

Facebook Integration into University Classes: Opportunities and Challenges

Romualdo A. Mabuan

Lyceum of the Philippines University
Intramuros, Manila, Philippines 1002
romualdo.mabuan@lpu.edu.ph

Gregorio P. Ebron, Jr.

Lyceum of the Philippines University
Intramuros, Manila, Philippines 1002
gregorio.ebronJr@lpu.edu.ph

Abstract

Following the principles of the TPACK Framework (Koehler & Mishra, 2009) and Blended Learning Framework (Horn & Staker, 2014), this study reports findings of integrating Facebook, a Social Networking Site (SNS), in facilitating English language classes at a private university in Manila, Philippines. It aimed to explore students' attitudes towards the use of a 'closed' class Facebook group in the English language classroom and to describe how they utilize it as part of their English language learning. Research participants were sophomore students enrolled at an English writing class in the first semester of the academic year 2016 – 2017. Research data come from surveys, students' wall posts, students' reflections, and individual and focus group interviews suggest that despite some technological limitations, students view and respond positively to the use of Facebook as an alternative platform for English language learning and as an innovative and strategic tool in enhancing lesson delivery, engaging students with the material, and creating a discourse space for self-expression. Pedagogical implications for ESL (English as a second language) and EFL (English as a foreign language) and researchers are offered in the light of these results.

1 Introduction

The influx of Information and Communications Technology (ICT) has revolutionized the teaching of English to ESL/EFL learners (Cequena, 2013). If students before were used to in-class traditional English language learning delivered within the walls of the classroom, today, the scenario has dramatically changed with the rise of modern technology. 21st century students now carry portable and handheld electronic and smart gadgets such as laptop, tablet, phablet, netbook,

iPad, phone, and other devices and use them every day when doing their school and personal tasks. This '24/7/365 fingertip access' to information allows students to navigate the information superhighway, stay updated and connect interpersonally in virtual spaces with anyone, anytime, and anywhere. This trend extends to the academic world; in fact, in the last decade, research has shown how the World Wide Web or the Internet and other communication technologies have supported meaningful educational experiences (Belz & Kinginger, 2002, 2003; Garrison & Anderson, 2003; Sykes, 2005; Arnold & Ducate, 2006; O'Bryan & Hegelmeier, 2007; Lord, 2008; among others) to students deemed Digital Natives (Prensky, 2001, 2006).

These technological innovations are continually reshaping, redefining, and revolutionizing the phases and pathways of educational landscapes across the many parts of the globe. Hence, with this technological advancement dominating and permeating globally, it is imperative that the teaching of English, especially among English as second language (ESL) students, must be interactive, responsive, and relevant to make language learning more challenging and meaningful to the learners. The World Wide Web or the Internet's features of interactivity, connectivity and ubiquity make it a good platform for an alternative classroom engagement to trigger some 21st century skills namely critical thinking and problem solving, collaboration and communication, global awareness, and information literacy (Dohn, 2009). Today, educators can utilize social networking sites (SNS) such as Facebook, Twitter, YouTube, Instagram, Pinterest, Google Hangout, Blogger, and Tumblr as platforms for enhancing students' English language skills.

Among these sites, Facebook is the most widely used domain by students for their virtual social activities.

Facebook is a SNS that boasts more than 1 billion monthly active users, and it is one of the fastest-growing and best-known sites on the Internet today (“Most famous social network sites,” 2016). Established by Mark Zuckerberg in 2004, Facebook is a powerful learning tool that is not only built off of synchronous and asynchronous technologies that has transformed learning but also extended the reach of communicative tools (Blattner & Fiori, 2009). Facebook has a variety of interactive features that students can use. Students can create their own profiles, upload photos and videos, post on their wall posts, share information, join in groups as online communities, among others. Selwyn (2007) stated that Facebook has quickly become the social network site of choice by college students and an integral part of the “behind the scenes” college experience. Thompson (2007) added that the adoption rates of Facebook in universities and colleges are remarkable, i.e., 85% of college students that have a college network within Facebook have adopted it. Furthermore, Pempek (2009) reveals that Facebook enables teachers to provide constructive educational outcomes in a variety of fields. Hew (2011) furthered that Facebook allows teachers to practice a differential pedagogy, in the best interests of the students.

Several studies have already explored the pedagogical benefits of integrating Facebook in a language classroom (Selwyn, 2007; Stewart, 2008; Madge et al., 2009; Schroeder & Greenbowe, 2009; Yunus & Salehi, 2012; Shih, 2013; Yu, 2014; Ghani, 2015; Miron & Ravid, 2015; Low & Warawudhi, 2016). These studies have established the pedagogical potentials, benefits and implications of integrating a SNS, particularly Facebook, in the classroom. This study aims to contribute to these ongoing dialogs and explorations, to contextualize the use of Facebook in the Philippine ESL (English as a second language) classroom, and to respond to Prensky’s (2006) challenge: “it’s time for education leaders to raise their heads above the daily grind and observe the new language that’s emerging.” Following the tenets of the TPACK Framework (Koehler & Mishra, 2009), which urges the researchers to consider the complex interplay of

the three primary forms of knowledge: Content (C), Pedagogy (P), and Technology (T) and their intersections in the language classroom context, the researchers drew implications from these intersections: PCK or Pedagogical Content Knowledge, which refers to the knowledge of pedagogy that is applicable to the teaching of specific content that a teacher intends to teach; TCK or Technological Content Knowledge, which refers to the knowledge of the relationship between technology and content; TPK or Technological Pedagogical Knowledge, which refers to the components and capabilities of various technologies as they used in teaching and learning; and finally the TPACK or Technological Pedagogical Content Knowledge, which is the intersection of the three components characteristic of true technology integration in the classroom. Furthermore, the study is anchored on Horn and Staker’s (2014) Blended Learning Framework, employing one of the four models – the Flex Learning Model, which integrates technology into a regular face-to-face or in-class setup.

1.1 Research Questions

The main purpose of this study was to determine the pedagogical viability of integrating ‘closed’ Facebook groups in the ESL classroom. Specifically, the study attempted to answer the following questions: (1) How often do students access the class’ Facebook groups, and what features of Facebook groups do they use during their access? (2) What are the students’ attitudes towards Facebook as a learning tool in the English language classroom? And (3) What are the advantages and challenges in using Facebook groups in the English language classroom as perceived by the students?

2 Method

2.1 Participants

The study was conducted during the first semester of the academic year 2016 – 2017 which lasted approximately five months. The participants were 100 sophomore undergraduate students in a Writing in the Discipline class at the Lyceum of the Philippines University, Manila, Philippines. These students were majoring in Bachelor of Arts in Multimedia Arts. Their English levels range from Intermediate to Upper Intermediate based on their TOEIC scores in Listening and Reading

Tests. The researchers created Facebook groups for classes, and students were required to be members of those groups. The Facebook group name was given to the class, and they joined the group individually. The researchers acted as the group administrators and approved students' requests to join. As a classroom extension, the students were required to participate actively in the online activities such as responding to polls related to the lessons, posting responses to prompts, commenting on the teachers' and classmates' posts, replying to comments, tagging classmates to reply to posts, uploading and downloading files, among others. Group chat feature was also used to establish connection among members of the group. Occasionally, students sent PMs or private messages to ask questions or clarify something. All this was done to encourage students to practice what they have learned in the class and to solve the so-called 'three-hour problem' of learning English weekly.

2.2 Instruments and Data Analysis

The researchers utilized surveys, students' reflections, wall posts, individual interviews, and focus group discussions to gather data from the respondents. Before and after using the class Facebook groups, the students responded to two surveys via Survey Monkey (www.surveymonkey.org). The pre-FB-group survey aimed at exploring students' background and experience on using the features of Facebook and Facebook groups and their demographic profiles, while the post-FB-group survey explored the respondents' experiences and perceptions about using the group in the class. Individually, students were also asked to submit their reflections about how the class Facebook group affected their English language learning in the class. Students' wall posts were also analyzed to identify students' activities and participation in online discussions. Finally, the researchers posted an invitation for individual and group interviews on the FB groups' walls, and 15 students agreed to be interviewed at the college office during their free time.

2.3 Data Analysis

For the analysis of the demographic data, frequency and percentages were used. As for the open-ended survey questions and interviews, students' views were codified and categorized as

emerging domain themes and analyzed accordingly. Students' reflections and Facebook wall posts were analyzed and used to give meaning and support to the other data.

3 Results

3.1 Frequency of Facebook group access

Table 1: Frequency of students' access to Facebook groups

	f	%
Whenever I get Facebook notifications	51	51
Every day, even if I don't get Facebook notifications	44	44
The day before the next English class	3	3
Every week	2	2
Not at all	0	0

One-hundred students participated in the study for a period of one semester or five weeks. Table 1 shows the frequency of students' access to the class' Facebook group. Majority of the students (51%) indicated that they accessed the group every time they were alerted by the notification feature of Facebook; others (44%) reported that they visited the group automatically even without notification alerts in order to check if there were class announcements. A small percentage stated they accessed the group a day before the English class schedule (3%) and every week (2%). Having mobile gadgets such as cellular phones and tablets, free campus Wi-Fi connection, and free data connection from telecommunication networks allowed students to stay online most of the time and get connected and updated with the online group. This happened despite some concerns on poor Internet connection in the campus or at home and lack of Internet-ready gadgets among some students. Others reported that they were willing to access the class' Facebook group regularly but could not to do so due to high volume of school tasks.

3.2 Facebook group activities of students

Facebook as the world's largest SNS has a wide array of features that allow its users to perform online activities using their electronic devices.

When students were asked to list the different activities that they performed whenever they accessed the group, they reported a total of 711 responses. Of these answers, 12.9% indicated that they visited the group primarily to see if there were announcements from the teacher such as a lecture file to be downloaded, a weblink to be accessed, a task to be completed, or a project to be submitted. Others stated that they accessed the group to like their teacher's and classmates' posts (12.2%), which is also a means to see for updates and to scan or skim some wall posts. These first two activities can be categorized as passive activities by the students because they do not necessarily have to perform something. This also includes seeing posts (10.7%), which also another way of checking information. In contrast, the other reported activities can be categorized as active activities because students have to do something to fulfil or accomplish certain tasks. These include the following: commenting on posts (9.3%), submitting tasks (9.3%), replying to posts or comments (7.6%), tagging teacher or classmates (5.8%), replying to teacher or classmates' comments (4.8%), posting ideas or photos (4.5%), sharing links, photos or videos (4.5%), chatting with classmates (4.4%), starting a discussion (2.7%), and chatting with the teacher (0.7%).

Table 2: Student activities while using class' Facebook group

	f	%
Check announcements from the teacher	92	12.9
Like posts	87	12.2
Comment on my classmates' posts	76	10.7
See posts	76	10.7
Comment on my teacher's posts	66	9.3
Submit assignments or tasks	66	9.3
Reply to my classmates' comments	54	7.6
Tag my teacher or classmates	41	5.8
Reply to my teacher or classmates' comments	34	4.8
Post random thoughts and/or photos	32	4.5
Share some links, photos, or posts	32	4.5
Chat with my classmates	31	4.4
Start a discussion	19	2.7
Chat with my teacher	5	0.7
Total	711	100

Facebook group's homepage contains the group's name, cover photo, share button, notifications section, and other features for adding people, sending message, managing group, editing group settings, removing the group from favorite list, and creating a new group.



Figure 1: A screenshot of a class' Facebook group

Figure 1 is a screenshot of one of the Facebook groups, which shows the interface of the group. On the left side are the links for newsfeed, events, favorites, groups, pages, apps, friends, interests, events, and payments. On the right side are the functions to add members to the group, description of the group, tags, group chats, recent group photos, and suggested groups. In the center is the main activity area for all of the group's members. Here, any member can access the discussion, members list, events, photos, and files. Below, the member can write a post, add a photo or video, and create a poll. The 'more' button allows the member to sell something, add a file, create a photo album, create a document, and create an event. Other features allow members to do the active and passive activities mentioned above. The area where members can write is called 'wall' and the written idea or uploaded photo or video is called a 'post'. Posting an idea can be more specific as the wall allows the member to add photos or a video to the post, tag people in the post, add what the member is doing or feeling, and indicate the member's location. Once the idea is successfully posted, other members can use any of the three buttons under the post: like, comment, or share. Facebook also indicates how many people have 'seen' the post. Other options with the post also allow any member to save the link, turn off notifications for a particular post, turn off commenting, pin or unpin post, refresh shared

attachment, delete post, or start group chat. On top of that, any member can chat privately with any member or send a private message to others.

Table 3 illustrates Facebook features that the students commonly used whenever they accessed the group. Of the 474 responses, 329 or 69.41% can be categorized as active activities performed by the students. These include the following: commenting (18.8%), posting (12.9%), replying (11.8%), downloading (6.8%), uploading (4.6%), tagging (4.2%), sharing (3.8%), chatting 3.5%, and editing (3%). Meanwhile, 145 responses or 30.6% can be categorized as passive activities when they accessed the group (liking posts, 20.5%; seeing posts, 10.1%).

Table 3: Facebook group features used by the students

	f	%
Like	97	20.5
Comment	89	18.8
Post	61	12.9
Reply	56	11.8
See	48	10.1
Download	32	6.8
Upload	22	4.6
Tag	20	4.2
Share	18	3.8
Chat	17	3.5
Edit	14	3.0
Total	474	100

This data reveals how students utilize the available Facebook group features in performing online tasks and activities as part of their English language learning beyond the regular class hours outside the classroom. It further shows that students use these functions to accomplish both active and passive tasks – they complement one another for successfully carrying out activities virtually with or without teacher or peer assistance.

3.3 Learner-perceived benefits of class Facebook groups

Students' reflections as well as the results of the survey, individual, and group interviews revealed that all of them "liked" the idea of having a Facebook group for the class as a virtual classroom extension outside the campus. When asked about the benefits of using Facebook groups in the class, reasons why they liked it, and what challenges

they encountered in using it, students reported a variety of responses, as shown in Table 4 below.

Table 4: Students perceived benefits of using class' Facebook group

	f	%
Facilitates easy and fast information dissemination, class updates	61	36.3
Facilitates online communication and interaction with my teacher and my classmates	36	21.4
Promotes academic sharing and collaboration	16	9.5
Reinforces learning and enhances class participation	15	8.9
Helps develop English communication skills	14	8.3
Serves as classroom extension	13	7.7
Is easy to access	10	5.9
Facilitates file sharing	3	1.8
Total	168	100

Of the 168 responses, 36.3% (61 responses) indicated that Facebook groups facilitate easy, convenient and quick information dissemination among students. By accessing the group anywhere via Internet-ready electronic devices, students can get notifications and updates about the class seamlessly, without having to meet physically with the teacher. Thirty-six (21.4%) responses showed that Facebook groups act as an online platform to facilitate teacher-student and student-student interactions. Fifteen responses (9.5%) suggested that Facebook groups can promote sharing and collaboration among students. By using features like sharing, tagging, posting, commenting, replying, and chatting, teachers and students can easily establish online dialogs, forums, brainstorming sessions, and discussions about various topics and accomplish tasks by communicating with one another. Fifteen responses (8.9%) pointed out that Facebook groups can increase class participation and reinforce learning through continuous engagement among members. For instance, after class dismissal, the teacher may create a poll about the previously discussed concept in the class and invite students to respond to the question on their free time. This method engages the students to

reflect on the lesson, provides opportunity to passive students in the class to participate, and extends the discussion for further understanding of ideas. Other feedback indicated that Facebook groups can develop the communication skills of the students (8.3%, 14 responses) particularly writing skills because students are given opportunities to post their ideas on the 'wall', respond to polls, engage in discussions via comment threads, and comment on posts. Depending on the guidelines agreed upon by the class, the teacher can ask the students to avoid posting or commenting using slang expressions or colloquialisms to help them develop formal writing skills. Some students also reported that Facebook groups serve as a good classroom extension beyond the physical classroom (7.7%, 13 responses), as an accessible platform for learning anytime anywhere (5.9%, 10 responses), and as a quick channel for file transfer and sharing (1.8%, 3 responses).

3.4 Challenges in using class' Facebook group

Table 5: Challenges encountered by the students in using class' Facebook group

	f	%
Weak internet connection	28	50
Difficulty in accessing Facebook, consumes extra time	15	26.8
No internet access at home	13	23.2
Total	56	100

As with any other educational undertaking, integrating class Facebook groups in the traditional English language classroom also comes with challenges and limitations. When students were asked what challenges they encountered while using the groups for the entire semester, they reported varied answers. Of the 56 responses, 50% complained about weak internet connection in the campus or at home. This was addressed by the university's continued efforts to increase the Wi-Fi connection inside the school premises and by encouraging students to use the university's e-library. Fifteen responses (26.7%) echoed a similar concern on difficulty accessing Facebook while logging in, downloading and uploading files, which could also be attributed to weak internet access. Thirteen responses (23.2%) reported that

they did not have any internet connection at home; thus, they could not participate actively in the online discussions or comply promptly with the online tasks or assignments. Some students shared that they had to go out of their house and go to a computer shop just to do the online tasks, which required them to spend extra money and extra time.

4 Discussion

This study explored the educational value of integrating Facebook groups into the English language classroom by identifying how students used this media in performing classroom tasks online, how they viewed its relevance and usefulness to their English language learning, and what challenges they encountered in using it. Consistent with the findings of Low & Warawudhi (2016), this study revealed the pedagogical potential of using Facebook groups in managing large classes and in providing enhanced engagement among teachers and students beyond the physical classroom via virtual spaces. Because of its ubiquity and popularity among the learners, Facebook acts as an online rendezvous for the teachers and students; and since everybody is using Facebook, it is easy for the teacher to create an online community and ask the students to join and become members. Hence, the findings illustrate that Facebook groups can serve as a class management system that allows the teachers to create an exclusive virtual space, design it like an online meeting room, and use it as an extension of the physical classroom. Facebook groups act as a point of convergence where teachers and students connect with one another at any time and place with the power of the Internet.

The results of this study also corroborated with that of Shih's (2013) – integrating Facebook using a blended learning model such as the flex model based on Horn and Staker (2014), which combines face-to-face or in-class instruction with off-line or out-of-class interaction can help increase students' interest and motivation in the lesson and assist them in doing their classroom tasks. Because the teacher can upload learning materials as review tools, post useful websites for enhanced input, and communicate with students for consultation, the learners feel connected and engaged with the happenings of the class; thus, continuity of learning may occur. Various Facebook features

such as ‘post’, ‘upload’, ‘download’, ‘comment’, ‘reply’, ‘share’, and ‘chat’ affords the teacher and the students to access and shares files quickly and easily.

Consistent with Miron and Ravid (2015), this study found that the use of Facebook groups for educational purposes is favored by the students because they appreciate the idea of using a social tool as a means for learning, where they can freely share their opinions and apply the lesson concepts learned in the classroom. This also resonates what Yu (2014) found in the context of university level learning in Taiwan where she also utilized Facebook groups to facilitate students’ participation from in-class to online class discussion. Selwyn (2007) emphasized that this active participation and collaboration among students on Facebook reflects a good model of learning.

Although Madge et al. (2009) argued that the use of Facebook is solely for social purposes and sometimes for informal learning, we believe that careful teacher design can capitalize on the ‘social power’ of Facebook, and educators can tap its features to provide an educational dimension that can co-occur with its social function. Selwyn (2009) may view this as intruding students’ social spheres in order to use Facebook for educationally ‘appropriate’ or ‘valid’ purposes, yet we cannot discredit its pedagogical potential as the participants in this study claimed to be helpful and useful in their learning process. Other concerns remain to be addressed pertaining to the availability of infrastructures, readiness and willingness of teachers to innovate their pedagogies, capability of the students to participate, flexibility of the curriculum, and appropriacy to the learning context.

While some educators and practitioners may be skeptical on the pedagogical viability of integrating SNSs such as Facebook into the language classroom, we believe that it can be one of the feasible and practical means to engage our modern learners – the ‘digital natives’ of the Generation Z – and address their changing needs and nature, and connect with their dynamic, fast-paced, and mobile lifestyle. As Mishra and Koehler (2009) recommended: teachers need to go beyond the “functional fixedness” of technology, and instead need to creatively repurpose it to make it pedagogically viable.

4.1 Pedagogical Implications

Ubiquity, mobility, and accessibility have become the buzz words of the 21st century. Social media such as networking sites (SNSs) are now part of the lifestyle of today’s learners who are techno-savvy and adept at maneuvering networked systems. A decade ago, technology integration into the classroom was considered only as an option; now, it has become a significant part of the curriculum. Technology can now be utilized to “substitute, augment, modify, and redefine” (Puentedura, 2014) classroom practices to “enhance and transform” students’ learning experience. The changing nature and needs of the 21st century learner implicates a reconfiguration in our pedagogical practices if we are to stay relevant, responsive and meaningful in this modern age.

5 Conclusion

The findings of this study must be set against its own limitations – the area of inquiry focused only on the class Facebook group, which is only one of the communication mechanisms available to the students to explore and utilize while they are online. The data showed the concurrent use of other Facebook features among the participants, with students referring to private messaging and chatting. Students’ use of the class Facebook groups is part and parcel of the face-to-face mode interaction in the classroom, and it should be seen as only partial accounts of larger conversations taking place among students and their teachers about their studies. This may raise ‘important questions about how universities will articulate their teaching with students’ (Kitto and Higgins, 2003), how educational leaders acknowledge these innovative strategies (Prensky, 2006), and how we can harmoniously blend our time-tested pedagogies with the emerging models of teaching and learning.

Acknowledgements

This work is supported in part by the College of Arts and Sciences Faculty Development Fund. We would like to thank our college dean, Dr. Joyce M. Dy. We also thank the anonymous reviewers for their insightful comments.

References

- Arnold, N., & Ducate, L. (2006). CALL: Where are we and where do we go from here? In L. Ducate & N. Arnold (Eds.), *Calling an CALL: From theory and research to new direction foreign language teaching* (pp. 1-20). San Marcos, TX: CALICO Monograph Series, 5.
- Belz, J.A., & Kinginger, C. (2003). Discourse options and the development of pragmatic competence by classroom learners of German: The case of address forms. *Language learning*, 53(4), 591-647.
- Blattner, G., & Fiori, M. (2009). Facebook in the Language Classroom: Promises and Possibilities. *International Journal of Instructional Technology and Distance Learning*, 6(1), 17-28.
- Cequena, M. (2013). Does blogging facilitate the development of students' writing skills? *Philippine ESL Journal*, 10, 126-147.
- Dohn, N.B. (2009). Web 2.0-mediated competence: Implicit educational demands on learners. *Electronic Journal of e-Learning*, 7(2), 111-118.
- Garrison, D. R., & Anderson, T. (2003). *E-Learning in tire 21st Century: A framework for research and practice*. London: Routledge.
- Ghani, M. B. (2015). Using Facebook in Teaching and Learning English. *The International Conference on Language, Literature, Culture and Education*, April 25-26.
- Hew, K. F. (2011). Students' and teachers' use of Facebook. *Computers in Human Behaviour*. Article available at doi:10.1016/j.chb.2010. 11.020.
- Horn, M., & Staker, H. (2014). *Blended: Using Disruptive Innovation to Improve Schools*. San Francisco, CA: Jossey-Bass.
- Kitto, S., & Higgins, V. (2003). Online university education: Liberating the student? *Science as Culture*, 12(1), 23-58.
- Koehler, M. J., & Mishra, P. (2009). What is technological pedagogical content knowledge? *Contemporary Issues in Technology and Teacher Education (CITE Journal)*, 9(1), 60-70.
- Lord, G. (2008). Podcasting communities and second language pronunciation. *Foreign Language Annals*, 41(2), 364-379.
- Low, P., & Warawudhi, R. (2016). Undergraduates' Attitudes toward the Use of Facebook in Fundamental English Course. *International Journal of Information and Education Technology*, 6(12), 934-939.
- Madge, C., Meek, J., Wellens, J., & Hooley, T. (2009). Facebook, Social Integration and Informal Learning at University: 'It is More For Socializing and Talking to Friends about Work Than Actually Doing Work'. *Learning, Media & Technology*, 34(2), 141-155.
- Miron, E., & Ravid, G. (2015). Facebook Groups as an Academic Teaching Aid: Case Study and Recommendations for Educators. *Educational Technology & Society*, 18(4), 371-384.
- Most famous social network sites worldwide. (2016). Retrieved from <https://www.statista.com/statistics/272014/global-social-networks-ranked-by-number-of-users/>
- O'Bryan, A., & Hegelheimer, Y. (2007). Integrating CALL into the classroom: The role of podcasting in an ESL listening strategies course. *ReCALL*, 19(2), 162-180.
- Pempek, T., et al. (2009). College Students' Social Networking Experiences on Facebook. *Journal of Applied Developmental Psychology*, 30(1), 227-238.
- Prensky, M. (2001). Digital natives, digital immigrants. *On The Horizon*, 9(5), 1-6.
- Prensky, M. (2006). Listen to the natives. *Educational Leadership*, 63(4).
- Puentedura, R. (2014). *Learning, Technology, and the SAMR Model: Goals, Processes, and Practice*. Retrieved from <http://www.hippasus.com/rpweblog/archives/2014/06/29/LearningTechnologySAMRModel.pdf>
- Schroeder, J., & Greenbowe, T. (2009). The chemistry of Facebook: using social networking to create an online community for the organic chemistry laboratory. *Journal of Online education*, 5(4).
- Selwyn, N. (2007). Web 2.0 Applications as Alternative Environments for Informal Learning – A Critical Review. *OCEDKERIS International Expert Meeting on ICT and Educational*

- Performance*. Cheju Island, South Korea: Organization for Economic Co-Operation and Development.
- Shih, R. (2013). Effect of using Facebook to assist English for Business Communication course instruction. *TOJET: The Turkish Online Journal of Educational Technology*, 12(1), 52-59.
- Stewart, P. (2008). Facebook: A School Librarian's Tool for Building a Community of Readers. Retrieved from <http://www.slideshare.net/verzosaf/social-networking-literacy-skills-recasting-the-readers-services-librarians-competencies-in-the-21st-century>
- Sykes, J. (2005). Synchronous CMC and pragmatic development: effects of oral and written chat. *CALICO*, 22, 399-431.
- Thompson, J. (2007). *Is Education 1.0 Ready for Web 2.0 students? Innovate* 3(4). <http://www.innovateonline.info/index.php?view=article&id=393&action=article>. Retrieved on August 1, 2016 from <http://webcitation.org/5aG19ykvH>.
- Yu, L. (2014). A case study of using Facebook in an EFL English writing class: The perspective of a writing teacher. *JALT CALL SIG*, 10(3), 189-202.
- Yunus, M., & Salehi, H. (2012). The Effectiveness of Facebook Groups on Teaching and Improving Writing: Students' Perceptions. *International Journal of Education and Information Technologies*, 1(6), 88-96.