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Title

Pre-paid literacy: money, youth and mobile technologies

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Abstract

The popularity of mobile technologies among Australian teenagers presents a challenge: because most adolescents have limited financial resources, their management of costs associated with mobile technologies is increasingly important. Drawing on research into youth 'mobile literacy' practices, this paper explores the relationship between financial cost and mobile technology use. Whilst this use is understood within the general framework of 'literacy as social practice', the concept of 'financial literacy' is also used to understand student practices. Drawing on the voices of students, strategies for cost-minimisation will be explored. As mobile technologies are adopted more actively for teaching and learning – as 'm-learning' emerges – bridges need to be built between in- and out-of-school literacies. The financial cost of mobile communication plays a central role in emerging literacy practices associated with mobile technology use.

Keywords

Mobile technology, mobile literacy, financial literacy, m-learning, out-of-school literacies

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Pre-paid literacy: money, youth and mobile technologies

Introduction

We have moved beyond the book to mobile technologies that utilise the same underlying concepts - but our expectations of technology-enabled learning and its education applications are still being developed and explored. (Watson & White, 2006, 1)

Mobile technologies have rapidly emerged as an essential tool in the lives of contemporary youth, however, this has not transferred over to effective uses in educational contexts. Currently, appropriate pedagogies and educational practices around 'm-learning' (Norman & Pearce, 2007), or "mobile learning" (Goggin, 2005), are still being researched and developed. Whilst there are some teaching innovators experimenting with new ways ahead, predominantly mobile technologies and schooling remain estranged. This paper lays groundwork for considering the educational potential of mobile technologies, through an exploration of literacy practices associated with their use and the deterministic role that financial cost plays in this relationship.

After outlining the research on which this paper is based, we will then move onto an outline of the two central concepts: economic capital and financial literacy. Then, drawing on the voices of students, various strategies for controlling costs associated with mobile technology use will be examined, specifically with regard to the literacy issues involved. Lastly, the paper will suggest connections with education generally, and literacy education in particular. Some form of cost has always been associated with literacy practices, but it is only with mobile technologies that we have a situation where the cost is so concrete, immediate and personal for adolescents.

The study

This paper reports on findings emerging from research conducted into the 'mobile literacy' practices of rural Australian adolescent students. It was undertaken in a rural township over 250 kilometres from Melbourne: Riverton (a pseudonym). The township consists of around 10,000 people, with a district population of over 22,000. Riverton High, a school of around 1,000 students was the focus site for the study; appropriate as the research

is concerned with the intersection between in- and out-of-school practices around mobile technologies.

This ethnographic study investigates mobile literacy practices in the experience of a group of rural adolescents (n=13). These students (referred to by pseudonyms) were aged between 15 and 17 years during the course of the study, and were from both rural areas and the township. Traditional ethnographic data collection methods were used, including: observation, interviews, a focus group, and artefact collection. Two classes were undertaken with this same group of adolescents at the school, exploring the 'appropriate' and 'proper' use of mobile technologies. Students completed an informative piece of writing, intentionally titled: "How to use mobile technologies properly." Data was used in an iterative manner, with collected information informing interviews – the primary data source – and vice versa.

Although this research does not claim to be generalisable, what it does provide is insight into a hitherto under-examined corner of youth social practice: mobile technologies and literacy. The saturation prevalence of mobile technology amongst adolescents suggests that there will be huge variety in the ways mobile technologies are used for various purposes by various people. What this research contributes is a perspective on ways forward for educational research and practice, one that is sensitive to, and indeed, stresses, the local nature of practices associated with the adoption of these globally popular technologies.

This paper elaborates on a particularly strong factor influencing the literacy practices of young people using mobile technologies: the deterministic impact of the financial cost of using these devices. Whilst the predominant focus is on communication activities – because that's where the majority of costs are incurred – other mobile devices did influence social practice in more subtle ways, generally based on the sharing and exchange of content (circumventing certain costs). Mobile phones form the central focus, as these devices were almost universally adopted amongst this peer group, though not everyone had an iPod, PSP or PDA. Therefore, as with the majority of other research into mobile technologies, mobile phones formed a focal point, being the primary mobile device used by Riverton adolescents.

Economic capital

The concept of economic capital is drawn from the sociological theories of Pierre Bourdieu (1977; 1986). In this structure, it functions as merely one form of 'capital', however, for the purposes of this discussion, only the more conventional meaning is considered. Economic capital concerns the financial resources that an individual has access to: money or goods "...immediately and directly convertible into money." (Bourdieu, 1986, 243). From this perspective we can consider the function of financial resources as part of social practice, as part of a broad system of mercantile exchange.

The limited economic capital of adolescents is increasingly appealed to by market-forces, which positions them as a specific consumer group. Configured and targeted as a particular niche market, 'tweens' and 'teens' in particular are increasingly part of the marketplace and consumer culture (Kenway & Bullen, 2001). It is this which contributes to the taste for 'trends' and 'fashion' that Geser suggests contributes to their active adoption of

mobile phones by adolescents (2006). Mobile phones also play a dual role in teen-empowerment and mobile parenting: here teens seek to move beyond the family home and create their own identity, whilst at the same time, parents utilize the potential of mobile phones to extend their parental influence and control (Geser, 2006; Ling & Haddon, 2008). The key point is that mobile phones and other such technologies are a product of the marketplace, which exacts costs for their purchase and use. The active adoption of mobile technologies by youth places a financial burden on contemporary teens; whether or not financial burdens are purely a quality of contemporary teenagers, is a debatable matter though.

Nina Weerakkody (2007) found that mobile phone contracts placed a heavy burden on adolescents, one which they could not always cope with. That in these findings, the parents assumed some of the financial burden for their child's mobile phone use, points to the productive role that parents have come to play in their children's mobile phone adoption, even if it is with reluctance or trepidation. The difference, as will become obvious, is that the participants in this research were generally connected to pre-paid contracts, limiting their ability to get into financial debt. The connection is that the cost of mobile devices still structures the way that they are used in some respects: adolescents use lower cost features, combined with engaging in behaviours which seek to circumvent cost. This was not to say that as individuals they had not experienced financial strain associated with mobile phone use, but that the impact was often mitigated by use of features such as pre-paid contracts.

It must also be pointed out that the 'economic capital' adolescents have access to isn't always their own, but that of their social networks. In some cases youth get money from others to spend on their mobile communication. As will be discussed below, some of the students involved in this study obtained money from their parents for pre-paid phones, whilst the sharing and gifting of credit amongst peers was talked about by many respondents and also observed by the researcher.

Financial literacy

Financial literacy, like a number of other parallel or satellite concepts – computer literacy, scientific literacy, social literacy, emotional literacy, etc. – is really a way of thinking about and structuring the articulation of knowledge within specific fields of social practice. Whilst they don't refer to the same concepts as traditional 'Literacy' (with a capital 'L') – what Street labels the "autonomous model" (1984) – they provide a useful theoretical structure for thinking about communication and meaning-making practices around specific topics or experiences.

At their most base level, these different topic-based literacies have a similar structure: knowledge about a particular field, and the appropriate application of that knowledge. This is the case with financial literacy, which has, in recent years, become a focus for policy development, including by the Australian Government, ASIC and the ANZ Bank. Although this concept has been largely developed in the policy and business fields of study, its basic definition is useful in examining the effectiveness with which students are able to control their

spending. It is also clearly not a concept limited to adolescents and youth, but something to be considered across a range of groups. As defined in the National Financial Literacy Framework:

Consumer and financial literacy is the application of knowledge, understandings, skills and values in consumer and financial contexts and the related decisions that impact on self, others, the community and the environment.”

(MCEETYA, 2006,
<http://www.curriculum.edu.au/mceetya/default.asp?id=14430>)

Although the MCEETYA Framework further breaks down financial literacy into four competencies – knowledge and understanding, competence, enterprise, responsibility – this level of detail will not be examined: the intention is to keep the focus on individual behaviours at the level of everyday social practice, with the concept of financial literacy used as a guiding heuristic to suggest levels of capability in controlling spending.

The practice of financial literacy at the everyday level is somewhat similar to Street’s concept of Commercial and Maktab literacy in Iran (1984). However, whereas in Street’s case it was Maktab literacy which laid the basis for a system of commercial literacy, in this case, the financial literacy – the ability to effectively manage money with respect of mobile technologies – forms the base for mobile literacies. Put simply, if students do not have access to money, and are not able to manage their spending, their ability to use their mobile device is undermined: no credit, means no messages.

Knowledge of the implicit rules and conventions that made up the hidden structure of ‘commercial’ literacy were crucial components of that expertise and therefore of that power. (Street, 1984, 175)

With regard to the adolescents at the heart of this research and their use of mobile phones, like the villagers in Street’s research, knowledge of the hidden structures – knowledge of phone contracts or device features for instance – was a significant feature of an individual’s ability to effectively manage their own financial expenditure on mobile communication. In this case the connection between ‘literacy as social practice’ – Street’s “ideological model” – and financial literacy becomes clear: financial literacy involves social practices around communication that is tailored to the financial resources and restrictions of particular individuals.

This cross-disciplinary approach to literacy (literacy as social practice combined with financial literacy) is not so much the realm of just English or literacy teachers, but of all teachers across the curriculum. Literacy practices associated with mobile technologies do not fall cleanly into a disciplinary subject like English or SOSE, although they do have relevance. Official recognition of the communicative value of SMS in the English discipline has already been conferred though by the Victorian Curriculum and Assessment Authority (VCAA); for example, when they put an SMS text on the 2005 VCE English exam (Gibson, 2008). However, across the curriculum, literacy practices associated with mobile devices – financial issues included – have wide relevance. Although they don’t fit neatly within disciplinary

studies, they do suggest issues and potentials under the Victorian Essential Learning Standards, particularly in the “Interdisciplinary Learning Strand” (VELS, <http://vels.vcaa.vic.edu.au/essential/index.html#standards>). Here the potential of everyday practices and literacies associated with these emerging technologies offer relevance and potential across associated four Domains: Communication; Design, Creativity and Technology; ICT; and Thinking Processes. However, whilst adolescents use mobile technologies to communicate, share information and learn informally in their use beyond the school grounds, the potential of these practices are only beginning to be examined for educational potential.

The significance of the relationship between financial literacy and mobile technology use for youth is that, unlike most other Information and Communication Technologies (ICT), these devices confer a very personal economic cost on these youth. Whereas the cost of computers, internet, digital or pay television and the like, are often bourn by others – family, institutions (schools), businesses – the cost of mobile technologies is increasingly bourn by the youth themselves. This can result in financial problems, as Nina Weerakkody illustrates (2007), but also allows for youth to exercise agency and ownership of their own financial decisions, whether successful or not. All students in this study had their own mobile phone, which they very much thought of as their own, and took responsibility for recharging (even if it was through asking a parent or friend for some money). They utilised a range of strategies to minimise their financial expenditure on mobile communication and other uses, including: taking on part-time jobs, using pre-paid contracts, preferring ‘txtng’, using free features (bluetooth, pranking, free content), sharing technologies and using social networks to circumvent cost. That these practices can be understood in terms of financial literacy is significant, because this concerns the extent to which adolescents are successfully able to control their mobile device costs. Knowledge of phone contracts (and other associated costs) and the appropriate application of that knowledge varies at the individual level, demonstrated by the wide variety of experiences Riverton students had in respect to mobile phones use.

Establishment costs

At the very basic level, for an adolescent to participate in mobile communication practices, they need to have a mobile phone. The same goes if they want to listen to music on the move, conduct computing, play games or watch videos; they need the appropriate devices. This of course requires spending financial resources in the first instance. By the end of the data collection phase in 2008, all participants owned their own phone, many of which they had paid for themselves. Peter for instance, claimed that he used to regularly buy a new phone (Interview 3). The majority of students though, were quite pragmatic in their attitude towards mobile phone purchases, purchasing them second-hand (Erin) or getting them as family hand-me-downs (Josh, Tom). Amongst all the 15-16 year old students I met at Riverton during this data collection, only two, had never owned a mobile phone. As they had limited access to economic capital, the general consensus among the research participants was that

it was necessary to have a phone, though "...no one cares what kind of phone you have." (Bailey, Interview 1, 15).

The importance of devices not just for adolescents, but increasingly in the everyday consciousness of all Australians was clearly illustrated by the number of technological gifts that were given, just during the course of this study. As this research straddled the Christmas holiday season, quite a number of project participants reported back to their final interview with news that they had received mobile technologies as gifts: Erin received a new phone and iPod, Peter received a laptop, Bailey received a new phone, laptop and portable hard-drive, Sarah received an iPod and was given a phone. Mobile technologies have become, for contemporary adolescents a part of their gift-giving landscape, particularly with regard to adults, or those with access to more economic capital. The predominance of gift-giving was from adults (generally parents) to children, seeming to support research demonstrating parental involvement in youth mobile technology purchasing decisions (Ling, 2001; Geser, 2006; Ling & Haddon, 2008; ACMA 2007). I even heard anecdotally of a student getting their parents to buy them an iPod, as they were doing a VCE subject for which the teacher had produced podcasts: learning then, and not just security, could act as a possible route to getting certain devices as gifts.

Another way in which students were able to circumvent and minimise costs associated with the initial purchase of mobile technologies, was by purchasing them second hand. In this way, social networks became important, as individuals were made aware of purchasing or borrowing opportunities amongst their friends and family. Erin, for instance purchased her first phone from her "friend's aunt" for fifty dollars (Interview 1). Josh had his father's phone passed down to him (Interview 2). Tom swapped and shared phones and an iPod with his siblings (Interview 3). Sarah was even given a phone by a friend for free – who had "found it in a taxi" – after she had been without one for a number of months (Interview 3). Money was not always exchanged either, and peers and acquaintances engaged in the sharing, swapping and lending of devices and components. Rebecca engaged in an extended period during which she swapped phones with a friend, so that they could try each other's (Interview 2). Josh swapped coloured components of his phone with friends and acquaintances who had compatible model phones: a Motorola V-series (Interview 1). It was also a common feature around the school grounds, during scheduled recess and lunch breaks, to see students sharing devices amongst groups. In this way, it was not necessary for all students to have devices, but that someone they knew did. Sharing iPods, showing texts on phones to others, were seen frequently by the researcher around the schoolyard (Observation Notes). Through their increasing importance as a tool for social organization, entertainment and information sharing – and with the *potential* for this to increase – the cost of mobile technologies is mitigated by their shared use amongst peers.

On-going cost management

The most significant economic factor with regard to mobile technology use is the on-going costs. Mobile technologies do not just cost money once, but on a continuous basis. It is this continuing financial burden that causes such problems as those Weerakkody found (2007). Typically such contracts include the price of the phone, with a minimum or zero up-front cost. Debt derived from contracts is obviously significantly more difficult on a pre-paid plan (which the majority of Riverton students were on), but even with the cost of buying a phone handset outright (even second-hand), the simple fact remains: mobile phones continue to cost money. Other mobile devices can also impose an on-going financial cost, but it is the mobile phone that remains the primary device for financial expenditure.

The majority of students who participated in this research paid for their own on-going mobile phone costs. Many of them, for instance, had part-time jobs – Bailey, Erin, Josh, Owen, Brad, Peter, Jennifer, Beth – which they used to exercise their own financial independence, including paying for their own phones. However, others obtained money from family members and friends (Tom), or spent their own pocket-money on phone credit (Rebecca). Controlling on-going costs was not always a successful endeavour either, with Sarah for instance explaining that her parents took her phone off her because she was spending too much time and money on it. Subsequently, Rebecca found that she no longer wanted a mobile phone, avoiding all associated costs and providing an interesting counterpoint to the majority experience in Riverton – until she was given a second-hand-phone by one of her friends (Interview 3).

The importance of 'financial literacy' with regard to controlling spending associated with mobile technology use, was most clearly demonstrated in respect to these adolescents knowledge of phone contracts, and understanding which was the best option for them. The main way in which students managed ongoing costs was by connecting with the Telstra network on the 1 cent-text pre-paid plan. This put the cost of intra-network SMS at 1-cent per message. Still, this did not always guarantee savings, as Owen says with regard to going through around five dollars – or 500 texts – a week: "...it disappears pretty quick." (Owen, Interview 3, 7). It seems cheap, so they text at lot; short, sharp messages, and this adds up. It was not uncommon for student to go through over 10 dollars – 1,000 texts – in a week (though it cannot be confirmed that this was all spent on SMS).

The decision to connect with Telstra was influenced by a combination of infrastructure, financial and social factors. Telstra has the longest history in the area and still has the most extensive and reliable network, especially beyond the Riverton's urban sprawl. With a large population of students living outside the main town, Telstra was the only network of choice, resulting in a form of enforced membership: if they wanted a mobile phone, there was only one provider. The desire for private peer-to-peer communication – "...a part of the emancipation process in the teen's development of a self-identity" (Ling & Haddon, 2008, 139) – further strengthened adherence to Telstra membership, when it was realised that 1-cent text only applied if the recipient was also a Telstra member. What has resulted is that if you're not connected with Telstra, then as Tom puts it: "Say if I'm on *Optus* and my friend's on

Telstra, he won't text me. 'Cause it costs him twenty five cents." (Interview 2, p.6). Communication by Riverton's adolescents was therefore heavily structured by economic concerns, with a degree of social exclusion resulting from being too expensive to contact.

In order to avoid excessive costs with regard to SMS, the importance was to keep to the '1-cent text' rule. As such, texting people on other networks, who were therefore more expensive to text, was minimised or avoided. Strategies included writing longer messages, claiming they were running out of credit or avoiding contact, even saying that they didn't receive the message. However, due to the fact that it was not always possible to know which network a recipient was with (particularly when you've only just met them) accidents occurred, as Peter explained:

I used to text this one chick and I didn't know that she was...wasn't 1 cent, and I had like 20 bucks and I texted her for ages, and I looked at me phone and there was like 5 buck left and I was like: "Oh shit!" (Interview 3, p.7)

Whilst the vast majority of students at Riverton were connected to Telstra's pre-paid 1-cent text plan, the exceptions to this rule tell us something about the importance of not just understanding the details of their phone contract, but applying this to a reflective understanding of their own behaviours with regard to these technologies. Erin presents an interesting case-study in this respect. Unlike the majority of her peers, she was connected to Telstra's *Freedom* plan. This enabled her to nominate five contacts, whom she was then able to contact via phone (through a range of mediums) at no cost. The cost of this free feature was that she would then pay more to contact additional numbers, a feature of which she was aware, and claimed she generally acted in accordance with (Interview 3). Anecdotally, some students took their contractual knowledge to a new extreme of social practice, a technique Josh was contemplating at one stage during the study:

But a few of my mates have got two SIMs, just so they have 1-cent and then on the other one they've got 'Freedom'; that's 5 different people you can nominate to have free calls all the time. So when they need to call someone, chuck that one in... (Interview 1, p.3)

Another student, Bailey, also used two different contracts for different purposes; in fact, she had two phones. Her own was connected to the pre-paid 1-cent text plan, which she used, unsurprisingly for SMS, and paid for herself. The other was connected to a 'contract', which was in her parents' name and paid for by them: she used this for phone calls, but only to her parents (Interview 3).

Unlike the children in Nina Weerakkody's study (2007), the adolescents of Riverton do not seem to get into too much financial debt with their use of mobile phones, related to the fact that all of them were on pre-paid contracts, and once the credit ran out, they could no longer make outgoing messages or calls. Despite this restriction, or perhaps because of it, students found ways to circumvent this. One strategy involves asking friends for credit. A feature of the Telstra network is that students are able to transfer credit between their mobile phone accounts, effectively, lending money to each other. That this is tied up with friendship

networks is a clear issue – “I only send credit to people I know who will send me some back if I need it” (Tom, Interview 2, p.11) – and distaste was expressed for a fellow student who was always frequently asking others for credit without reciprocating (Tom, Interview 3; Peter, Interview 3). It seems that the negotiation of micro-loans amongst fellow students has become part of the landscape for contemporary adolescents: very adult concepts are increasingly playing a role in their friendships.

Clearly, among Riverton’s students, the application of knowledge of financial structures, in the form of mobile phone plan knowledge, was important, and they applied this knowledge in a range of ways. The particular financial structure of their experience has resulted in the emergence of the primacy of written text in the form of SMS. The time for the persecution of SMS – or ‘txtng’ (Crystal, 2008) – has passed, and instead it falls to educators and learners alike, to investigate the potential of this genre of writing (Carrington, 2005). Whilst it does contain truncated language, we can take a perspective that seeks to understand this emerging language form and its conventions. The distinctive features of SMS have variously been labelled and described: “squeeze-text” (Carrington, 2004); “acronymy”, “emoticonomy” and “technobabble” (Bodomo & Lee, 2002); “pictograms and logograms”, “initialisms”, omissions, “non-standard spelling” and “shortenings” (Crystal, 2008). But as David Crystal points out: “The highly distinctive text messages which attract media publicity are not typical of the genre as a whole.” (2008, 23). Even in SMS, Standard English prevails. In fact, for students using predictive texting, it is actually more difficult and time consuming to write with SMS-language (Bailey, Interview 1), and as Owen revealed when he conducted a quick class survey: half the students wrote SMS messages manually, and half used the predictive text, or dictionary feature (Owen, Interview 1). Josh also indicated, and stressed, that he used punctuation for extra-linguistic meaning, extending their meaning-making potential: a full-stop meant “this conversation is over” or “Go away”, depending on the context and length of the message. (Interview 2, p.5). The continuing prevalence of standard written communication in SMS is important in conserving money in a concrete way: actually understanding the message. As Owen indicated in his first interview, there was no point texting if the message could not be understood – it would be a waste of money.

Fare evasion

Both of the previous sections have discussed ways in which students *manage* the costs associated with their mobile technologies. A simple strategy, by which these teens *managed* costs, was by evading them. Whilst it was not always possible to avoid costs, where they could, students made use of free features and content. There was a high degree of distrust demonstrated towards pricing structures around digital content, from Bailey exclaiming that Telstra made a huge profit margin on SMS (Interview 1), to a pervasive distrust of ‘SMS-clubs’.

The new marketing venture of ‘SMS-clubs are now advertised in many places which adolescents audiences, from magazines to TV to the internet, but participants in this project expressed nothing but disdain for them. These clubs advertise for people to download a

variety of digital content to their phones: from ringtones, to wallpapers, to games, to tricks, to pornography. There was a general consensus – born of shared anecdotal evidence – that these clubs were a “scam” (Brad, Interview 3, p.5), as “...it just chews up your credit... who would want to pay 5 dollars for a ring tone and then 5 dollars every time it rings...!” (Bailey, Interview 2, p.7). The majority of Riverton’s adolescents seemed to gain this knowledge from anecdotal evidence from friends, or through their own costly experience (Rebecca and Bailey for instance). Only one student (Jennifer) volunteered that she actually read the fine print about the cost of such clubs (Interview 3). Whilst SMS-clubs were an obvious place where students knew they were going to be spending money – after all, they were opting-in to buy content– other aspects of mobile phone use required more nuanced evasive measures.

Very few students accessed the internet or web content via their phone. This was highlighted during a class activity in the initial stages of the research, where students indicated that cost was a negative attribute associated with the ‘mobile internet’. During his interviews however, Brad indicated that he regularly accessed content for free. Initially, during the 2007 interviews, he was connected to the CDMA network, and whether via a network glitch or terms of his contract he was unaware of, found that he could download and use games on his phone for free, via a program called ‘Loop’ (Interviews 1 & 2). He used this until his phone both malfunctioned and he had to change to the Next-G Network (including a new phone), when the CDMA network was closed down in April 2008. However, with his new phone he was permitted to access free content via Telstra’s BigPond homepage. He indicated that he had been careful to keep track of his pre-paid account online to ensure he was not being charged, and so far, so good (Interview 3). He also noted that on approved content it said “Free to Browse” at the top of the screen. Cost avoidance here once again influenced the types of texts and content that the financially restricted adolescent would access.

Cost avoidance was also an issue where other mobile technologies (including media players such as iPods, mp3 players and PSPs) were linked with financial literacy practices. In such cases, students were primarily involved in accessing static digital content, in the form of files, rather than accessing streaming or live content via a phone network (such as the Next-G’s mobile television). Students talked about trading songs, pictures and video files with friends, avoiding having to pay for such digital texts through sources such as iTunes. When asked about how they accessed content for their iPods and media players (if they had them), responses ranged from burning CDs (Jennifer, Rebecca), to using P2P (person-to-person) file sharing software, such as Limewire and torrents (Owen, Brad). Content was also shared using school computers, where students brought content from home on portable hard drives and USB sticks. They also made use of bluetooth technology to wirelessly transfer content that was stored on phones, as this was cost free.

Students also made use of a practice called ‘pranking’, where one calls a number, lets it ring, but hangs up before the recipient has time to answer it. In this way, since the call is not connected, no cost is incurred, but a record of the caller remains on the recipient’s phone as a ‘missed call’. This practice had both an entertainment value – getting people in trouble in class (Tom) – and a more prevalent pragmatic purpose. A number of students spoke about

pranking their parents when they had finished work, school, sport or another pre-arranged activity, and needed to be picked up, or if they just wanted the recipient to call them back (Josh, Bailey, Peter, Erin, Owen). In this way, the financial cost of communication is shifted to parents, or in the eyes of Riverton's adolescents, those who could afford to make a phone call.

Finally, the most low-tech solution was observed by the researcher every single day at Riverton High, and this was students sharing content in person by sharing devices. It was a common site to see students sharing iPods (each having an ear-bud in), as well as passing around and showing phones to each other: the simple act of sharing content with friends in person, of watching videos and listening to music together was a free form of entertainment that has become a part of adolescent social practice (Observation notes). Essentially, there was a marketplace of exchange in digital files amongst peers, which did not always aim to avoid cost, but did so just the same.

Pre-paid literacy and English teachers

So what does all this have to do with English teachers and literacy education at the classroom level? At the very least, teachers must deal with the emergence of a new genre of written text in the form of SMS or "txtng" (Crystal, 2008). This occurs at the level of both the student – through their use and experience of SMS – and at the institutional level – in the form of official recognition of SMS in formal documentation, such as exams (Gibson, 2008; Macnamara, 2005):

One of the best-known examples in Australia was the uproar in response to a question in the Victorian Certificate of Education English paper in 2005, asking candidates to compare the SMS message 'how r u pls 4giv me I luv u xoxoxo O:-)' with a famous Keats poem, 'You fear, sometimes, I do not love you so much as you wish' (Macnamara, 2005).

(Gibson, 2008, 76)

The fact that SMS emerged as a distinctive genre, with its own grammatical, lexical, stylistic and visual features, partly as a result of cost pressures, is an interesting point of note as we consider the specific practices of individual students. The case of Riverton demonstrates that individual students can vary in their attitude towards the use of SMS-language and mobile phone use. Some were quite adamant that they used 'proper English', ascribing this to either personal preference (Josh) or to the use of 'predictive texting' (Bailey). Other students indicated that they were quite happy to use SMS language and text their friends lots, due to the low cost of this communication medium, with the majority of students pointing to "1-cent txt" as their reason for using it so much. One student even acknowledged that the situation in Riverton was culturally specific to their community after a trip overseas:

Oh...more people call people in *Hong Kong*. I noticed everyone was on their phones and like...I saw kids my age on their phones...looked

like...they looked like they like to call people instead of text message them. While here, we've...I don't know how it happened...we've all managed to go on Telstra, 1 cent text plan, so probably 90 percent of kids in Riverton are on 1 cent text. So, we all message each other, 'cause 1 cent's cheaper....(Owen, Interview 2, p.5)

Cost in the case of these adolescents in part structures their avoidance of other, digitally-rich forms of communication, such as video-phone, audio-visual content, the internet and even phone calls. The high expense of these communications mediums was often cited by many students – over and over again – as playing a restrictive role, limiting their use. The fact that these adolescents had limited access to economic capital, and that primarily they paid for their pre-paid contracts themselves (with parents and peers acting as a secondary form of economic capital), means that for many contemporary adolescents, financial concerns play a very real part in the texts that they personally create and consume via mobile devices.

The texts around mobile technologies that we use at the classroom level, and the interpretive framework we bring to them, needs to be sensitive to the experience of students. Financial concerns are increasingly a factor in the everyday lives of contemporary adolescents who are targets of market forces (Kenway & Bullen, 2001). As such, communication and literacy practices for contemporary youth cannot always be disassociated from financial issues and cost pressures. Indeed, the distinctive features of SMS-language have their origin in to the need for brevity in sending a single SMS – it all has to fit in 160 characters, or you have to pay to send a second message (Carrington, 2004). This very economic basis of mobile communication actually opens up critical literacy questions of power, privilege and positioning that can, and should, be explored with adolescents.

Further, when thinking about the emerging field of m-learning and the impact that this may have on classroom pedagogies and communicative possibilities (Watson & White, 2006), the potential is not limited to the English classroom. The VELS framework provides a structure for cross-disciplinary literacies to be addressed in the Interdisciplinary Learning Strand (<http://vels.vcaa.vic.edu.au/essential/index.html#standards>). This perspective puts literacy practices associated with mobile technologies – including the influence of economic factors – into the domain of all teachers.

Lastly, the financial constraints of mobile technology raises ethical issues around their use in schools and for learning. At the most basic level of pragmatism: who should pay for the costs involved when these devices are used for schooling? This problem is of course not limited to English or Literacy teachers, but is a concern for schools in general: administration, discipline. Mobiles already present issues of debate within schools, centred around the status symbol of such devices and issues of theft, cyberbullying and discipline. Who should pay for the use of mobile technologies, which are rapidly evolving and improving in their features and capabilities, when learning is the aim? This vexed question cannot be answered here, but requires far more research.

For these rural Victorians in particular, nothing has changed since Watson and White's 2006 observation that;

In Australia, despite the online content generated, owned or sponsored by Governments and their various education departments and agencies, together with the federated online resource developments of The Learning Federation, limited national networks and fragmented local access continue to place useful information beyond the reach of many potential users, both in the community and in some schools. (9)

The clear implication for literacy on the ground, is that if mobile technologies are to be used for m-learning, thought needs to be put into the financial implication for students. They have turned to SMS in large numbers, not simply because it's seen as cool, but because it has become a new way to communicate, to form identities with peer groups and develop independence. But this process now comes with a very real financial cost, which contemporary adolescents are developing strategies to navigate.

Conclusion

Many of the qualities specific to mobile technology usage practices that Riverton adolescents engage in, can be traced back to the economic basis of this communicative market. Their restricted economic capital has resulted in a preference for a particular medium of communication: namely SMS, yet the role of cost in fostering the commonly understood teen dominance of txtng is yet to be fully researched and understood. Due to the perceived minute value of these messages – at 1 cent per text – students actually don't send less messages, but rather, displayed a flippancy with regard to keeping track of their SMS-expenditure. Most students claimed to send hundreds of text messages a week. The low cost also plays a part in determining the complexity and features of the written messages. While the distinctive characteristics of 'SMS-language' were influenced by having to fit a large amount of information in to limited character spaces, the experiences of these students appear to support David Crystal's findings that traditional grammatical and linguistic features remain predominant (2008). The impact of economic factors and the financial literacy practices of youth in negotiating them, should act as a word of caution for educators who seek to build bridges between in- and out-of-school literacy practices: when mobile technologies find a role for educational activities, negotiation of cost is part of the deal.

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