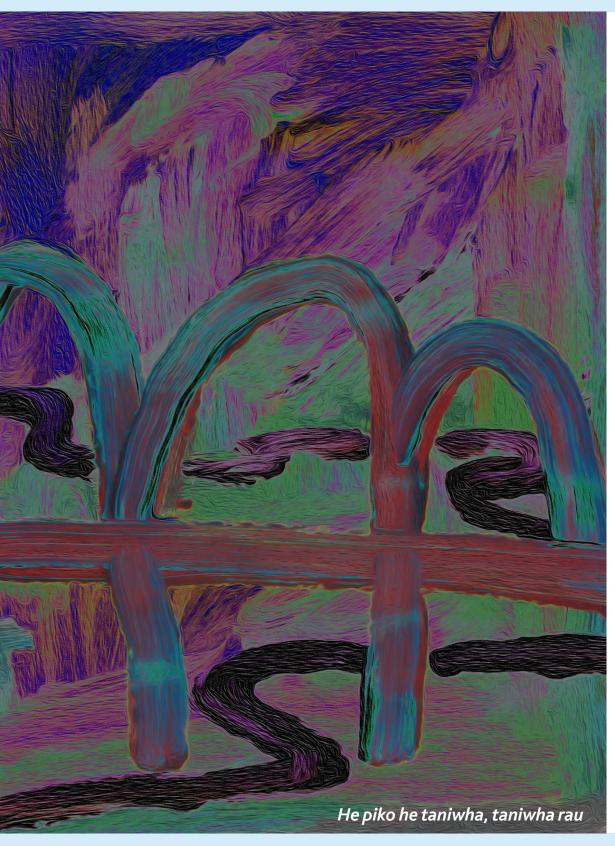


Waikato Journal of Education Te Hautaka Mātauranga o Waikato



Special 20th Anniversary Collection 2015



Waikato Journal of Education Te Hautaka Mātauranga o Waikato

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Confirmations and contradictions: Investigating the part that digital technologies play in students' everyday and school lives

Margaret Walshaw

Massey University

Abstract

Widespread change at the technological level brings a dimension into students' everyday life scarcely imagined in earlier times. This paper investigates the role that digitally mediated forms of activity play in the lives of young people. Using data drawn from a national survey, complemented with interviews undertaken with two students, the paper exposes confirmatory and contradictory practices at work, in relation to technology use in two different fields. Bourdieu's insightful analyses of social practice provide a means to reveal the ways in which a student's habitus, formed by the technology available in everyday life, is fostered, shaped and negotiated in schools.

Keywords

Digital technologies, young people, school use of technologies, everyday use of technologies, habitus

Introduction

Times change. Widespread change at the level of technology brings a dimension into everyday life scarcely imagined in earlier times. Seeping into our homes via consumer and social networking websites, the digital revolution has also dropped into our pockets through credit cards, iPhones and iPods and into workplaces through email communications, PowerPoints, e-books, and search engines. New forms of communication and new understandings of community have the effect of undermining the rhythms and textures of the past. If digitally mediated forms of activity play a significant role in the lives of young people, as Lenhart (2012) and Lewis and Fabos (2005) have shown, it will be important to investigate what roles those forms play in the school life of young people. Bourdieu's conceptual toolkit provides a useful framework for exploring how young people think of themselves in relation to technology and for understanding the ways in which a student's sense-of-technological self in everyday life is fostered, shaped and negotiated in schools.

Rapid changes brought about by the technological revolution are punctuated with an educational imperative to leverage the power of information and communication technologies (ICTs) for the development of new knowledge and improved learner outcomes (Garrison, Anderson, & Archer, 2003; Moore & Anderson, 2003). The push towards the development, integration and use of



(pp. 237–247)

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technology-based and technology-enhanced educational tools is driven by perceived economic benefits and by the social argument that technology-rich classroom environments provide an increasing number of people with a wider range of educational opportunities (Richardson & Swan, 2003). Since internet-based computer technologies provide a range of capabilities across learner environments that are able to transcend the barriers of distance and time, teaching and learning need no longer be restricted to face-to-face interactions and need no longer occur at the same time (Duncan, 2011).

Technological advances have the potential to change inter-relationships (Dron, 2007; Peters, 2003). They reshape the way social interaction occurs, creating different kinds of communities and different kinds of knowing. Young people, situated squarely within the digital age (Lenhart, 2012) and engaging with new digital technologies, develop a sense of community from webs of relationships with close and distant others. Materialising as iPods, internet links and mobile telephones, the technologies they use elicit loyalties and attachments that are enhanced by the personalisation of experience, the visual aspects of the digital medium, intimacy as well as the immediacy of feedback (Duncan, 2011). In the process students learn new skills in relation to multi-tasking, information searching and filtering, speedy responsiveness and incisive analysis.

Given that these skills and interactions are sometimes at odds with those made available by the school (Thiel-Stern, 2007), techno-spaces undermine the traditions of knowledge production and relationships within the classroom environment. These differences stimulate interest in exploring the way in which technological advances reshape the way social interaction and learning occurs, in a young person's everyday life and in the classroom. Specifically, in this paper I am searching for insight about how a student's habitus (Bourdieu, 1977 is formed within the structure and community of available technology in everyday life and within the structures and community of available technology within the classroom. Such knowledge might initiate a more fruitful view of the gap between the practices that are assumed and enacted within the two settings. Such a view is not only informative; it is also a key lever for rethinking education's practices and processes.

Conceptual tools from Bourdieu

Bourdieu's (e.g., 1973, 1979, 1989, 1998) work is part of a wider intervention concerning debates in which issues of agency and structure are paramount. His work provides tools for exploring the ways in which young people live their technological lives in the multiple social fields they inhabit. In particular, and in relation to this paper, Bourdieu's conceptual tools allow us to deal with the complex interplay between social structures and the processes of self-formation. According to Dreyfus and Rabinow (1993), his major contribution is in "providing ontological descriptions of social space as it is worked out in locales and periods" (p. 39). However, as Albright and Luke (2008) have noted, Bourdieu's work has generated critique from a number of scholars (e.g., Giroux, 1997; LiPuma, 1993) who maintain that his framework "does not set the generative grounds or programmatic agendas for social movements and political action" (Albright & Luke, 2008, p. 4).

My reading of Bourdieu's body of work, like that of Albright and Luke and others (e.g., Harker, 1990; Mutch, 2006; Nash, 2002), takes a generative stance and avoids over-classification as a unified theory. In these readings, Bourdieu's reflexive sociology is dedicated to a wide range of critical interrogations, each of which reaches beyond conventional understandings to provide a language and the theoretical tools to shift thinking about familiar concepts. Putting Bourdieu's ideas to use allows us to extend our 'what' questions about people, relationships and systems into questions concerning 'how' and 'why'. The ideas can be used to interrogate education's practices and processes, clearing a space for new insight and for imagining creative change.

In his Outline of a Theory of Practice (1977) Bourdieu developed a language and a framework for explaining the ways in which processes of identification are lived by individuals in relation to

structural, historical and lived practices. For him, whilst an individual is historical and situationally produced, she is, nevertheless, always contingent and precarious. In Bourdieuian understanding, technologically savvy young people are historical and culturally specific constructions. However, even as they are concrete, material phenomena they do not establish their materiality with a fixed prediscursive essence. They are embedded within forms of social organisation and social practices which are continually changing, yet which, at the present time, constitute them as thinking, feeling and acting subjects. Within the classroom, just as in everyday life, students are caught up in a *dynamic* relationship with the subject positions established for them.

To capture his more nuanced understanding of an ongoing changing relationship between the individual and that within which she is situated, Bourdieu offers a number of key concepts. In this paper the terms habitus, field, symbolic capital and normativity are useful for coming to terms with the ways in which processes of identification are lived by individuals in relation to structural, historical and lived processes. Habitus refers to embodied and reasonably durable dispositions that are constituted through history, processes and structures. These constitutions operate through different fields, which Bourdieu (1990) explains, are "historically constituted areas of activity with their specific institutions and their own laws of functioning" (p. 87). For example, the school and family life are both fields that produce effects on young people. Both fields play a central role in creating normative discourses about ways of thinking, being and acting.

Processes of normativity influence and affect the choices we all make. Without often knowing it, young people, like all of us, more often than not make sure that what they do, think and say is in line with what is expected of them in the fields of everyday life and school life. Normativity opens up membership to social entities that have a sense of cohesion about them. If normativity influences the way young people carry out everyday and school tasks, it also affects the way they see themselves and others, working through networks of relationships. Typically, they tend to ensure that what they do, think and say never strays too far from the realm of the sanctioned and that it is never too close to the unacceptable.

Methods

Data collection

The data used in this paper are drawn from a larger study (Andrews, Bell, Butler, Tawhai, & Walshaw, 2012) that set out to develop an understanding of how young people think of themselves in terms of national identity. Specifically, the project explored what national identity looks like in New Zealand, how it is fostered by families, schools and technological communications and how it is lived by young people in everyday life. In the larger study, once ethical approval was granted, an invitation was sent to all secondary schools throughout New Zealand with Year 12 enrolments to participate in an online questionnaire during September 2011. Schools took responsibility for the management and timing of the questionnaire completion and, perhaps predictably, most students completed the questionnaire in class time. In all, the questionnaire was completed by 787 students from 56 schools (secondary Years 9–13, secondary Years 7–13 and composite (Years 1–13) across the decile range. Developed with a predominance of Likert-scale questions, the survey also included a small number of additional open-ended questions to allow students to expand on their responses.

ⁱ A school's decile indicates the extent to which the school draws its students from low socio-economic communities. Decile 1 schools are the 10% of schools with the highest proportion of students from low socio-economic communities, whereas decile 10 schools are the 10% of schools with the lowest proportion of these students.

To sharpen the discussion the study also planned for a series of individual interviews. Students who participated in the survey were invited, at the time of the survey, to participate in an individual interview at a later date, and to provide an email contact. Students who had originally volunteered were sent an email re-inviting them to participate and, if accepting of the invitation, to provide a phone contact. Of these, the first twenty students who were willing to participate when re-approached in 2012, one year after the survey was completed, were selected for interview. The cohort of students that emerged varied according to school decile and geographical location. Interviews were conducted by telephone and were recorded. Excerpts from the interviews of two of these students are reported here, not because their responses were necessarily representative, but because they were deemed contrasting and insightful.

Data analysis

The larger study provided a broad-brush look at New Zealand Year 12 students' access to and use of digital technologies. Analytical tools available within the design of SurveyMonkey, which hosted the online survey, provided a quantitative analysis of the data. In particular, a record of the numbers and percentages of students who had access to various technologies and to what purposes these technologies were put by the students was established. The categories of gender, ethnicity and geographical location, in relation to technology use, were also explored. The analysis offered a general understanding of how resources from the technological macroworld are mobilised by young people in the microworld of their everyday and school life. The questionnaire highlighted similarities and differences in the ways in which some young people in this study understand and make use of digital technologies at school and within the field of everyday experience. In accordance with ethical responsibilities to the students, pseudonyms have been used for student names.

The students' interviews enabled a particular and localised exploration of technology access and use. The method used to analyse the interview data systematically examines spoken text as a ways of understanding habitus formation in two sites. This method begins in Bourdieu's theory of structure, history and lived processes and takes seriously the interplay between social structures and self-formation. What is of particular interest in this study is how versions of the social and natural worlds of technology use create different material effects with regard to the habitus of senior school students. The analysis is grounded in words generated through the interview responses with an intent to make visible how values, dispositions and ways of being might influence a student's technological experience. It is also intended to provide a view of how everyday life and the school function in sync or otherwise as part of the technology of normalisation.

Findings: Students' technology use in everyday and school life

The case of alignment between home and school

From the findings of the questionnaire, it became clear that technological innovations are part and parcel of young people's everyday life. Technologies shape their everyday experiences. Almost all of the Year 12 students who completed the survey technology questions had access to a computer at home (92.2%) and most of these students had broadband Internet access (82.1%). Rebecca, from a decile 7 school in a small town in the South Island of New Zealand, explained the extent of involvement with digital technology within her family life:

We use the computer, of course, because we're on it almost every night. Mum's got a laptop ... Dad's got a laptop, that is his. The kids [Rebecca's brothers and sisters] have a laptop [but] they're both quite young so they don't use it. They use the laptop

that I use, which is Dad's old one. So, we use about three computers a night.... They're all laptops....

Mine is used for study and checking my emails and my bank and Facebook. Mum uses hers every night. She will be playing, doing all the bills, and all the Mum jobs probably. The kids use theirs every night too, most days of the week, and then Dad probably uses his about the same as me, twice or three times a week, for emails and the bank and stuff. And the kids use it for games.

Almost all students (93.3%; n=734) in the survey owned a cell phone. Students used their cell phone or a computer to keep in touch with friends based locally or within other parts of New Zealand. Friends based overseas were in communication via computer or cell phone with 63.3% of the students. Rebecca explained that in her family, "we've all got cell phones."

[Mine] is an Android Touch. I use it quite a lot because I have a few jobs. So I'm always getting texts. I use it quite often, not just for social but for other things as well.

The findings reveal that if young people are not tapping out Twitter and Facebook social media messages, dancing their fingers along keyboards, we can expect them to be plugged into mobile phones and connecting in cyberspace to distant as well as close friends. Two thirds (66.2%) of the students made daily contact with their friends through text messaging and slightly over half (51.7%) made use of social networking sites such as Facebook to keep in touch with friends daily. Text messaging, social networking sites and face-to-face conservations were the preferred means for daily interactions with friends.

A small number made cell phone calls (13.9%) to communicate with friends daily and an even smaller number (9.3%) used a land line. Daily email communication was used by a tenth of the students and a few students (6%) used Skype or other video chat media to keep in touch on a daily basis. When the frequencies with which students communicated with friends daily are compared with the frequencies on a less regular basis, the findings show that students communicated with friends using a landline (27.7%), cell phones (21.6%), emails (20.1%), Skype, and letters and cards (10.8%) more often a few times of month than they had on a daily basis.

Sketching out her daily use of digital technology use from the time she wakes up on a typical day, Rebecca pointed out:

I use my phone for my alarm. I go to school and I use my cell phone in my first class because well, you know it's a small class, it's only 15 minutes. So I use that for texting my friends—seeing who's at school. I'll get text messages from friends telling me to tell the teachers that they're not going to be there or something. And then I put that away and I go to my first class and it will depend if we're on computers or not. Sometimes we'll be on computers so we'll go over and do research on computers. And then we do that during the second period but mainly we're not on computers that much, and then at interval I'll go and, I'll go on Facebook on my phone, at interval, because it's not blocked on my smartphone. And so will all my friends and we'll sit around and talk. And then the next two classes, we might be on computers depending on what class we've got. Then we've got lunch where I'm back on Facebook and back sitting with my friends. And then I have my last class and most likely not on computers, last class, because all the junior classes get put on computers. Then I come home and, it depends. I might be at work, at that time of night I use the work computer because it's a till. But if it's not I could be at home and I'll be on my phone (laughs) again, or I'll be using the computer to study for homework, or I'll be watching TV.... I do have a bit of an addiction with downloading music [on my phone] ... But I try not to. I don't download anything on the computer.

Girls (69%), more often than boys (31%) in the survey, tended to use face-to-face conversations daily to communicate with friends. They also used text messaging (72%) and social networking sites (69.1%) more than boys (28%; 30.9%) to keep in touch with friends. A high percentage of students who were surveyed kept in touch with family members, whether the family members happened to be based locally (82.3%), in other parts of New Zealand (73%) or overseas (63.2%). When communicating with family members, girls opted for landline conversations and text messaging more often than boys did. However, all students texted family members (37.6%) on a daily basis much less frequently than they texted their friends (66.2%).

The students in the survey were more than passive consumers of digital technologies; they were directly implicated in, and actively involved, in habitus construction through technology during everyday life. Simultaneously constructed by and constructing identities, these young people, invariably, were engaged in complex negotiations with texts, technologies and cultural practices. More often than not, they were *multi-synching*, actively engaged in multiple domain sites. There were a few concerns expressed, however, about the effect of their close involvement with digital media. As Rebecca pointed out:

I've got a really bad memory because ... I've been using my phone so much and I'm just relying on my phone and the computers to remember everything for me.... [We] don't use our brain as much anymore because we've got all these computers and ... technological things doing it for us.

In some schools students' heavy media multitasking in everyday life coincided with practices at the pedagogical level. For example, students' school technological experiences might make use of interactive whiteboards, computers and hand-held calculators and, within mathematics classrooms, might tap into educational media such as mathematical games, computer algebra systems (CAS) and dynamic geometry software. Rebecca explained that, in her school,

everything is on the computer, there's no bookwork. It's computer everything. I have a teacher who uses her mobile phone a lot and she gets us to sit in class and hook up to the wi-fi and do our research and stuff on our phones if we can. She's always telling us to do these phone apps and stuff with her class. So we use the computers and laptops and stuff a lot. We've got quite a lot of kids who sit at the back on their phones and stuff, she's trying to interpret it, so, she's not trying to take it away from us but she's trying to direct us onto a different path. Most of my classes are really technology-featured. Like, I've only got five classes, of course, and Economics: the teacher uses the projector, Social Studies: we either use computers or the projector, Psychology: we use computer and projector, English: we use the computers and Business Studies: we use computers. They use them a lot.

The case of domination and reproduction in school

However, many teachers, as gleaned from the students in this study, park the advantages of technology behind the closed door. For many schools, we might assume, the cost of educational software is prohibitive. For others, we might also assume, it is the demand of a changed pedagogical approach that is prohibitive. The visual aspects of the digital medium and the speed of feedback require a pedagogical stance that acknowledges the transformative potential of digital media in the tool/student relationship. It demands a new sensitivity and responsiveness to students' learning made available through digital media. Matthew explained that at his decile 10 school in a major city within the North Island of New Zealand

we ... have a data projector in every classroom. So often we'll have a PowerPoint to accompany the teaching and we also have lots of computer rooms that we can go to,

maybe once every four weeks I think with each class to do research.... Photography is primarily digital. So there's a lot of technology, quite specified technologies in that.

However, in his other classes, it was "mostly handbook stuff and PowerPoints.... So it tends to be a show and tell rather than an interactive use of that technology." He noted that it "feel[s] like it is a bit disjointed—the experience I have at home with technology and the role it plays at school". At home his three-member family consisting of mother, brother and himself all used personal computers, tablets and smartphones. He was, in his words, "lucky enough to have a family that can afford an iPad, even if it is between the three of us". Matthew used digital technology occasionally for playing games on the console, downloading music, and surfing the net. He also "check[ed] out the news and [his] emails quite a bit on [his] smartphone" but "not a huge amount of texting". He had shifted the way he keeps in touch with people, explaining:

I used to have a ridiculous amount of friends, like 700 people who, many of whom I'd never met and in real life; they just added me on Facebook. I just made a decision that if I was going to use that technology I would use it on my terms ... I prefer to have, you know, 200 friends, I really like personal, newsy and, I use it more to keep up with contact details like cell phone numbers and things.

All these kinds of technology-based practices in Matthew's everyday life stood in marked contrast to the practices and provision in his school. Within his school, the neglect of ICT in some classes or its use as a mere support for more traditional modes of learning, in his view, lent coherence to an understanding of a vastly differently technological environment. "There's an old staff group at [his school] who perhaps aren't as savvy with technology. That might be part of their reluctance" to embrace the opportunities. He considered "the culture within the school" to be

frustrating because this is, you know, one of the biggest high schools in [the region] ... and if any of the schools in the country, we should surely be at the forefront of technology and there are a number of schools that I understand, that are already actively encouraging devices to be brought to school ... It's always, like you know, there's not enough computers to go around at school as well.

Discussion

Students learn what is defined as normal technological use and practice through their relation to the habitus of others within the social field encompassing family and friends. That is to say, those relationships offer students access to normative discourses about technology use. They contribute to the development of an individual student's habitus. As Nolan and Walshaw (2012) argue, "everyday decisions made in a social context (the field) shape ... and are shaped by, one's habitus" (p. 348), offering ways of thinking and acting. They offer, in Bourdieu's (1977) words, "a way of being, a habitual state (especially of the body), and, in particular, a predisposition, tendency, propensity, or inclination" (p. 214) towards some practices rather than others in relation to technology use.

Without students' full awareness, decisions naturalised and made inevitable over time by the family and significant others were fundamental to the way they used technology within the field of everyday life. Most of the students in the study learned that access to and use of a range of digital technologies for study, leisure, friendship and keeping in contact with close and distant others was not only acceptable but also desirable. Given that their close friends and most of their close (adult) family members were also 'like-minded', the students came to view their habitus within the field as 'natural'. Their habitus is, in Bourdieu's understanding, 'embodied history'. As a consequence, the students' actions with, and thinking about, technology use within everyday life perpetuated the social practices of the field.

As the students moved cyclically from home to school they entered a different network of political and social practices. Both the field of everyday life and the field of school technological experience "implicitly furnish[ed] a model of the 'right' mode of intellectual activity" (Bourdieu, 1971, p. 201). Like the field of everyday life, the school, as a field, independently promoted discourses that contributed to the way students acted and were positioned in relation to technology use. Practices relating to technology use within the classroom that were understood by the students as positive and appropriate tended to match their own use and understanding (created in everyday life) of the potential of digital technology. In their alignment with the student's own understanding of technological use, these particular classroom practices served to legitimate the student's attitudes towards and practices with technology, creating a greater sense of agency within the student.

In assessing pedagogical use of technology, students made distinctions based on the school's connectivity access as well as the ways in which physical space and time were organised for computer use, data projectors and hand-held technological devices. Importantly, the students also formed their assessments from the particular pedagogical approaches experienced. For Rebecca and Matthew, the approach that sat comfortably with their personal view of teaching honoured, first and foremost, the technological knowledge and experiences that students brought to the classroom. For them, the 'right' pedagogy supported inquiry approaches to learning, encouraged interactivity with the media and nurtured both the development of independent learners and the interaction with other learners. In Rebecca's case, the habitus formed from these kinds of pedagogical approaches coincided with the habitus formed from within everyday life with family and friends.

Rebecca's school, in its alignment with the technological provision and use made possible in everyday life, allowed her to feel "at home in the world because the world is also in [her], in the form of the habitus" (Bourdieu, 2000, p. 43). She read technological usage through the terms made available by both fields. In ways that we cannot adequately imagine, the school and the home constituted Rebecca as a proficient technology user. In creating knowledge and operating modes for Rebecca, both the family and the school worked as powerful cultural institutions, positioning, defining, enabling and regulating her habitus. In Bourdieuian understanding, by validating particular technological practices and experiences, the school as well as her everyday life experiences provided her with symbolic capital and hence with a self-assurance that might lead to a positive future-focus in relation to her technology use. As Bourdieu (1977) explains:

The habitus entertains with the social world which has produced it a real ontological complicity, the source of cognition without consciousness, of an intentionality without intention, and a practical mastery of the world's regularities which allows one to anticipate the future without even need to posit it as such. (p. 12)

Practices that were at odds with each other, in relation to technology provision and use, were keenly felt by Matthew as he moved from home to school. The provision and use of technology that he articulated operated differently across the two fields. On the one hand, the symbolic capital inherited from the family's provision and use of technology granted him "legitimacy and agency" (Davies, Edwards, Gannon, & Laws, 2007, p. 33) with digital technology within daily life. However, the school carved out its own borders, institutionalising mandates for technology provision and authorising particular pedagogical frames of reference that effectuated certain ways of doing and being for students in relation to technology use. To this end, the divisions between the fields operated not only between the fields but also within Matthew himself. By his acknowledgment, technology use at the school tended to reproduce the values and behaviours of staff members who held the most symbolic capital, and in this way, the school was immersed in specific relations of power, knowledge, dependency and commitment.

The school produced its own truths about technology use. Those truths became intelligible through their reliance on certain strategies which were accepted, sanctioned and made to function as true. In Matthew's assessment, traditions and a respect for the understandings about technology of long-

standing staff members became coordinates which constituted teaching and learning in the digital age. The field of technological experience within everyday life, on the other hand, contributed to his development as a different kind of learner. Experiences within everyday life made it possible for him to become adept at monitoring correspondence, accessing and synthesizing information, analysing quickly and incisively, and navigating social situations. At school, the symbolic capital that had accrued within daily life experiences tended to be minimised.

The relational nature of Bourdieu's ontology allows us to suggest that Matthew's capacity to think and act with technology at school is strategically fashioned. It is linked to networks of power, targeting thinking, speech and actions, with a view towards producing particular students. Differing discourses produced within Matthew's everyday life and the school released a tension that tended to favour an internally persuasive discourse shaped from his knowledge and everyday use of digital technologies. Invested in the new order, however, Matthew has the potential to name and negotiate his own space in the school. As Bourdieu and Wacquant (1992) might put it, for Matthew and other students:

Depending on their trajectory and on the position they occupy in the field by virtue of their endowment (volume and structure) in capital, they have a propensity to orient themselves actively either toward the preservation of the distribution of capital or toward the subversion of this distribution. (pp. 108–109)

However, any changes are likely to be small. On a wider scale, significant social change may take generations since it will always be constrained by "a lineage of loose alliances, relations of resistance and mastery, and configurations of fluid interests ... [that are] not outside the games of truth" (Blake, Smeyers, Smith, & Standish, 1998, p. 62).

Conclusion

The digital age has changed the way we go about our everyday lives. Through exploring responses to a national survey and by analysing two students' reflections of their everyday and school use of technology, it has been possible to develop an understanding of the ways in which social practice theory can help illuminate issues of domination and reproduction in education. Exploring the dynamic and complex interactions between Bourdieu's concepts of field and habitus, it has been possible to unearth the political and strategic nature of the formation of habitus. In that exploration the school and the family became concrete plot points for the constitution of habitus, even as they are constituted, in turn, by a student's habitus. In quoting from Rebecca and Matthew, the intent has been to expose the practices at work that co-constitute the two students, independently, and the field in which both are embodied. Woven through the students' stories is a sense of how technological practices within the social field of the school forms the structural context in which habitus is produced.

But students also have agency. They are not merely passive members within the structures in which they find themselves. Habitus is never fully determined by structures, nor completely determined by free will. Rather, it is constituted by a kind of interplay between both over time. Structures of thought, speech and action that shape habitus are fluid and transitory. The ways in which students relate those structures to themselves, at any one moment, will influence the ways in which their habitus is constituted and the ways in which their future habitus might be shaped. However, since students are not typically ranked high in the school hierarchy, the potential for agency when confronted with misaligned technological practices between school and everyday life is somewhat compromised.

Nevertheless, it is possible to imagine a way in which the field of the school is reconstituted. Through the agency of students and those in schools, we might consider a time and a space where digital media might be viewed as a means for making education a more transformative experience. This would be a future where technology might become a means for innovation and provide new ways of expressing and understanding the world. In a setting where worldwide connectivity was affordable and accessible

to all schools, "students could instantly access information, software for pedagogical processing, interaction with diverse learning communities, and a range of teacher facilitators" (Calder, 2011, p. 126). Within that environment, learning communities would become more interactive and equitable and "grow in far more unstructured, organic ways" (p. 127).

However, as a number of researchers (e.g., Martinez, 2010; Putnam & Borko, 2000; Thomas & Brown, 2011) have pointed out, a vision such as offered demands the emergence of alternative approaches to teaching and learning. In addition to honouring the central role that teachers play in students' learning, we might also honour the knowledge and experience of technology that students bring to their learning. Embracing technology in schools would require that teachers are provided with the time and support as well as the opportunity to develop the inclination for and confidence with technology and learn how to use it in ways that enhance and inspire students (Goodlad, Mantle-Bromley, & Goodlad, 2004; Lankshear & Knobel, 2006). What would then become possible is something more like, simultaneously, a 'construction' of student habitus, and a 'construction' of the field of technology within schools.

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