The Paradox of Social Media and Higher Education Institutions

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Abstract

This paper explores the paradox that occurs between institutional expectations and expectations held by student regarding the use of social media in support of learning in higher education settings. Specifically, the example is given of a disagreement that took place in a recent conversation in a distributed medical education programme in Canada. The current body of research regarding the incongruity of expectations about integrating social media into a higher education institution framework suggests that a widening gap is emerging and that conflict is taking place. The example from Canada exemplifies the difference that exists in people's understandings and expectations of how social media can be employed for benefit in education. The paper looks at the principles of social media and the potential impact on many of society's institutions, including government, commerce, media and education. Interestingly, higher education seems to have fallen behind in adopting and adapting to the new social media reality. The key points of social constructivist thinking are then examined with special attention to the following five points: learning requires active participation by the learner; previous experience is important when reinforcing new learning; individual knowledge construction requires a social interaction element; negotiation within the learning environment is essential; and, learning best takes place within a socio-cultural context. These principles are then addressed in relation to the social media principles of active participation, collaboration and that of reflection. Finally, three points are expanded as to potential sources and reasons why conflict may occur when trying to integrate a popular social media perspective into the established higher education setting. These are: existing hierarchical structure of higher education institutions; accreditation and quality concerns; and, formal and informal learning. Social media is more than computer application and programs and the technology behind them it is about transformation. At its core, social media is a collection of ideas about community, openness, flexibility, collaboration, transformation and it is all user-centred. If education and educational institutions can understand and adopt these principles, perhaps there is a chance for significant change in how we teach and learn in formal and informal settings. The challenge is to discover how to facilitate this change.

Keywords: social constructivism, Web 2.0, social media, academy, conflict, grassroots, formal learning, information learning

Introduction

In 2004, the Faculty of Medicine at the University of British Columbia (in Canada) undertook a geographically distributed medical education expansion (within the Province of British Columbia) with the aim of doubling the number of medical graduates within ten years. The current schedule mandates that all incoming first year students spend their first term together at the UBC campus in Vancouver. Following this, they distribute to their respective geographical dispersed partner sites in January of the first year. With the distribution comes the need to insure all students maintain a connection with the others, the central site, and respective faculty. This has become increasingly difficult and complicated. Recently the Faculty of Medicine formed a small working group, of which the writer participated, to review the idea of forming learning communities within and across the respective sites. The proposal was that learning communities would likely be physical spaces, but virtual or

online spaces could also be included. Social media technologies were identified as possible solutions to this issue, but working group participants expressed concern over the ability to meld the two together.

Based on the discussions that were conducted within the working group, it seemed that the grassroots / user-directed nature of social media conflicted with the strong set of values, including quality assurance, which are fundamentally part of higher educational institutions, including the Faculty of Medicine. From this perspective the writer began a review of the literature in order to ascertain what research had been conducted regarding the use of social media in higher education institutions to establish if any issues had been documented. At the onset of the review, the assumption was that social media and higher educational institutions were not clearly compatible. Both academic and popular sources were researched and have been included in this paper with the hopes of providing an example of the tensions that arise between the new social media tools (popular sources) and the academic institution (academic sources).

A considerable amount of research has been done on social constructivism as a learning theory and applying social constructivist principles to the classroom and learning environment setting (Zualkernan, 2006). At the same time, research has been conducted on integrating social media technologies into the classroom and learning environment based on social constructivist principles (Bates, 2008). Much of this research literature focuses on the social aspects of social media in the educational setting. New research is starting to look at the incongruity that exists between students' expectations compared to those of higher education institutions regarding the integration of social media and social constructivist principles within a higher education institution setting. Trinder et al. (2008) suggest that the incongruity is leading to a "widening of the gap between the culture of the educational institutions and the culture of learners' lives outside higher education. Outside formal educational environments individuals act as active participants navigating their way independently through complex multimodal digital environments. Yet in higher educational they are expected to submit to a pedagogic regime that is fundamentally premised on the transmission and testing of decontextualised knowledge and skills, and which is dominated by "old- generation" technologies (Web 1.0) underpinned by a radically different philosophy and a different set of affordances" (Trinder, et al, 2008, p. 4).

So, do the principles of social media foster this type of initiative by and for learners? If so, what are the implications for formal and informal learning? Does this then put the academy in conflict with the learners it is trying to teach? Perhaps it is the informal nature of social media, or the way people freely and autonomously organize themselves, which is acting as a catalyst for change in the way people organize and collaborate online and offline. Furthermore, it is the uneasiness and risk of change to the formalized higher education institutional directive thinking that leads to social constructive conflicts. This conflict may in turn facilitate a major paradigm shift in the fundamentals, and theoretical thinking in the classroom and learning setting.

Review of Literature

Grassroots and Web 2.0/Social Media: Power to the People or Harnessing the Wind?

The first mainstream use of the term Web 2.0 or social media came in 2004 when O'Reilly Media and MediaLive hosted the first Web 2.0 conference. In 2006, the cover story of Time Magazine was, "Time's Person of the Year: You":

> It's a story about community and collaboration on a scale never seen before. It's about the cosmic compendium of knowledge Wikipedia and the million-channel peoples' network YouTube and the online metropolis MySpace. It's about the many wresting power from the few and helping one another for nothing and how that will not only change the world, but also change the way the world changes. The new Web is a very different thing. It's a tool for bringing together the small contributions of millions of people and making them matter (Grossman, 2006, ¶ 2)… it's really a revolution (Grossman, 2006, ¶ 3).

Bart Decrem, founder of the popular social-network browsing platform, Flock™ has called social media the "participatory web" (Decrem, 2006, ¶ 5). Some of the key components of the participatory or social web are:

1. Interlinking of people
2. Engaging actively and interactively with content

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The participatory web means using the web collaboratively and interactively. Google seems to understand this and has built their business to reflect interactivity and collaboration. Instead of fighting the winds of social media, they have decided to sail along and harness the social winds. Google's approach has not been to force people to use their tools as Google thinks they should be used. Rather Google has built the tools, which allows the users to use the tools as they believe will benefit them. This is a grassroots way of doing things.

It can be argued that social media and social networking have had significant impact on many of societies institutions, including government, commerce, and media. Higher education has, however, fallen behind in adopting and adapting to new social media.

The complexities of social media in the context of formal education and learning are not new and have been researched from a variety of perspectives (Anderson, 2008; Hemmie, et al., 2009; Mason & Rennie, 2009; Polin, 2008; Ravenscroft, 2009; Thompson and Ku, 2006). An important arena of research is looking at exactly what are the components of social media and the ways in which these components can be employed for improving learning. Though there has been significant research in this area, the academy is still struggling with how best to integrate social media.

Could it be that the very nature of social media is that leads to this conflict? Formal academic institutions are built on power structures and hierarchical relationships, based on expert knowledge. The very nature of social media question these power structures or relationships. In the past it has been argued that e-learning was simply translating the classroom (Bates, 2008) into a virtual classroom using technology, and to a certain extent, it could be argued that this has not been successful. Educational institutions want to harness the power of social media, but on their own terms without fully understanding what it is about social media that has the effect on shaping group interactivity and collaboration.

It is important to be cautious when thinking that the transformative powers brought on by social media are of benefit to everyone. Only those with access to Web 2.0 are able to take advantage of what it has to offer. It is also important to not create a sense of utopia when discussing the participative and transformative powers of social media and Web 2.0.

> Participative processes can be experienced as tyrannical when participation is demanded by
> course designs, tutors and ultimately by participants in an unreflective and normative way.
> (Ferreday & Hodgson, 2008, p. 647)

The promised benefit of social media has not fully been achieved and may never materialize. What can be concluded is that social media are inherently provocative and have sparked a new way of thinking about communication, collaboration, and group effort. They encourage the coming together of people for collaborative purposes across many different disciplines and arenas in society including education and learning.

The potential for change is possibly one of the most powerful aspects of social media, specifically in the area of teaching and learning.

> For educators, the potential changes in the ways our teachers teach and students learn are
> momentous. The tools of the new Internet give us opportunities for collaborations and for
> constructivist learning, and allow students to become meaningful contributors to the vast body of
> knowledge that is the Internet. (Richardson, 2008, Front Cover)

Social Constructivist Learning

Collaborative production, where people coordinate with one another to get something accomplished is considerably harder than simple sharing; however the results can be more profound. New tools allow large groups to collaborate, by taking advantage of nonfinancial motivations, and by allowing for wildly differing levels of contribution (Shirky, 2009, p. 109).

Traditionally, learning as been teacher-centred. Teachers have assumed the centre role while students were passive receivers of knowledge. This approach is slowly giving way to a new way of teaching and learning (Champoux, 2008). The idea of student-centred learning had already emerged out of the works of John Dewey, Jean Piaget, Lev Vygotsky, and Carl Rogers, (Rogers, 1983) which focused on how student construct their own learning; social constructivist learning.

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Social constructivism emerged during the late 20th Century as an alternative philosophical and educational theory. Two of the main tenants to constructivism were that of Jean Piaget and David Ausubel (Niaz et al., 2003, p. 787).   Ausubel was a contemporary of Piaget. Piatetian constructivism stressed the importance of looking beyond simple expository learning, or simply dumping of information, so that learning focused on the development of reasoning. Ausbelian constructivism focused more on receptive learning that was meaningful based on the prior knowledge of the learner (Driscoll and Tomiak, 2000). These two main foundations for social constructivist learning have spawned many other forms based on these original themes of social constructivism:

1. "Learning as information processing" (Tynjälä, 1999, p. 400). This is typically seen as cognitive approach to learning with the mind being a process of learning and learning is seen as input to the mind.
2. Learning as experiential growth and pattern recognition. This is typically a cognitive approach where the learning is a continual process of that is rooted in the experiences of the learner (Tynjälä, 1999).
3. Learning as a sociocultural activity. This approach is typically a social constructivist approach in which learning is seen as taking place as an interaction between the individual and social aspects (Tynjälä, 1999).

Social constructivist theory of learning involves processes that are more active (rather than passive). An example of this is the traditional teacher-centred pedagogy in which knowledge is seen as being transmitted from the teacher to the student. In a social constructivist environment, learning is seen more as student-centred in which the students are supported and guided in their own construction of their understanding within their sociocultural situation (Laurillard, 2002, p. 67) and collaborate actively with others on their learning.

Social constructivist learning can be summarized as having 5 main elements (Yilmaz, 2008, p. 167):

1. Learning requires active participation by the learner. Learning is not passive.
2. Previous experience coupled with and compared to new experience results in a reinforcement of /or adaption of that knowledge.
3. Individual knowledge construction requires a social interaction element within the environment.
4. Negotiation within the learning environment is essential to the development of shared meaning and common knowledge.
5. Learning best takes place within a sociocultural context - a community of practice.

Thus, social constructivist learning occurs when individuals are creating knowledge as they actively experience, explore, discover, collaborate and reflect on all of these processes. This type of learning is best situated within a social setting where knowledge is constructed as a cooperative and collaborative effort. Individuals helping each other and sharing responsibilities accomplish this. This concept of social constructivism is compatible with the social media revolution.

Social Constructivist Learning and Social Media

As noted earlier, social media have been collectively defined as the participative web; a read-write web (Richardson, 2008). This is a place of interactive content that is iterative, and not the static content of Web 1.0. For example, one individual writes a blog post and several others read and comment on the post. The blog author then responds back with a new line of thought and the collaborative process has begun.

The following table lists a comparison of the social constructivist principles against social media ideas:

Table 1. Comparison of social media and social constructivism principles

Social Media	Social Constructivism
Are dynamic and based on active participation rather than passive viewing	Active participation where learning is created based on collaborative effort
Information sharing	Knowledge is built upon experience
Communication	Social interaction
Information is created by the individual participation and interactivity of the users/Collaboration	Shared interaction creates common knowledge
Information sharing	Learning takes place best in a sociocultural context

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It is suggested that the main points of what social media has to offer and the elements of social constructivism are very compatible. As the web continues to progress and new ways of thinking, interacting, and learning evolve; it will become even more important that educators become familiar with what social media offers. As Richardson proposes, "although a considerable number of colleges and universities have begun to explore the potential, educators are just now beginning to contemplate in significant numbers the ways in which his new Internet can enhance their own practice and their students' learning" (Richardson, 2008, p. 5).

Conflict and Paradox

Social media is a new and exciting space for exploration, discovery, and learning. But this space is also relatively new and somewhat unknown. Higher education institutions have existed for hundreds of years and are not so unknown; melding the known and the unknown can be problematic and create a space where there is conflict. Social media are seen as a 'disruptive technology' because of the manner in which the traditional learning setting is disrupted. This can be quite threatening to the existing academic structures. As Thompson points out, social media "is a potentially disruptive technology because of its potential to change the model of higher education from the traditional classroom framework to an asynchronous 24/7 mode. IHEs historically do not cope well with disruption, especially in the short term; however, coping with this disruptive force could mean engaging students in extended collaborative learning opportunities. From this perspective, the perceived disruption could entail many positive implications for higher education" (Thompson, 2007, p. 5).

Three key areas emerge as to where conflict could occur:

1. Existing hierarchical structure of higher education institutions
2. Accreditation and quality concerns and
3. Formal and informal learning

Existing Hierarchical Structure of Higher Education Institutions

In most higher education institutions there is a specified organizational structure, which also tends to be hierarchical. For example there are students, support staff, seasonal lecturers, and tenured professors. Traditionally the academic institution has been seen as the repository of knowledge and that the educator is there to transfer the knowledge to the students. Anderson (2007) suggests that "universities are perceived to accumulate status as 'knowers' (p. 16). In contrast, social media allow for anybody to create, modify, transmit and share information – not just the 'knowers'. This approach challenges the traditional position of the higher education institution. There will need to be negotiations between the hierarchical stance of the institution and the openness of social media. Social constructivism may be in a position of bridging the two sides of the continuum since it already has roots in education and shares many of the same values as social media.

Accreditation and Quality Concerns

One of the key values of an academic institution is providing a quality education that prepares learners for entering the workforce. Accreditation boards are set up to insure institutions meet the traditional set standards. As noted already, social media in education is non-traditional and introduces new outcomes that may prove troubling to higher education institutions. Those outcomes need to be assessed. As McConnell points out, "The quality of the student's learning experience is possibly the central issue of importance in assessing the potential of e-learning in higher education" (McConnell, 2006, p. 62). Begg et al. (2007) warn that social media pose challenges to standards of learning in institutions of higher education, and therefore, require careful scrutiny and thoughtful adoption policies. While social media may actively engage students in learning, a revolution in the way students learn needs to be tempered with assurances that what students learn can still be accredited (Begg, et al., 2007). Though social media may introduce an unknown element that is hard to assess, social media permeate much of society. If educational institutions are to continue preparing students for future endeavours in society, it would be useful if students could be exposed to these elements while learning. It is important to prepare students to meet the challenges they will face. Social interaction, collaboration, and technology are all key elements to current society.

Formal and Informal Learning

Recent research suggests that there is an increasing awareness of the tension between formal learning (academy) and informal learning via social media (Buckingham, 2007, Nikolov, 2007, Selwyn, 2006). Research suggests that the tension between the academy and social media remains mainly unanswered. A recent research project (Clark et al., 2009) found that social media are a contributing factor to the blurring of boundaries between

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formal and informal learning. This is an important point regarding the academy's mandate, which includes formal learning. Typically informal learning has not been within the recognized remit of the academy. But this new blurring of boundaries could cause a sense of uneasiness, which leads to an uncomfortable position for learners and instructors and the academy. Clark et al. suggest that learners are continuing to find ways of utilizing social media within the formal context of the academy: "Learners' active and routine circumvention of school-designated rules in order to use these technologies in the school setting are generating a sense of 'digital dissonance' around these technologies as learners and their teachers struggle to negotiate an acceptable balance between the social and educational potentials they offer" (p. 66). Though learners may not perceive the potential of social media with their learning context, Clark et al. suggest that learners do want a greater inclusion of social media within the learning arena. "Most learners are and would like to use at least some of these technologies [social media] to support their learning in more formal contexts" (p. 68).

It is becoming increasingly more important that educators, and especially higher education institutions, embrace social media for what it is: as a grassroots form of mass communication, collaboration, and tool for bringing people together.

> It is an entirely provider-centric perspective that takes no account of students' academic or logistical needs. Students will increasingly opt for the university that is genuinely student-centred, that structures study time around student needs, not institutional needs. (Laurillard, 2002, p. 189)

But embracing will mean to understand what social media are, and what makes them appealing to students. In essence, social media allows grassroots initiatives that are neither directed nor prescriptive. By imposing direction and regulations, higher education institutions may miss the point of the benefits. This is the conflict and paradox. Higher education institutions want to harness tools that do not work when harnessed. By imposing a defined structure and regulations on social media, higher education institutions may counter the notion and value of social media.

Social media are more than the technology behind the social applications and programs. Their use includes a set of ideas about transformation and social gathering, mass participation, user-generated content, openness, flexibility, collaboration, community, and they are user-centred. If higher educational institutions can understand and adapt some of their practices to these principles, perhaps there is a chance for significant change in how tutors teach and how students learn. Expecting traditional universities to adopt the Google mentality of allowing users to use tools according to personal preferences and perceived benefits may not be realistic. However, student expectations for traditional universities to move toward learner-centred, social approaches to learning are likely to increasingly influence university policies, practices, and structures.

> [The use of social media] is not a technological revolution, but rather a social movement.
> (Downes, 2004, ¶ 7)

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