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The teacher as the ‘digital perpetrator’: Implementing web 2.0 technology activity as assessment practice for higher education Innovation or Imposition?

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Abstract

The purpose of this paper is to present an evaluation of the use of ‘YouTube’ video broadcasting technology as an assessment modality for higher education nursing students using vital signs assessment as the focus. Approximately 150 first year undergraduate nursing students at UB in Victoria Australia were invited to participate in an evaluative survey concerning a nursing vital signs skill assessment which utilised ‘YouTube’ as the medium. Whilst this study acknowledges that we must bring assessment into line with contemporary student populations in order to stimulate and satisfy the learning needs of undergraduate students, this study is also cognisant that higher education must be mindful of the added complexity that these technologies bring. Therefore there is a need to work towards collaborative outcomes for both student and academic, remaining aware not to cast the student as the digital victim and portray the teacher as the digital perpetrator. In light of the findings therein lies a dichotomy between what students see as assistive to learning and what the teacher sees as helpful to assessment.

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1. Introduction

Traditionally, in higher education practices of assessment seek evidence in the form of examinations, essays, and written case-studies to name a few. Each of these assessment modalities has proven efficient in the evidence of learning stakes, however are less than reflective of the technological society students and academic staff alike find themselves. If higher education is to embrace the possibilities provided by technology for teaching and learning, then appropriate assessment practices need to be a pivotal component of that consideration. Discourse regarding assessment is replete with arguments that current approaches merely provide surface learning and a ‘teaching-for-the-test’ approach to student learning, rather than the instilling of problem solving, critical thinking, collaboration, innovation and creativity - the attributes sought by the modern employer (Cousin, 2005; Elliot, 2008; Pelligrino, 1999; Thompson, 2007). Although this study proposed that the use of ‘YouTube’ online video broadcasting

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technology provides a unique, vehicle by which to address some of the challenges levelled at assessment techniques the results are not entirely supportive.

2. Background

2.1. You Tube as Assessment

The use of YouTube technology as an adjunct to contemporary learning approaches is not necessarily a new phenomena. Skiba (2007) highlights the use of the tool in assessment allows for more active participation from digital native students. The application of the skills required to produce a YouTube clip tend to relate to networks and support in reaching learning outcomes. As such the engagement in the video learning experience improves visual literacy. Most importantly however the use of this tool engages learners in the task and therefore draws them more closely into their experience (Skiba, 2007).

2.2. The Digital Native and Digital Immigrant

Prensky (2001) first coined the now almost parse term ‘digital native’ to encompass those born between 1980 and 1994. It is this cohort that the majority of higher education institutions world find within their programs. The digital native is proposed to have been immersed within the technological world, and as result surround themselves with and use the latest technology available to them with relative ease (Bennett, Maton & Kervin, 2008; Prensky, 2001). As learners the digital native is thought to be experiential, optimistic, team-oriented achievers, proficient in multi-tasking, and adept at communicating through the internet (Prensky, 2001). A discord is considered to have resulted form the natural and maturational influx of such a student into the higher education system, an educational system not designed to meet the needs of the digital native (Prensky, 2001). The Digital immigrant by contrast represents those born pre-1980, a cohort considered less adept with the modern technology as their more junior counterparts. It is the discrepancy between the technological capabilities of the digital immigrant and the digital native that is considered the catalyst of the dissatisfaction of current higher education students with the higher education system they find themselves in (Levin, Richardson, & Arafteh, 2002, Prensky, 2001). However, a growing body of research seeks to question the actuality of this dichotomy and the perhaps more importantly the actuality of the ‘digital native’ it self.

2.3. Challenging the Labels

Questioning the genuinely native nature of the digital native, Kvavik, Carusi & Morgan (2004) surveying American students found that although the use of technology was high, the creation and publication of shared information was low (21%). These figures are similar to those presented by Oliver and Goerke (2007) in an Australian study. These studies highlight that the notion of being native is perhaps not as universal as first supposed. Opportunities in terms of socio-economic status is most commonly cited as a mechanism for these findings (Livingston & Bober, 2004). Students who have limited access and availability are here disadvantaged further by a system that makes such assumptions concerning the homogeneity of the generation and their subsequent digital proficiency (Bennet, Maton & Kervin, 2007).

3. Method

3.1. Sample. - Approximately 150 students, enrolled in a foundational nursing unit at the University of Ballarat, were required as part of their overall assessment tasks to produce a two minute video demonstrating their ability to perform a series of psychomotor skills including vital signs and to link appropriate theoretical aspects and evidence based research. Students were then able to upload their video clip to YouTube if they chose or to simply submit a DVD for review and assessment by academic staff. Students were allocated in class to work in groups of three or four over the semester (12 weeks) in order to produce their video.
3.2. Data Collection

A paper-based survey was developed for circulation to all students. Both quantitative and qualitative data was collated through the survey and input into Statistical Package for Social Sciences (SPSS) for subsequent analysis (statistics not presented here).

3.3. Analysis

Written qualitative responses from student surveys were analysed using a three-step thematic approach as described by Grbich (1999). Both researchers agreed on the initial broader themes. All of the student responses were then re-read with these tentative themes in mind and examined further to articulate an understanding and relatedness across all of the broad themes. From this second step analysis, some of the themes were merged into more comprehensive themes. In the third step, an overall statement was formulated that encapsulated the essence of each individual theme and subsequently the student responses accurately. These comprehensive synthesized themes were agreed upon by both of the researchers. The responses were grouped into two major themes and a number of sub-themes were organized under each major theme.

4. Results

A total of 94 surveys were completed and returned out of the 150 distributed. This represented a return rate of around 63 percent. The study included a total of 60 students aged between 17 and 19 years (63.8%), 26 aged between 20-25 years (27.6%) and 8 students aged from 26 to 40+ years (8.6%).

4.1. Thematic Analysis

Thematic analysis of qualitative responses yielded two significant themes: Talking the Talk and Lost in Translation. A number of sub-themes were also identified to amplify further the major themes.

4.1.1. Talking the Talk

Educators in higher education seeking to ‘Talk the Talk’ need to become cognizant, first and foremost with the language of the digital native. Incumbent upon educators is a need therefore to immerse and engage with the technological platforms that students frequently use in their social and everyday life. The YouTube assessment is a culmination of this process and an attempt to bridge the generational gap between educator and student and the creation of a common platform as a medium of assessment. This tends to support the premise that there was a space in which the digital native and the digital immigrant could relate. This theme provides an opportunity to illuminate the degree with which students embraced the assessment modality in a manner that reflects the ability of the technological approach to ‘Talk the Talk’ and engage the digital native learner.

4.1.1.1. Contemporary Innovation

This sub-theme titled ‘Contemporary Innovation’ highlights the positive way in which students engaged in the assessment task. Student perceptions suggest that YouTube provided a contemporary approach to traditional assessment methods. Students frequently portrayed a level of enjoyment and diversity in engaging in the YouTube learning task. Some of the responses from students indicate that the variation from usual written assessments was an appealing component in their learning processes. The following quotes capture the essence of this sub-theme.

Great idea to do a filming activity for example, I feel we use the internet for all subjects anyway but using something such as YouTube keeps you interested. And It was a good task, very modern’
Students consistent reporting of the contemporary nature of the assessment modality highlights strongly the way in which an effort to match the assessment task with the inherent nature of digital native student was embraced and enjoyed. Matching a traditional nursing skill with a contemporary learning platform consistent with the digital native environment, highlights again the way in which this assessment is capable of Talking the Talk. It is possible that these confidence levels are improved as a result of students having to practice the skill repeatedly prior to filming.

It was good to have to rehearse and get in more practice...

The researchers advocate the notion that student cognisance of the fact that their video would be open to peer review encouraged a deeper engagement in the assessment task and the building of confidence. Although not mentioned significantly in the qualitative data by students, a direct link could be made between the confidence and competence of students as a result of such practice and immersion.

4.1.1.2. Confidence Building

Any assessment process is limited if its capacity to build confidence in students to some degree is not able to achieve any change in existing levels of confidence. Students were explicit with their acknowledgement of the ability of this assessment to build upon their current confidence levels. Without doing it I think I wouldn’t be as confident performing them (vital signs).”

Overall I enjoyed it, and learn how to do the vital signs. Without doing it I think I wouldn’t be as confident performing them.

Students appeared to relate to the assessment topic and perhaps the importance of the psychomotor skill in ways different to traditional approaches. The ability of this assessment task to immerse the student through active participation in the creation of a YouTube video, could be seen to build upon student confidence levels. The frequency of students reporting such a change is indicative of the assessments ability to achieve the outcomes any educator would expect of an assessment task.

4.1.2. Lost in Translation

This major theme Lost in Translation captures the tension that exists between the educator who has attempted to learn the language of the digital native through the assessment task and the actuality of the task itself. Despite the best efforts of the educators to modernise assessment tasks, students have identified frequently that a significant disconnect exists between the perceptions of teaching staff with regard to what a digital native is and its actuality. That is, despite the majority of the cohort being within the age bracket of the digital native, many students indicated that they were confronted by the complexity of using this assessment medium, and as a result of the assumptions being made by the researchers in terms of the homogeneity of the student cohort, the learning process became an imposition over and above a mere extension of the digital natives competence to the assessment tasks itself.

4.1.2.1. Technology Imposition

The theme of technology imposition embodies the way in which the assumptions of the research team about the homogeneity of the student cohort with regard to their digital competence where challenged by the students responses concerning the application of technological skills required for the task. Students most frequently identified that the assessment task imposed upon them an added complexity that at times shifted the student’s focus from the assessment task itself and subsequently highlights the notion that student’s immersion in the task and its added requirements could be seen as imposing upon the student’s learning process.

You spent too much time learning how to use the programs rather than learning the base material’ and I thought it was a whole lot of work for a small assessment that could have been tested in like 5 min, even less in a simple lab test

The YouTube assessment seemed rather pointless was overcomplicated and was not particularly relevant to developing our skills as nurses. Too much focus was on developing an impressive video rather than actually becoming more competent with vital signs skills which is much more important.
Findings such as this highlight that assumptions of education staff of the ability of students to use technology given their status as digital natives, impose a significant disconnect between the institution and the generation. The one positive that came through the data concerning the imposition of the technology was the pragmatic approach of students to engage more fully in group work to meet their technological needs. As one student commented “Technology can be quite affronting and I believe we are luck to have had a member in the group who was competent with it.”

5. Implications

As educators there is an increasing need to remain aware of the student demographic that we apply historical assessment methods to. Therefore we should be mindful to remember that the digital native population with their intimate familiarity with technology possess a vastly different learning style to preceding generations. This could appear to have implications on how we educate them especially with the first generations of natives having recently entered into tertiary level educational institutions. As outlined by Prensky (2001) the digital native is attracted more to ‘games’ than to work. This could suggest that the blending of formality of assessment utilising familiar technology may not fit comfortably with the digital native student. Prensky (2001) warns educators of today to not take on the ‘accent of digital immigrants’. Digital immigrants learn to adapt to the technology that digital natives have grown up with. This has implications for teaching students as there is a vast division in the understandings of each of these groups. One must also be mindful of the culture within the academy that calls upon the digital immigrant to translate age-old assessment practices into contemporary assessment approaches. In some way the teacher is often the go between. through this type of translation

This is something that had not been previously considered as there was an assumption made by the researchers that students are more-so digital natives and therefore should be more familiar with technologies. There is also the tendency to at times question whether the outcome of this evaluation may seen to be in conflict with what is described as digital native behaviour as outlined by Prensky (2001) as the blending of the formality of assessment and the social nature of the technologies utilised perhaps symbolises a move out of traditional native territory. The result is a blurring of the intention to appeal to the digital native and ultimately becoming lost in translation.

References


