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PROMOTING STUDENT LEARNING WITH ONLINE VIDEOS: A RESEARCH AGENDA

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ABSTRACT

Gen Y students are digital natives (Prensky 2001) who learn in complex and diverse ways, with a variety of learning styles apparent in any given course. This paper proposes a web 2.0 conceptual learning solution–online student videos–to respond to different learning styles that exist in the classroom.

INTRODUCTION

Marketing educators need to provide a range of learning experiences to tap into multiple learning modalities, given that a variety of learning types co-exist in any one given course (Karns 2006). Further complicating the need to cater to different learners is that the learning requirements of our students are changing (cf. Matulich, Papp and Haytko 2008). Gen Y students are distinguished from previous age cohorts by a key feature: they are 'digital natives' (Prensky 2001). They have grown up with technology and enjoy living their private lives in the public arena of cyberspace. Perhaps as a result of technology's ability to cater to their every need, these students are also much more demanding when it comes to their education (Howe and Strauss 2000). These characteristics and the variation in students that comes from different learning styles present both a challenge and an opportunity for educators.

Reflective educators have identified the learning styles and preferences of their students and adapted their teaching in light of substantial educational benefits (Morrison, Sweeney and Heffernan 2003). Some educators are adopting innovative approaches to teaching using new technologies, in an attempt to meet the needs of an ever-wider and more diverse range of learners. In particular, web 2.0 technologies have come to the fore. Along with the use of such technologies as games (Drea, Tripp and Stuenkel 2005), audience response systems (McGorry 2006) and internet-based simulations (Cook and Swift 2006), there is a growing body of literature concerning the use of web 2.0 technologies in educational settings, including podcasts, social networking sites, file sharing, Twitter and virtual worlds (e.g., Dickey 2005; Evans 2007; Grosseck and Holotescu 2008). However, while many educators have generally been innovative in adopting web 2.0 technologies in teaching (the domain of the academics) less focus has been placed on encouraging the use of these technologies in the learning process (the domain of the students). Traditional assessment forms still dominate course curricula, with limited use of web 2.0 learning resources. We suggest that this is not the result of a lack of student or faculty interest in using digital technologies in the teaching and learning process. Rather, we suggest that current university teaching and learning design does not adequately integrate web 2.0 technologies in a meaningful way for students and faculty to adopt.

One of the most used web 2.0 technologies by digital natives is social networking, where daily activities, thoughts and images are shared with friends. The desire to interact with others is reflected by the use of websites such as Facebook, MySpace and YouTube. Males tend to use applications like Facebook to 'compete' with their mates, while females use them to express their personality and identity to others (Russell-Bennett and Neale 2009). The breathtaking uptake of youtube.com indicates the interest that people have in making videos of their lives and sharing them with others.

The purpose of this paper is to propose a web 2.0 conceptual learning solution to the current challenge facing marketing educators when teaching digital natives. We propose that educators can tap into the existing relationship that students have with new technologies to facilitate enhanced learning in our courses. In particular, we recommend the use of online videos as reflective diaries in order to respond to the different learning styles that exist in the classroom. We identify areas for future study to address a lack of empirical research into the use of such videos as a learning tool.

THE ARGUMENT FOR ACCOMMODATING DIFFERENT LEARNING STYLES

Learning styles are defined as *"individual consistencies in perception, memory, thinking, and judgment across any stimulus condition"* (Curry 2000 p. 239). Or, the preferred approach one has to organizing and presenting information (Curry 2000). Much has been written about different learning styles, with a variety of models and scales available.

Kolb's (1984) learning theory suggests that learning is a cycle that consists of four stages, which require four different types of abilities, namely concrete experience (CE), reflective observation (RO), abstract conceptualization (AC) and active experimentation (AE). Kolb contends that these abilities combine to determine one's learning style: diverging, assimilating, converging or accommodating. Honey and Mumford (1982) developed the Learning Styles model, identifying four key learning styles, namely activist, pragmatist, theorist and reflector. As in Kolb's model, Honey and Mumford contend that learners in each of these categories are distinctly different and learn in different ways. Gardner's (1983) theory of multiple intelligences suggests that individuals possess numerous mental representations and intellectual languages, which affect how one receives, retains, manipulates and applies information. Specifically, he identifies eight intelligences: linguistic, logical-mathematical, musical, spatial, bodily-kinesthetic, naturalistic, interpersonal and intrapersonal. According to Gardner, all human beings possess these intelligences, but to varying degrees, and one's dominant intelligence will affect how they learn.

A review of the literature suggests that learning styles will inevitably vary among our students, and consequently faculty should adopt a variety of teaching approaches and methods of assessment to accommodate different learning preferences. Educational processes that reinforce one suite of skills do so to the detriment of others, with studies demonstrating loss of ability with regards to other skill sets (Kolb 1984). In such a dynamic and diverse field as marketing, this is problematic, because our goal must be to produce well-rounded graduates who are flexible and adaptable. Further, without customization, we risk unfairly under-assessing a large group of our students. Gardner (1983) makes the point that education has tended to favor two forms of human intelligence–language and logic–thereby favoring students who are good with words and numbers. Finally, matching teaching strategies to learning styles should positively affect student motivation, attitudes to learning and performance (Cassidy and Eachus 2000). Overall, when there is fit between the learning environment and student learning styles, positive learning experiences are more likely. The challenge is finding the right tools to facilitate this fit.

VIDEOS IN TEACHING AND LEARNING:ONLINE STUDENT VIDEOS FOR DIFFERENT LEARNING STYLES

Examination of videos in education has largely focused on their use by instructors for teaching or instructional purposes, particularly in the context of distance learning courses and e-learning environments. Recent attention has been given to lecture webcasting (Traphagan 2005), the use of videos in lectures (Karns 2006) and videoconferencing in educational settings (Dacko 2001). While the aforementioned studies suggest that these formats are often enjoyed by students, the majority also suggest that these techniques have minimal, if any, impact on student learning outcomes. A lack of interactivity and student involvement is a contributing factor: video, on its own, does not support active learning. This is problematic for marketing educators, since active learning is preferred by marketing students (Morrison, Sweeney and Heffernan 2003).

In professional learning situations, videos are being used to develop work practice. For example, self-produced videos are being used to support informal learning in Intensive Care Units (Brandt and Hillgren 2005) and even in teacher education (Clarke 2009). But again, emphasis has been given to the use of videos for instructor-led teaching and learning, with little regard for the student viewpoint.

There is an apparent gap in the literature concerning the use of videos by students in higher education. We propose that online student videos are an ideal web 2.0 technology to cater to a variety of learning styles, as shown in Table 1. Through the process of making, viewing and sharing online videos, the power shifts to the student. They may be used by instructors to help facilitate student learning, as well as allow students to demonstrate their learning as part of assessment. Overall, the video making and viewing process can be adapted by the student to suit their learning style and by the instructor to achieve necessary course objectives.

Online student videos may help students develop interpersonal skills, by expanding the opportunities for dialogue and collaboration. They may also be used as a means for students to keep a record of their personal learning experiences, because students can record and reflect upon observations, experiences and responses to course activities. Through the videos, students can record the development of their ideas and insights, reflect on course content covered, reflect on their learning process, and analyze and discuss key issues, thereby facilitating deeper learning.

REFLECTIVE ONLINE VIDEO DIARIES

One recommendation is to use online student video diaries for the purpose of reflection. Reflective learning requires exploring situations from a personal perspective. It is about integrating learning from experience and learning with ideas, so that personal meaning is discovered (Boot and Boxer 1980). Reflection has been defined as: *"A form of mental processing–a form of thinking–that we use to fulfill a purpose or to achieve some anticipated outcome. It is applied to relatively*

complicated or unstructured ideas for which there is no obvious solution" (Moon 1999 p. 10). Reflection is important, because it can result in higher levels of learning (Biggs 2003), meaning that content is understood and retained, as opposed to simply memorized in the short-term. Essentially, reflecting on unit content and the learning process helps students learn. An online video diary can facilitate this reflective process in a way that caters to the multiple learning styles present in the class.

Students can be encouraged to record a weekly video diary about the activities of the week (either as an individual or as a team) via a webcam, mobile phone or video camera. Specific questions could be posed by the instructor as a stimulus for students, but they could go beyond the scope of the brief. The videos could then be uploaded to a website platform that has secure access (unlike YouTube), such as Google Videos, which allows students to index their videos and search for those of other students. There are a number of free platforms available, which allow the instructor to pilot the concept with minimal expense. The search and index facility would be particularly valuable when students can access past students' experiences, allowing for the transfer of knowledge across different cohorts in different semesters.

IMPLICATIONS FOR MARKETING EDUCATORS

There are four key implications that marketing educators need to consider:
1. The technical support available for students needs to be organized prior to the introduction of online video diaries and equity must be an important consideration. For instance, if students do not have access to video technology via a webcam, mobile device or video camera, loan equipment should be provided. Universities often have loan laptops; if these have webcams installed, this overcomes the problem of access.
2. A detailed guide indicating acceptable format types and file sizes should be provided for students. Students need to be reminded to check their videos work once they are uploaded.
3. The video task needs to be linked to assessment in some way. This could be in the form of direct assessment, where the video is directly evaluated and marks allocated, or indirectly, where the students use their video as the basis for written assessment, which is marked.
4. Some students may be resistant to trialing new technologies and may experience anxiety over the task. Practice video trials are recommended throughout the semester, prior to any important or high stake video submissions. This helps students to overcome technical expertise difficulties and psychological barriers to change.

RESEARCH AGENDA

While we suggest that online student videos present an opportunity as an educational tool, there are some key research questions that remain unanswered. A lack of empirical research into the use of such a technique in education leaves us wondering the following:
1. Online videos for different learning styles
- Using Kolb's Learning Style Inventory, Honey and Mumford's Learning Styles Questionnaire, or the Multiple Intelligences Developmental Assessment Scales, what learning styles are apparent in a given course and how do online videos appeal to these learning styles?
- Can students improve their learning through enhanced self-awareness and the ability to identify and adopt behaviors using online videos conducive to their style?
- Where students' learning styles and discipline demands are congruent as a result of using online videos, is workload perceived to be lighter and does this in turn encourage a deeper approach to learning?

2. Videos for teaching and learning:
- How can online videos facilitate peer-to-peer learning and what are the benefits in this regard?
- Does reflection as part of video making, viewing and sharing result in deeper learning?
- Do online student videos better engage students in the learning process?
- How does this learning activity contribute to student achievement of specific learning outcomes?
- How can actual learning be assessed for online student videos and what criteria should be used?
- What are the barriers to the effective use of online videos for student learning?
- What is the relationship between the use of web 2.0 technology such as online videos and student satisfaction?
- What is the relationship between the use of web 2.0 technology such as online videos and student performance?
- What are the resource implications (e.g., financial, skills, workload, IT support, manuals) for implementing a successful online video diaries program?

CONCLUSION

To date, research reported in academic literature has been teaching focused. In this paper we propose that web 2.0 technologies may offer a means to cater to different learning styles. In particular, we propose that online video diaries may encourage students to take an active role in the learning process. These videos may also facilitate peer learning and knowledge management of key learnings, which can be passed between student cohorts. The uptake of web 2.0 technologies by digital natives in the education environment is in its infancy, however marketing academics have the opportunity to better incorporate technology in the curricula, before students demand its presence. This will allow academics to be proactive rather than reactive to the demands of the ever-changing student cohort.

In addition to proposing a new approach to catering to the multiple learning styles of digital natives, we have also outlined a research agenda to guide reflective educators in the adoption of web 2.0 learning technologies. There are considerable issues to consider when implementing a new approach to learning and assessment such as online video diaries. However, the opportunities to increase student engagement and graduate capabilities provide an incentive for marketing academics to further investigate this area.

Table 1 Application of Online Videos for Different Learning Styles

Learning style (Honey and Mumford 1982)	*Description of style*	*Application of online videos*
Activist	Students with this style learn best when doing, rather than thinking first. They enjoy work that is flexible and daring, and when it is centered around them.	Online videos allow students to speak their thoughts as they experience them, without the need for planning. The video format is determined by the student, so this allows flexibility. Also, since the student is 'the star' of their own video, the content is completely centered on themselves.
Pragmatist	Students with this style like to apply ideas, theories and techniques in a practical way. They enjoy implementing their ideas efficiently and with confidence. They like to research new ideas and experiment.	Online videos allow students to talk about their practical experiences. The use of video is an efficient way for students to communicate their ideas, plus it allows them to experiment with new technologies.
Theorist	Students with this style solve problems using a logical, rational and objective schema. They structure information into a logical order and synthesize isolated information to create a holistic theory.	Online videos allow students with this style to develop theories that explain their experiences. The videos provide a platform for them to organize their observations into logical order and make sense from this information.
Reflector	Students with this style prefer to step back and observe a situation, collect and analyze data (about events and experiences), and use this to draw conclusions in their own time.	Online videos allow students to plan their responses if they desire to do so. The videos can be done in students' own time, thus allowing them to tailor this to their own needs, rather than those of other students. Students can be provided with a list of topics for consideration and reflection, thereby offering structure and guidance, which increases certainty and confidence to perform the task.

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