

MICROBLOGGING AS AN EDUCATIONAL TOOL TO ADVANCE LEARNING: CASE STUDIES AND RECENT REPORTS

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Abstract

Microblogging is a form of online communication which users beam short texts via instant messages, emails, or text messaging. Microblogging can be considered as integration of blogging, text messaging and social networking. Some of the more well-known microblogging services are Twitter, Cirip, Tumblr, Pownce, and Jaiku. They allow users to create an account and post short text messages, Web links, audio clips and photos. Each post is limited to 140-200 characters. "Twitter by far is the most popular microblogging site with 3.3 million users and will be referred to most often throughout this paper" [1, p. 186]. In the area of education, several researchers have pointed out the benefits of using Twitter in language learning. Using Twitter in a language course has the potential to change the passive atmosphere of a classroom to a dynamic one. Besides exploring collaborative writing, it also promotes writing as a fun activity. It can also foster editing skills and develop literacy skills while giving learners a chance to record their cognitive trails and then use them to reflect on their work. Students can use Tweets to send out questions and observations to the group while engaged in classroom activities. It gives the students a sense of what a person is like outside of the classroom (they end up being a lot more comfortable with classroom discourse). Having said that, using Twitter in a language course is a new phenomenon. Therefore, this paper will report a comprehensive review of literature on current research work that uses Twitter as an educational tool to advance learning.

Keywords: Microblogging, Twitter, Learning.

1 INTRODUCTION

Microblogging is a form of online communication which users beam short texts via instant messages, emails, or text messaging. Different medium channels such as websites, instant message softwares or mobile devices can do process of posting. This study wants review the literatures done prior on microblogging users especially Twitter in the matter of learning English vocabularies for second language speakers. Nowadays Most English learners do not need using passive input like texts, essays, grammar lessons or videos; what they need is to apply communicate and collaborate with their current knowledge language capability. By applying Twitter as a collaborative tool for communication in everyday life, it can happen.

This paper, therefore, provides a current review of research literature and case studies related to the use of microblogging technology as educational intervention to enhance language learning and communication among students. First a brief background of microblogging will be discussed. Then, a general review on several case studies and current use of microblogging in learning will be presented.

2 MICROBLOGGING

Microblogging can be considered as integration of blogging, text messaging and social networking. Currently the best-known microblogging services are Twitter, Tumblr, Pownce, and Jaiku. They allow users to create an account and post short text messages, Web links, audio clips and photos directly or indirectly. Each post is limited to 140-200 characters. Twitter by far is the most popular microblogging service with less than three years old, commands more than 41 million users as of July 2009 and is growing fast [3]. As Newman and Park stated, they "crawled Twitter and obtained 41.7 million user profiles, 1.47 billion social relations, 4,262 trending topics, and 106 million tweets" [4].

In recent years, educators have explored the use of microblogging in various ways to further enhance the process of teaching and learning. Though not much empirical research has been done to support this claims, there are many informal anecdotal reports that suggest the transformational experience of using this form of technology when incorporated to the learning environment. In the paragraphs to

come, several case studies will be discussed to highlight some results and experience of several educators' using microblogging as a catalyst role in enhancing the learning process

3 CASE STUDIES AND RECENT RESEARCH REPORTS

This section will highlight several case studies and recent reports on how microblogging and specifically Twitter are used as a learning tool to enhance the learning experiences of the students.

3.1 Case Study 1: How to learn from a Microblog and Microblog to learn?

This case study review will focus on Cirip.eu as a one of the microblogs. However, conclusions can be extended to other microblogging platforms. This environment is designed specifically for didactical usage such as information and knowledge management, enhancing course contents, delivering entire online courses (or in a blended learning environment), collaborative projects, communities of practice, hosting various workshops/scientific events and constructing e-portfolios. The researchers in this case study points out the main aspects of their work are integrating participants' Personal Learning Environments; the integration of microblogging with other Web2.0 technologies, and Open Educational Resources movement; capturing the experience and the new pedagogical approach in using microblogging, formal representation of learning design objects and how learning design objects can be shared, discussed, improved, reused on the microblogging platform [5].

Holotescu and Gorsseck claims that essentially "People use Twitter to communicate, to ask questions, to ask for directions, support, advice, and to validate open-ended interpretations or ideas by discussing with the others. Twitter has mashed up personal publishing and communication, the result being a new type of real-time publishing [5]." As microblogging is adopted into different settings , its usefulness becomes more and more convincing for educational environments. Among the popular microblogging platforms used in education are Twitter, Cirip, Edmodo, Plurk and a recent one, Twiducate. Four of the mentioned platform were featured in the Top 100 Tools for Learning 2009, compiled by Jane Hart from Centre for Learning & Performance Technologies [6].

From the results of Holotesco And Grosseck case study, it can be concluded that while most microblogging platforms are not perfect, various practitioners from the educational segment have found that microblogging can be successfully used and integrated in both teaching and learning process or other educational activities. This finding also concurs with several other research reports ([7], [8], [9], [10], [11], [12] and [13]). The pertinent aspects that were emphasized in literature reveal that microblogging:

- offers the opportunity to discuss / practice different types of online discourse, to organize ideas, reflections;
- creates instant communities in unexpected environments;
- promotes a collaborative virtual environment which foster process-oriented learning;
- facilitates the work of multidisciplinary group;
- is a useful tool for cooperation and collaboration in project management or for assessing students opinions;
- is a viable platform for metacognition;
- is the preferred support for conferences or other events;
- is used in the convergence of knowledge;
- facilitates the creation of a personal learning network;
- allows exploration of colloquial language (important in learning foreign languages);
- can be a reference service in libraries;
- can be successfully used in teaching-learning process.

3.2 Case study 2. Microblogging's effects on college students' engagement and grade

This second case study reports on a recent research work by researchers Junco, Heibergert and Loken. They collected data on the percentage of students sending tweets and the number of tweets sent by using the Twitter Application Programming Interface. The researchers conducted a semester-long experimental study to determine whether using Twitter – the microblogging and social networking platform – for didactical purposes can affect college students' engagement and grades [14]. 125 students taking a first year seminar course for pre-health professional majors participated in this study (70 in the experimental group and 55 in the control group). With the experimental group, Twitter was

used for various types of academic and co-curricular discussions. Engagement was quantified by using a 19-item scale based on the National Survey of Student Engagement. To assess differences in engagement and grades, we used mixed effects analysis of variance (ANOVA) models, with class sections nested within treatment groups. We also conducted content analyses of samples of Twitter exchanges. The ANOVA results showed that the experimental group had a significantly greater increase in engagement than the control group, as well as higher semester grade point averages. Analyses of Twitter communications showed that students and faculty were both highly engaged in the learning process in ways that transcended traditional classroom activities. This study provides experimental evidence that Twitter can be used as an educational tool to help engage students and to mobilize faculty into a more active and participatory role.

This research study used Chickering and Gamson proposed seven principles for good practice in undergraduate education, all of which are related to student engagement [15]. They are: (1) student/faculty contact; (2) cooperation among students; (3) active learning; (4) prompt feedback; (5) emphasizing time on task; (6) communicating high expectations; and (7) respecting diversity. Later, Chickering and Ehrmann (1996) gave examples of how technology can be used to help implement the seven principles [16]. Kuh reported that institutions of higher education can directly influence engagements by implementing these seven principles [2]. We know that academic and co-curricular engagement is powerful forces in both student psychosocial development and academic success. Improvement in grades and persistence has been noted across a variety of populations, including minority students, first generation students, and students who are not adequately prepared for college academic work with increased engagement [13]. Institutions can create programs that help increase student engagement, and thereby increase the chances that students will reach the desired outcomes of a college education [2].

Twitter is more amenable to an ongoing, public dialogue than Facebook because Twitter is primarily a microblogging platform [9]. Indeed, some have described Twitter as a blog that is restricted to 140 characters per post but that also includes the functionality of social networking [17].

The findings showed that 301 tweets had been sent via the Twitter account. 89 were replies (@replies) to students while 18 were retweet-forwarding tweets from another user from 301. The goal was to select activities that were reflective of all of Chickering and Gamson's [15]. The researchers reported, "Some students who were engaged in academic discussions via Twitter also forged interpersonal relationships. While they discussed the reading, students made connections when realizing they had shared values and interests. For instance, the conversation between Student02 and Student04 led them to realize that they have a mutual friend and a shared extra-curricular interest. While these connections may have happened eventually in class, they happened quickly over Twitter, as traditional classroom discussion boundaries did not exist (i.e. do not talk about personal things during academic discussions'). Indeed, one of the striking effects of having students communicate on Twitter is how they built strong relationships across diverse groups – something that rarely happens with first-year students at this institution. One particularly noteworthy example was an extroverted student who is a popular athlete who became good friends with a more introverted student who is interested in comic books – a connection that may have never happened in the real world.[14]"

In general, the results satisfied the research questions, where the findings show that the level of engagement in the experimental group increased. This suggests that Twitter has a positive impact on student engagement in educational scenarios. In addition, findings also reveal that Twitter has a positive impact on encouraging student usage and direct impact on their grades. Further evaluation of the contents suggests that students had enthusiasm to contact each other which rarely happened before in pre-health professional first year students. The evaluation of tweets among the upper-class student panel showed that students were encouraged to ask questions from their fellows or seniors.

Junco, Heiberger and Loken found Twitter to be a transformative experience for their classroom teaching and learning process stating they were able to "leverage Twitter to support Chickering and Gamson's [15] seven principles for good practice in undergraduate education:

- We improved contact between students and faculty (principle 1) by providing an avenue for contact congruent with their digital lifestyles.
- The use of our Twitter protocol also encouraged cooperation among students (principle 2) – students used Twitter to ask each other questions, not only about the material in the first-year seminar course, but also about material in other courses. Students also collaborated on their service learning projects via the Twitter feed, provided emotional support to each other, and created and scheduled real-world study groups via Twitter.

- The Twitter assignments promoted active learning (principle 3) by helping students relate the course material to their own experiences both inside and outside of the classroom.
- Twitter allowed us to provide prompt feedback (principle 4) to students, not only for their assignments, but also for a wide variety of questions and issues they faced. For example, a few students tweeted about having trouble viewing an online video that was required for the course, and within 10 min, we provided feedback as to how they could solve the problem.
- One of the great benefits of using Twitter in this way with our first-year experience courses was that we were able to maximize time on task (principle 5). The course only met for an hour each week; however, thanks to the Twitter stream, we were able to continue discussion and build a strong learning community among students.
- We used Twitter to communicate high expectations (principle 6) in student's academic work, service learning projects, and out-of class activities.
- Lastly, using Twitter showed a respect for diversity (principle 7) because, in addition to discussing diversity issues via the Twitter feed, we encouraged students who otherwise may not be active participants in class to participate online.[14, p. 10]"

In conclusion, this empirical study reveals that Microblogging (Twitter) can increase college student engagement and have a positive effect on their grades

3.3 Case study 3. Using twitter to train communicative and cultural competence

Borau, Ullrich, Feng and Shen explored microblogging as a tool in language learning [7]. They used twitter to train communicative and cultural competence. They started work with Twitter API in an English course for native Chinese in different ways. First the instructor created a new personal Twitter account. Then push students to create their own account as their homework. Eventually, some became "friends" with facilitator and other classmates in Twitter. Because each twitter user would receive the message of his or her friend whom he or she follows, so all would get their facilitator's posts were asked to post at least 7 posts weekly. In addition to that, the students were asked to read all incoming messages posted by their Twitter "friends".

During this study held on English course at the online SJTU three main problems were come up. time limitation for studying English, number of learners inside classes and their different level of English, because the study was conducted on adult learners who came from different educational studies, so their knowledge of language is different. For instance, some of the students started to learn English since 10 years ago continuously while some just started their learning. Some of them did not have enough leisure time to practice even an hour, because of the full time works family stuff etc, but still they can spend time when they are commuting or free times in the office to practice in English[1].

In this study, Twitter was considered as a tool to practice in authentic environment. Like different perspectives of the target language which is taught in the classrooms. One aspect of language learning which can be practiced in Twitter is *communicative competence* [13], a concept based on a view of language learning postulated in the communicative approach to language teaching, in which interaction is focused as a means of language learning and teaching[7].

Current views on language teaching emphasize communicative competence as the main goal of language learning (e.g. [19]). According to [3], communicative competence consists of four components: grammatical competence (words and rules); socio-linguistic competence (appropriateness), discourse competence (cohesion and coherence), and strategic competence (appropriate use of communication strategies).

The researchers focused on two subcategories of communicative competence: sociolinguist and strategic competence. "Twitter is a perfect tool for supporting English learning", they claimed. One of the reasons is its accessibility. Twitter can simply access almost from everywhere and every time from computers, laptops or mobile phones, so learners can practice English in their own leisure time. Moreover, Twitter is proper for any level of English to post tweets with their desired grammatical structures. In addition to these, using Twitter can integrate learners to make a community and share knowledge even when they are absent in the class [7].

Although beside the overall positive findings, researchers mentioned about some limitations they found in this study. They said: "in the questionnaire around half of the students told they communicated with native speakers via Twitter", because it is difficult to confirm this data by analyzing the actual updates and only few posts have clear evidence which students have a contact to native

English speakers. It is hard to know except by stating the recipient's user name. Due to privacy restrictions, we were unable to use the follower list as an additional source of information. Still, if we believe the survey, students recognized Twitter as an opportunity to communicate with native speakers.”[7] The researchers concluded that Twitter could be an effective language learning tool specifically to train communication and culture competence anytime anywhere without face-to-face interaction. They were convinced that the students like using Twitter, in that one student even suggest continuing the use of Twitter after the project.

4 CONCLUSION AND FURTHER RESEARCH

These recent research case studies and report have highlighted the transformational and first-hand experiences of educators in exploring microblogging in their educational setting. Seeing that this social network technology is relatively new in this area, there is a strong need to embark on a more empirical research studies in various issues and challenges that surrounds it particularly in the area of education. Among them, researchers should look into technological and pedagogical issues; best practices; issue of trust and sharing of information as well as assessment methods.

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