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EDUCATING GENERATION NEXT: SCREEN MEDIA USE, DIGITAL COMPETENCIES AND TERTIARY EDUCATION

Toija Cinque & Adam Brown

Abstract: This article investigates the use of screen media and digital competencies of higher education students in light of the growing focus on new media and e-learning in Australian universities. The authors argue that there is a need to resist the commonplace utopian and dystopian discourses surrounding new media technological innovation, and approach the issue of its potential roles and limitations in higher education settings with due care. The article analyses survey data collected from first-year university students to consider what screen media they currently make use of, how frequently these media are interacted with, and in what settings and for what purposes they are used. The article considers what implications the digital practices and competencies of young adults have for pedagogical programs that aim to engage them in virtual environments.

Keywords: Screen media, new media, digital competencies, higher education

Introduction

This article responds to the need to interrogate assumptions around, and the realities of, the perceptions and uses of new media screen culture by students in higher education. The question of how and to what degree university institutions and teachers need to alter existing practices in light of ongoing changes in the local and global communications environments is a major issue in Australia (and elsewhere). While we do not intend to posit any solutions to such a large and complex issue here, we aim to contribute to this debate by examining the pivotal issue of how young people are actually using screen media – an issue that often seems to be overshadowed in the enthusiastic, if not hasty, conclusion that students and education will 'never be the same again.' With these developments in mind, we examine current first-year university student competencies, perceptions and interests in terms of contemporary (particularly online) screen culture and the implications of this for the growing use of new media in teaching.

The present article's overarching research question investigating the perceptions and uses of new media by first-year undergraduate students can be dissected into the following sub-sets of issues for enquiry: Have Australian students proven to be early adopters in the active creation and dissemination of digital content on vlogs (video log or video diary entry via YouTube for example) personal webpages or wikis? What digital competencies do current higher education students possess in relation to new media? What does current student engagement with new media innovation reveal about their interest in, and perceptions of, digital screen culture? And lastly, what implications does this have for the adoption of new media technologies for use in university settings? In exploring the debate over how new media innovation should be applied in and outside the classroom, we hope that this research will accomplish two things: 1) improve teaching knowledge and practice in the uses of social media and other devices for educational purposes; and 2) highlight areas of? further research in student use of

communications technologies and digital competencies. Results from a survey of almost four hundred first-year university students reveal significant, and often surprising, trends in how young people understand and use new media in the present day.

Literature review

University students have similar goals to youth through the ages: the desire to express their ideas and individuality and to shape their identities, to create authentic cultural forms, to be taken seriously *and* to entertain themselves, to prepare for and ultimately engage in interesting post-university work. The ventures and media through which these goals, and liberal education itself, are pursued have certainly evolved. (Axelrod 2002, p. 141)

The considerable literature concerned with the role(s) of new media in tertiary education constitutes an industry in itself. The passage above from Axelrod's study, Values in Conflict: The University, the Marketplace, and the Trials of Liberal Education, makes a key assumption common to numerous other studies in the extensive scholarship of (e-)teaching, an assumption that provides the impetus for this article. Emphasising the importance of teachers developing an understanding of the culture, values and expectations of contemporary students, and pointing to the necessity of new media having a place in the university environment, Axelrod writes that '[r]ather than belittling the interests of those who occupy their classrooms, professors should aim to know their students and whence they have come' (2002, p. 142). While we share the crucial sentiment that teachers must know their students, Axelrod's statement already presupposes what precisely students' interests and expectations are: that classroom populations hail from a tech-savvy 'generation' more interested in the virtual world and eager for their years of formal education to be permeated with information derived from, and produced through, social networks and virtual media. It is this assumption that we aim to investigate and critique.

Just as there are many (and often opposing) discourses in the mass media about the increasingly mediated nature of present day society, different ideas about new communications technologies - from the utopian to the dystopian - can be found in writings on the tertiary sector. At one end of the spectrum, David Noble (1998) condemns teaching with and through the Internet, arguing that such activities have given rise to what he calls 'digital diploma mills,' which constitute the latest form of 'commoditisation' in his dystopian view of the 'automation' of higher education. On the other hand, Jones and Issroff (2007, pp. 190-91) highlight a considerable literature that stresses the high motivational value of e-learning technologies in combating problems with student demotivation. A number of studies prioritise the 'extraordinary' or 'transformational' changes that technology is perceived to enable (Richardson 2010, p. 2), but do not consider the potential limits of this technology and the limitations of introducing it into (or out of) the classroom. The recent collection, Cutting-Edge Social Media Approaches to Business Education: Teaching with LinkedIn, Facebook, Twitter, Second Life, and Blogs (Wankel 2010), comprises one among many studies in which potential pedagogical obstacles and issues of student access and digital competencies are either marginalised or omitted entirely.

Noting that the vast majority of popular and academic opinion constructs an essentially optimistic vision of 'the life-changing power of digital technology,' Selwyn (2011, pp. 21, 31) contends in one of the latest studies in the area that 'we should not be seduced by promises of digital technology changing everything for the better. Questions

about the future of education are far too important to be left to a blind faith in the "power" of technology.' We seek here not to build a case for either perspective on the place of new media in tertiary education, but to stress the need to understand competing discourses around new media in order to attend more fully to the key issues revolving around the perception and use of new media by students. Reflecting on the prevalent adoption of e-learning through Moodle ('Modular Object-Oriented Dynamic Learning Environment') in Australian high schools over a number of years, the increased emphasis on social media engagement, and the 'building' of entire virtual university campuses through Second Life, Brown writes of the importance of interrogating what premises such developments are 'founded on and what kind of implications this might have... for student learning' (2011, pp. 173-74).

Recent research from Canada has addressed the importance of questioning widespread assumptions about young people and their use of new media. Bulleen et al. (2011) critique the often uncritical use of the concept of 'generation,' which is frequently employed as a means of explaining and rationalising the use of information and communication technologies (ICTs) in higher education. Arguing that '[t]he idea that the generation born after 1982 is fundamentally different than [sic] previous generations has become so firmly entrenched that it is treated as a self-evident truth,' Bulleen et al. undertake a review of academic and popular literature and an empirical analysis of the interests and activities of university students. The study's results suggest that students actually used a 'limited set' of ICTs, with their use being driven by familiarity, cost, and immediacy, rather than a process of enthusiastic and active adoption/application. Significantly, Bulleen et al. point out that the common claims around a substantially 'different' population of students, whose needs and desires are drastically different from all those preceding them, 'have potentially significant and costly implications for educational institutions... as they are being urged to make significant changes to how they are organized, how they teach, and how learning technologies should be used' (Bulleen et al. 2011).

However, it is certainly the case that contemporary teenagers and young adults in the so-called Western world have grown up in what Ohler (2010, p.170) describes as the natural, human and digital 'ecosystems' - which undoubtedly has important (and often positive) implications for everyday life. We argue here that new media technologies such as the Internet afford different expectations in terms of choice, access, affordability, and functionality. Some key aspects of new media technologies that are important include: (1) the technical capacity of the medium; (2) that internet content is more than mere electronic publishing and broadcasting; and (3) a sense of the diverse global audience (Cinque, 2011:144-145). Our use of the phrase 'Generation Next' is underpinned by an acknowledgement that the diversity of student experience must always be kept in mind. In this new media age, a reasonable question has arisen about whether or not it is possible to reconfigure the relationship between teacher and student on more equal terms. New media differs from traditional media forms in that old media is one-way while new media offers many-to-many information sharing and co-creative possibilities. This has meant that what we do with media has changed and with it our needs and expectations. As a result, young people raised with access to such technologies have developed different expectations of their media (choice, access, affordability, functionality) and they have expectations that other aspects of their lives, including their educational institutions, will offer the same. Meeting students' needs is an ongoing challenge for educators in this 'new media age.'

Further, due to the fact that scholarship exploring young adults' understanding and use of communications technologies predominantly stems from research in the United States, it is important to examine whether trends identified in this context are the same

as, or different from, those exhibited in Australia. Focusing on the new media practices of Australian students, Kennedy et al. discovered in a 2007 study that while they are heavy users of mobile phones, text messaging and emails, they are not readily classifiable as active participants. Following on from this, our objective is to investigate whether Australian students (in this context, first year university undergraduates) have since become early adopters in the active creation and dissemination of digital content for creating vlogs (video log or video diary entry accessible via YouTube for example) or wikis, for instance, or whether they remain 'passive' users (if, indeed, they are users at all) of social networking platforms such as Facebook. This preliminary study seeks to investigate whether or not the trend in Australia has changed in the years since Kennedy et al.'s (2007) work in order to encourage finding a way of stimulating learning that is usefully assimilated, but also enjoyed, by both the Net-Generation and the upcoming Generation Next.

The intersection of new media and assessment has also been the subject of much discussion in the scholarship of teaching. Stressing the benefits of e-assessment, Sclater et al. (2007, p. 155) note that online evaluations of learner understanding can provide richer forms of student interactivity and greater consistency in the marking process. While a number of studies explore the strategies, practices and challenges of online assessment (Palloff and Pratt 2009; Williams 2006; Hricko 2006; Howell 2005), limited attention is given to student backgrounds, perceptions and preferences. The benefits of investigating student perspectives on, and their use of, new media are further highlighted when one takes into account Brosnan's (1999) findings that computerassisted learning and evaluation disadvantages specific groups of students who suffer from 'computer anxiety.' As Swierczek and Bechter (2010, pp. 791-92) emphasise, 'e-Learning neither eliminates cultural differences nor is it culture free,' resulting in situations that can lead to 'digital gaps.' Therefore, an investigation of trends in the use or otherwise of digital screen culture by young people is important to situate the issue of e-assessment (which is, nonetheless, invariably introduced for its cost-effectiveness in delivering courses to increasingly large cohorts rather than pedagogical considerations), in its fuller context.

This issue points to the crucial importance of being aware of students' digital competencies, which can readily be connected to the previous discussion of what discourses are used to understand technology and its use, both in teaching scholarship and more broadly. Indeed, digital competencies in relation to children and young teenagers is a growing field of research, expanding the notion of a 'digital divide' to encompass more than a group's socio-economic context alone, to include issues of education and digital literacy (Carlsson 2010; Cole and Pullen 2010; Carlsson et al. 2007). Roberts (2010, p. 94) points to the rhetorical construction of 'digital natives' as possessing the characteristics of, among others, being 'tech savvy,' 'multi-taskers,' 'information rich,' and 'connected.' It is already apparent that generalisations along these lines must be examined with a critical eye, which this article seeks to accomplish. In order to examine new media perception and use in a nuanced manner, the need to resist and critique the 'prominence of [the] utopian-dystopian controversy' (Dutton and Loader 2002, p. 20), and understand the complexities of the issues involved, remains.

In his discussion of guiding principles for innovations in online education, Dutton (2002, p. 329) stresses 'the crucial role of social, economic and political factors in shaping the design and outcomes of technical and institutional changes tied to the deployment of ICT capabilities in higher education and learning.' This is an important point. While individual academics and discipline teams always have a measure of flexibility in the adoption and deployment of new media in and outside the classroom, there are a number of other influential factors – internal and external to the university –

that impact on how courses are designed and offered to students. The timing of the current research project is fortuitous for several reasons. Not only does the incremental establishment of (and the construction of discourses around) the National Broadband Network impact on the issue of digital screen culture for Australian universities and society in general, there are also several more 'local' factors that need to be taken into account for specific institutions. This is particularly the case in relation to the tertiary education sector, which is currently undergoing major ideological shifts in its approach to the issue of e-learning and 'the Cloud.'

The researchers of this project have taught at the tertiary level for several years. Throughout our experiences with both undergraduate and postgraduate student cohorts, we have found that far from validating expectations or assumptions that all or even most students are passionate about the use of new media in educational and other settings, they are often unaware of many technological developments, uninterested in their use, and/or highly judgemental (in a negative sense) of those who do use them. Therefore, one hurdle that must be overcome by teachers who desire for their students to learn about – much less use – new media in educational settings is the need to gauge and understand student attitudes towards technology. Indeed, while utopian views of new media innovation are often expressed by institutions keen to adopt the latest innovations for e-learning, many students exhibit a dystopian perspective of new media, thus pointing to an apparent rift that does not conform to (stereotypical) assumptions about the interests, desires and capabilities of 'Generation Next.'

The significance of the present research is borne out in recent developments both internal and external to the higher education landscape. University-wide curriculum review initiatives are promising a fundamental drive towards a new paradigm regarding how universities engage with their students. Heavy emphasis is directed toward programs around the adoption of Cloud Learning and new media generally. Further recent internal developments at one Melbourne university have seen a growing emphasis on the use of new media for teaching with internal administrative initiatives towards online marking. Arguably there remain important questions that need to be addressed in relation to student preferences and competencies. New media-based initiatives such as a move to e-assessment are invariably premised on the twin assumptions that 1) students prefer to work with interactive devices in the virtual world; and 2) students are competent in their use.

A 2009 report titled *Perspectives on the Future of Flexible Education* raises a number of issues pertinent to the research presented here. Investigating the perspectives and experiences of thirty-two Melbourne university educators via interviews, along with those of ten students in focus group sessions, the report found that student participants preferred face-to-face teaching over online learning as it motivated (or 'forced') them to stay up to date with topics of discussion. On the other hand, the small number of student participants reported that they were easily distracted when engaging with unit material in the online environment. Students' digital competencies were also a matter of interest to the study, with one academic commenting that '[t]here's been the presumption that young people are digital natives but the repertoire of their skills is quite narrow' (Institute for Teaching and Learning, 2009, p. 60). The report concluded that:

students were happy to use the basic functions of DSO [online learning] but needed guidance and assistance to learn from tools such as Facebook and YouTube despite regularly using them for socialising... facilitating the adoption of flexible education also calls for strong support in several areas. Access to technology needs to be considered carefully rather than be taken for granted. Both students' access and

ability to use the technology and staff capabilities must be recognised... While ongoing support is vital, embedding new forms of technology would call for support structures that are reliable and responsive to needs. Quality support is critical to success. (2009, pp. 60 & 69)

With ambitious plans to establish a Cloud Learning Environment at the core of higher education's pedagogical future, a number of issues need to be analysed and critiqued in order to fully appreciate the dynamic nature of higher education not only from the perspective of teachers and technology developers, but from the group that developments in e-learning are primarily directed towards: the students. The following analysis of student screen media use and digital competencies seeks to address several of the issues outlined in the ITL 2009 report in order to gauge what implications student perceptions and uses of new media have for ongoing shifts in higher education more broadly.

Research methodology

This article examines current undergraduate university student competencies, perceptions and interests in terms of contemporary (particularly online) screen culture and the implications of this for the growing use of new media in teaching. Primary data was collected using the survey entitled New Media: Perceptions and Use Survey Questions developed for this research by the authors of this current work. Convenience samples comprising a total of 367 completed surveys from university students in Melbourne and Geelong studying first-year units were taken in Trimester 2, 2011, and Trimester 1, 2012, respectively. The participants comprised 367 undergraduate university students. There were 104 males and 263 females with a mean age of 18 years. Some 43 different Majors were recorded with most students coming from Media and Communication (85 cases); Public Relations (48 cases); and Education (23 cases).

Results

Data collated from the survey's preliminary questions highlighted that 72 per cent of participants were female and 28 per cent male. Ages of the participant group, which included several mature age students, ranged from 17 to 55 years old, with 89 per cent falling into the 18-23 years old bracket. 86 per cent of participants who completed the survey reported that they were enrolled in their first-year of university study. Reflecting the diverse cohort of the first-year students sampled, a total of 45 per cent of participants surveyed were undertaking at least one major in a Communications-related discipline (Media and Communication, Public Relations, and/or Journalism) as part of their undergraduate studies. Some 15 per cent of participants, many of whom had just begun their degrees, were still undecided on the focus of their studies. The diverse range of participants highlights that the results of this research can be seen as representative of a broader student cohort than only those mainly interested in fields such as Media and Communication Studies. This is significant given that it is the often Media and Communication students who are perceived to be more interested in contemporary screen culture and new media technological innovation.

The mean results for each question requiring a quantitative response from students are summarised in Table 1 below:

Table 1. Mean results for each survey question requiring a quantitative response

Survey question	Mean (hours per day)
How many hours do you spend on average per day watching television via a television set?	1.96
How many hours do you spend on average per day do you spend watching the television set for education?	0.48
How many hours do you spend on average per day do you spend watching television for information?	0.67
How many hours do you spend on average per day for recreation/entertainment?	1.69
How many hours do you spend per day using the internet?	4.20
How many hours do you spend on average per day watching/catching up on television shows using the internet rather than the TV set?	1.02
How many hours do you spend on average per day using the internet for work related activities (from which you derive income)?	0.53
How many hours do you spend on average per day using the internet for study related activities?	1.96
How many hours do you spend on average per day using the internet for recreation/entertainment related activities?	2.69

Figures 1-9 below provide a more detailed representation of findings from the survey regarding students' use of present day television and online screen culture in different settings and for different purposes. Complementing these questions were further questions seeking qualitative data. These questions focused on the various types of websites visited and software applications used by students as part of their online activities in the following categories: 1) Internet use for everyday purposes; 2) Internet use for work-related purposes; 3) Internet use for study-related purposes; and 4) Internet use for recreational/entertainment purposes. The questions were phrased broadly in order to avoid leading participants to take a particular 'approach' to the question. As a result, a comprehensive account of the highly diverse answers provided to these questions cannot be depicted here in either verbal or visual form; nonetheless, we reflect in part on these responses in the following analysis.

Figures 1-4 below focus on how much, and for what purposes, students watch television via television sets (as opposed to online viewing of television programs).

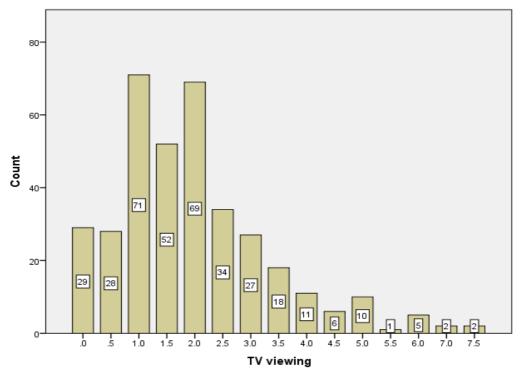


Figure 1. How many hours do you spend on average per day watching television via a television set?

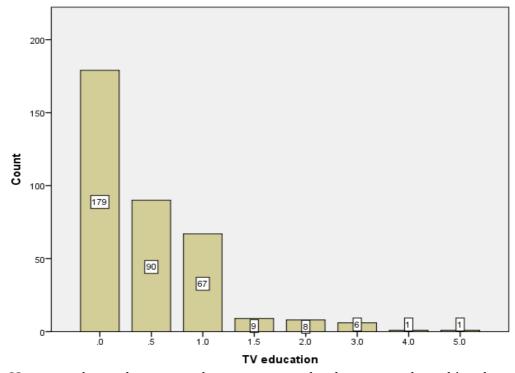


Figure 2. How many hours do you spend on average per day do you spend watching the television set for education?

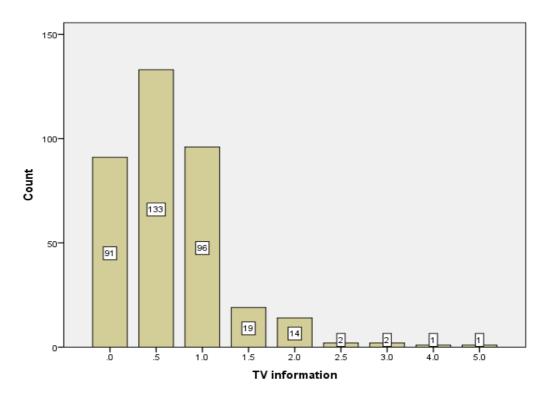


Figure 3. How many hours do you spend on average per day do you spend watching television for information?

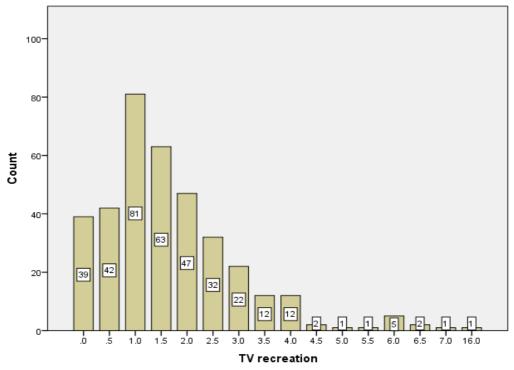


Figure 4. How many hours do you spend on average per day for recreation/entertainment?

It is evident from these graphs that television is, for the most part, viewed daily by students, with only 8 per cent of respondents reporting zero average daily use. On the other hand, the proportion of participants who reported no television use for the purposes of education (49 per cent) and information (25 per cent) was considerably

higher, reflecting the predominant use of television for recreational or entertainment purposes. Figure 3 shows that between .5 and 1 hour per day are generally spent watching television for information (which may involve, for example, news, documentary or current affairs programs). This is in contrast to the 1 to 3 hours reported television viewing for recreation purposes. Most importantly, the above graphs provide useful contrasts with Figures 5-9 below, which focus on the amount and nature of daily internet usage by students. Of consequence is the two to five hours per day spent using the internet reported by most participants (67 per cent) – although an even larger amount of online activity was reported by a significant number of students also (see Figure 5 below).

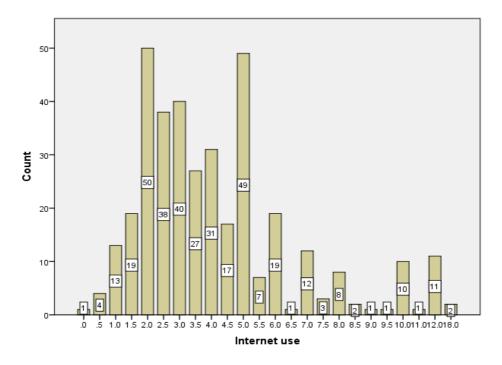


Figure 5. How many hours do you spend per day using the internet?

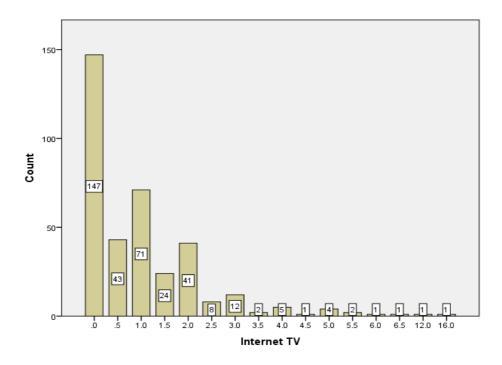


Figure 6. How many hours do you spend on average per day watching/catching up on television shows using the internet rather than the TV set?

The mean results of the survey, as revealed in Table 1, appear to support the commonplace hypothesis that internet use is fast replacing television viewing as a recreational past-time and even as a source of information. In the vast majority of cases, the internet is not directly 'taking over' as the means by which students are *always* viewing television programs (i.e. instead of using the television set); nonetheless, the 37 per cent of students who do watch television programs online is important to note. The average (mean) result of just below two hours of everyday television viewing is arguably well below what have generally been (stereo)typical assumptions regarding young people's engagement with the television set. On the other hand, one potentiality that cannot be discounted is that subjects might have the television on *while* using the internet, and investigation into the extent to which this occurs is warranted in future research.

In parallel with the former questions regarding how much television is viewed by students for specific purposes, Figures 7-9and Tables 2 and 3 below highlight the numbers of hours reported in relation to internet use for work, study, and entertainment.

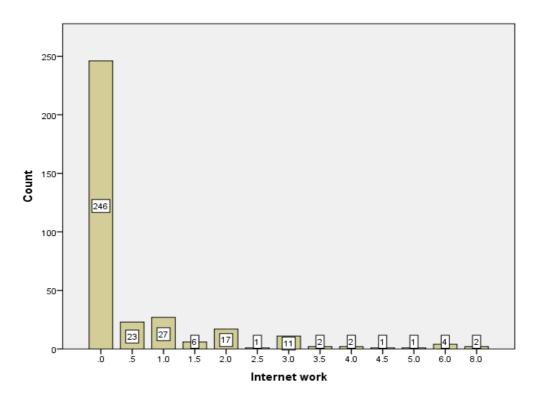


Figure 7. How many hours do you spend on average per day using the internet for work related activities (from which you derive income)?

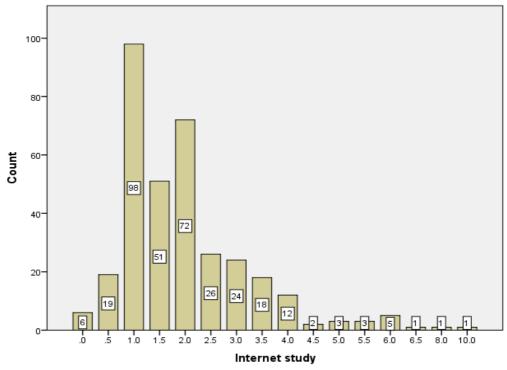


Figure 8. How many hours do you spend on average per day using the internet for study related activities?

As outlined below, a total of 71 different responses were provided to the question of 'which websites are used for study-related purposes'; only two respondents reported that this question was not applicable to them. A diverse range of social networking and news sites were reported by a small number of students, with the most prevalent sites reported summarised in the following Table 2:

Table 2. Most common responses to which websites are accessed by students for the purposes of study

Most common responses to which websites are accessed by students for the purposes of study (over 15 responses)	Count (out of 367)
Google	152
Google Scholar	28
Wikipedia	25
Electronic databases	17

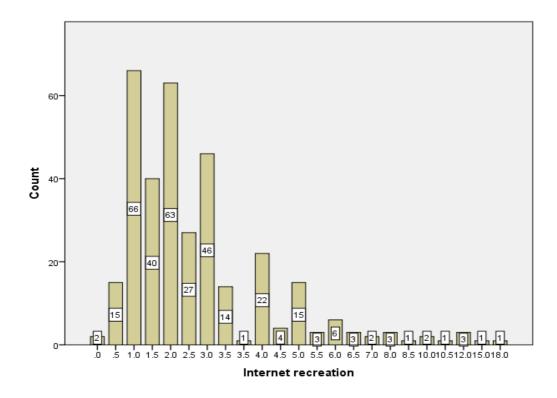


Figure 9. How many hours do you spend on average per day using the internet for recreation/ entertainment related activities?

Comparing the mean scores obtained in relation to hours of online activity at work (.53) and online activity for study purposes (1.96) with the use of the internet for recreational or entertainment (2.69) reveals a considerable increase in the latter (Table 3 below). Only two students reported that they did not use the internet for recreation purposes. Again, a diverse range of (133) websites were reported, with the most prevalent examples being summarised in Table 3 below:

Table 3. Most common websites accessed by students for the purposes of recreation/entertainment.

Most common websites accessed by students for the purposes of recreation/entertainment (responses with over 15 responses)	Count (out of 367)
Facebook	254
YouTube	121
Tumblr	39
Twitter	31
Hotmail	21

Google	17
Blogs	16

The relative lack of engagement with blogs, Twitter and Tumblr highlights the importance of understanding what uses of new media contemporary university students are making of new media innovation outside the classroom. In addition, it is not clear from this survey how many students are actively using these applications by creating their own content as opposed to being passive 'lurkers.'

Discussion

While Figure 6 above reveals that the number of students who do not view television programs online via websites such as ABC's iView or torrent sites is relatively large (40 per cent), internet usage clearly has become a more prominent medium for young students than television in contemporary times (see Figure 5). As with the participants' reported viewing of television (between 1 and 1.5 hours per day on average), the use of the internet for recreational or entertainment purposes far outweighed the online activities relating to study and work from which students derive income. Given the far greater rates of internet usage at between 2 and 5 hours per day on average (as opposed to television viewing) overall, there was also a much greater diversity of responses regarding daily usage. However, the most significant findings of the survey are revealed in the intersections between this quantitative data and the qualitative data obtained from additional questions relating to what websites and applications students used for everyday internet activities, and specifically for the purposes work, study and recreation.

Crucial to exploring the predominance of internet activity reported by students over their use of television sets is an investigation of what uses students make of their time online. 140 different responses were given to the question of which websites were visited by students on an everyday basis, with only four of these answers noted by more than 50 participants, including Facebook (225), YouTube (108), and Google (66). While a comprehensive account of most, much less all, websites visited by participants was not – nor could be –expected from such a survey, the responses to such broad questions often suggest as much by what they do not say as what they do. Major aspects of everyday internet use that might have been expected to arise more frequently did not figure in the survey responses, such as internet banking (12 responses), eBay or other online shopping sites (24 responses), and various news sites (32 responses). Presumably, such online activities were practised by a far larger number of students; however, potentially due to the increasingly naturalised place of the virtual in everyday life, such activities take less priority over massively popular sites such as Google, which has itself become in many cases synonymous with 'the internet.'

Significantly, 246 (67 per cent of) respondents reported that the question of how they use the internet in their (non-university) workplace was not applicable to them. Such responses might be attributed to the students either being employees in industries such as hospitality, shop retail, and so on, or to not being employed at the time of the survey. The majority of those participants who did report online activity as part of their paid work highlighted email, search engines, and various entertainment sites, which were not likely in the majority of instances to have been directly related to the students'

employment. Only twenty respondents (5 per cent) reported that they used intranets or websites specific to their workplace, although when this data is linked to the number of hours of online activity at work noted by these respondents, it is clear that using new media technology is seldom a crucial facet of their paid work. On the other hand, the survey results reveal that the internet is clearly a more prominent means for students to obtain information and conducting for their higher education studies.

While the exact nature of student access to Google or Wikipedia, for example, cannot be surmised, it is evident that the vast majority of students' uses of new media are limited to certain activities. The reliance (or, in some educators' minds, overreliance) on online search engines may be borne out in the responses of 41 per cent of participants who highlighted their use of Google, along with the 25 respondents who noted their use of Wikipedia (although this answer may have been minimised by student understandings of many teachers' negative perceptions of the site). Significantly, this number is identical to the number of participants who mentioned electronic databases or e-journals as aspects of their online study. In terms of computer applications that were reported as used for study purposes, the only significantly reported examples were various email programs (reported 185 times), with Microsoft Word being reported 9 times as the second most cited application.

Conclusion

This present investigation supports the conclusions of the earlier Australian studies of ITL (2009) and Kennedy et al (2007) that internet use in the everyday life of Generation Next has increased with a number of (new media related) activities seeming to be 'naturalised' or newly embedded within the cultural practices of the sample, but that students are still not readily classifiable as active participants. As stressed earlier, a number of problematic assumptions are frequently made regarding student access and digital competencies by both scholars of e-learning and educational institutions that seek to 'stay ahead of the game.' Utopian discourses regarding the role and potential of new media must be balanced with a realistic assessment of their limitations, whether this be in terms of student access and capabilities, or simply their desire to undertake an increasingly prominent part of their studies online. Students' clear reliance on material provided for them on university websites and straightforward (or 'blind') Google searches over the development of research skills via electronic databases and scholarly journals may also be suggestive of the trend of students 'going online' for faster and 'easier' options. Several participants who highlighted Google as a means by which students use the internet to study gave an indication of this through the particular wording of responses, including: (a) Start off with Google, then branch off; (b) 'Google to look for websites to study from'; or (c) 'Whatever's on Google'. An acknowledgement of the limitations of the survey data obtained for this project is crucial to this issue. The researchers found that a number of misunderstandings on the part of participants occurred as to what exactly constituted a website or an application, reinforcing the need to interrogate critically the assumptions made about the online activities and understandings of Generation Next.

Further sustained research is needed into higher education students' engagement with contemporary digital screen culture. The perpetuation of utopian discourses in society regarding technological innovation as a democratising, transformative and 'inevitable' force, and the subsequent development of organisational policies and plans that arise from these, need to be grappled with – and not only in the educational sector. We have

not sought in this article to resolve the immensely complex issue of how new media innovation should be adopted and adapted in (and outside of) the classroom, but to expose and explore the issues of how young people – those of 'Generation Next' – are currently engaging with contemporary screen culture. Thus, it is imperative that educators continue to develop the most comprehensive picture of new media perceptions and uses possible.

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