Engaging Foreign Language Learners in a Web 2.0-Mediated Collaborative Learning Process

Inclusión de estudiantes de lenguas extranjeras en procesos colaborativos de aprendizaje mediados por la web 2.0

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The purpose of this action research was to explore the types of interactions that foreign language learners experience while using a wiki as a supporting tool for a face-to-face research course. This design allowed me to play a dual role: first, I studied my own classroom setting and students. Second, I implemented a pedagogical intervention based on a collaborative online learning interaction. The data were gathered from participants' posts, and the findings revealed that class tasks promoted an asynchronous voluntary interaction among participants in which they shared knowledge and experiences while expressing the opinions and points of view that enabled them to actively participate in the face-to-face class.

Key words: Collaborative learning, foreign language learning, web 2.0, wiki.

El propósito de esta investigación acción fue explorar el tipo de interacciones que estudiantes de lenguas extranjeras presentaron al utilizar una wiki como herramienta de soporte de un curso presencial. Este diseño me permitió desempeñar un doble papel. Por una parte, estudié mi propio salón de clase y estudiantes; por otra, implementé una intervención pedagógica con base en una interacción colaborativa en línea. La información se recolectó por medio de 128 aportes hechos por los participantes. Los hallazgos revelan que las actividades de clase permitieron una interacción asincrónica voluntaria entre los participantes en la cual ellos compartieron saberes y experiencias, a la vez que expresaron opiniones y puntos de vista que les permitieron participar activamente en la clase presencial.

Palabras clave: aprendizaje colaborativo, aprendizaje de lenguas extranjeras, wikis, web 2.0.

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Introduction

This article attempts to describe my experiences during an 80-hour research course that was taught during the spring semester 2012. This introductory course was intended to provide foreign language pre-service teachers with qualitative and quantitative theoretical research foundations, methodologies, and evaluations of research. Throughout this course, six intermediate-level English students were engaged in collaborative activities while reading, summarizing, and critiquing research papers that allowed them to discuss and compare the relationship between the theoretical foundations learned in class and what is published in the research field of foreign language learning and teaching.

Based on my former students' feedback, and seeking ways to embrace information and communication technologies (ICTs) to create better learning environments, I designed a wiki as a core element of the course in order for the students to be part of a collaborative, complementary online learning experience that would allow them to interact with one another, post tasks, and provide and receive feedback from others.

In contrast to myriad other neologisms, there appears to be a broad consensus on the origins of the term *wiki*, derived from the Hawaiian word for quick, which was coined by Ward Cunningham, the first creator of a wiki in 1995. Its applications are as diverse as humans' imaginations and as plentiful as humans' needs. According to Vaughan (2008), "wikis have recently emerged as a very powerful digital tool for supporting student collaboration" (p. 48). Castaños and Piercy (2010) defined a wiki as "an online database that allows users to create, edit, and reflect on the content of a web page" (p. 948). In educational environments, wikis are particularly interesting for learning purposes (Reinhold; Shih, Tseng, & Yang; Wang & Turner; Yukawa as cited in Kimmerle, Moskaliuk, & Cress, 2011). Furthermore, wiki users

"can share their knowledge, create a joint artifact, discuss and integrate different opinions, and develop innovative ideas [thus] wikis may be considered as powerful tools for learning and knowledge building in educational contexts" (Kimmerle et al., 2011, p. 138).

Accordingly, wikis can be "applied to a diverse set of systems, features, approaches, and projects" (Lamb, 2004, p. 38). In my teaching experience, I have found that providing students with technology-supported learning environments implies a dynamic and more engaging way of developing learning projects. In other words, students interact and use a foreign language (FL) in a real context, alongside their peers, and professors are given the opportunity to monitor and obtain up-to-date information on their students' progress.

Although "no generation is more at ease with online, collaborative technologies than today's young people" (Economist Intelligence Unit, 2008, p. 5), today's classroom teachers seem not to be prepared to address digital natives, "who have grown up in an immersive computing environment. Where a notebook and pen may have formed the tool kit of prior generations, today's students come to class armed with smart phones, laptops, and iPods" (Economist Intelligence Unit, 2008, p. 5). It is customary for most FL teachers to ban the handheld wireless devices students bring to the classroom because they are found to be interrupting. Perhaps after professional training, FL teachers could start to advocate the use of all types of technological gadgets to be integrated into the curriculum. After having created the wiki *Becoming-a-Researcher* (http://becoming-a-researcher.wikispaces.com/), I have come to understand that all of the dynamic processes generated by this student-student interaction through this wiki paved the road for course takers to master the qualitative and quantitative theoretical research foundations, methodologies, and evaluation of education research. Mostly, the interactions were guided by the tasks and questions

I asked in order to lead the discussions. Although this was a face-to-face course, the wiki provided participants with an opportunity to strengthen the key topics that were developed during class time. However, the wiki also allowed participants to share their reactions and the feelings they experienced as the course gradually developed.

Two questions guided this study: (a) What type of interactions does the use of the wiki generate among foreign language learners? (b) How does the use of a wiki influence the foreign language learning process? Consequently, the purpose of this study was to explore the sorts of interactions foreign language learners experience while using a wiki as a supporting tool to a face-to-face research course.

A Learning-by-doing Experience

This qualitative inquiry took place within an introductory research course, which is the first of a set of four research courses. After a rigorous self-evaluation process in the FL program in which this research took place, it was found that although professors incorporated ICT tools into their classes on a regular basis, they had not measured the impact of their use on learning and teaching foreign languages. Consequently, I embarked upon a research project to engage FL learners in a web 2.0-mediated collaborative learning process in order to provide pre-service FL teachers with a dual purpose: first, providing FL students with training in ICT through a learning-by-doing experience and second, facilitating collaborative knowledge construction in the field of foreign language research by having them become members of the wiki *Becoming-a-Researcher*. Although the students were enrolled in a face-to-face course, the wiki was designed as a core course element for the students to interact with one another mainly based on the activities and tasks I created as part of the course syllabus.

Theoretical Background and Literature Review

Technological innovations might help to re-design learning and teaching in higher educational environments. As such, professors who are familiar with emergent technologies (e.g., wikis) have come to understand that they "offer powerful opportunities to online collaboration" (Godwin-Jones, 2003, p. 12). According to Bandura, "co-constructing meaning in a democratized digital space has a certain social constructivist elegance" (as cited in Higdon, 2005, p. 3). Most activities that are suggested through wikis are developed through collaborative work. Reading and writing—receptive and productive skills—are the most common language skills used for acquiring and exchanging knowledge. In a wiki, the flow of interactions allows users to play a twofold role: "readers are writers, and readers and writers jointly form a community of collaboration" (Ferris & Wilder, 2006, p. 2).

In an FL setting, this mutual learning appears to be sufficiently valuable. First, students are given real opportunities to improve their competence in the target language while commenting on their classmates' production, and second, students demonstrate knowledge by posting comments, ideas, and reflections on a specific topic.

Relevant to the study are the notions of wikis and collaborative learning. As with other web 2.0 applications, the so-called *wiki way*—"open, pre-structured asynchronous collaboration in a text-based environment" (Bryant, 2007, p. 11)—allows users to create, edit, and delete web page contents. Wikis can be used as collaborative writing tools and have the potential to facilitate "collaborative knowledge building amongst learners" (Lee as cited in Bryant, 2007, p. 9). After having used wikis for personal projects, I found that they were excellent online environments to support face-to-face courses because they "encourage people to share early drafts, interim

thoughts and texts for others to contribute, plus they move beyond individual ownership of documents towards a more open, collaborative approach" (Bryant, p. 12). The main idea was to give the students an opportunity to co-construct based on one another's production.

A number of studies have reported the use of wikis for educational purposes, such as collaborative learning environments, collaborative construction of wikis, online collaboration, and collaborative knowledge building (Boulos, Maramba, & Wheeler, 2006; Bruns & Humphreys, 2005; Duffy & Bruns, 2006; Kessler & Bikowski, 2010; Kimmerle et al., 2011; Koçak-Usluel & Mazman, 2009; Li, Dong, & Huang, 2011; Su & Beaumont, 2010; and Witney & Smallbone, 2011).

In Colombia, a small number of studies have discussed the use of web 2.0 technologies within educational settings, especially the use of blogs. For example, Insuasty and Zambrano Castillo (2010) "examined how student teachers could be empowered as more reflective practitioners through journal keeping and blog group discussions" (p. 87). Quintero (2008) conducted research that attempted "to analyze the role that feedback played in the process of writing. Participants interacted 'by means of using blogs'" (p. 7). Similarly, Espitia and Clavijo Olarte (2011) reported on a "teacher education experience in which tools such as blogs, earning software, e-mail, forums and internet-based tools were used to improve EFL learning and teaching" (p. 29), and Cote Parra (2000), in a small-scale project, described how online discussion groups contribute to fostering learning interactions outside the classroom settings. Some studies have reported on implementing other web 2.0 tools, such as WebQuest (Jimenez Pulido, 2009); StoryBird (Herrera, 2013); Hot Potatoes (Beltrán López, 2009); and BlackBoard (Salinas Vacca, 2014).

In contrast, I have adopted a collaborative learning perspective based on a dialectical constructivism "that highlights the importance of social interaction in developing knowledge and thought" (Moshman as cited in Bruning, Schraw, Norby, & Ronning, 2004, p. 195). According to Silverman (as cited in Cortez, Nussbaum, Woywood, & Aravena, 2009), "the second area of research stemming from computer-supported collaboration (CSC) is computer-supported collaborative learning (CSCL) which aims at enhancing the learning process and improving students' academic results with the help of technology" (p. 126). This definition is consistent with the main goal of this project, which allowed students to share their experiences, challenges, and knowledge building while becoming familiar with the theoretical foundations and intricacies of conducting research in the education field.

> Higdon (2005), suggests that wikis allow students to "co-construct meaning in a democratized digital space" (p. 1), and Fountain (2005), states that the use of wikis to support collaborative projects helps "promote 'pride of authorship' and ownership in the team's activities." (Vaughan, 2008, p. 56)

My incorporating a wiki as a core feature of this course gave the students the opportunity to interact and create a cooperative online learning environment.

Context of the Study

During spring semester 2012, 12 foreign language undergraduate students enrolled in a face-to-face introductory course on research at a public university in Colombia. This 16-week course was designed to provide an overview on facilitating the theoretical foundations of qualitative and quantitative research, methodologies, and evaluation of FL research. After having consented to participate in this exploratory qualitative research, the participants embarked upon a web 2.0-mediated collaborative learning experience in which they were required to contribute on a voluntary basis to the suggested activities as an online support to the face-to-face curricular activities.

With regard to the students' participation, they were expected to make voluntary contributions on the posted activities. Students participated as a way to reinforce topics that had been previously studied in class. They posted their individual contributions, and most of them were definitions, brief explanations of research designs, summaries, and personal insights on research papers. In other words, interacting through the wiki helped participants to build their knowledge on topics discussed in class, ask questions, and edit their own posts and their classmates'. As the students participated, they also explored and learned how to use the tools offered by the wiki.

Description of Online Tasks

Throughout the semester, I designed seven tasks to give the students the opportunity to internalize and better comprehend the concepts and theoretical foundations of different qualitative and quantitative research designs. For example, participants engaged in reading, summarizing, and critiquing research papers, which allowed them to discuss and contrast the relationship between theory and what is published in the field of learning and teaching foreign language research.

A typical task, at first, asked the participants to read a passage, concept, or research paper; second, to answer a series of questions to check their understanding of the reading selection; and third, to help others by suggesting ways of improving their written answers. The participants were also encouraged to ask one another for help. Although most of their interactions were triggered by the task itself, their opinions and comments were also posted throughout the course.

Although I started using this wiki in 2011, this paper reports on the interactions students and I had during the spring semester 2012. During this course, the participants posted 46 direct messages in response to the seven tasks, and these messages generated 82 messages in the form of questions, comments, or requests for clarifications.

Method

Drawing on a naturalistic paradigm, I conducted an action research study because this design "is characterized as research that is done *by* teachers *for* themselves" (Mertler, 2006, p. 2). Action research is defined as "systematic procedures done by teachers (or the individuals in an educational setting) to gather information about, and subsequently improve, the ways their particular educational setting operates, their teaching, and their student learning" (Mills as cited in Creswell, 2011, p. 550). This design allowed me to play a dual role as researcher and implementer of the pedagogical proposal. The former allowed me to study my own classroom setting and my own students. The latter gave me the opportunity to put into practice a collaborative learning process.

Data Analysis

The qualitative analysis is based on 128 posts written by the participants as result of the interactions generated by the tasks that were suggested throughout the course. The posts included: 46 direct responses to the seven tasks and 82 responses in the form of questions, comments, or requests for clarifications.

I decided to use one message as the unit of analysis because its "parameters are determined by the author of the message" (Rourke, Anderson, Garrison, & Archer, 2000, p. 10). In other words, there are no restrictions on the type of message that is produced as a response in terms of length (e.g., a sentence, a word or a paragraph, among others). In addition, using this unit of analysis makes it easy to identify the posts, and the number of units to be analyzed increases as the participants enter any type of response.

Findings

After I analyzed the 128 posts, they were labeled using 14 codes that were aggregated into two main categories: becoming familiar with course content, which shows how participants expressed their levels of understanding of the concepts, theories, or research designs that we studied in class, and collaborative learning, a category that explains multiple ways of interaction among participants.

Becoming Familiar with Course Content

The participants engaged in an asynchronous exchange of experiences and knowledge while becoming familiar with theories, concepts, and research designs. For the most part, they asked and answered questions in order to have a better understanding of the concepts and theoretical foundations of different qualitative and quantitative research designs by introducing, paraphrasing or summarizing concepts, theories, or designs. This interaction may explain how their contributions allowed them to comprehend the course content and to be better prepared to take part in the face-to-face class. A total of 22 contributions were posted under this category.

The participants used the wiki as a way to introduce key concepts or theories that helped them expand on what they were expecting to learn in class. The next sample illustrates how one participant shared a definition with his classmates:

> **Hi everybody I just want to share with you a good definition of Culture:**
>
> According to an English anthropologist, Edward B. Tylor describes culture in his book Primitive culture, published in 1971 with this words: Culture is the complex whole which includes knowledge, morals, belief, art, law, custum and any other capabilities and habits acquired by a man as a member of society [*sic*].

Although participants posted concepts without thorough discussions on their part that did not generate threaded discussions with the rest of the participants, the simple exercise of using the wiki as a way to share key concepts allowed them to interact actively during the face-to-face discussions in class.

As opposed to simply introducing a definition, when paraphrasing a concept, the participants displayed a more demanding intellectual exercise in which they restated concepts using their own words. The following excerpt shows how one participant explained in her own words what she had understood about the concept of culture:

> Hi, guys...Today I want to tell you what I learned about "culture". To begin we could express many definitions of culture according some authors and also for us. Now, I learned CULTURE is a way in which the human being learns many social aspects such as beliefs, habits, traditions, customs, language and standards of morality which are part of his personality and allowing him to adopt a role into a society (environment) [*sic*].

This contribution shows a higher level of comprehension because the participant elaborated a more sophisticated sort of sharing in which she decided to paraphrase a concept. In so doing, it seems that she went through a more complex process that required her to first understand the concept and then to restate it in her own words.

Along with paraphrasing, when summarizing, participants demonstrated that they were able to condense multiple definitions and concepts into reasonably shorter versions. As one participant posted:

> In short, culture is the process of learning due to experiences, habits, customs and knowledge where it is involved into a social group; with the purpose to educate and to form the human beings with values, beliefs and all time acquiring new experiences [*sic*].

It can be inferred that when participants shared summarized versions of concepts or ideas, the wiki enabled them to exercise a more complex skill that involved understanding and restating ideas, thoughts, and concepts. Along with paraphrasing, when learners summarized concepts or ideas, they demonstrated a higher level of comprehension.

Collaborative Learning

The participants engaged in online collaborative learning in which they expressed their opinions and points of view and used the target language naturally. This collaborative learning experience illustrates the way participants interacted while taking part in the discussions linked with some of the tasks that were suggested during the course. A total of 57 interactions were posted.

Participants sometimes expressed their opinions through brief posts to thank another student for helping them to improve their posts. The following extract illustrates one of the instances in which a participants showed her appreciation to a classmate:

> Thanks x, your opinion is very important to me to improve in a good way my future critiques...In fact, I tried to do my critique in a clear and specific manner to understand much better and to comply with the purpose of making known my paper, criticizing an Action Research [*sic*].

Although participants made minor grammatical mistakes or typos while posting their messages, meaning was not compromised. In other words, what really mattered to those who participated in this online community was providing timely advice or suggestions to help others to accomplish tasks more effectively or efficiently. It is important to highlight that the wiki was suggested as a way for the students to be better prepared for the classes. Consequently, the written assignments appeared to have been polished based on the suggestions students made on the wiki. Similarly, during the face-to-face sessions, having spent some time interacting on the wiki helped them to internalize the concepts and theories and be willing to take part in class discussions.

Interestingly, participants did not only note their classmates' mistakes; they also suggested improvements. It seems that the wiki actively engaged students in two-way interactions, giving them the opportunity to negotiate meaning and come to agreements. These exchanges may reflect a collaborative learning environment in which the students helped others to improve their posts, and, conversely, obtained ideas and comments from others. What this seems to suggest is that participants worked cooperatively to achieve understanding while improving their language skills. That is to say, the wiki exposed the participants to a natural way of using linguistic skills while giving them the opportunity to internalize and better comprehend the course content.

More importantly, taking into account that the feedback was not regarded as being judgmental, it was customary to accept fellow students' suggestions. A thorough review of the posts revealed that once they had been viewed, nobody rejected any of them. In other words, the camaraderie exercised during the online interactions strengthened the scholarly and personal ties among participants.

With regard to participants' expressing their points of view on others' posts, this web-based student-student interaction served to provide others with timely feedback. In the following exchange, one participant advised a classmate on the way she should have fixed a post: "Hi x, I think you should be more clear and specific when you write a conclusion." Taking into account that participants were EFL learners, they struggled not only with the theories and concepts studied in class but also with the accurate use of the target language. According to some early posts, their participation centered more heavily on language use than on what was needed to fully understand concepts and theories, which was the core element of this

course. The following excerpt explains this recurring concern: "You can change *analyzed* to *examined* in order to avoid repetition." Although the course aimed at developing participants' research competences, the wiki allowed them to improve their linguistic skills while positively impacting their face-to-face interactions and their classroom participation as well as their mastering of the course content. Eventually, as participants became more comfortable exchanging comments and ideas, they gradually focused on the course content rather than the language itself. The following interaction describes how one participant further elaborated on an earlier comment:

> I see what do you mean but do not forget quantitative design collecting numeric data from a large number of people. In addition it has three types of quantitative method: experimental, quasi-experimental and survey; in this case quan design generalizes. On the other hand qualitative studies a phenomenon in a real context; I mean, it explores people behaviors; and it does not generalize [*sic*].

It is noteworthy to mention, however, that the participants' comprehension levels significantly increased, as evidenced during class time, as the interactions came to center on the content rather than the form. The following contribution depicts how participants interacted on a voluntary basis:

> Finally I would like to know, Why are there different cultures in the world??? What do you think is the MAIN reason??? maybe, because everybody think in a different way, or people try to create their own identity [*sic*].

It seemed that participants found the wiki a way to ask others and to expand their knowledge. Furthermore, this online environment provided participants with an opportunity to use the target language naturally, by asking and answering questions, for example.

In addition, the sort of interaction the wiki generated allowed participants to track their own progress, as evidenced by their posts and their evident comfort levels when taking part in class activities. As one of the participants explained:

> After this second term I can infer how difficult is to read and reread a paper, for instance, and start doing a critique. Nevertheless, being objective, I can see progress in my knowledge in the research field. I still got a doubt and maybe it's late to clarify it but I want you to help me to stablish the difference between Criticism and Critique. What I know is that the first is especially adversely and the other one is a serious examination of something but at last they are synonyms. So what? [*sic*]

This participant understood that the best way to gain more robust knowledge on the course content required her posting her contributions on the wiki. As she interacted, she became aware of what she had grasped and what was yet to be mastered. It is important to note, in addition, that this visibility offered participants a twofold benefit. First, the way the tasks were structured allowed them to interact on a voluntary basis, and second, in spite of the grammatical mistakes, the participants progressively became part of an online community that shaped their thinking as they shaped others'.

Conclusions

The purpose of this action research was to explore the sorts of interactions that foreign language learners experienced as they used a wiki as a supporting tool to a face-to-face research course. In an attempt to answer research question one, I would say that once the participants embarked upon web 2.0-mediated collaborative learning, class tasks promoted voluntary interactions among them in which they expressed their opinions and points of view. This online environment engaged the participants in an asynchronous exchange of experiences that enabled them to actively participate in the face-to-face class. With regard to the second research question, I consider that this type of online interaction allowed

participants to use the target language naturally. By and large, the tasks required them to answer specific questions, giving them the opportunity to contrast their ideas and understanding with those of others. More importantly, as they developed reading and writing skills, participants were exposed to meaningful learning in context. Taking into account that most of the mistakes they made while posting did not compromise meaning, the mistakes were regarded as a natural part of the learning process. In the long term, this type of collaborative learning experience could help participants not only to improve their foreign language competence but also to become lifelong learners.

References

Beltrán López, J. F. (2009). *Using the online software Hot Potatoes to help first graders develop beginning writing* [Master's thesis]. Universidad de La Sabana, Bogotá, Colombia.

Boulos, M. N. K., Maramba, I., & Wheeler, S. (2006). Wikis, blogs and podcasts: A new generation of web-based tools for virtual collaborative clinical practice and education. *BMC Medical Education 6*(41). Retrieved from http://www.biomedcentral.com/1472-6920/6/41.

Bruning, R. H., Schraw, G. J., Norby, M. M., & Ronning, R. R. (2004). *Cognitive psychology and instruction* (4th ed.). Upper Saddle River, NJ: Pearson.

Bruns, A., & Humphreys, S. (2005, October). *Wikis in teaching and assessment: The M/Cyclopedia project*. Paper presented at the International Symposium on Wikis of the Association for Computing Machinery. San Diego, USA. http://dx.doi.org/10.1145/1104973.1104976.

Bryant, L. (2007). Emerging trends in social software for education. *Emerging Technologies for Learning, 2*, 9-18.

Castaños, C., & Piercy, F. P. (2010). The wiki as a virtual space for qualitative data collection. *The Qualitative Report*, *15*(4), 948-955. Retrieved from http://www.nova.edu/ssss/QR/QR15-4/castanos.pdf.

Cortez, C., Nussbaum, M., Woywood, G., & Aravena, R. (2009). Learning to collaborate by collaborating: A face-to-face collaborative activity for measuring and learning basics about teamwork. *Journal of Computer Assisted Learning, 25*(2), 126-142. http://dx.doi.org/10.1111/j.1365-2729.2008.00298.x.

Cote Parra, G. (2000). Learning English through online discussion groups. *Journal of Adolescent & Adult Literacy, 44*(1), 36-38.

Creswell, J. W. (2011). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (4th ed.). Boston, MA: Pearson.

Duffy, P. D., & Bruns, A. (2006). The use of blogs, wikis and RSS in education: A conversation of possibilities. *Proceedings Online Learning and Teaching Conference 2006, Brisbane, 31-38*. Retrieved from http://eprints.qut.edu.au/5398/1/5398.pdf.

Economist Intelligence Unit. (2008). *The future of higher education: How technology will shape learning*. Retrieved from http://www.nmc.org/pdf/Future-of-Higher-Ed-(NMC).pdf.

Espitia, M. I., & Clavijo Olarte, A. (2011). Virtual forums: A pedagogical tool for collaboration and learning in teacher education. *Colombian Applied Linguistics Journal, 13*(2), 29-42.

Ferris, S. P., & Wilder, H. (2006). Uses and potentials of wikis in the classroom. *Innovate: Journal of Online Education, 2*(5). Retrieved from http://www.qub.ac.uk/directorates/AcademicStudentAffairs/CentreforEducationalDevelopment/e-Learning/E-LearningFileStore/Filetoupload,134940,en.pdf.

Godwin-Jones, R. (2003). Emerging technologies: Blogs and wikis: Environments for on-line collaboration. *Language, Learning & Technology, 7*(2), 12-16. Retrieved from http://llt.msu.edu/vol7num2/emerging/.

Herrera, Y. E. (2013). Writing skill enhancement when creating narrative texts through the use of collaborative writing and the Storybird Web 2.0 tool. *Colombian Applied Linguistics Journal, 15*(2), 166-183. http://dx.doi.org/10.14483/udistrital.jour.calj.2013.2.a02.

Higdon, J. (2005, November 15). Teaching, learning, and other uses for wikis in academia [Web log post].

Retrieved from http://campustechnology.com/articles/2005/11/teaching-learning-and-other-uses-for-wikis-in-academia.aspx.

Insuasty, E. A., & Zambrano Castillo, L. C. (2010). Exploring reflective teaching through informed journal keeping and blog group discussion in the teaching practicum. PROFILE Issues in Teachers' Professional Development, 12(2), 87-105.

Jimenez Pulido, C. (2009). *Webquests and the improvement of critical reading skills in a group of university students* [Master's thesis]. Universidad de La Sabana, Bogotá, Colombia.

Kessler, G., & Bikowski, D. (2010). Developing collaborative autonomous learning abilities in computer mediated language learning: Attention to meaning among students in wiki space. *Computer Assisted Language Learning, 23*(1), 41-58. http://dx.doi.org/10.1080/09588220903467335.

Kimmerle, J., Moskaliuk, J., & Cress, U. (2011). Using wikis for learning and knowledge building: Results of an experimental study. *Educational Technology & Society, 14*(4), 138-148.

Koçak-Usluel, Y., & Mazman, S. G. (2009). Adoption of web 2.0 tools in distance education. *International Journal of Human Sciences, 6*(2), 89-98. Retrieved from http://www.j-humansciences.com/ojs/index.php/IJHS/article/view/756/397.

Lamb, B. (2004). Wide open spaces: Wikis, ready or not. *Educause Review, 39*(5), 36-48. Retrieved from http://www.educause.edu/ir/library/pdf/erm0452.pdf.

Li, Y., Dong, M., & Huang, R. (2011). Designing collaborative e-learning environments based upon semantic wiki: From design models to application scenarios. *Educational Technology & Society, 14*(4), 49-63.

Mertler, C. A. (2006). *Action research: Teachers as researchers in the classroom*. Thousand Oaks, CA: Sage.

Quintero, L. M. (2008). Blogging: A way to foster EFL writing. *Colombian Applied Linguistics Journal, 10*, 7-49. Retrieved from http://caljjournal.wordpress.com/scientific-committee/number-10-october-2008/.

Rourke, L., Anderson, T., Garrison, D. R., & Archer, W. (2000). Methodological issues in the content analysis of computer conference transcripts. *International Journal of Artificial Intelligence in Education, 11*. Retrieved from http://iaied.org/pub/951/file/951_paper.pdf.

Salinas Vacca, Y. (2014). Collaborative project work development in a virtual enviroment with low-intermediate undergraduate Colombian students. PROFILE Issues in Teachers' Professional Development, 16(1), 29-48. http://dx.doi.org/10.15446/profile.v16n1.37607.

Su, F., & Beaumont, C. (2010). Evaluating the use of a wiki for collaborative learning. *Innovations in Education and Teaching International, 47*(4), 417-431. http://dx.doi.org/10.1080/14703297.2010.518428.

Vaughan, N. (2008). The use of wikis and weblogs to support deep approaches to learning. *Research Review, 1*(3), 47-60. Retrieved from http://journals.ufv.ca/rr/RR13/article-PDFs/6-vaughan.pdf.

Witney, D., & Smallbone, T. (2011). Wiki work: Can using wikis enhance student collaboration for group assignment tasks? *Innovations in Education and Teaching International, 48*(1), 101-110. http://dx.doi.org/10.1080/14703297.2010.543765.

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