

The Use of Social Networking and Learning Management Systems in English Language Teaching in Higher Education

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Abstract

Purpose – The use of web-enhanced teaching of the English as a foreign language in higher education in Greece is addressed in this case study which examines the student's perceptions of online instruction using Moodle as a learning management system (LMS), with and without the use of Facebook (FB) as an adjunctive learning platform. The merging of this collaborative and interactive social platform with a LMS is explored, examining the attitudes of higher education foreign language learners toward Moodle as a LMS, and FB as an adjunctive informal learning environment. The paper aims to discuss these issues.

Design/methodology/approach – Results are drawn from a pre-FB questionnaire after a term using Moodle only, and a post-FB questionnaire following a term using Moodle and FB.

Findings – Results suggest that the use of web-based tools and social media changed the way students viewed the role of internet technology in the development of their English language learning. Most students (76 percent) agreed that the addition of FB to the course helped build a sense of community within a learning environment, while 69 percent suggested it enhanced the learning process.

Originality/value – Results suggest FB may reinforce communication skills and engagement in the learning process and may support participation and collaborative learning in the formal learning environment provided by Moodle.

Keywords Social networking, Collaborative learning, Language learning, Learning management systems

Paper type Research paper

The application and integration of networked technology in higher education is gaining in popularity. Through the use of the internet and the World Wide Web new learning opportunities arise. Teaching and learning styles are evolving, and the tools to accommodate these new practices are changing. Similarly, computer-mediated social networks have become part of the life of university students. Computer-mediated communication in the form of asynchronous communication (e.g. e-mail, blogs, wikis, discussion boards) and synchronous communication (e.g. instant messenger) has transformed learning. Their emphasis is on collaboration and communication. Web-based tools, such as blogs, wikis and online forums are supplementary to the educational technology used to facilitate a shared learning environment. These tools form the basis of the current evolution of the internet and are based on the premise that individuals derive their competence through the connections they make (Siemens, 2004).

The use of social networks in foreign language learning is a matter of concern for researchers and the pedagogical suppositions behind their use have been questioned (Harrison and Thomas, 2009). Research is currently seeking to investigate how online social networks such as Facebook (FB) can develop a sense of community in language classrooms, or how they can impact the development of pedagogy in a language classroom. Informal learning occurs outside the context of formal education settings and "present alternative means of engaging students in academic content without the time constraints of the formal curriculum"

(Bull et al., 2008, pp. 100-107). Learning takes place in the form of constructivism, where knowledge is constructed in a community of practice where users "share similar interests" and have "pedagogical potentials" that can be utilized "in language classes in varieties of constructive manners" (Blattner and Fiori, 2009, p. 18). Social networking sites (SNS) offer an alternative informal, mobile environment with flexible teaching and learning and no time constraints. FB integrated instruction may enhance students' interest, motivation and encourage

collaboration between foreign language learners (Shih, 2011; Harrison and Thomas, 2009; McBride, 2009; Karpati, 2009). Language learning is not limited to the formal learning environment of the classroom, and much language learning can occur informally, outside the classroom environment.

As social networks in multiple languages are used by millions of users – mainly university students and adolescents – they serve as a medium for lifelong learning networks for teachers and students. Students and teachers can use SNS to upload files, photos, videos and other educational material that is relevant to their course and learning. However, “students appear keener on using Facebook (FB) instructionally than do faculty” (Roblyer et al., 2010, p. 138) and report positive experiences with using a FB closed group to discuss their academic work outside of class. Research has demonstrated that students may use FB individually or in collaboration with their instructors as a formal learning tool (Dogoriti and Pange, 2010; Smith et al., 2010; Towner and Munoz, 2011). Students appear to make regular use of FB for course discussions much in the way they use the SNS for social purposes (Estus, 2010). Yet, other research using FB demonstrates that teachers may not share the student’s enthusiasm. FB has not been endorsed by scholars in tertiary education (McCarthy, 2010) as many lecturers have low Web 2.0 literacy and are less willing to learn how to use the interface of the network to their advantage (Towner and vanHorn, 2007). Reluctance to use SNS for educational purposes emanates primarily from the educators’ unfamiliarity with these tools or with safety and privacy matters (Schwartz, 2009).

Educators that teach in an online environment are most familiar with learning management systems (LMS), which are popular web tools used to create an online classroom. Their primary use is course management – “support to span multiple class sessions across an entire course with common goals, adding tools for evaluation, feedback and discussion” (Adams, 2010, p. 254). As Coates et al. (2005) summarize, the factors that have motivated universities to introduce a LMS include:

- increased teaching efficiency;
- enriched student learning with the addition of learning resources;
- opportunities to use advanced technologies;
- competitive pressure between universities; and
- the control and regulation of educational tools for teaching and learning.

The topic of ICT use in the field of language teaching in higher education in Greece and teachers’ attitudes toward ICT was addressed by means of surveys (Demetriadis et al., 2003; Dogoriti and Pange, 2010, 2012). The results suggest that although the infrastructure in higher education institutions is adequate, ICT use is limited. Language teachers’ attitude to online learning and web-based language learning resources were positive and they were keen on using a foreign language platform that would improve ICT integration into the educational setting, but they believed that ICT tools are time consuming and not teacher-friendly.

The purpose of the current study was to examine the impact of SNS integration with a LMS to facilitate student achievement in a language learning course. It focusses mainly on the potential of FB as an academic teaching medium which may support a LMS in the teaching of English for specific purposes (ESP) in a learning community.

Materials and methods

This study followed students enrolled in the Department of Applied Foreign Languages in Management and Commerce, in the Technological Institute of Epirus, Greece in an online English Language laboratory course that spanned two semesters. Two surveys were administered to the students, one following exposure to Moodle as a LMS (LMS Survey), and one following the use of FB as a supplementary tool (FB Survey). Comparisons were drawn between students’ course preferences for, and attitudes toward an English as a foreign language online course delivered online through a LMS, and the same course delivered with the addition of FB as an online tool to support communication and interaction among the members of the learning community. The study was guided by the following research objectives:

- To evaluate students’ LMS preferences for, attitudes toward, and perceived learning associated with the academic use of LMS and SNSs.
- To evaluate students’ LMS use of and comfort with LMS.
- To compare students’ FB preferences for, attitudes toward, and perceived learning when LMS is associated with SNSs.
- Based on results from the survey, to provide educators with practical advice concerning implementation of online interactions in their courses so as to promote communication, co-operation and collaboration between the members of the language community.

The course featured language activities related to ESP. The students were introduced to the platform (Moodle) and created an account through which they viewed the educational material and performed tasks on the LMS during the semester. After completing the first semester of the online course, students filled in the pre-FB questionnaire concerning their LMS online course experience. The questions concerned their opinion of the online course, their preferences concerning the tools embedded in the LMS, the difficulties they encountered and their expectations concerning the use of educational technologies. In the following semester, the same students created a FB account and joined a community of practice that included the teacher and students within the course. The group involved the following functionalities:

- student-educator communication through questions and answers;
- student-student communication;
- extra material relevant to the course (e.g. quizzes, videos, podcasts); and
- posts concerning course management.

The students were assigned to use FB for the course online discussion component. FB participation was made mandatory and points were assigned for participation. To support the activities, throughout the semester the instructor actively participated and acted both as the group administrator and facilitator providing explanations or prompting discussion. Students were able to post status updates, follow activity streams, and subscribe to be notified of other users' actions within the FB environment. Instructor to student, peer sharing of resources (such as web sites, YouTube videos, news articles), and timely commentary on student events were shared.

Both LMS and FB questionnaires were developed and distributed online through the LMS. Students were notified of the survey and instructions to complete the survey through their e-mail (in the LMS and later in both the LMS and FB). Participation in the surveys was voluntary and all responses were anonymous. The surveys were comprised of a combination of Likert scaled, dichotomous multiple choice, and ranking scaled questions. The data were collected and recorded within the LMS and later analyzed based on descriptive statistics and frequency distribution.

Results

The LMS survey was completed by 48 students, with a mean age of 22.871.98 years and a gender mix that consisted of 35 percent male and 65 percent female. The FB survey was completed by 51 students with a mean age of 22.572.18 years old (37 percent male; 63 percent female).

LMS questionnaire results

The main scope of the LMS questionnaire was to assess the students' opinion on the usefulness and usability of the online platform, and their motivation to actively participate in the online course prior the introduction of FB. The scores pertaining to the use of Moodle were poor – only 2 percent of the students used the “chat” tool of Moodle (Table I), while none of the students (0 percent) used the “News forums for distributing information.” Only 19 percent of the students demonstrated a willingness to use the online platform, selecting the answer “It motivates me” on the question “I am using the ESP platform as: (select one or more).” These results indicate a lack of enthusiasm when it comes to using the online tools. Finally, while the majority of the students (70 percent) agreed that the use of the online platform had a positive effect in their course, only 6 percent felt that their interaction and engagement in the course were increased and only 6 percent of the students agreed that they had the chance to facilitate a more active learning (see Table I).

FB questionnaire results

The scope of the FB questionnaire at the end of the course was to re-assess the students' attitude toward the online platform after the introduction of FB as a teacher- student and student-student communication tool. Table II summarizes the most important findings of the FB questionnaire in which respondents were asked to report their opinion on the use of SNS in English as a foreign language (EFL). A series of five-point Likert scaled questions were asked that were designed to measure levels of agreement where:

- 1 = “strongly disagree”
- 2 = “disagree”
- 3 = neutral or undecided

Table I.
Moodle features used
by ESP students in
their online course

Which Moodle features have you used within your course(s)?	You Tube videos	Podcasts	Chat	Glossary	Exercise	Forums	Hot potatoes quiz	Question naires	Quizzes	Wikis	Calendar feature	News forums for distributing information	Grades
Number	0	10	1	8	0	3	15	0	11	3	0	0	0
%	0	20	2	16	0	6	29	0	22	6	0	0	0

Table II.
Educational use of
Facebook in the ESP
language course

	Strongly disagree (%)	Disagree (%)	Undecided (%)	Agree (%)	Strongly agree (%)
Social networking sites like Facebook help to strengthen your English skills	15	6	4	42	33
Social networking sites help to build/strengthen a sense of community within a learning environment	4	13	8	46	29
Social networking sites can enhance the learning process	13	15	4	42	27
Facebook can make classes more interesting	6	4	8	31	50
The use of Facebook as a learning tool engages students	4	10	2	21	63
There are no specific benefits that make Facebook a better forum for class discussions and announcements over a learning management system like Moodle	10	13	4	42	31
Facebook is not an appropriate environment for learning	4	6	0	25	65
I preferred following discussions rather than participating	35	31	2	21	10
I enjoyed posting to the discussion forum	40	31	4	17	8
I learned a lot from my local classmates	13	19	10	46	13
I would like to use FB in other language classes	19	10	2	25	44
I felt uncomfortable posting my thoughts publicly in the forum	31	19	10	33	6
The FB project took up too much time	27	25	4	40	4
Overall, the FB project was beneficial to me	13	15	2	33	38

- 4 = "agree"
- 5 = "strongly agree"

Most students (76 percent) agreed that the use of SNS helped build or strengthen a sense of community within a learning environment, while 69 percent suggested SNS enhanced the learning process. Most students (81 percent) responded that FB made classes more interesting, while 84 percent found themselves engrossed in the online tool. In fact, 90 percent of the students expressed a preference for using FB as a forum for class discussions rather than the discussion forum in Moodle. Interestingly, though, students reported FB to not be an appropriate learning environment (90 percent). It is noteworthy that just 31 percent of the students expressed their preference for following discussions rather than participating. Similarly, 71 percent enjoyed posting to the discussion forum, while 56 percent considered the communication with classmates in FB beneficial. Finally, the majority (71 percent) found the FB project to be beneficial (Table II).

Discussion and implications

The present research demonstrates the student's preference for informal course discussions to occur through a SNS (FB) rather than the LMS (Moodle). The use of the LMS platform provided a controlled formal educational environment where students were required to complete their assignments, whereas FB was a less rigid, informal learning environment allowing student self-regulating interactions. Many applications of SNSs like FB, Edmodo and others have been used in informal approaches to learning by both learners and educators in higher education. Familiarization with technologies for social networking has added to their popularity and prevalence. The current generation of university students tends to regard them as part of their way of life rather than as a new set of tools (Salaway and Caruso, 2007; Shier, 2005).

SNS provide a convenient and accessible way to connect and interact, share ideas or gather feedback in a fluid way (McLoughlin and Lee, 2007; Pempek *et al.*, 2009). From the angle of Social Cultural Theory, Lantolf and Thorne (2007) postulate that exposure to input in the target language is necessary. Second language socialization is the route a learner has to take to socialize into the target language community through the practice of second language (Duff, 2007). Sociocultural Theory acknowledges that the target language is created and acquired through real interaction in a suitable sociocultural environment (Kasper, 2001; Norton and Gao, 2008). Learners of EFL have more possibilities to learn the target language through activities and participation in an English cultural community (Lantolf and Thorne, 2007; McLoughlin and Lee, 2007; Ricento, 2005). Results of the present study suggest that students reacted positively to the use of FB in their ESP course as a supplement to their Moodle-based course. Students acknowledged a good number of benefits (social and pedagogical) related to the integration of this SNS in their online learning environment, including:

- (1) facilitation of communication among students and student-instructor;
- (2) student participation and collaboration; and
- (3) motivation.

Interestingly, while students believed the addition of FB to their online ESP course was beneficial, they did not believe FB was an appropriate learning environment for the formal portion of the course, which is consistent with the findings of others (Selwyn, 2007; Hemmi *et al.*, 2009; Gray *et al.*, 2010). Results suggest FB should be considered a valuable adjunct to a language course, or supplementary activity, and not be used as the primary learning platform or to create the formal learning environment. FB may be best suited as an adjunct online tool to facilitate the learning of EFL. Students used FB to complement the LMS course and as an interactive tool where they could share information that enhanced the class work and student interaction.

While the use of the "Forum" feature on the LMS may seem to be a more traditional learning tool for students, it was not preferred by students in the present study. Instead, the addition of FB as a communication and social tool seems to have brought the community of learners together. Traditional forums or discussion board tools lack this social element of learning (Blattner, 2012). A new conception of learning is favored in which students prefer the richness and directness of the web and the online community to the confines of the e-learning platforms. Students are more at ease with posting in their FB learning group or following threaded discussions in FB led by the language instructor and other group members. This study has demonstrated the value of using FB to support other Web 2 tools in the sense that it can engage students in learning activities, motivate them and help to strengthen a sense of community within a learning environment.

Future trends

This research can be taken into consideration in future research concerning comparisons of the use of FB with other social media (e.g. Wikis and blogs), web-based learning environments in other countries, and with other subject matter. While data from only one group of ESP learners in higher education was analyzed in the present study, future research is encouraged to analyze data from more EFL groups in order to present a more complete picture of the use of FB or other SNSs in language classes. Even though FB seems to provide valuable benefits and opportunities for learners and educators in the field of foreign language education, more research is needed to further establish the effectiveness of SNS tools in foreign language classrooms.

Conclusion

The results of this exploratory study provided insight into how SNS fit with the use of other Web 2.0 tools such as LMS for language learning. Results demonstrate the usefulness of FB as an adjunctive instructional tool which can facilitate the development of students' language skills, reinforced their cognitive skills and supported an active

learning environment. The addition of FB as an educational tool strengthened the EFL learner's motivation and engagement. Learners recounted their satisfaction with learning through interaction and sharing with peers on FB. The findings demonstrate that students were comfortable with the online learning environment and felt motivated by the well-structured online tasks presented through FB.

References

- Adams, C. (2010), "Learning management systems as sites of surveillance, control, and corporatization: a review of the critical literature", in Gibson, D. and Dodge, B. (Eds), *Proceedings of Society for Information Technology & Teacher Education International Conference 2010, AACE, Chesapeake, VA*, pp. 252-257, available at: www.editlib.org/p/33345 (accessed October 31, 2013).
- Blattner, G. (2012), "Web 2.0 technologies and foreign language teaching", in Wang, V. (Ed.), *Encyclopedia of E-Leadership, Counseling and Training*, IGI Global, Hershey, PA, pp. 89-107.
- Blattner, G. and Fiori, M. (2009), "Facebook in the language classroom: promises and possibilities", *Instructional Technology and Distance Learning, ITDL*, Vol. 6 No. 1, pp. 17-28.
- Bull, G., Thompson, A., Searson, M., Garofalo, J., Park, J., Young, C. and Lee, J. (2008), "Connecting informal and formal learning experiences in the age of participatory media", *Contemporary Issues in Technology and Teacher Education*, Vol. 8 No. 2, pp. 100-107.
- Coates, H., James, R. and Baldwin, G. (2005), "A critical examination of the effects of learning management systems on university teaching and learning", *Tertiary Education and Management*, Vol. 11 No. 1, pp. 19-36.
- Demetriadis, S., Barbas, A., Molohides, A., Palaigeorgiou, G., Psillos, D., Vlahavas, I., Tsoukalas, I. and Pombortsis, A. (2003), "Cultures in negotiation: teachers' acceptance/resistance attitudes considering the infusion of technology into schools", *Computers & Education*, Vol. 41, pp. 19-37.
- Dogoriti, E. and Pange, J. (2010), "Considerations for on-line English language learning in Greece", paper presented at 10th International Educational Technology Conference & Exhibition (IETC), Istanbul, April 26-28.
- Dogoriti, E. and Pange, J. (2012), "Teaching ESP with ICT In higher education: foreign language teachers' perceptions and expectations of computer technology use in foreign language learning and teaching", 20012 *Proceedings of ICICTE, Rhodes*, pp. XXIV-XXXIV.
- Duff, P. (2007), "Second Language socialization as sociocultural theory: insights and issues", *Language Teaching*, Vol. 40 No. 4, pp. 309-319.
- Estus, E. (2010), "Using Facebook within a geriatric pharmacotherapy course", *Am J Pharm Educ.*, Vol. 74 No. 8, pp. 1-7.
- Gray, K., Thompson, C., Sheard, J., Clerehan, R. and Hamilton, M. (2010), "Students as web 2.0 authors", *Australasian Journal of Educational Technology*, Vol. 26 No. 1, pp. 105-122.
- Harrison, R. and Thomas, M. (2009), "Identity in online communities: social networking sites and language learning", *International Journal of Emerging Technologies and Society*, Vol. 7 No. 2, pp. 109-124.
- Hemmi, A., Bayne, S. and Land, R. (2009), "The appropriation and repurposing of social technologies in higher education", *Journal of Assisted Learning*, Vol. 25, pp. 19-30.
- Karpati, A. (2009), "Web 2 technologies for net native language learners: a 'social CALL'", *ReCALL*, Vol. 21 No. 2, pp. 139-156.
- Kasper, G. (2001), "Four perspectives on L2 pragmatic development", *Applied Linguistics*, Vol. 22 No. 4, pp. 502-530.
- Lantolf, J.P. and Thorne, S.L. (2007), "Sociocultural theory and second language learning", in VanPatten, B. and Williams, J. (Eds), *Theories in Second Language Acquisition: An Introduction*, Routledge, New York, NY, pp. 201-224.
- McBride, K. (2009), "Social-networking sites in foreign language classes: opportunities for re-creation", in Lomicka, L. and Lord, G. (Eds), *The Next Generation: Social Networking and Online Collaboration in Foreign Language Learning*, Vol. 8, CALICO Monograph Series, San Marcos, TX, pp. 35-58.
- McCarthy, J. (2010), "Blended learning environments: using social networking sites to enhance the first year experience", *Australasian Journal of Educational Technology*, Vol. 26 No. 6, pp. 729-740, available at: www.ascilite.org.au/ajet/ajet26/mccarthy.html (accessed February 12, 2013).
- McLoughlin, C. and Lee, M.J.W. (2007), "Social software and participatory learning: pedagogical choices with technology affordances in the web 2.0 era", paper presented at the ICT: providing choices for

- learners and learning, Proceedings ascilite Singapore 2007, Centre for Educational Development, Nanyang Technological University, Singapore, December 2-5, available at: www.ascilite.org.au/conferences/singapore07/procs/ (accessed March 24, 2013).
- Norton, B. and Gao, Y. (2008), "Identity, investment, and Chinese learners of English", *Journal of Asian Pacific Communication*, Vol. 18 No. 1, pp. 109-120.
- Pempek, T.A., Yermolayeva, Y.A. and Calvert, S.L. (2009), "College students' social networking experiences on Facebook", *Journal of Applied Developmental Psychology*, Vol. 30 No. 3, pp. 227-238.
- Ricento, T. (2005), "Considerations of identity in L2 learning", in Hinkel, E. (Ed.), *Handbook of Research on Second Language Teaching and Learning*, Lawrence Erlbaum, Mahwah, NJ, pp. 895-911.
- Roblyer, M.D., McDaniel, M., Webb, M., Herman, J. and Witty, J.V. (2010), "Findings on Facebook in higher education: a comparison of college faculty and student uses and perceptions of social networking sites", *The Internet and Higher Education*, Vol. 13 No. 3, pp. 134-140.
- Salaway, G. and Caruso, J. (2007), "The ECAR study of undergraduate students and information technology", in Boulder (Ed.), EDUCAUSE Center for Applied Research, CO, available at: www.educause.edu/ECAR/TheECARStudyofUndergraduateStu/161967 (accessed April 15, 2013).
- Schwartz, H. (2009), "Facebook: the new classroom commons?", *The Chronicle of Higher Education*, October 2, p. B13.
- Selwyn, N. (2007), "Web 2.0 applications as alternative environments for informal learning – a critical review", paper presented at the OECD-KERIS Expert Meeting – Session 6 – Alternative learning environments in practice: using ICT to change impact and outcomes. Institute of Education, University of London, available at: www1.oecd.org/edu/keris/39458556.pdf (accessed March 18, 2013).
- Shier, M.T. (2005), "The way technology changes how we do what we do. New directions for student services", *Technology in Student Affairs: Supporting Student Learning and Services*, Vol. 2005 No. 112, pp. 77-87.
- Shih, R.C. (2011), "Can Web 2.0 technology assist college students in learning English writing? Integrating Facebook and peer assessment with blended learning", *Australasian Journal of Educational Technology*, Vol. 27 No. 5, pp. 829-845.
- Siemens, G. (2004), "Connectivism: a learning theory for a digital age", available at: www.elearnspace.org/Articles/connectivism.htm (accessed February 1, 2013).
- Smith, S., Caruso, J. and Kim, J. (2010), "The ECAR study of undergraduate students and information technology", available at: www.educause.edu/Resources/ECARStudyofUndergraduateStuden/217333 (accessed November 15, 2012).
- Towner, T. and Muñoz, C. (2011), "Facebook and education: a classroom connection?", in Wankel, C. (Ed.), *Educating Educators with Social Media: Cutting Edge Technologies in Higher Education*, Vol. 1, Emerald, Bingley, pp. 33-57.
- Towner, T. and VanHorn, A. (2007), "Facebook: classroom tool for a classroom community?", paper presented at the Annual Meeting of the Midwest Political Science Association, Midwest Political Science Association, April 12, Chicago, IL, available at: [http:// citation.allacademic.com/meta/p197133_index.html](http://citation.allacademic.com/meta/p197133_index.html) (accessed April 21, 2013).

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