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Research article

Experiences of Social Media in Higher Education: Barriers, Enablers and Next Steps

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Abstract

There are many examples of social media being used in higher education to enhance learning and teaching. While some academics are confident in exploring multiple strands of social media and blend them instinctively for a multi-dimensional learning experience; others are more tentative, preferring to understand the nature of the tool or process thoroughly, often by learning from others before embarking on a social media based activity (Beckingham, Purvis and Rodger 2014). However there are a broad range of factors, experiences and perceptions that may influence an individual and their resulting use of, and expectations of, social media as a learning construct.

The aim of the study was to examine current institutional practice in the use of social media in this context, to inform strategic direction and consider implications for future academic development in order to achieve a positive impact on the learning experience for students.

Fifty individuals responded to an online survey. While the majority of these (n=35) were already using social media in some way in their teaching practice, and mostly had positive attitudes towards it, the remainder had not. Some were open to the idea, though naturally cautious, while others were clear that it had no place in their teaching practice.

This rich picture revealed a variety of barriers and enablers: where confidence was high and support available; uptake of social media as a tool for learning was more prevalent and more successful. There was a strong connection between support (formal and informal) and individual confidence, and a subsequent willingness to try new things to enhance learning.

Recent research advocates the development of digital capabilities including the confident use of social media for communication and collaboration (Beetham 2015); and that where embedded, its use provides essential skills for future graduates. It is therefore timely to review the skill sets and development needs of staff in order to support the learning of students.

Introduction

The background of social media is traditionally identified as one of expressing individual identity and pursuing informal social activities, it was not one of education or supporting learning. The use of social media is expanding beyond personal need, firmly into professional arenas, and slowly but surely into an educational context, where teachers are discovering that the affordances of social media can provide richer and more sustainable learning, and contribute to more digitally competent and autonomous graduates (Seaman and Tinti-Kane 2013). Added to this, an increasingly demanding market place, where social media now plays a critical role in business (Qualman 2009, Burgess and Burgess 2014) and service activities such as reputation, growth, support, liaison, research, production, presentation, problem solving, publication, reportage, communication, collaboration and so on (Dabbagh and Kitsantas 2012). The careers service at Sheffield Hallam University reports a marked increase in the appearance of social media skills in person specifications, and further to this High Fliers (2014) report the increased use of social media for recruitment. This means that higher education can ill afford to ignore or stymie the use of social media as an active part of the curriculum, and should instead aim to integrate it appropriately across the teaching in all subject areas, with confidence and appropriate strategic purpose.

The use of social media in higher education has increased, with positive outcomes showing evidence of increased student engagement, belongingness and increased grades (Junco et al. 2011, Ratneswary and Rasiah 2014). However its use does not come without concerns of online safety, digital ownership and e-professionalism (Lupton, 2014). In our higher education institution in 2013 there were repeated requests for guidance for the use of social media in the context of teaching and learning. It was those requests that led to student-facing guidance to be produced (Sheffield Hallam University, 2013) which supported students directly and also gave confidence to staff to enable them to use social media in their learning and teaching practice. This initial work then led us to begin to question what the barriers and enablers were in relation to the use of social media for learning in higher education, so we would be well equipped to plan strategically, and to tie into our evolving digital capability agenda.

Elsewhere, Higher Education institutions in the UK are gradually beginning to respond with student facing guidance, and to a lesser extent staff facing, however there is very little in the literature to support evidence of evaluation and impact of the use of open social media in learning and teaching. While wiki and blogging tools have been part of most virtual learning environments for about a decade within a walled-garden capacity, social media in its truest form is for the most part regarded as an optional element of the curriculum (exceptions to this may include subject areas such as journalism (Cochrane et al. 2013) where the impact of social media on the industry is extreme). It is generally used by the confident, or those who are influenced to the right degree; consequently staff practice and development opportunities are the domain of those who are curious and already engaged (Selwyn, 2011).

At Sheffield Hallam University (2014) alone there are examples of social media being used to enhance course community; facilitate autonomous and creative learning; develop public facing professional portfolios and to extend the classroom. We have found through support and sharing of practice that the level of commitment and resource this necessitates varies greatly between individuals; some are comfortable and confident in exploring multiple strands of social media, blending them for a multi-dimensional learning experience, on occasion, involving students in the design structure and delivery, and usually, adapting ideas or processes on the fly. Others are more tentative, preferring to truly understand the nature of the tool, the process of the activity, or plan for student behaviour before embarking on a single activity. Teaching staff are seeing how their experiences as personal users of this medium can be transferred to their teaching practice with powerful effect, providing opportunities for collaboration, research and problem based learning (Poore 2013).

Meanwhile, many students are finding they can independently augment their learning through collaborative networks and folksonomies (Junco, 2014), and strategically enhance their employability, while others need more support and guidance to develop their online learning skills (Parkes, Stein and Reading 2015). As practice evolves and becomes more commonplace, and as expectations from all quarters increase, the implications for higher education become more noticeable and urgent (NMC, 2014).

It is not unusual for staff to see social media as a daunting addition to the ever increasing raft of technologies and concepts they feel they have to “learn”, navigate or understand to become social media literate and netsmart (Rheingold 2012). While there may be a desire to draw on the affordances of a particular tool or form of communication, it can be difficult to understand terminology, techniques and behaviours. Equally the barriers perceived, such as lack of confidence or support structures, may be enough to prevent an individual from venturing beyond their default “I’m a technophobe” position. There

are a broad range of factors, experiences and perceptions that may influence an individual and their resulting use of and expectations of social media as a learning construct (Lupton, 2014).

At Sheffield Hallam there is currently no mandate for the use of social media, or expectation of its use for teaching and learning, but as a general topic it is repeatedly a part of personal and curriculum development conversations. Optional workshops and sharing sessions are very well attended, and enthusiasm is obvious. Even so, higher education institutions in general tend to be slow to put guidance in place. Student facing resources were developed at Sheffield Hallam in September 2013 as a response to teaching staff desperately needing formal guidance for themselves and guidance to pass on to their students to help set the scene for appropriate conduct, good practice and further down the line - for encouraging students' strategic practice. Subsequently, following extremely popular practice sharing events, the beginnings of a holistic resource for teaching staff was established. It introduced a rationale for social media in teaching and learning, guidance around responsibilities, student support and planning frameworks. However, this was based on intuition and common sense as opposed to informed understanding of the experiences of staff and their challenges of managing social media and engaging students.

By surveying teaching staff at Sheffield Hallam about their experiences of incorporating social media into learning and teaching, along with the reasons why they have stumbled or stalled along the way, and by critically examining (Fuchs 2013) what they feel the enablers and the barriers to be, we will be able to more clearly understand the practice that is taking place here. The results indicate the attitudes and perceptions that staff have with regard to incorporating social media into the curriculum, and help us to strategise and develop further guidance accordingly. Beyond Sheffield Hallam, this research will provide a rich case study of contemporary practice and attitudes at a single institution, and contribute to the sector discussion on how universities can respond to the challenge of enabling innovative teaching practice in this field.

The broader study was designed to identify current institutional practice in the use of social media for learning in order to inform our strategic direction and consider implications for future academic development. Equally the results would be relevant to other higher education institutions looking to innovate and support innovation in the use of social media for learning and teaching, and may contribute evidence and experience to the broader HE community. The study comprises a staff facing survey, focus groups to pick up on themes emerging from the survey, and individual interviews to delve more deeply into detail and personal experiences. This paper reports on the key findings from the survey element of the study.

Method

At a time when our teaching staff are being contacted for viewpoints on a variety of different aspects of university practice, it was considered that the most appropriate action would be to target those who had at least expressed an interest in the use of social media for teaching in the prior 18 months. We had kept a record of around 200 attendees to social media specific workshops and sessions, who were emailed directly. From this initial action around 35 staff responded. Conscious that we were attracting majority of staff who had used social media, we also advertised the survey on the university's staff portal news section, worded deliberately to encourage staff with any viewpoint, not just those experienced and engaged with the use of social media in teaching and learning. This increased the total respondents to 50 by the time of close. However, we acknowledge the self-selecting sample has a potential social media bias as a limitation of the study. The study obtained ethics approval and participants indicated their informed consent following agreement with a statement at the start of the survey.

The survey contained two key sections. The first looked at the respondent's experience of particular tools within three different contexts: personal, professional and teaching. It also asked respondents how they feel about the challenge of adopting new technologies into their lives (in general). The second section required respondents to self-select from one of four descriptions of their experience and attitude to social media usage within their teaching specifically. The range of questions from this point focussed on barriers, enablers and opinions accordingly.

Initially, all respondents were asked which option best described their approach:

- I like to give it a go, working it out as I go along
- I am cautious, preferring to find out as much as possible before starting
- I avoid it unless I have no choice

The purpose of self-selection was to gather viewpoints which reflective of four different types of teaching experience of social media for learning, and for each of them examine barriers and enablers. We categorised the four types into the following groups:

Group 1. Those who currently use or have used it well (n=33)

Group 2. Those who have tried it, but did not have such a positive experience (n=2)

Group 3. Those who have not used it, but are open to the possibilities (n=8)

Group 4. Those who have no desire to use it in their teaching (n=7)

In analysis of the survey, we considered it more useful to cluster the groups into two larger groups,

Cluster A. Those who have used or are using social media in their teaching (n=35)

Cluster B. Those who have not used social media in their teaching (n=15)

We identified the most commonly known tools to represent formal interactions (LinkedIn) and informal ones (Facebook); highly social and participative environments (Twitter) and resource base (Youtube), along with a general tool type for curating references (social bookmarking i.e. Diigo). An 'other' box was included to allow respondents to include other tools they like to use.

For each tool, we asked those who had not used it in their teaching to tell us more about their receptiveness to using in this way in the future, and gave a drop down menu of choices:

- I can see the potential for using it in my teaching
- I need convincing that there is any potential for using in my teaching
- I do not see any potential for using it in my teaching

This provided information about receptiveness for using different tools in particular contexts.

In the second section of the survey, Cluster A were asked for detail about the decisions, thoughts or processes they encountered in designing their use of social media for learning, so that we could ultimately understand more comprehensively about the things they perceived as barriers or enablers. We asked them:

- The objectives of the learning activity
(dropdown included: sharing, collaborating, communicating etc.)
- The drivers of the learning activity
(dropdown included: curriculum or sector drivers, student suggestion, etc.)
- The extent to which they were concerned/worried about aspects of the activity
(each asked about: security, inclusivity, skills, confidence etc)
- How they addressed any of these concerns or worries (if at all)
(free text)
- Whether they perceived anything to be a barrier
(drop down included: resources, time, money, attitudes)
- How did you overcome these barriers (if at all)
(free text)
- Name 3 things that would have enabled you or you felt ensured the success of the project?
(free text)
- What could the university do to support the use of social media in teaching and learning?
(free text)

In the results and discussion below, we will focus on the data directly relating only to barriers and enablers, although we may draw on elements of the other questions.

Our questions of Cluster B in this section were simpler, we asked them the extent to which they were worried or concerned about particular aspects, what they felt would enable them, and what could the university do to support the use of social media in teaching and learning.

Results and Analysis

Approaches to new technology or concepts

The majority of staff had a the attitude of “I like to give it a go, working it out as I go along” (60%, n=31) with the next largest group cautiously wanting to find out as much as possible before hand (28% n=14). Only one respondent reported avoiding new things unless they had no choice. Four reported taking different approaches, though on examination these people largely described themselves as cautious or curious. This does suggest that our respondents are generally confident in their approach to technology, and where they are not as confident, they work things out as they go along. They are not hindered in their efforts, but perhaps they do approach technology in a different way in order to prepare for a new process.

Current use of social media tools

We asked a set of questions which helped us see how prolific our users were in the use of social media tools within three contexts: personal, professional, and teaching. We utilised this device from the Pearson survey (Seaman and Tinti-Kane 2013) which appears to be the only measure available currently for how social media is being integrated into teaching practice. 'Social media' was defined as “any online tool that connects users, allows collaboration and communication”.

The identified tools represent those best known for their type: Twitter (micro blogging), Facebook (social networking), LinkedIn (professional networking), YouTube (video sharing), and a broad option of Social Bookmarking (suggesting Diigo or Delicious as examples). A free text other tools box was included to allow respondents to expand on their use of other unnamed social media tools. Free-text inputs revealed a high use of image based tools notably Flickr and Instagram.

The results (Figure 1) are not necessarily surprising: Facebook is used much more in social contexts than professional or teaching, and yet social bookmarking (tagged favourites) is not much used at all, indeed many (n = 17) respondents do not know what it is at all. YouTube however, is shown to be ubiquitously very well used across all three contexts.

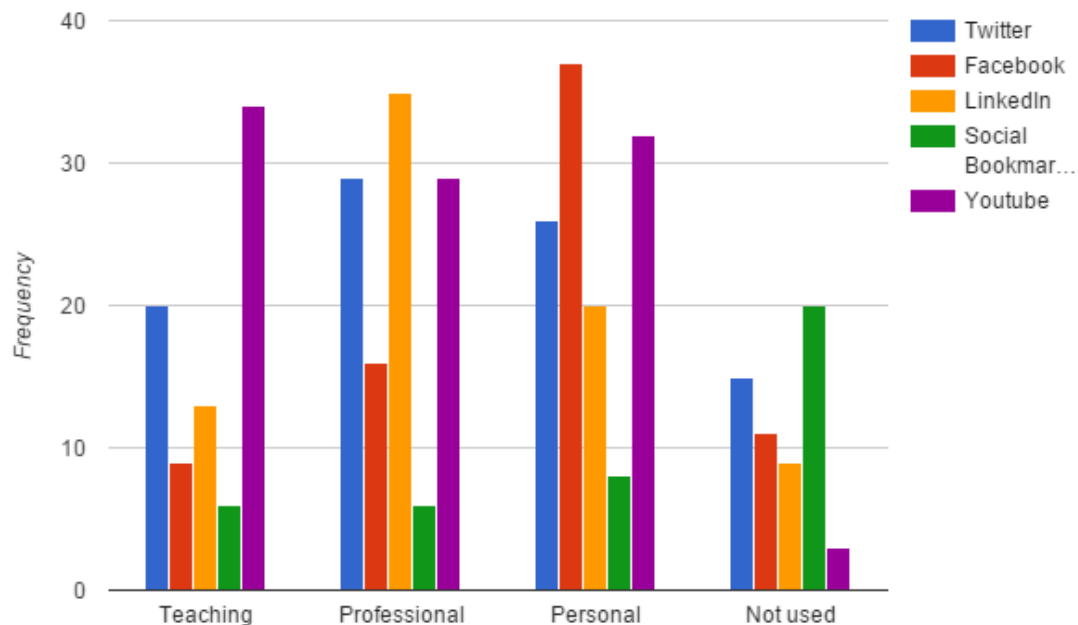


Figure 1. Identified tools and their use in teaching, personal and professional contexts.

Whilst we might expect that the tool itself is key in the potential usability and uptake for learning and teaching, there were exceptions. We asked about tools that can be roughly categorised as 'social bookmarking' and suggested the example of Diigo. We know that these types of tools can be logically associated with the Higher Education context in relation to research, referencing and scholarly practice, and yet their uptake is relatively low (n=6 use in teaching). The primary reason given for not using in teaching is "not knowing what they are". These tools have not achieved a place in popular culture, and perhaps need to be explained in order for people to make connections, and therefore understand how to use as a resource and implement in learning and teaching. If not used in a personal or professional context, this experience cannot be transferred to teaching.

Tools that are frequently used in popular culture are easier to engage with. YouTube is the most commonly used video sharing tool and was used by our respondents more than any other social media tool we suggested. While we suspect most of our respondents do not upload their own videos or engage in online discussion (within YouTube), it is well used as a resource base. YouTube videos can also easily be embedded within the traditional virtual learning environment.

For each defined tool, we asked those who had not used it in their teaching to tell us if they were receptive to using in this way in the future, with the following choices:

- I can see the potential for using it in my teaching
- I need convincing that there is any potential for using in my teaching

- I do not see any potential for using it in my teaching

Respondents are most reticent about the potential of Facebook but fairly receptive to Twitter and social bookmarking. YouTube is the tool that almost all respondents are familiar with and do not need any convincing to use (Figure 3).

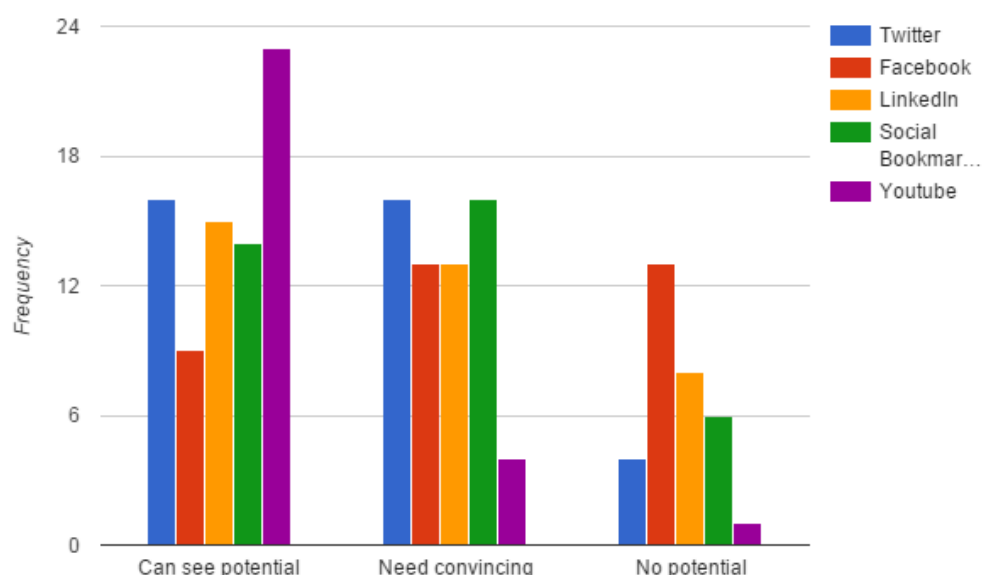


Figure 3. The potential use in teaching for identified tools, all respondents

Barriers and concerns to using social media tools for learning

The survey took two approaches to establishing issues around the use of social media for learning, firstly looking at experienced and perceived barriers (extrinsic), and then looking at personal concerns our respondents had, or expected to have (intrinsic).

Barriers

We asked those who had or would consider using social media (groups 1, 2 and 3) about barriers to using social media for learning and teaching. We excluded those who had already declared themselves closed to the use of social media for learning (group 4). They chose from a list of barriers and selected those they felt applied to them. The list of barriers was roughly categorised as resources e.g. access to support and guidance, hardware, software; attitudes and confidence e.g. management buy-in, understanding of the tool; age of student; confidence of colleagues, student and self.

It must be highlighted that the number of respondents who have not used social media but are open to using it (group 3) are a quarter or the size of the groups of respondents who have used social media in learning and teaching (1 and 2). However it is notable that those who have not used social media see

understanding of the tool as a significant barrier (87%), and their own self confidence to a lesser extent (62%) whereas those who have used social media report these factors as much less of a concern (29% and 23% respectively). Half of Group 3 also perceive access to support and guidance, hardware and software as a potential barrier.

Both clusters agree that time is the most significant barrier, with a combined 67% of the set agreeing that it plays a role in preventing the use of social media for learning. More positively, for both clusters combined, the age of students is the lowest rated barrier (11% combined), and also less significant are access to funding (16%) and Management buy-in (14%). Student confidence was only being perceived as a barrier by those who had experience of using social media (Cluster A, 41%); those with less experience (Cluster B) perhaps not having had that direct experience to draw upon, were more optimistic (12%).

Individual Approach to new technologies or concepts

We asked a specific question to help us understand a respondent's general behaviour when challenged with new technology or concept. The answers allowed us to make rough assumptions about openness to technology and give us a broad idea of confidence levels. From that position of understanding we could then examine the barriers and enablers encountered or perceived.

The majority of the group like to try things out, but may also be cautious. It's doubtful that attitude or level of confidence is representative of the university as a whole, given the bias towards using social media in this group. However, the additional comments begin to give us an idea of some of the motivating factors for using technologies.

"Depending on the product, my experience and quality of support available either give it a go or find out before starting"

"I like to find out as much as possible beforehand, but that doesn't mean I'm necessarily cautious - just interested!"

"I am willing to try anything, so long as I can be convinced of its relevance - and so long as I can be given time to test it out, and be trained to use it. Which isn't usually the case."

Perceiving benefits or needs

Further questions examined receptiveness for using different tools in particular contexts. There seemed to be a little confusion about this question. Some people who had used it in a teaching context still

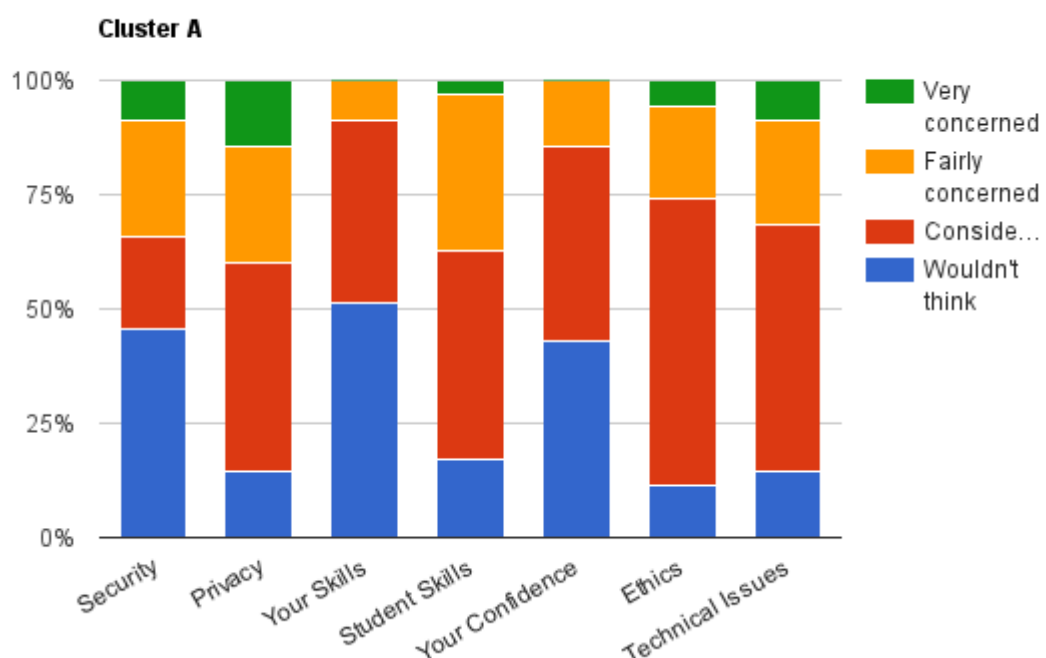
answered, probably with consideration about the tools they had not yet used in a teaching context and the potential benefits of those as-yet unused tools.

YouTube is the most accepted of tools while Facebook is the tool that most respondents use. While it is perhaps easier to imagine why they would need convincing to use Twitter (as Twitter can be a concept that many struggle to understand), it is more surprising to find the number that saw no use for LinkedIn at all (for themselves or in teaching students). On the whole, participants are broadly receptive to using a range of social media tools and types in teaching practice.

Concerns

All groups were asked about a selection of concerns (Cluster A) or perceived concerns (Cluster B), including security, privacy, yours and your students' confidence, ethics and technical issues.

Overall, the respondents are least concerned about skills and confidence of themselves, and their students, and more mindful (particularly cluster B) about security, privacy, ethics and technical issues. There is some disparity between the two clusters, with Cluster A generally more experienced and open, and Cluster B more cautious and describing their expectations rather than their experience.



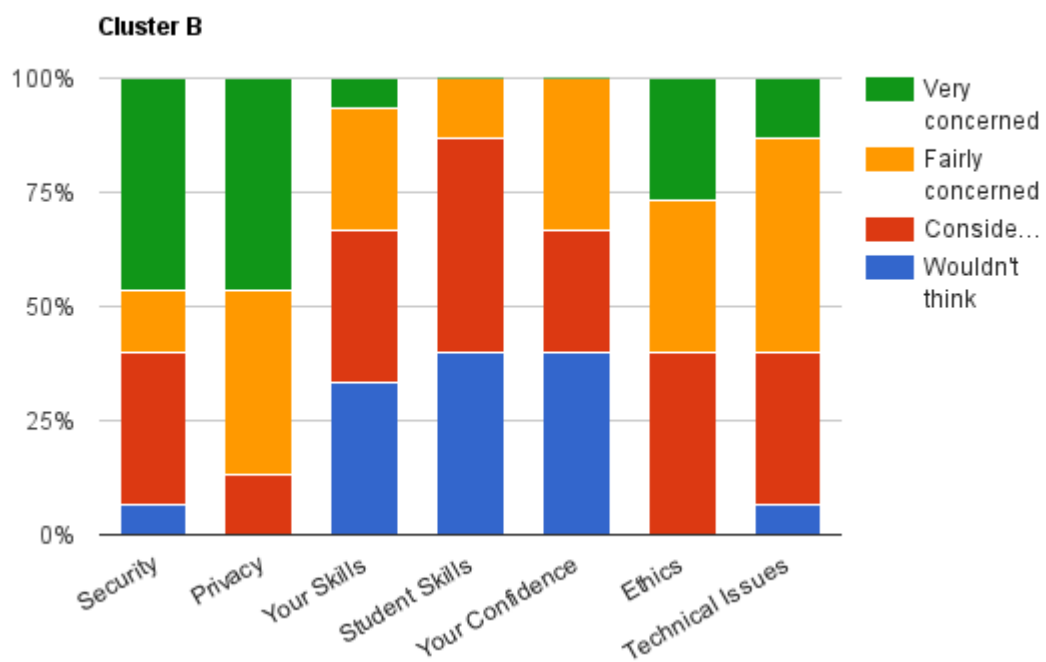


Figure 4. The concern for the use of social media for learning (Cluster A and Cluster B)

Enablers

Where appropriate we invited free text responses to understand how groups and clusters had overcome barriers, or addressed concerns. The themes of enablers from the group of respondents who had experience of using social media (Cluster A) were: being able to provide a clear rationale to students, persisting in the approach, and using personal time to develop skills and techniques.

Providing a clear rationale:

"Through experimentation and asking students to 'give it a go'. I often given a rationale of the benefits to get student buy in."

"by presenting a persuasive argument of the benefits of the technologies' use in their personal and professional context"

"Explained the purpose of the tool to the students. So far there have been no breaches of confidence."

Persistence:

"Learning on the job really - following other academic colleagues who are ahead of me in this area"

"Just went and found guidance as didn't know where to locate it internally. Confidence is all about being honest with students and stretching outside of both my and their comfort zone.

"worked out how to do things myself, accessed support from the TEL team and designed sessions to deliver to students to enable them to acquire the skills and develop the confidence"

Personal time:

"worked the weekend to teach myself the best way"

"Time: a lot of this takes place in unscheduled time or outside "normal" 9-5 hours. So it is not accounted for."

Responses from this cluster which describe how concerns were addressed are more disparate, but included practice advice for working with social media in learning and teaching:

"Security - undertook an I.T. audit, revisited contingency plans - instigated a weekly automated scan and offsite backup.

Student skills - be prepared. You can't deal with every eventuality nor predict it. What matters is how you reduce problems and deal with them if they occur. So plenty of support materials online, people can telephone us anytime and leave messages, interact with us through twitter and regularly ask students about their learning experience and how we can make it better. Delivering to learners in the middle east was interesting. Most use Macs' and the OS has real problems with secure pdfs and viewing some webinars! Technical - assessed and planned everything before rushing in!"

"Beware of the nature of the beast you are dealing with. Or be bitten."

"Talked to colleagues and agreed guidelines."

"biggest thing was criticism of trying something new - needs to be done though"

Respondents were asked to name up to three things that they felt enabled them, or that ensured the success of a project. Responses varied, but often touch on personal approach *"Mental toughness - personal resilience"*, *"My diligence"*; and maximising on positivity: *"Focusing on the longer term organisational benefits (not short term budget management)"*, *"Open to change along the way"*, *"the encouragement from other departments at LTA conference"*.

Other enabling factors mentioned were focused on the learners and other stakeholders: *"definitely the students' attitude to try something different."*, *"when it works, it really works - students who do get*

involved love it.”, “colleagues and contacts in events industry encourage me, since they can see the value in it.”

The two groups that comprise the cluster who have not used social media in learning and teaching (Cluster B) were asked different questions about potential enablers. Group 3 were asked what factors would influence their use of social media in learning and teaching; group 4 were asked what would convince them to consider using social media. Despite the slightly different questions some of the same factors emerged with themes of support, guidance, understanding the benefit, and, being reassured by and working with others. When asked what the University could do to aid or support the use of social media in learning they said *“Drive discipline and professional conduct a bit harder.”, “Allowing time for one-to-one tutorials (ongoing) about how to use it, the benefits to any particular module, setting it up, etc.” and “Workplanning allocation”.*

Respondents were also asked to “Name up to three other things that might enable you to use social media in your teaching?”. Again the themes of support, guidance and working with others were strong: *“Team teaching with a confident colleague; “Chance to observe the tool being used”; “Belief in the fact that students wouldn't direct abuse at staff - I've experienced this before”; “Having more time allocated to be trained in social media. Not just a one-off workshop, but continuing workshops/one-to-one support”; “team approach and agreement”*

As group 4 had identified themselves as being closed to the use of social media in learning, we asked them if there were any factors that would “convince you to consider using social media in your teaching?” Only two of the 8 suggested time as a factor, however 6 say they would use social media if they saw there was a benefit, and another mentioned if the sector need was there. The overriding thing about this group, is not that they are closed because they do not feel able, it's that they do not (currently) see the need, and that it is not so much as caution or lack of confidence, or even resources making them closed to the potential - as their own personal buy-in.

Conclusion and Recommendations

The results of this research present a rich picture of a variety of barriers and enablers. Where confidence was high and support available, uptake of social media as a technology enhanced learning tool was more prevalent and more successful. The place of a tool within popular culture may also influence its position as a potential tool for learning and teaching alongside an understanding of the benefits the tool may offer. There was a strong connection between support (formal and informal) and individual confidence, and a subsequent willingness to try new things to enhance learning. In addition there is a correlation

between the personal and professional use of social media, and the implementation (or consideration of) within teaching.

Whilst it was highlighted that not all use the social media tools aforementioned in teaching, they did not outrule the use of a social media tool where relevance for learning and teaching could be easily attributed. The use of case studies providing both generic and subject context might be recommended, alongside guides such as staff guides (Sheffield Hallam University 2014). It was also identified that hands on support or resources that could demonstrate use, provide a foundation for taking initial steps. Understanding the range and forms these may take would going forward provide an insight into practical motivating enablers. Equally where caution prevails (and quite rightly) the information or guidance required to highlight the safe use of social media and other digital spaces. Our results echo those of Lupton (2014) who also described the positivity of most academics but with a number of concerns that needed to be addressed before they could confidently use social media for learning and teaching.

Recent research advocates the development of digital capabilities including the confident use of social media for communication and collaboration (Beetham 2015); and that where embedded, provides essential skills for future graduates. It is therefore timely to review the skill sets and development needs of staff in order to support the learning of students. Further research by the authors is already underway which aims to provide insight into the specifics of barriers and enablers that have been highlighted from the results of this survey research. The relationship between the staff skillset and the requirement for the development of student capability is also being explored. It is the intention of the researchers to publish the outcomes of the further stages of this research in due course.

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