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Using social media to enhance learning and teaching

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Abstract. Social media has grown from its original conceptualisation and as it is realised today, it may offer a new construct to enhance learning and teaching. Greenhow and Gleason (2012) explore the use of *Twitter* and suggest that it may lead to increased engagement and better interaction between students and teachers. A similar view is held by Fusch, who explores the possibility that the resources at our disposal are as important as the learning intentions and that indeed, resources are needed which promote social communication, create a more interactive learning experience and promote collaboration amongst peer groups and staff (2011). The paper offers a synthesis of international literature and draws conclusions from a recent study carried out within The University of Glasgow. Crucially, it will explore the students' perception and expectations on social media interaction within the context of their learning experience.

Keywords: *learning, teaching, social media, technology, interactive, engagement.*

1   Introduction

1.1   Background

As teachers orientate towards a more student-centred approach, the role of technology continues to grow. Pedagogy has changed in recent years, with many teachers looking for new and inspired ways to engage with their students. Society demands innovative approaches to teaching and learning and many teachers are now utilising practices which promote interactive learning, where teachers facilitate the process by passing control and responsibility to the learner. Indeed, this is not a local phenomenon, but is reflected across the international landscape. Lea *et al.* (2003) reviewed several global case studies and concluded that there is sufficient evidence to suggest that we should be taking a student-centred approach to teaching; thus having a positive impact on learning and attainment. Indeed, there is an increasing emphasis placed onto *teaching with technology*, with the integration of tools placed at the teacher's disposal. There is however, an inherent risk that the focus falls in the wrong place. There arises a need to look towards a model which places the emphasis on *learning with technology* (Dunn, 2012).

1.2   Purpose of the Study

The study explores the student perception and expectations on social media as a construct to enhance learning and teaching. Given the high costs of technology at a time of economic challenge,

it is unlikely that a classroom or lecture theatre be equipped with a plethora of mobile devices. Ergo, the role of portable technology such as personal smartphones and tablet computers may offer an alternative, and more sensible solution. Given this, it is important to consider how the technology can be integrated effectively into the learning environment. The ability of a student to engage socially via technology can depend on both their own attitudes and on their ability to command the complex nature of interpersonal communication (Zepke and Leach, 2005). The line between social interaction and learning via social media is becoming blurred. For the purposes of this paper, social media will infer networking tools such as *Facebook*, *Twitter*, *Google+*, *LinkedIn* and *Instagram*.

The need to examine the expectations across the student cohort has never been greater. Indeed, we also have an important role to play in developing best practices and producing graduates with skills in using and interpreting social media, as this is an increasing requirement for many employers (Greenhow and Gleason, 2012). Likewise, the literature describes many opportunities to enhance learning through social media integration. Equally, there are many challenges working to thwart the most enthusiastic teacher (Dunn, 2013). The study was designed to explore the descriptive practices amongst students by measuring the extent and purposes to which they use social media. This included a measure within the context of education; how personal access compares between *actual* and *desired* use.

2 Theoretical Framework

2.1 Learning through Social Interaction

Social interaction is an essential component in learning, ranging from peer support groups, collaboration and testing theory. Knight (2002) makes a case to identify such processes and make them fully interactive through face-to-face contact or via technology. When we examine the dynamics of such a relationship between the teacher and the student, it is worthwhile considering the paradigm shift between teacher-centred learning and teacher-facilitated learning. O'Neill and McMahon interpret this shift by concluding that *'knowledge is constructed by students and that the lecturer is a facilitator of learning rather than a presenter of information'* (2005:28). If we agree with such a statement, this would imply that our own practice must take into consideration the means to facilitate and provide our students with the opportunity to interact with each other. Knight (2002:139) suggests that we must create an environment for learning by applying a structure to facilitate the process. The asymmetries of power; that is those who foster cue seeking behaviour, could be tackled within such an environment. Students can take the initiative, interact with both the teacher and their peers and engage in the learning process by thinking for themselves. Virtual Learning Environments (VLEs) such as Moodle provide an extension to the classroom for which the teacher can present additional information and interact with the group away from the classroom. Such a framework has the advantage that learning can continue to be facilitated

remotely. By extending the learning process, it may add value and promote a student-centred approach. In our connected world, internet access within schools, homes and communities may present the ideal opportunity to bring together teacher facilitated, student-centred social interaction to enhance the learning experience. Indeed, *"the adoption of social media impacts our constructs for learning, instruction, and paths for future research"* (Greenhow, Robelia, and Hughes 2009, citied in Greenhow and Gleason, 2012).

2.2 Is Social Media a Fad?

Needless to say, social media is not a fad. One could argue that the significant uptake of such activity is shaping our view on technology. Technological realisation often overtakes the concept; this has been seen in recent years where social interaction is now seen as a core function in design. The original concept of the mobile phone was to transmit and receive audio/voice communication, but today incorporates a range of features which many people access on a daily basis. A YouGov (2012) poll illustrates the scale of *Facebook* use in the UK, with a massive 95% of 16-20 year olds and 74% of 21-24 year olds accessing the platform in single month. The same poll also indicates that 41% of the online population within the UK is becoming bored with social media; indeed, they are now seeking more purposeful interaction rather than simply connecting with people because they can. Marketing and branding has focused heavily upon building a social presence, yet education seems to lag behind.

2.3 Study Methods and Adopted Construct

Many of today's schools and higher education institutes have an international profile. They often have excellent reputations for high quality teaching; supporting dynamic learning with a clear focus on teamwork, research, scholarship and the development of the individual. To this end, an online survey was constructed and students were solicted to respond. Individual compentency in using the technology was not considered, but rather the student's habit of social networking. A total of 231 viables respones were recorded. An additional experimental group of 29 students was established as a means of cross referencing responses. Using both qualitative and quantitative data collection, triangulation and indexing, the results give attention to the opportunities and, challenges via identification of the normative perceptions; scoping the potential advantages and disadvantages of social media integration for teachers and students. Dunn (2013) identified three fundamental questions:

1. *How do our students currently use social media?*
2. *Do they want to use social media to support learning?*
3. *Can social media enhance their learning experiences?*

3   The Social Landscape

3.1   Digital Natives

The Digital Natives survey is carried out every two years within the University of Glasgow. In 2010, a paper was produced to compare data between 2007 and 2009. It illustrates that students are becoming more mobile, moving away from desktop computers to laptops and 3G mobile phones (Gardiner, 2010). Interestingly, those who we would coin 'Digital Natives' (Prensky, 2001) are taking an increased interest in how the technology can be used to support their studies. The following data has been extracted from the survey results (citied in Gardiner, 2010:2), as carried out across the intake of new students in 2009.

- *Mobile phone access is almost universal, with only 0.7% having no access.*
- *Very few respondents are not connected to the Internet and 94.5% have ready access to high-speed connections.*
- *The use of social networking increased from 78% in 2007 to 90% in 2009.*

3.2   Results of the Survey and Experimental Group

The results of the survey mirror those findings from Digital Natives. 92% of students indicated that they use some form of social media, with *Facebook* being the most popular (86%), followed by *Twitter* (41%) and *Google+* (24%). *LinkedIn* and *Instagram* also featured within some responses (Table. 1).

Table. 1. The percentage of students who use one or more of the indicated social media (source Dunn, 2013)

Which social media do you use?	
Facebook	86%
Twitter	41%
Google +	24%
LinkedIn/Other	24%

The divide between personal use and academic use often differs from person to person. As expected and argued by Zepke and Leach (2005), it is a personal disposition. 81% indicated that they accessed at least one social network for personal use, compared to 34% who used it for professional networking and 24% who used it for research and studying (Table. 2).

Table. 2. The actual use of social media at present (source Dunn, 2013)

What do you use social media for?	
Personal Use	81%
Professional Networking	34%
Research and Studying	24%

The study was further extended to include an experimental group of 29 students, exposed to social media throughout the duration of a 6 week period. *Twitter* was used to share resources and

Facebook was used as a community of practice, both when students attended campus and when they were on field experience. Comments indicated that such use within lectures and seminars was found to lead to an increase in peer activity; questioning, reflection and feedback. This output aligns to the findings of another study by Greenhow and Gleason (2012:467). Interestingly, just over half (53%) would use a social network to enhance lectures, seminars and tutorials, whilst 41% desired such a method of interacting with the teacher before and after the session (Table. 3).

Table. 3. The desired use of social media to enhance learning and teaching (source Dunn, 2013)

What is your desired use within your studies?	
Interact with staff	41%
Labs and tutorials	21%
Seminars	19%
Lectures	17%

Overall, 68% agreed that social media could enhance their own learning experiences. Within this smaller group, 75% indicated that the use of *Facebook* by their tutor was very helpful, 18% suggested it was 'helpful' and 7% a 'little helpful'. None of the students described the experience as 'not helpful' or 'unsure'.

4   Opportunities and Challenges

4.1   What are the Opportunities?

The use of popular networking is for many, a more natural process with an immediate effect, rather than simple posting to forum or a message board (Dunlap and Lowethal, 2010 citied in Greenhow and Gleason, 2012:468). It may offer a more systemic approach to rapport building between the teacher and the student, where the proverbial door is always open for discussion, advice and guidance (Schwartz, 2009 cited in Roblyer *et al*. 2010). For international students, Kabilan *et al* (2010) took an in-depth look into the use of Facebook and discovered that it could motivate students to study the use of language.

There are additional benefits. In using Twitter, for example, it may also encourage the development of 21st century skills which support employability, where today's employers are seeking graduates with a sound understanding of socially-designed interaction and interactive affordances of technology (Roblyer *et al*. 2010). The ability to command social presence whilst interpreting the landscape is an essential skill for anyone who engages in online discussion. Being able to review a record of discussion allows a new voice to be heard within context, even though the speaker may have only just joined in the conversation.

Scholars already realise that social media can play a vital role in course advertising, recruitment and to engage students in meaningful communication, content exchange and collaboration. Other opportunities may include flexibility, convenience and accessibility (Zaidieh, 2012). The study

concludes that social networking may improve students' motivation to engage with course content whilst increasing their interaction with peers and academic staff, thus creating opportunities for feedback and mentoring.

4.2 What are the Challenges?

The use of social media in education is not without critisism. Zaidieh (2012:20) explores the challenges of using social networking in education by discussing *"Privacy, real friendship, taking up time and miscommunication".* In academia, using such practice raises questions on control, copyright and plagairism, when the *actual* source of information cannot always be verified. The practice relies upon the student having access to the technology needed to support such activity. Exceptions in participation may need to be made and our own expectations must be kept in check. Even those students who have the means to engage in online social interaction may not want to. Likewise, we should not assume that all users within the same generation use the same social media (Fusch, 2011).

There may be unexpected realisations which will need to be predicted as far as possible, but identified early on when they do occur. Appropriate interventions can then be staged when required. The influence that social media can have on attitude and behaviour must not be underestimated. Mobilisation being an extreme; with a rapid increase in the use of *Twitter*, *Facebook* and *YouTube*, where these platforms were undoubtedly a vehicle in transformational, societal change in Tunisia, Egypt and Libya. Dunn (2011) discusses how *Twitter* was used to successfully coordinate marches and Howard *et al*. (2011) discovered that conversations on social media platforms seemed to escalate social protest (cited in Greenhow and Gleason, 2012:465).

There are opportunities for misunderstanding and miscommunication, where virtual conventions replace the tradition of tone, pace and body language. When one is restricted to 140 characters, it can be both frustrating and challenging. The underlying message must be implied. The nature of such an exhange has to be planned and carefully considered, otherwise it may lead to problems later on (Zaidieh, 2012).

5   A Professional Medium

5.1   Conclusion

The initial setup of social networking requires time and effort from the facilitator. Likewise, implementation and maintenance will need to take priority. It needs to be carefully planned and the reasons for adopting the practice must be clear and transparent. The ground rules must be set out; many educators may not want to open up their online profiles to their students, where the line between personal networking and professional networking needs to be crystal. Privacy issues are likely to be the biggest concern and quite rightly so. Any information placed within the public domain is in danger of falling into the hands of people out with the immediate circle of 'friends'.

The key advantages can be stated as:

- Increasing student motivation and engagement with course material;

- Increasing student-to-student collaboration;

- Enhanced interaction between the student and the lecturer/ teacher;

- Accelerated data and information sharing;

- Removes barriers to self-expression and contribution;

- Provides students with 21st Century skills which could aide their employability and increase levels of satisfaction.

5.2   Recommendations

The results of the survey tell an interesting story, though the picture which has been revealed to date is not clear. It would be beneficial to investigate student behaviours within a local context, with some comparison across the international landscape. Additionally, whilst some students indicated their preference for using a social media, it is not known which type of network is preferred for which purpose. Typically, this may be driven by individual personality, or by the levers enacted by the teacher; and as such could be difficult to map. With many teachers utilising social media both within and out with the classroom environment, such behaviour and the advantages and disadvantages requires further research. The means to use social media to enhance learning and teaching is at best 'patchy' with pockets of good practice and an equal measure of resistance; a phenomenon which we do not fully understand within the educational context.

There is value in considering that many students access social media via their own tablet computers, laptops and mobile phones. The extent of such use amongst the population and how the technology is integrated within the context of secondary school policies is of great importance, and must also be considered as part of the bigger picture. If indeed, individual competencies and attitudes play a role in determining the success of social media as a construct to enhance learning and teaching, the rules of engagement must be set out clearly from an early age.

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