribed	<ul style="list-style-type: none"> • Narrative • Thematic

Appendix 4: Online questionnaire

1. What sort of school do you attend?

- Private
- Government
- Not regularly attending school at the moment

2. I identify as:

- Male
- Female
- Other

3. How old are you?

- 14
- 15
- 16
- 17
- 18
- 19

4. Where did you find out about this research project?

- School
- Art centre

5. What digital devices do you use on a daily basis?

- Mobile phone
- Laptop/Desktop Computer
- Tablet
- iPod
- iPod touch
- Other _____

6. Where do you access the internet?

- Home
- School
- Friends' house
- Library
- Out of school program
- Other _____

MONASH University GROUP OF EIGHT

Education

Name _____

What sort of school do you attend?

Private

Government

Not regularly attending school at the moment

I identify as

Male

Female

Other

How old are you?

14

15

16

17

18

Where did you find out about this research project?

School

Art centre

7. *Design format of online questionnaire*

What

device/s do you use to access the internet?

- Mobile phone
- Laptop/Desktop computer
- Tablet
- iPod Touch
- Other _____

8. On average, how long do you spend online each day?

- Under 1 hour
- 1-2 hours
- 3-4 hours
- 5+ hours

9. What is the first thing you normally do online?

10. When online, what programs do you normally have open (i.e. iTunes)? What websites are you logged into?

11. What websites do you check on a regular basis?

- Social media / SNS
- News
- Youtube
- School associated website
- Other _____

12. Do you have a mobile phone?

- Yes
- No

If you wrote yes to question 12, what is the main thing you do with your mobile phone? Rank the following options in order.

Text message

Make calls

Go online

Take photos

Other _____

13. Do you have a favourite website or application? If yes, please list it below.

14. How often do you check your email?

- 2-3 times a week
- Once a day
- 2-3 times a day
- 4+ times a day

15. How many emails do you receive a day from friends or genuine contacts? *Genuine contacts are not companies or organisations.*

- less than one a day
- 1-3 a day
- 4-7 a day
- 7+ a day

Who are the emails usually from? i.e. friends, family

16. Tick if you do any of any of the following things online.

Look for news, information or media related items

Participate in an online forum or group related to personal interests

Post, link, or forward information or media

Give help, suggestions or advice to others

a. What was the first social media site you joined? When and why?

b. Are you still on that social media site today? Why or why not?

c. _____

17. What social media site do you currently use the most?

a. How often do you use social media?

- Rarely
- 2-3 Times a Month
- Once a Week
- 2-3 Times a Week
- Daily
- More than once a day
- I'm always logged in to a social media site when online

b. How long do you use social media for at any one time?

18. What is the main way you learn about the internet or digital media? Rank the following in numerical order, with 0 indicating nothing is learnt through at this option.

- At school
- With friends
- With parents
- Through promotions/ advertisement/ popular media
- In an out of school program
- Other _____

19. Does the school play a role in helping you understand how digital media works? If yes, explain how. If no, please list where you learnt/learn these skills.

20. When you come to school do you feel as though you are connected to digital media in the same way you are in other places i.e. home? Why or why not? Do you think this is a good thing?

21. Do you think schools could do more to support young people in their use of digital media? If yes, could you explain how.

22. Do you feel like there are issues around how you, or others you know, use digital media? Can you briefly identify or explain these?

Appendix 5: Instructions for Provocation 1

Mapping digital and non-digital experiences

Digital media and digital networks are things we use all the time, but it is hard to actually picture these practices - it is difficult to imagine and visualise. What do you imagine you are doing when you 'go on' the internet? What do you see? What is actually happening when you connect to the internet? Part of today's activity is trying to visually represent some of these concepts, so we can promote and think about the role of digital media in our daily life. There is no right or wrong – we are more interested in what the process might bring out for you.

*We know that creativity is a really important skill not only to make and produce beautiful and meaningful objects and creations **but also as a tool of critique and analysis**. We can use art and creativity to ask questions of the world; to imagine alternative possibilities; and to subvert and rearrange the world we know.*

Today we are going to make maps to try and create a visual representation of the role digital mediation plays in our daily life. We will try and trace the digital devices we have. It's not only drawing the map that is important but hopefully the process of making and manipulating will provide some interesting insights for you in regard to your use of technology. We will also talk about it as a group, look at each others work, talk some more and see what we find together.

Materials

- Oil paints, palettes, brushes
- A1 cardboard
- A1 transparent paper
- Paper clips
- Fine black textas

Step-by-step

1. Fold paper in half. Imagine yourself in the centre, along the fold. On a separate piece of paper list all the groups of people you spend time with (i.e. friends, immediate family, teachers, cousins). Now using the paints designate one colour for each group of people, write the colour next to each group. Using paints and a simple (circle?) shape paint these onto the page with the size of the shape indicating the amount of time spent with each group of people and their 'closeness' to you indicated by how close they are to the centre fold.
2. Next list all the place and spaces you spend time. Designate each a colour. In a roughly shaped ring outside the representations of people paint the spaces with the size approximating how much time spent at each place. Perhaps their proximity to certain people indicating that's where you spend the time with that person (i.e. home might sit just adjacent to the family).

3. Now fold the paper in half and press down, creating a mirror of the representation of places and people on the other half. Open out.
4. What if we imagined that the original side was your non-digital experiences of these people and places and the copy on the other page was your digitally mediated experiences of these people and places. Thinking about the amount of time you experience these people or places digitally (i.e. on mobile, laptop) or non digitally (i.e. face to face) consider whether this is an accurate designation of your time and experience. If not use the tracing paper to make this into a more realistic diagram. For example you might cut parts out to indicate you do not spend any time on digital media with your family (or one member), add notes to each space person, blank out parts, add paint, glitter glue etc. Write all over it.
5. Draw something that represents yourself along the centre. Write a note or key on the cardboard to show what each blob represents.
6. Now list all the digital devices you use. Give them a line (i.e. dotted, wavy, straight) (?). From yourself in the middle draw a continuous line to the various places where you use this device or the people you communicate with through this device and back to you again. For example, only use ipad at home to do homework so line travels from you to home and through teachers etc.
7. **Share the maps with each other and the group**
8. **Prompt questions:**
 - Which relationships in our life are most mediated? Why? Which devices do we use most? Why?
 - Do you think your digital experiences mirror the non-digital ones or are they completely different types of relationships?
 - How do relationships change when digitally mediated? Why do we spend more time on digital media in particular places and not others?
 - Have you realised anything through this activity?

Appendix 6: Instructions for Provocation 2

Visualisation of the internet

We are interested in how you imagine the structure of the internet. With a partner or on your own we are going to make a 3D model. Again there are no right or wrong answers.

Materials

- Plasticine
- Wire
- Thick cardboard
- Coloured cardboard
- Cotton wool
- Streamers
- Bamboo sticks
- Popsicle sticks
- Newspaper
- Foil
- Other arts and crafts

1. Word association - individual

Write down a list of words, like a stream of consciousness, that come to mind when you think of the internet. (2 mins)

2. Share with group.

3. Activity

With a partner try to build a model that represents the internet. In your model try to depict how it is structure and how information moves around it. Most importantly try to represent where you think humans fit into it.

4. Present model back to the group.

Discuss:

Structure: how is the internet structured?

Parts: what are the parts and components that make up the internet?

Humans: where do humans fit in?

If you can, explain what the following terms mean in regard to the internet:

blog, link, like, online community, share, post, friends, 'exploring the internet', network.

5. Critical questions:

- Can you think of other metaphors/ways to describe the internet?
- How does information circulate or move around the internet? How is it directed or managed?
- Are all individuals equally well connected to the internet? What limits people's ability to become effective users of digital technology?

Appendix 7: Interview one questions

1. What are the main websites you use on a day to day basis?
2. Are you on social media? Which ones are you on?
3. Go to screenshots: Who/what is in your profile picture? Why did you choose it?
4. What kind of information do you like to include in your profile? Why?
5. What were some of the comments you recently posted? Can you tell me about the last few comments people left on your wall/picture? How did you respond or feel about those comments?
6. What do you mainly use social media for?
7. Who do you communicate with on social media?
8. Do you discuss school, projects or other academic interests on social media?
9. Do you discuss news items or politics on social media?
10. Have you ever become involve with or participated in a social cause (explain) that you learnt about via social media?
11. Would you say that people in your network share information related to politics, community or current affairs?
12. How important is it to use social media amongst your friends? What would happen if you were not on social media?
13. How often do you update your profile? What generally prompts you to do that?
14. How would you describe your social media profile? What's the most important thing about your profile? How similar is it to the person we might meet in real life?
15. Do you feel a sense of belonging when you use social media? To what?
16. Where did you learn to use social media? Did someone teach you or did you teach yourself?
17. Has the school played any role in teaching you how to use social media or the internet?
18. Do you draw on any skills or knowledge you learnt at school when you go online?
19. Do you ever pay attention to the ads that can be seen in on your social media pages?
20. Have you ever thought about who owns the photos and information that is on your social media pages? Is that important to you?
21. Is privacy an issue you ever consider when using social media? What privacy settings do you have?
22. Can you think of one piece of information that was most useful to you in your use of social media or the internet?
23. Do you think there is a way that _____ (social media platform used) could do things better? Are there things you want to on social media that you can't?
24. Have you ever learnt about how the internet, websites or social media pages are structured and created? Do you think this would be a useful thing to know? Why or why not?
25. Would you describe yourself as a savvy or critical user of digital media? Can you explain your answer?

Appendix 8: Instructions for Provocation 3

Timeline of digital practices

Introduction

The point of today's activity is to try and think about the history of our digital practices (i.e. the things we do, the websites we visit, the people we communicate with online). For example, what we do online today is probably quite different from what we were doing last week, last year or five years ago for that matter.

Materials

- Dot matrix paper
- Conte (hard chalk)
- Fixative
- Black textas

Instructions

Today you are going to create a timeline using dot matrix paper and hard chalk that explores the different websites that you have used over the time you have been online. We are doing this because we are trying to draw attention to the way our digital practices have changed throughout time.

1. First of all have a think about the first time you used the internet. How old were you? What were the first websites you went on? (go round the table)

On a piece of paper write down each year you have been on the internet and for each year write down the main websites you were using. You can have as many websites as you need for each year. By 'main websites' you need to be using them regularly - at least once a week - or you need to think of them as being somehow significant to you. *When you were young you might not have been online as regularly, so for the early years just try to remember the main websites you were on and list these.*

2. I'm going to give you some continuous sheets of paper to plot our timeline. For this activity each page represents one year in your life. So if you have been on the internet for 10 years then you would need 10 pieces of paper (take a couple more perhaps to ensure you've got enough). Write the year on the bottom of each page.

3. Now we are going to introduce some colours to start our timeline. For each of the websites that you used allocate a colour.

** For some of the websites we will all use the same colours:

Facebook will be blue

Wikipedia ?

Google green

YouTube red

4. Time to plot the websites onto your timeline. Now for each page (or year) draw in the websites you were on as a line. You can choose to do any sort of line you want – straight, wavy, spiraled, jagged – but it has to move forward toward the next year. This line can

change across the years. So if you began to use a website more often in one year then you might make the colour more intense or the size of line thicker to represent that. As each line begins use your black pen to write which website it is. There are special erasers that you can use to add tone or alter a mistake.

5. Now mark three significant moments on your timeline. These moments could be to do with a change in your identity, relationships, participation or learning. At the bottom of the page write a brief explanation of the significant moment

Group discussion

Share timelines with the group.

1. What do you notice about your timeline? Can you see any patterns emerging? Having a bit more of a think about these patterns, do they correlate with other aspects or changes in your life? What was going on for you?
2. What do you think causes us to change our digital practices? (or the websites we visit?)
3. Why do you think you used different websites today to what you did back then? Were you interested in different things? What's changed?
4. What is the relationship between our identity and the websites we visit? Do you think we change even slightly when we start using particular websites or platforms? Why do you think this is the case?
5. Have you ever consciously thought about changing your digital practices? What made you change them?
6. If we look at the timelines of the whole group what do you notice collectively? Which colours are most represented? Why? If the internet is so open and infinite then why do we all have the same colours on our timeline? Why are these websites so popular? Have you ever used an alternative?
7. Have you ever thought about the fact that our digital practices change over time? What do you think causes them to change?
8. Do you think we consider our digital histories very often? Why do you think this is the case?
9. If you were to choose three websites to put in a museum from today for people of the future, which three would you choose?

Appendix 9: Interview two questions

1. Let's have a look at your screen shot from last time we met. Did these photos/comments/friends/links/likes last on your page for long? Can you remember why they were or were not changed?
2. Do you think this photo/comment/image/friends/links/likes made your friends see you any differently?
3. Does the profile of yourself back then differ from how you see yourself now? How?
4. When X happened how did you decide what you were going to do? Did you talk to anyone about it?
5. A selection of questions in regard to the current social media screen shots brought in will also be asked. These will be similar to those asked in the first interview i.e. questions 1 & 2.

In the two interviews and activities we've completed you use a, b, c and participate in x, y, z. (i.e. roughly sketch a picture of their digital networks, co-constructed over the first two visits). I'm interested in how school and the technology you use there fits into your digital media practices.

6. Do your daily digital media practices continue at school? Or are you prevented from doing particular things in this space? Is this a good thing or not? For example, can you see any advantage in not being able to access social media all the time?
7. What is good about the way digital technology is used at this school?
8. What do you wish you could change about the way digital technology is used at this school?

Appendix 10: Instructions for Provocation 4

Re-articulating the icons of the internet

Materials

- A4 sheets 210 gsm
- Paint like textas
- Icon cards

Introduction

Our activity today involves thinking about the icons that we use everyday on the internet. Much of the language and many of the icons that we engage with when we use the internet have meanings that we take for granted. For example, a Facebook 'friend' is quite different to a friend that we might have in real life. So the word 'friend' on Facebook actually refers to something quite different to how we originally used the word. The purpose of today is to think carefully about these icons and if necessary re-design or re-define them so that they are truthful to the function they serve on digital networks. We are going to do this by copying the icon and then re-appropriating it. In this exercise we will be drawing to think, so don't get too concerned about your sketches – they are a tool.

Process

1. Give out one card to a group of two (these cards are below). *You have 5 minutes to read your card with your partner to ensure you both understand what it is about. Discuss the card and get ideas for the sketch from their group.*
2. *Each person does 3 sketches of one re-appropriated icon (10 minutes). Remember to use the original icon as a basis – you don't have to create something entirely new.*
3. Re-group and show your partner the sketches. Your partner chooses one of the three as final icons for you to work on. (5 minutes)
4. Each participant to complete finalised icon either using Photoshop or Textas on thick paper. (15 – 20 minutes)
5. Each person to write a definition. (5-10 minutes)
6. Present back to the group

Group discussion

1. How did you choose the final icon?
Was it hard to redefine these terms? Why do you think that is?
2. Why do you think these changes in meaning take place? (Why do we call a Facebook friend a friend and not a follower? Or find that when we use the word privacy we are not really referring to being private in the original sense of the word at all?)
3. Have you thought about this before? Why do we not like to think about it?
4. Do you think FB or Google would take on your icon? Why or why not?
5. Has this activity revealed anything to you? Can you explain what?
6. After doing this would you think differently about these icons, or the functions we use on FB?
7. Were you confronted in any way by doing this exercise? Why?

Appendix 11: Information cards for re-articulation

Friend

(noun: a person attached to another by mutual feelings of affection or personal regard)



Facebook users average about 338 friends each. Having friends on Facebook means getting more friends as friends of friends send further friend requests. Rampant friend requests pose the question: how many people can you realistically be friends with? In 1993 Robin Dunbar, an anthropologist at the University College of London, conducted research to determine the cognitive limits of a person's real world social network, where individuals know who each person in that network is and how each relates to every other person. His research was based primarily on animal and primate interactions. That limit, it seems, is about 150 people including your classmates, family and friends, favourite barista, the shop attendant, the people you attend community events with etc. But that's just the limit of people you can maintain stable relationships with, much less friendship. If Professor Dunbar is right, our brains just aren't big enough to hold all the information necessary to maintain meaningful relationships with hundreds or even thousands of people. In today's ever-hectic society, it seems as though brain capacity isn't the only issue. It takes time to cultivate friendship. In today's world, friending is a simple click taking only seconds to bridge a connection. However, being a friend requires a real investment of time.

Is a Facebook 'friend' really a friend?

Your task: *Redesign the icon so that it more accurately represents what a 'friend' is on Facebook. Write a sentence to accompany the icon that redefines the word 'friend' to fit the Facebook context.*

Adapted from: <http://www.psychologytoday.com/blog/hope-relationships/201404/is-facebook-destroying-friendship>



Privacy

(noun: state in which one is not observed or disturbed by other people)

In the digital context, privacy isn't a matter of keeping our information secret or locking it away from others but rather it is a matter of having control over where that information goes. Increasingly, what worries people is that this control seems to be slipping away. We post our photos behind our privacy settings but then a contact forwards the information on unexpectedly. Or we give our data to institutions we should be able to trust (school, work, hospitals, etc.) and then it turns out they have commercial partners with different understandings of who the data belongs to and what its value is.

Social media corporations tend to assure individuals they deal responsibly with user data, but at the same time sell our private information to commercial partners to raise revenue.

What does privacy actually mean in the digital era? Is our information actually 'locked'?

Your task: *Redesign the privacy icon so that it is a more accurate representation of what 'privacy' means in the digital context. Write a sentence to accompany the icon that redefines the word 'privacy' for the contemporary era.*

Adapted from: An interview with Sonia Livingstone, 2014, <http://www.hastac.org/blogs/superadmin/2014/10/24/trust-complex-and-shifting-world-learning-interview-sonia-livingstone> and Fuchs, C. (2014). *Social media: A critical introduction*. London: Sage.

Like

(verb: to take pleasure in; find agreeable or congenial)

Facebook promotes a culture of liking in the form of its 'Like' button. It is only possible to like pages and postings, but not to dislike them. Facebook wants to spread a positive atmosphere in which people only agree and do not disagree or express discontent or disagreement. One can only imagine that it could be harmful for Facebook's profits if users would massively dislike certain companies that are important advertising clients of the platform. Liking is therefore linked with advertising and raising revenue for both Facebook and the companies that advertise on there. This may explain why, after Mark Zuckerberg, said in 2010 that Facebook is "definitely thinking about" introducing a dislike button, nothing happened.



What purpose does the 'Like' button actually serve?

Your task: Redesign the 'like' icon so that it is a more accurate representation of the 'Like' button. Write a sentence to accompany the icon that outlines the role of the 'Like' button on Facebook.

Adapted from Fuchs, C. (2014). *Social media: A critical introduction*. London: Sage.



Link

(verb: to join by a link or links; connect or unite)

Wikipedia defines the hyperlink as “a reference in a document to an external piece of information”. Links are like “ties” that join up websites, creating and directing internet traffic which in turn generates revenue for companies like Google. Links are the basic unit used by the World Wide Web to investigate, map out, and reproduce its own existence. Links are measured and mapped by Google’s search algorithm (a step by step procedure for calculations, especially by a computer). If millions of websites took down the links to their pages from the Google search engine, this could possibly be the end of Google – the vital pillar of an empire. Google’s empire is based on the link work that others put into their websites and documents. Counting the number of links pointing to a website is a way of ranking that site’s popularity, so that what is listed first in a Google search is the most popular website with the most links to it, rather than the most accurate.

The link is much more than a simple connection between two pages – they help map out the World Wide Web, direct internet traffic and generate revenue for companies.

What is actually being connected or united when we follow a ‘link’?

Your task: *Redesign the ‘link’ icon so that it is a more accurate representation of what the ‘link’ actually does. Re-write Wikipedia’s simple definition of the hyperlink to acknowledge the role it plays in the information economy.*

Adapted from Lovink, G. (2011). *Networks without a cause: a critique of social media*. Cambridge, UK: Polity.

Search

(verb: to find something by looking or otherwise seeking carefully and thoroughly)

PageRank is an [algorithm](#) (a step by step procedure for calculations, especially by a computer) used by [Google Search](#) to rank websites in their search engine results.

PageRank was named after [Larry Page](#), one of the founders of Google. PageRank is a way of measuring the importance of website pages. PageRank works by counting the number and quality of links to a page to determine a rough estimate of how important the website is. The underlying assumption is that more important websites are likely to receive more links from other websites.



With the dramatic rise of accessible information we rely heavily on retrieval tools, so that ‘search’ is the new cultural code that governs contemporary life. We no longer learn by heart; we look it up. It is hard now to imagine a time without search engines. However, search engines rank according to popularity, not truth, making it difficult to distinguish between intellectual insight and gossip.

In the context of the internet does ‘search’ mean to look for something thoroughly and carefully?

Your task: *Redesign the search icon so that it is a more accurate representation of what we might find when we search for things on the internet. Re-write the definition above to accompany your re-designed icon.*

Adapted from Wikipedia <http://en.wikipedia.org/wiki/PageRank>

and Lovink, G. (2011). *Networks without a cause: a critique of social media*. Cambridge, UK: Polity.

Appendix 12: Interview three questions

This interview also included questions from previous interviews on social media screenshots.

1. Examination of screenshots. Discussion of their digital identities since last phase of the research.
2. Remind participants of what was involved with each provocation and what has been achieved throughout the year.
3. Seeing and thinking about the creations we have made in response to the provocations, as well as the print outs of your social media pages, do you have a different perspective on the role of digital media, social media or the internet in your life?
4. Have you learnt anything about yourself, your relationships or your digital world throughout the year?
5. Who do you talk to about what happens online or on social media?
6. Is there anything you think we should have talked about throughout the year but didn't?
7. Is there anything that you would have changed about the provocations?
8. Do you think the school could be a good place to think about and reflect on your digital media practices? Why or why not?
9. Do you think you might be more mindful or critical in your digital media practices having had time to reflect on some of the issues we have talked about?

Appendix 13: Consent form for participation in the exhibition



CONSENT FORM FOR EXHIBITION OF WORK

Project: Becoming digital – an exploration of digital media in young people’s lives

Chief Investigator: Professor Ilana Snyder

Student Investigator: Luci Pangrazio

Other Investigator: Professor Neil Selwyn

I have taken part in the Monash University research project specified above. I understand that my work will be displayed in the Monash University Library and I hereby consent to participate in this exhibition.

I consent to the following:	Yes	No
Having my work from the project publicly exhibited	<input type="checkbox"/>	<input type="checkbox"/>
Displaying quotes from interview transcripts that explain the work	<input type="checkbox"/>	<input type="checkbox"/>

I understand the following:

- that my participation is voluntary and that I can withdraw at any stage of the project without being penalised or disadvantaged in any way;
- that data from the study will be kept in a secure storage and is accessible to the research team. I also understand that the data will be destroyed after a 5 year period unless I consent to it being used in future research.

Name of Participant _____

Participant Signature _____

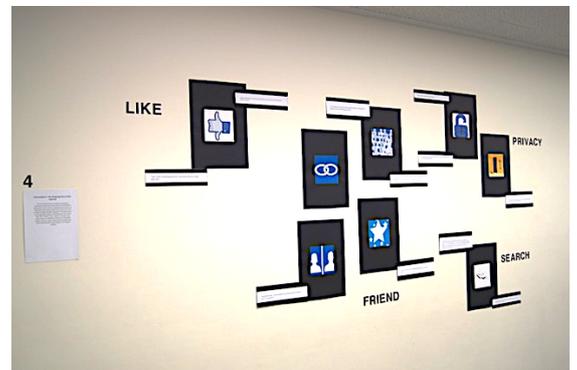
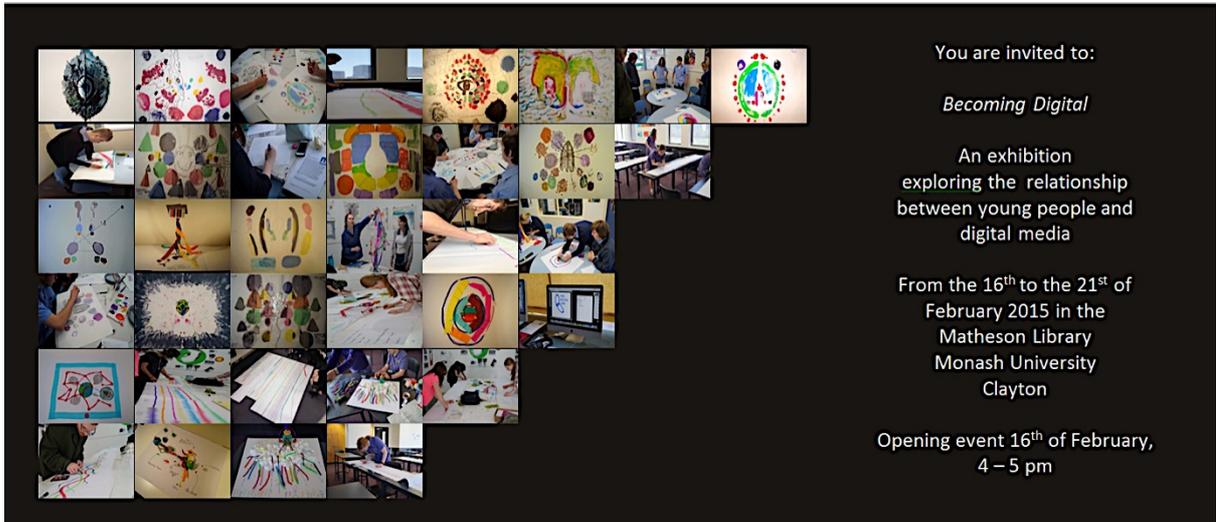
Date _____

Name of Participant’s Parent/Guardian _____

Parent/Guardian Signature _____

Date _____

Appendix 14: Documentation of the exhibition



Appendix 15: Sample narrative analysis

Trent

Provocation 1 – Mapping digital and non-digital experiences



Trent's map of digital and non-digital experiences

Trent's inkblot reveals many interesting things not only about his digital practices, but about the way he views himself in the digital context. Most striking is the Pac-Man ghost that he used to represent himself in the centre of the page. When I asked him why he chose the Pac-Man ghost he replied that it symbolised his interest in games, as well as the way he views his relationship with others: 'I like playing games, I'm a bit of a gamer and I spend a lot of my time doing that. And I tend to appear and disappear out of like friend groups around like the school so I think a ghost, a Pac-Man ghost would represent me a bit better'. In the Pac-Man game the ghost is the enemy or the monster and roams the maze trying to catch Pac-Man. As soon as a ghost touches Pac-Man he withers and dies.

Despite the Pac-Man ghost's power in the context of the game it is interesting that Trent has chosen to represent himself with something that has no corporeal body and can 'appear and disappear' when necessary. This is not just a strategy that Trent actively uses to deal with particular social situations both online and offline, but at some level he acknowledges that it represent how others see him. For example, he says 'No one really notices me appearing and disappearing', so at times he feels almost invisible. Indeed, 'disappearing' might be a defense mechanism that Trent employed over the years to deal with the bullying he has endured. As he explains in interview, 'I've been bullied like my whole life really. It just recently stopped near the end of last year'. In light of this, Trent turns his potential for invisibility into an active strategy to cope with bullying behavior. In an online context this became particularly important as he explains bullying was 'a reason to *not* go online yeah big time'. The only

thing he went online for was Steam as the people on the gaming platform were ‘just friends that weren’t bullying’. Facebook in particular appears to be a platform that he needed to disappear from: ‘I was originally on Facebook from year 7 but I deactivated the account for a little while just to stop that aspect. Then you can never message me and say [anything]. When I started it up I had nothing bad on there so you couldn’t do anything on my Facebook’. To Trent, being able to disappear, has become a valuable strategy.

Trent has chosen to represent several significant groups of people on his inkblot. His friends are represented through a large purple circle close to the centre; family is a medium sized orange circle slightly further out from the centre; non-school friends are shown as a smaller green circle again further from the centre. On the outer reaches of the inkblot are teachers represented by a small yellow shape and surfing mates represented by a small blue spot. On the digital side Trent has blacked out his family. As he says, ‘I never talk to any of my family online or anything’. Trent also says: ‘I never talk to my teachers online or anything so no connection at all’. This he has shown by blacking out teachers on the digital side. His non-school friends are largely primary school friends with whom he has a ‘bit of a connection’ with online, so they appear to be half blacked out. Trent is also part of a support group called the ‘Reach Foundation’. As he says not only does he ‘participate in everything’ but they also ‘call you up to make sure you’re going to things’ so he has left the digital side as simply the imprint left from the folding process. There is little digital connection shown with surfing mates.

As for the places that Trent experiences in his life, home appears to be a well mediated space and at school he is using digital media for about a third of the time. Trent also spends time at friends’ houses and the beach where there is little to no digital mediation involved. Indeed, Trent does seem to be trying to increase the amount of time he communicates with people face to face as opposed to through digital or online means. This provocation might have helped facilitate this realisation as he explains: ‘It made me realise how much I kind of use technology and well it made me want to actually kind of...actually talk to people more face to face’. This might be a sign that Trent is gaining more confidence in a social context, as he explains in the past people haven’t taken him seriously: ‘People don’t see me as a serious person in most friend groups, so they see me as a bit of a joke. Even when I’m trying to be serious they tend to laugh at it’. He attributes the change in the way people see him to his cover shot, which he believes makes people take him more seriously: ‘They see that profile and they’re just like he must be serious or something’.



When asked whether this had helped him present himself differently in ‘real life’ as well he replied: ‘Well I tend to be serious about a lot of things in real life, but no one sees it for some reason. So people have started to take me more serious’. In this way, Trent’s use of social media was a direct reflection of what he was experiencing in real life. For example, he was being bullied so he decided to leave Facebook in year 7. When he started to use Facebook again at the start of year 10 he was able to show a different, more ‘serious’ version of himself

through his choice of cover shot. In Trent's words this has encouraged people to take him more seriously in real life. As he explains in interview digital media can help people to show different sides of themselves, however, this is not always a positive thing: 'Sometimes it's [online] a bad thing and with others it's good, cos you can like really get to know people cos they will say things online more than face to face'. In this instance, social media has helped him to become the person that he would like to be and be seen as. Indeed, as he gets older, Trent appears to be learning some strategies that might help in a context that can be at times confronting and challenging.

Provocation 2 – Visualisation of the internet

While Trent and Ben's model is playful in appearance, it does reveal some interesting things about their understanding of the internet. Trent begins the explanation: 'I had a theory that the internet was coming from a satellite on the moon, there's a hole in the moon that's my theory'. Ben elaborates: 'we have the moon with a little satellite and a beam of internet coming towards the Earth which a satellite picks it up'. While it might be difficult to see there is a cat's head on top of the 'awesome moon'. When I asked about the cat Ben replied: 'Cats control the internet. It's kind of like the 'Hitchhiker's Guide to the Galaxy' where the mice created the Earth – cats created the internet. So we have all the internet browsers coming towards Earth to give Earth its internet goodness. But we have Telstra and Optus which actually harness this internet and make us pay for it'. What's interesting about Trent and Ben's model is that while they clearly had fun making it and presenting it to the group, it references some more complex concepts associated with the internet. First, is the idea that the internet is a naturally occurring thing that comes from the moon and is inherently good. Bound up in this idea is that there is a sense of inevitability about the internet and its influence; according to the boys, 'bad internet' is not when something bad happens on or to do with the internet, but just a 'really bad internet connection'.



As Trent and Ben explain the job of companies is not to provide the infrastructure to build the internet, but to 'harness' the naturally occurring 'internet goodness' coming from the 'awesome moon'. The internet is akin to a natural resource, like gold or oil, which is there to be 'mined' into a form that humans can use. Following this logic the internet is not only a neutral structure, but imbued with positive, almost magical qualities. While this is an abstract representation of the internet, the ideas that underpin it do have a certain truth to them that the boys return to later in interview. For example, when asked whether he had thought about the structure before Ben replies 'I've always thought of it as sort of a pyramid of sorts, so you have all the sort of the deep down stuff, so it's like where the internet starts and then it slowly

comes to the top'. Again the imagery that Ben draws on mirrors the idea explained earlier in regard to the model – that the internet just exists, perhaps some deep in the earth with this explanation. In this way, creating the model tapped into some latent ideas the boys held about the internet; for example, that the structure of it is less the result of humans than the inevitability of technological progress. Having this idea underpin your conceptual understanding of the internet has implications for their digital practices. For example, it might make it more difficult to arrive at the idea that you can manipulate it to suit your own ends (i.e. being a critical user).

Another interesting part of their model is that companies are harnessing this 'free' resource (the internet) and making money from it. To clarify this point, Mark asks, 'Can I just get an understanding of this... the cats are beaming free internet down to the earth and the big corporations are taking that internet and selling it to us for high prices'. Both Trent and Ben answer 'Yes', to which Mark replies, 'That makes more sense than you would probably know'. To Ben and Trent it is Telstra and Optus who 'make us pay for it'; it is clear that this is a bit of a sticking point for the group. In making the model the boys were given an opportunity to consider the various roles played by stakeholders involved with the internet, and in doing so were able to recognise that some stakeholders (i.e. telecommunication companies) reaped more of a reward than others (i.e. the user). In this way, the process of visualisation and creation afforded through the provocation offered them, and the rest of the group, the opportunity to explore a more critical perspective on how the internet is structured.

Ben and Trent also explored other features associated with the internet that might constrain or improve use. For example, the 'bad internet' is a really bad internet connection, which apparently is a fairly common occurrence in the geographical region where the school is located. Viruses are shown on one side of the moon and are thought to be trying to 'take down the moon'. Again viruses are seen as naturally occurring things and not something that might have been created by humans. 'Internet browsers', on the other hand, help with filtering and bringing the 'internet goodness' to Earth. It is interesting that in their discussion of the internet humans are not referenced at all. This is quite different to the other two groups, who built their models so that they in some way reflect the most popular websites that humans use. That said the fact that Ben and Trent attribute cats as having control of the internet might be a nod to the power of YouTube and the popularity of cat videos. It is clear from the model that Ben and Trent think fondly of the internet, seeing it almost as an otherworldly resource that has inherently good qualities. Conceived in this way, Ben sees people becoming quite dependent on the internet in their daily lives: 'people need it nowadays. It's not you know "I want the internet" it's "I need the internet so I can do this and this and this"'. At another point in the group discussion Ben used the metaphor of a pier to describe the internet. In this metaphor, the internet was made up of a series of piers, which Ben explained could be thought of as websites, while people were the ships: 'so they leave something on the website and somebody picks it up and moves it around the place'. From this, 'information' might be thought of as the 'parcels' that are picked up and dropped off at the pier. As Ben explains within this metaphor a ship 'can go wherever you want around the world'. Despite this fairly 'neutral' reading of the internet there were critical dimensions to their understanding that were further accentuated in group discussion.

Provocation 3 – Timelining digital practices

Analysing Trent's timeline not only tells us something of how he developed his digital practices, but also help us to understand his current ones. He took a slightly different

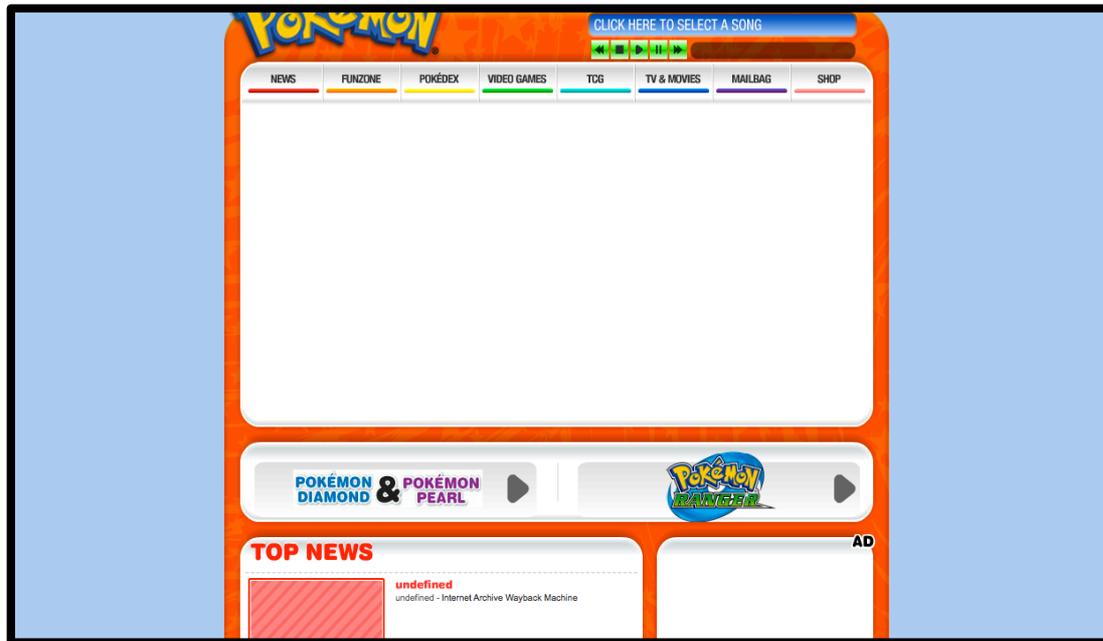
approach to creating his timeline in that a straight line indicated no activity on that website, and a wavy line represents him starting to use that site. His timeline therefore goes from being a series of straight lines to a series of wavy lines, crossing and intersecting with each other in an almost chaotic way. This might reflect how Trent feels about his increasing use of digital media in that it is hectic and in some respects difficult to negotiate.

Trent first started using the internet in 2005 at the age of seven. From his timeline it appears his early use was mainly on Google, represented as a consistently wavy green line from 2005 until present day. Around the same time Trent also started using Club Penguin represented here as a purple line with most activity indicated in 2009. This was a significant moment for Trent that resonated beyond the digital context as he had found a place to go where he was not being bullied. This was largely due to the fact that he could be anonymous in this space: 'it's like nobody knows who you are and so you can just talk to some people and kind of become, like form a team or something. They don't know who you are, they just know what your strategies are in the game'. Trent had been bullied a lot at school, so finding a place at age 11 where his skills might be appreciated and where he was free of bullying was liberating. Looking at his timeline, Trent has consistently used Club Penguin up until recently. While his use was not frequent it appears to be regular, so that it took on the appearance of a 'rhythm strip' on an ECG machine, indicating that it still significant for him at 16. He was not embarrassed to own up to this in the group discussion when he said 'On the weekend they were having this ninjitsu tournament on Club Penguin'. It appears that the bullying has shaped Trent in particular ways and as he explains it wasn't until school provided information on cyberbullying that things began to change: 'the school does a big thing about bullying and cyberbullying is one of the main things and some people do it without realising, but people do it purposely and so I think the cyberbullying education here knocked some sense into people'.

Despite the fact that the bullying might have declined for Trent, it appears that a lot of his current practices reflect his earlier experiences online and offline. For example, on Facebook he appears hesitant to get too involved saying that he just likes to 'sit back and watch things happen'. While this comment might reflect a disconnection from Facebook, in doing this he is also ensuring he stays out of people's way and prevents being bullied. Indeed Trent has a rather negative view of Facebook. In interview, for example, Trent said rather cryptically that 'Facebook is there to help us socialise, but not really socialise'. More definitively in the group discussion when I asked what the fact that they were all on Facebook told us he said 'We all lack social lives'. It appears he doesn't value his Facebook experiences all that much, claiming he felt little belonging to it and far more connected to Steam. Bearing this in mind it is interesting that he is still on Facebook - it as if he is doing it out of a sense of duty. Another significant moment for Trent indicated on his timeline, which is reflective of his earlier experiences is when he found the Reach foundation. While the majority of his Reach experiences take place face to face, the website seemed to play an important role for him, as he explains: 'I go on their website frequently to like see events and everything that's happening'. As there might be some time between these events checking the website and knowing what's coming up might serve as a bit of a lifeline for Trent.

Looking at his timeline it also appears that the majority of the websites that he regularly visits (eight out of 13) are gaming websites, where again Trent can be somebody other than himself (Q). Indeed a lot of Trent's early use appears to have scaffolded him into these digital practices. For example, one of the earliest websites he was on was the Pokemon website, which was introduced to him by his cousins. When I asked him what role Pokemon played in

his life he said ‘it made me a gamer’ and that ‘it was pretty much the start of games for me’. From this time Trent has always been on gaming sites and is often frequently using several at any one time. Trent’s digital practices are reflective of his formative experiences. He favours websites where there is some degree of anonymity and values those like Reach, which can provide him with support and something to look forward to when things are difficult. On the other hand he almost grudgingly uses Facebook. YouTube and Google are not shown to or spoken of as playing any significant role in his life.



Screenshot Pokemon website circa 2007

Appendix 16: Evidence of coding for thematic analysis

Code (and sub-codes)	Sources	References	Created on	Created by	Modified On	Modified By
Identity	3	326	19/5/2014, 11.10AM	LP	25/1/2015, 12.32PM	LP
• representation	3	180	20/5/2014, 1.07PM	LP	25/1/2015, 12.30PM	LP
<i>friends</i>	3	46	20/5/2014, 1.10PM	LP	25/1/2015, 12.43PM	LP
<i>photos</i>	3	59	20/5/2014, 1.10PM	LP	25/1/2015, 1.03PM	LP
• becoming	3	35	20/5/2014, 1.07PM	LP	25/1/2015, 3.30PM	LP
<i>vocational</i>	3	4	22/5/2024, 11.33AM	LP	25/1/2015, 3.35PM	LP
<i>social</i>	3	12	19/5/2014, 11.26AM	LP	25/1/2015, 3.30PM	LP
<i>aspirational</i>	3	3	19/5/2014, 11.10AM	LP	26/1/2015, 3.32PM	LP
• attention & feedback	3	111	19/5/2014, 11.12AM	LP	26/1/2015, 3.30PM	LP
<i>visibility</i>	3	27	19/5/2014, 11.26AM	LP	26/1/2015, 3.43PM	LP
<i>popularity</i>	3	35	22/5/2014, 11.32AM	LP	26/1/2015, 3.33PM	LP
Interaction & Communication	3	358	19/5/2014, 11.10AM	LP	26/1/2015, 3.30PM	LP
• bullying & judgment	3	69	20/5/2014, 1.07PM	LP	26/1/2015, 3.35PM	LP
• friendship & bonding	3	165	19/5/2014, 11.12AM	LP	26/1/2015, 3.30PM	LP
<i>gaming & affinity spaces</i>	3	45	19/5/2014, 11.26AM	LP	26/1/2015, 3.33PM	LP
• practices & conventions	3	75	19/5/2014, 11.26AM	LP	26/1/2015, 3.32PM	LP
<i>norms</i>	3	35	22/5/2014, 11.32AM	LP	26/1/2015, 3.30PM	LP
<i>socialisation</i>	3	40	22/5/2024, 11.33AM	LP	26/1/2015, 3.43PM	LP
• staying in the loop	3	24	19/5/2014, 11.26AM	LP	26/1/2015, 3.33PM	LP
• anonymity & pseudonymity	3	25	19/5/2014, 11.26AM	LP	26/1/2015, 3.33PM	LP
Critical Understandings	3	127	19/5/2014, 11.10AM	LP	27/1/2015, 3.30PM	LP
• architecture, technical	3	69	22/5/2014, 11.12PM	LP	27/1/2015, 3.35PM	LP
<i>existent</i>	3	24	22/5/2014, 11.32AM	LP	27/1/2015, 3.30PM	LP
<i>from provocation</i>	3	45	22/5/2024, 11.33AM	LP	27/1/2015, 3.43PM	LP
• critical self-reflection	3	13	22/5/2014, 11.12PM	LP	27/1/2015, 3.35PM	LP
<i>existent</i>	3	3	22/5/2014, 11.32AM	LP	27/1/2015, 3.30PM	LP
<i>from provocation</i>	3	10	22/5/2024, 11.33AM	LP	27/1/2015, 3.43PM	LP
• development of	3	45	22/5/2014, 11.12PM	LP	27/1/2015, 3.35PM	LP
<i>role of parents</i>	3	13	22/5/2014, 11.33AM	LP	27/1/2015, 3.36PM	LP
<i>role of peers</i>	3	10	22/5/2024, 11.33AM	LP	27/1/2015, 3.36PM	LP
<i>role of significant others</i>	3	9	22/5/2014, 11.35PM	LP	27/1/2015, 3.38PM	LP
<i>role of the school</i>	3	13	19/5/2014, 11.26AM	LP	26/1/2015, 3.33PM	LP

Sample of individual codes

Code: *Interaction and communication*

Reference 7 - 2.94% Coverage

L: On Monday you mentioned that a significant moment for you in your digital history was when you became friends with someone on Facebook who wasn't in your family. I'm interested in that, so what did this moment represent for you?

St: Well, I only got Facebook and I only had family on it, so when my first friend actually sent me a Facebook request I was really happy, because then I could actually communicate with others outside of school.

L: So who was that person?

St: I believe her name was Michelle Davies

L: And that was a school friend? B: Yeah

L: So that signified a moment where you could speak to people outside of your family? B: Yeah

L: Did that change anything for you in the off-line context?

St: No not much, usually the only reason I would talk to people or anything was to ask questions on homework and stuff. Otherwise I prefer to talk to them face-to-face.

Reference 8 - 0.63% Coverage

St: It was alright I had a lot of friends who supported me so...

L: And you learned how to deal with it. Maybe this in some way this helped you develop a process for working problems out?

St: Yeah

Reference 9 - 0.46% Coverage

L: And how do people react to this change it to get feedback from people?

St: Nah I don't usually get feedback, but it's fun to try and show.

Reference 10 - 2.08% Coverage

L: So you're using Skype a bit more?

St: I always use Skype just to communicate with friends in other classes from school, to ask for help or if

they need help they can talk to me. If they had some problems and they are not able to get out of class and they need to get it off their chest, they're able to talk to me about it.

L: Ok so how often you on you on Skype?

St: most of the time I usually have it open on my laptop, so if someone needs me it'll pop up and I'll quietly send them a message and all that

L: Okay alright so do you see you want your frieiids to know that you're there for them, is that why you use it?

St: Yeah pretty much

Reference 11 - 1.53% Coverage

L: So do you think popularity and gaining attention are important when you're using these platforms?

St: To most people it would be yes, but I don't think so

L: You try to keep it... how do you go about it ignoring it? I think it is hard, like we were talking about

on Monday?

St: I just turn a blind eye.

Code: Attention and Feedback

Internals\\ Group Transcripts\\Timelining – 1 reference coded [7.13%]

R: But then it can kind of get a little bad when people do stupid stuff just to get views.

St: Like that guy who climbed up that building just to hang off by his hands.

R: Yeah I start you know a little notifications on FB, I'm like people actually like me and then when I get nothing I'm like ok.

L: So it's kind of like a double edged sword- it's good when you're popular but then when you're not... C: Yeah it's kind of silly but that's what it's like.

L: But can you, and this is open to everyone, can you turn your back on that feedback? Is it easy to turn your back on it?

B: I personally can because I've grown up a bit more independently than a lot of people cos I usually just spend time in my room and think about whatever and... so I don't have that need for social belonging.

L: Confirmation? Does everyone else feel that way?

M: Yeah I feel the same way because I made it to 2014 without all that stuff, I can go without all that stuff.

St: I don't know I can probably live without most of it, but my parents say I have communication with others more of a person people, than in an office. So to an extent yes, but to another extent no.

L: How about you Rachel? C: I don't know.

L: It's a hard question, it's hard to ignore...

R: I feel like cos you know I'm a teenager and just sometimes I want attention and I think it's bad to say that but I'm being really honest now.

St: Who doesn't want attention?

Si: It's kind of like growing up.

R: Yeah

Artist/assistant: I think it's all your life I don't know if it's just for teenagers.

R: But it's like sort of like I'm not going to do anything stupid to get attention, but I like attention.

L: You can't help but be affected by it.

R: Yeah.

Internal\\Group Transcripts\\Visualisation – 1 reference coded [3.84%]

R: I think it's a problem cos a lot of people crave popularity over the internet. They'll do stupid things like I think last year some girl made a fake video about eating a tampon that got so viral and she came out and she's like I only did it for attention and it was fake. So it's crazy the stupid stuff people will do for attention.

Appendix 17: Monash University human ethics certificate of approval



MONASH University

Monash University Human Research Ethics Committee (MUHREC)
Research Office

Human Ethics Certificate of Approval

This is to certify that the project below was considered by the Monash University Human Research Ethics Committee. The Committee was satisfied that the proposal meets the requirements of the *National Statement on Ethical Conduct in Human Research* and has granted approval.

Project Number: CF14/538 - 2014000190

Project Title: Becoming Digital - An Exploration of Digital Media in Young People's Lives

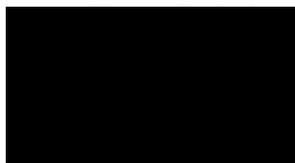
Chief Investigator: Prof Ilana Snyder

Approved: **From:** 24 February 2014

To: 24 February 2019

Terms of approval - Failure to comply with the terms below is in breach of your approval and the Australian Code for the Responsible Conduct of Research.

1. The Chief investigator is responsible for ensuring that permission letters are obtained, if relevant, before any data collection can occur at the specified organisation.
2. Approval is only valid whilst you hold a position at Monash University.
3. It is the responsibility of the Chief Investigator to ensure that all investigators are aware of the terms of approval and to ensure the project is conducted as approved by MUHREC.
4. You should notify MUHREC immediately of any serious or unexpected adverse effects on participants or unforeseen events affecting the ethical acceptability of the project.
5. The Explanatory Statement must be on Monash University letterhead and the Monash University complaints clause must include your project number.
6. **Amendments to the approved project (including changes in personnel):** Require the submission of a Request for Amendment form to MUHREC and must not begin without written approval from MUHREC. Substantial variations may require a new application.
7. **Future correspondence:** Please quote the project number and project title above in any further correspondence.
8. **Annual reports:** Continued approval of this project is dependent on the submission of an Annual Report. This is determined by the date of your letter of approval.
9. **Final report:** A Final Report should be provided at the conclusion of the project. MUHREC should be notified if the project is discontinued before the expected date of completion.
10. **Monitoring:** Projects may be subject to an audit or any other form of monitoring by MUHREC at any time.
11. **Retention and storage of data:** The Chief Investigator is responsible for the storage and retention of original data pertaining to a project for a minimum period of five years.



Professor Nip Thomson Chair, MUHREC

cc: Prof Neil Selwyn, Ms
Luci Pangrazio.

Appendix 18: List of websites and digital programs

Websites:

Anime Girl (Apple Inc., USA). *Anime Girl is an App where users act like a 'fashion adviser' and dress up the anime character.* See <https://itunes.apple.com/us/app/anime-girl/id933097703?mt=8>

Agame (Spil Games, Netherlands). *Agame is an online games platform with a focus on action and racing games.* See <http://www.agame.com/>

Club Penguin (Disney, USA). *Club Penguin is a massive multiplayer online game involving a virtual world of online games and activities.* See: <http://www.clubpenguin.com/>

Facebook (Facebook Inc., USA). *Facebook is currently the world's largest social networking site.* See: <https://www.facebook.com/>

Fashion Design World (RockYou, USA). *Fashion Designer World is a website where players design clothing in an attempt to win fashions shows.* See: <https://www.facebook.com/fashiondw>

Farmville (Zynga, USA). *Farmville is a farming simulation social networking game.* See: <https://zynga.com/games/farmville>

Google (Google, USA). *Google is a multinational technology company specializing in Internet-related services and products, including online advertising technologies, search, cloud computing, and software. It currently owns the world's most popular search engine.* See: <https://www.google.com.au>

Google Images (Google, USA). *Google Images a search engine on Google dedicated to finding photos and images.* See: <https://images.google.com/>

iMessage (Apple Inc., USA). *iMessage is a free instant messaging service for iPhones, and email.* See: <http://www.apple.com/ios/messages/>

Instagram (Facebook Inc., USA), *Instagram is a mobile photo-sharing, video-sharing and social networking site.* See <https://instagram.com/>

Khan Academy (Khan Academy, USA). *The Khan Academy website offers free micro lectures on specific topics and was operated by a non-profit educational organisation.* See: <https://www.khanacademy.org/>

Mathletics (3P Learning, Australia). *The Mathletics website is an online learning maths platform.* See: <http://www.3plearning.com/mathletics/>

Miniclip (Miniclip Inc., Switzerland) *Miniclip is an online gaming website predominately targeted at kids and early teenagers.* See <http://www.miniclip.com/games/en/>

Moshi Monsters (Mind Candy, England). *Moshi Monsters is a website where users adopt and care for a monster.* See: <http://www.moshimonsters.com/welcome>

Mumble (Creative Commons). *Mumble is an open source voice chat software, primarily intended for use while gaming.* See: <http://www.mumble.com/mumble-download.php>

Nickelodeon (Viacom Media Networks, USA). *Nickelodeon is a site for games, jokes and celebrity gossip based on Nickelodeon programs.* See <http://www.nick.com/>

Play School (Australian Broadcasting Corporation, Australia). *The Playschool website is composed of puzzles, games and songs based on the television program of the same name.* See: <http://www.abc.net.au/abcforkids/sites/playschool/>

Pokemon (Nintendo, USA). *Pokemon is a website based on the card trading game of the same name. Visitors to the site can play games, trade cards and watch Pokemon TV.* See: <http://www.pokemon.com/us/>

Snapchat (Snapchat Inc., USA). *Snapchat is a photo, video and text messaging application in which 'Snaps' are automatically deleted from the receivers screen after a range of 1-10 seconds.* See: <https://www.snapchat.com/>

Steam (Valve Corporation, USA) *Steam is an internet based, digital distribution platform offering multiplayer games and social networking. Steam has several notable community features like friends' lists and groups, in-game voice and chat functionality and cloud-saving.* See <http://store.steampowered.com/>

StickPage (Stickpage.com, USA). *StickPage is a flash animation website where viewers can watch videos, play games and talk to others.* See <http://www.stickpage.com/>

Tumblr (Yahoo Inc., USA). *Tumblr is a microblogging platform and social networking.* See <https://www.tumblr.com/>

Wikipedia (Wikimedia Foundation Inc.). *Wikipedia is a free online encyclopedia that is free for anyone to edit.* See: https://en.wikipedia.org/wiki/Main_Page

YouTube (Google, USA). *YouTube is a video sharing website that hosts user-generated videos, as well as professional and network content.* See: <https://www.youtube.com/>

Wattpad (WP Technology Inc., Canada). *Wattpad is a writing website that claims to host the world's largest community of readers and writers.* See: <https://www.wattpad.com/about>

Software programs:

Photoshop (Adobe Systems Inc., USA). *Photoshop is a software program for editing photos.*

Powerpoint (Microsoft, USA). *Powerpoint is a software program for presentations.*

Browsers and add-ons:

AdBlock (BetaFish Inc., USA). *Adblock is a content filtering and ad blocking extension for the Google Chrome, Apple Safari, Mozilla Firefox, and Opera web browsers.*