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Abstract

This article analyses and assesses the inclusion of blogs in higher education learning and teaching, and its use as an enabler for reflective learning, particularly in the context of group work.

The research reports on findings from existing literature and from an isolated observation of a class of 130 business students at undergraduate level. Two main areas for discussion have been defined: the impact of blogs on group work and the impact of blogs on student engagement. It has been found that the use of blogs in teaching and assessment deepens students' individual learning experience and increases group performance through the application of Kolb's Learning Cycle. Kolb's theory has been used as guidance in tailoring blog tasks and activities.

Overall, blog activities have minimised issues between group members and allowed for a more flexible and positive learning experience throughout the duration of group work; it was also found that students engaged in blog writing were able to motivate their peers to write on their own blogs too. Moreover, a relation between blog writing and better overall achievement in learning has been found.

However, there were problems and risks associated with blog use (i.e. privacy concerns, cyber-bullying, and harassment) which could have been minimised by setting some ground rules at the start of the task. The success of the student experience relies heavily on an active tutor, who is required to monitor and motivate

student participation. It has been established that the positives outweigh the negatives. This has demonstrated that the use of blogs in Higher Education can impact students' learning by exposing them to elements of self-reflection, contributing towards higher levels of student engagement and group work participation.

Introduction

With so many valuable electronic tools available to the modern student, it has become imperative that universities implement some of these tools to complement traditional teaching techniques and activities. However, it may be difficult to choose which tools to use, the variety is immense and not all tools suit all teaching environments and styles. Group work, for example, seems to be the least preferred method of assessment for students. During group work, cultural clashes, lack of common availability and problematic group relations can occur (HEA, 2013).

Nevertheless, using electronic tools in teaching has become a priority for most universities and their teaching staff. According to the Community Research and Development Information Service (CORDIS), the education sector is following the footsteps of businesses and private homes across the world by 'going electronic' (CORDIS, 2013). It is not surprising, considering many students already arrive at the University with 'advanced skills and practices with regard to electronic learning and communication' (Smirnova, 2008). New technologies can therefore be seen by modern schools and universities as a necessary (and perhaps indispensable) practice, in particular if they wish to remain competitive.

It is also widely acknowledged that students learn in different ways and styles (Bloom, 1956; Kolb, 1984) and that their learning can be deeply affected by factors such as poor teaching facilities (Schneider, 2003) and inappropriate teaching methods (Schroeder, 2004). Although traditional teaching is a valid and generally accepted way to disseminate information to large cohorts, the advantages of these electronic tools to support and supplement existing methods of teaching (and even

replace them altogether, whether they are web-based or digital) generate heated debate, dividing academics and practitioners. Some argue that electronic tools can aid in teaching and learning by reversing low levels of student engagement and collaboration (Chan, K. K., & Ridgway, J., 2004; Duffy, Peter D. and Bruns, Axel, 2006; Mynard, Jo, 2007); others argue that these new technologies prepare students to meet the expectations of their prospective employers (Latzer, 2009). There is obviously much interest around these tools, even if 'there is no consistent evidence that the adoption of these new technologies enhances learning' (Chan & Ridgway, 2004:3). It may be pertinent to note, though, that most of these studies were published over a decade ago and do not consider the recent changes in academic practice or a new generation that is now very technology aware.

This article aims to demonstrate that the use of electronic tools in Higher Education can impact students' learning, by exposing them to elements of self-reflection. This will be explained through an adaptation of Kolb's Learning Cycle model applied to blog use, in an attempt to establish that the use of blogs in teaching and assessment deepens students' individual learning experience and increases group performance.

Blogs as a tool for reflective learning

Reflection is an important part of the learning process. It consists of recapturing 'experiences, think about (*sic*) it, mull it over and evaluate (*sic*) it.' (Boud et al, 1983:19). The Higher Education Academy (HEA) reiterates this by establishing reflective learning as an important aid in 'develop(ing) critical thinking, self-awareness and analytical skills' (HEA, 2009). As educators, we are constantly encouraged to reflect on our individual practice. However, students are not as encouraged to reflect on their learning as they should be, except perhaps when they are engaged in typical work placement activities (Smirnova, 2008). Incorporating web-based tools - such as blogs - into teaching can ensure the student is exposed to valid and relevant elements of reflection throughout the course of their learning.

Blogs (a contraction of the term 'web logs') have become extremely powerful communication tools 'attracting a large and dedicated readership' (Boulos, 2006)

across the globe (Gurak et Al., 2004; Moon, 2005). Blogs enhance the ability for students to 'demonstrate critical thinking, take creative risks, and make sophisticated use of language and design elements'. (Duffy and Bruns, 2006: 33). Chan & Ridgway (2004) also defend blog use by declaring they 'support student reflection' and keep motivation levels high, depending on student perceptions and subject area. Nevertheless, it is their unique set of characteristics that make them so appealing to the academic community. Their 'form and function' (Gurak et Al., 2004) may be their most important features: blog posts follow an ascending chronological order, a structure deemed to be 'governed by spontaneity and novelty' (Gurak et Al., 2004). Time-stamp features provide students with an opportunity to question, assess and revisit their experience time and time again, but also to identify patterns and levels of personal development. This type of 'adaptive learning' can be linked to Kolb's (1984) studies on learning styles.

Kolb's Learning Cycle (Figure 1) assumes that learning is an on-going reflective process (Moon, 2005) whereby students constantly analyse, evaluate and assess an experience so as to draw conclusions and decisions which may or may not affect their future learning and actions. Application of Kolb's learning cycle to practice may explain (and even help) understand the mechanisms involved in human learning, but Moon (2005) rightly points out that this theory may be more about teaching than learning. When students go through the

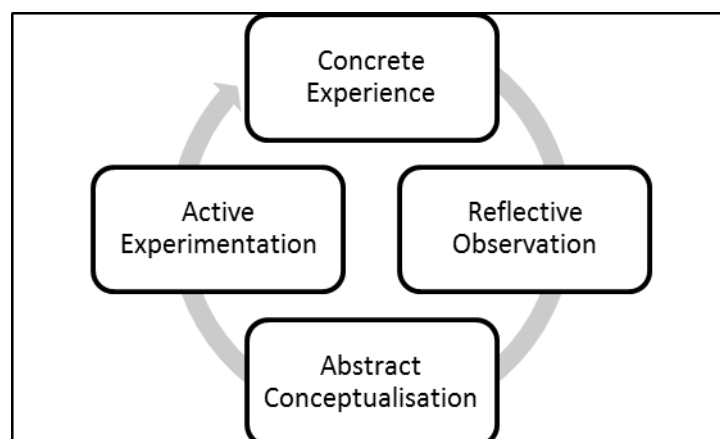


Figure 1 - Kolb's Learning Cycle (Simplified)

different stages of the cycle, there is not much self-awareness of the learning *per se*. This is because Kolb has focused heavily on 'process' and 'instruction' (Moon, 2005:5). Students tend to do what they are told without giving much thought to it. Considering 'reflection is a form of response of the learner to experience' (Boud et al, 1983:18), it is important to bring student consciousness into their own learning process.

Method

The main aim for this project was to analyse and assess blog integration as an enabler for reflective learning, particularly in the context of group work.

A Marketing Planning class of undergraduate business students were asked to keep a group blog during the preparation and writing up of a 2,000-words group report (Kolb's concrete experience). Students were also required to write an individual reflection of 500 words as part of that same assignment.

They were allocated to group areas using the University's virtual learning environment (VLE): Studynet. These group areas allow students to post files, create news, contact their members, create a wiki, and keep a blog – all within the same electronic page. Each individual group area can only be accessed by their respective group members. Other group members cannot access these areas but, for moderation purposes, all tutors can access all group areas.

In total, thirty (30) groups were created, each of which had between 4 to 5 group members. Students were asked to write on their blogs every day throughout the duration of their group work experience (Kolb's reflective observation). No word count was imposed for this but they were encouraged to discuss things such as group dynamics, experiences with research and application of theory, group issues and learning concerns. The structure of the tasks set allowed for students to write up their experience throughout the duration of their coursework, revisit that experience (Kolb's abstract conceptualisation), and later use their insights to write up a reflective evaluation of their learning. The result of these

exercises aimed to create in the student a mental action plan of 'dos' and 'do nots' (Kolb's active experimentation).

The research for this paper has also considered feedback received by 'StudentViewPoint', a tool used by the Hertfordshire Business School (University of Hertfordshire), to collect student satisfaction levels and feedback across all modules and disciplines.

Findings

Blogs' Impact on Group Work

Many years of experience have taught me that group work is particularly hard on students. They must engage with one another and find some common ground before even defining their roles within their groups (Shank, 2007; Schellens & Valcke, 2006). Disputes are inevitable, mostly because perceptions of contribution (or, most frequently, of non-contribution) are in fact quite different between group members. In the past, similar self-reflective exercises resulted in students spending more time debating about their group-related difficulties than on their actual learning.

For most groups, writing a blog during coursework has triggered participation of all the elements of the team (See Fig.2 for an example of this). Consequently, the number of disputes flagged by unhappy group members dropped 20% when compared to the previous academic year. In 2004, very similar research (Williams & Jacobs, 2004) led to comparable results whereby MBA students (rather than undergraduates) had to engage in blogging as part of their assessment work. The conclusion to that experience accepted the potential of blogs as 'truly transformational technology in that they provide students with a high level of autonomy while simultaneously providing opportunity for greater interaction with peers.' (Williams & Jacobs, 2004).

To note, a 'high level of autonomy' is always assumed, not necessarily experienced - in order to achieve effective student engagement in blog writing exercises, tutors must provide important guidance as well as clear guidelines

and rules of engagement (Williams and Jacobs, 2004). Moreover, students' progress must be monitored by a tutor who is ready to intervene if there is a deviation from the learning outcomes set for that particular task, experience or assessment.

Blogs' Impact on Student Engagement

Overall, only 10% of groups did not fully engage with the blogging task. Using blogs was not compulsory, nor did they account as an assessed element of their work – they were a mean to achieve an end. These factors may have been the underlying reason behind students' apathy towards this task, a trend that was also experienced in Williams and Jacobs (2004).

The screenshot shows a Moodle group blog interface. The main content area displays a post titled "Report Done" by a student on Monday 15 March 2010. The post text reads: "ive uploaded everything. but i'll attach the final version here again. if anyone should change anything, please let me and the others know, ok? because we all have to hand it in and i dont want different versions of the report handed it in." Below this, there is a "Document Attachments" section with a file named "report_rev.doc". A comment from the same student on Sunday 14 March 2010 says: "Final report – done by tomorrow morning! hi girls... just to let you know - i'm pretty much done with adding the final touch to the report. i will upload it tomorrow morning and then you can have a look at it and i guess it can be printed off... i don't think it will be online much later than 11 am. is that ok with everyone??? sorry i'm running a little late than first expected." The sidebar on the right contains sections for "Options" (New entry), "Archives" (March 2010 (2), All Entries (2)), "Keywords" (General (2)), and "Authors" (Student name (2)).

Figure 2 - Example of a group blog used by a group of students, and which was used as base of inspiration for their self-evaluation.

In Figure 2 (above) students are seen engaging with one another. Although the conversation is not exactly 'self-reflective', these students were able to review their communication records later in the semester to produce their self-reflection activity. Going back to their writing allowed the students to analyse, review and assess some of their interactions, and link them effectively to lessons learned and

actions for the future. As a group, this was a valuable task and has prevented some of the common problems that characterise group work: lack of communication and lack of motivation to contribute towards the work developed by the group. Surprisingly, the number of students using blogs was high.

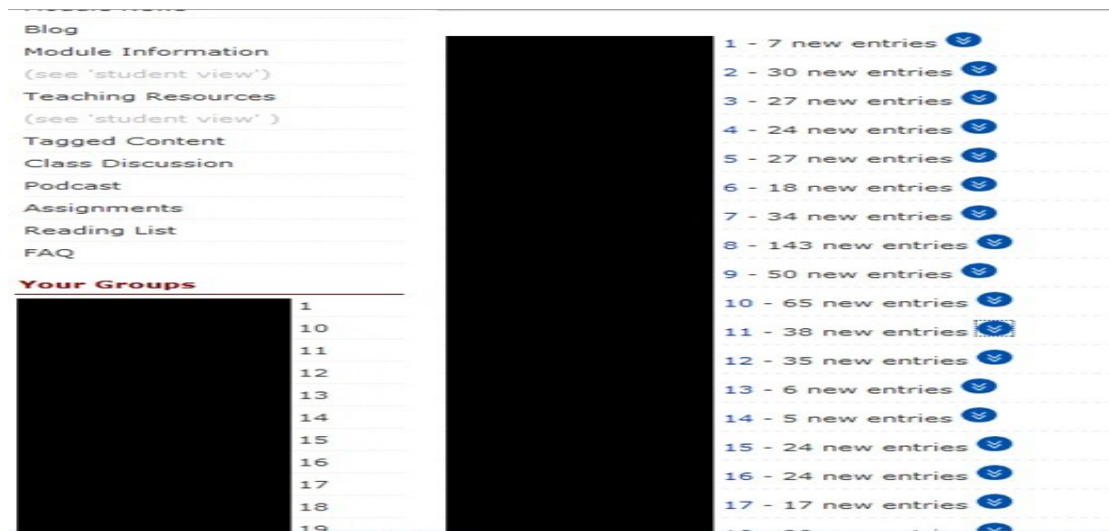


Figure 3 - Number of entries created in each group's page on the University's VLE.

Figure 3 (above) shows the number of entries registered in the students' group page - around 20% of the highest entry numbers were blog posts.

Discussion

Overall, Blog use has improved some of the students' abilities to reflect upon their work and write a more detailed self-assessment than they would normally. One can only assume that the use of blogs in this particular instance has had a cause-effect in student performance and learning experience, corroborating the above theories and previous experiences.

When marks were released, those who had used the groups' blog to record their experiences, thoughts and ideas (52% of the overall students) had achieved much better results on their self-reflective assessment than those who did not participate

as often. The on-going academic support resulted in nil fails for that particular piece of work, something that may have largely contributed for nil referrals at the end of the semester. The nine (9) most participative groups (which accounted for 30% of the students enrolled in that module) were also the ones achieving better results at the individual assignment that followed. This reinforces the idea that blogs may help in reflective thinking.

Blogs should therefore, be used as part of an 'assessment that promotes, or at least allows, personal pursuits and expression' (Nelson, 2006) – such as a self-reflection exercise. The results of such commitment and dedication were very positive in terms of student achievement. Davi et al. (2007) research concluded that blogging not only 'help(s) students develop their critical-thinking skills and reasoning skills', it also prepares students for class discussions, contributing towards the achievement of good 'written and oral communication skills' (Davi et al, 2007). This was certainly the case with these students.

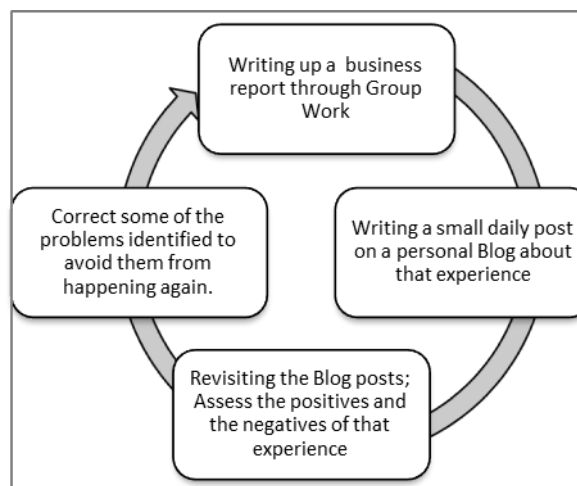


Figure 4 - Kolb's Cycle applied to Blogs used for reflective learning purposes

On another note, blogs are also an important feedback tool, as they allow monitoring 'projects in real time, thus indicating improvements before it is too late for the students to incorporate them'. (Luján-Mora and Juana-Espinosa, 2007). Students were able to peer-review their group members' work, and they also received comments from their tutor. Considering Chickering and Gamson's 7 principles for good practice in undergraduate education (1987), this exercise was

intended to contribute towards a more valuable and complete learning experience for individual students.

It has been found that using a blog as part of a learning task (or experience) may reinforce, complement and support Kolb's Learning Cycle as illustrated in Figure 4. In spite of some challenging academic arguments, it was found overall that students who contributed to a blog were much more conscious of their learning processes: they could revisit previous posts, make annotations on previous comments and consider actions for the future. This eliminates the argument that Kolb's learning cycle 'does not help ... to uncover the elements of reflection itself' (Boud et al, 1983:13), and reinforces the idea that blogs can contribute towards a 'deeper level of learning' (Henderson et al, 2004).

Issues Encountered

Marking a blog (or several blogs) can be a problematic issue, particularly where student participation and resources are concerned. One must take into account indicators such as 'group grading, individual posting, quality of posts, etc., as well as subjectivity vs. qualitative appreciations.' (Luján-Mora and Juana-Espinosa, 2007)

Unfortunately, this can be time-consuming, particularly if there are many students, many groups and many blogs to care for. It took over one hour a day to read most new entries, and over two hours just to keep students engaged and motivated – something that may have happened because they knew I was watching their work frequently.

Another issue identified by this research is linked to the safety of blogs. Lecturers and educators in general must always make a careful consideration of the risks before setting up a blog as a learning tool, even though the majority of the students in class seemed to be very aware of the issues arising from the use of social media/ new technology tools, i.e. privacy issues, cyber-bullying, harassment, etc.

When the risk outweighs advantages, then a blog may not be justifiable, because

they are 'still a public forum, even in the gated environment of a password-protected class account' (Deubel, 2007). Consequently, they are open to public interpretation and analysis, as well as public engagement and free content publishing – with little or no control over any of these. In the blogosphere, 'misrepresenting opinion as fact, plagiarism, conflicts of interest, and newer trends, such as word of mouth marketing' (Kuhn, 2005:5) are just some of the real risks students and educators must be aware of.

These risks can be minimised by ensuring bloggers and blog owners interact under a code of conduct (Kuhn, 2005), reinforcing the idea that, in order to be used effectively and safely, blogs need to follow strict guidelines. This may be seen negatively by student bloggers, who already have to adhere to strict guidelines during exam times and/or whilst working on their coursework.

Another issue to consider is the lack of technology know-how. It is understood that not all students are 'technology geeks' and may not feel comfortable with the use of technology in general. Although it has been previously stated many students are now more technology-savvy than ever before, there's also the possibility that, by requesting students to set up their blogs, or to inform students solely through a blog, may actually lead to the alienation of those who are less 'technology aware' (Luján-Mora and Juana-Espinosa, 2007). Just because a blog is a tool reasonably easy to set up and manage, one must not assume that all students (or all educators) can manage the tool efficiently and appropriately. Again, by reinforcing strict guidelines, as well as providing the appropriate initial training, such issues can be overcome.

Conclusion

According to the feedback received through the Student Viewpoint at the end of the semester, students felt that using blogs was a positive experience. Secondary research supports the use of blogs in education because they are convenient tools that are generally easy to use. Blogs also seem to help students engage with technology, allowing for them to learn at their own pace by giving them some

responsibility (autonomy and consciousness) over their learning. The application of Kolb's learning cycle to learning activities linked to blog use supports and explains the effectiveness of blogs in achieving self-reflective learning, whereby students are exposed to four co-dependent stages involving a great deal of individual review. Students engaged in blogging often outperform students that are not involved with blogs – something particularly true in assessments that include reflective tasks. This may mean that blog use can impact positively students' performance and learning experience.

In group work, students use blogs to communicate with their group members, and get the message across to their peers or *vice-versa*. Although this is a positive characteristic (enhancing communication in group work is key for successful student experiences), addressing their classmates or close peers through a blog may lead to an unintended lack of awareness of the privacy risks implied (or the personal boundaries and limitations imposed) by these channels (i.e. Plagiarism, collusion, or even cyber-bullying are just some of the 'perks' that come with the implementation of blog use in class). Although rare, there are also problems about lack of computer knowledge and/or know-how that could lead to a student's sense of alienation from the rest of the class, especially if there is compulsory use of a blog as part of their learning. These difficulties can be easily managed through appropriate training and also by providing students with clear guidelines, and a code of conduct.

Studynet, for example, allows students to set up their own personal blog, which they can use to document their own experiences: personal, academic or professional. A module's homepage also has a blog facility - if activated by the module leader, students will be able to post and comment as well as the tutors and lecturers involved in the module. The tools are already available for immediate consumption on the University's VLE (Virtual Learning Environment, Studynet).

Blogs are valuable communication tools that help students collaborate with their peers in a group work context, and engage with their course materials through self-reflective considerations about their individual learning style, skills and abilities. These tools also engage the educators with their students' work, allowing for a

close monitoring of students' understanding and allowing for knowledge reinforcement through pertinent and well timed interactions.

For all these reasons, educators must continue documenting their experiences, and the best ways to approach, implement and include blogs in their teaching. It is important to say that no matter what end they serve (personal, academic or professional), or whichever use we give to them, blogs have been created to aid communication; and communication is the basis for a good learning and teaching experience.

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