



Technology Integration in Higher Education in Kurdistan, Iraq: A Wiki Case Study

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1. Introduction

This classroom technology project, and subsequent research study, grew out of a formal partnership between the University of Cincinnati (United States) and Salahaddin University – Hawler (Kurdistan, Iraq). In 2010, through funding from the U.S. State Department, five universities in the United States were paired with five universities in Iraq to support the creation of new curriculum and professional development opportunities in Iraq. University of Cincinnati faculty involved in the project included faculty in the College of Education, Criminal Justice and Human Services – School of Education. Faculty at Salahaddin University – Hawler were from the Colleges of Languages, Basic Education, and Administration & Economics. The two universities worked collaboratively to define seven major goals for the partnership [1]:

- Increase English proficiency across curriculum.
- Bring content and knowledge base up to date.
- Enhance pedagogical knowledge.
- Broaden research capabilities.
- Create distance learning programs.
- Advance exchange opportunities.
- Establish a career center.

1.1 Initial wiki project development

This particular project grew out of a work team during the first year of the partnership. This group of faculty focused on identifying technology integration strategies to address specific barriers to teaching and learning identified by the Kurdish faculty. One of the strategies discussed was using blogs and wikis as a tool to increase student participation and motivation while also developing content knowledge and providing opportunities to practice English writing skills. One of the participants in the faculty work group decided to create a wiki for his English Syntax and Morphology classes.

1.2 Wiki definition and pedagogy

The term “wiki” is an acronym for “What I Know Is” [2]. In technology terms, a wiki is an editable website where users are able to create hyperlinks, insert images, and modify text [2] [3] [4]. The integration of wikis into lessons and assessments is grounded in the theory of social constructivism [5]. Wikis can be an effective instructional strategy because they promote learning by enhancing interaction and empowering students in the educational process. Three types of interaction are supported by wiki-based instruction: learner-content, learner-instructor, and learner-learner [6]. Wikis also provide additional opportunities outside the classroom setting for students to interact with the course content, each other, and the instructor. When compared to the learner-instructor interaction in the face-to-face context, instructors utilizing technology like wikis are more accessible to learners because the time for instruction and consulting is extended beyond the limited classroom instructional time. Finally, peer-peer interaction is facilitated by wikis through collaborative group assignments. Through wikis, students interpret, clarify, validate, and reflect on their understandings through sustained dialogue [7]. Through this dialogue, not only is the learning of primary content fostered, but also group behavior is improved, and group leadership skills are developed [6].

1.3 Development of the wiki project

The instructor taught 130 third-year students in English syntax and morphology. These students were divided into three classes of approximately 45 students each. Overcrowded classes like this made it difficult for the instructor to involve every student in all classroom activities. Additionally, class periods were limited to 45 minutes, making it even harder to dedicate enough time for interactive activities.

Salahaddin University has a website (<http://www.suh-edu.com/>) devoted to information about the university, however no pedagogical tools are included in the website such as a learning management system, student email services, or university hosted wiki or blog services. After a number of discussions with the Academic Director for Online Learning at the School of Education, Cincinnati, the Salahaddin instructor decided to create a workspace on PBWorks (<http://www.pbworks.com>) in order to increase students' interaction with each other and with the instructor. The workspace was entitled 'syntaxandmorphology' and the purpose was for students and the instructor to discuss grammatical issues by posting and solving grammatical exercises. The aim was to provide a blended learning environment that combined the advantages of the traditional face-to-face classroom with the extra opportunities of online learning. Studies have shown that learners are more actively engaged in such a blended kind of learning than in a purely traditional classroom setting [8]. Because online learning is not officially



incorporated into the education at Salahaddin, the students' participation in the wiki was optional. Consequently, the instructor could only reward those who participated with extra daily marks. For those who were unable or uninterested in participating in the wiki, daily marks were based solely on in-class participation. After the conclusion of the academic year, the Salahaddin instructor and the Academic Director, Cincinnati decided to conduct a case study analysis of the project to see whether it met the intended goals for the activity.

2. Research methodology

In order to analyze the outcomes of the project, the co-researchers utilized a case-study design. Data included:

- textual analysis of the wiki,
- survey of student participants (conducted when the instructor-researcher was no longer the instructor for these students),
- self-reflection by the instructor-researcher,
- and grades from the course.

2.1 Research questions

The research questions for this study were:

- Did the wiki increase student motivation in English language studies?
- Did the wiki increase student learning in English language studies?
- Did the wiki promote positive student-student interaction?
- Did the wiki promote positive student-instructor interaction?

3. Results

Sixty-five students out of the total 130 decided to join the wiki workspace and approximately 20 of them were regularly active on the wiki. Seven of the active students completed the optional survey.

The workspace started with two pages: a question-answer page (where students could post their questions for the instructor to answer) and a suggestions page (where all participants could post suggestions to improve the workspace). Gradually the students suggested adding more pages and the instructor suggested that they take charge of individual pages. Eventually the instructor was able to assign a student to assist in the running each page. This gave the students more responsibility regarding their own learning. The wiki grew to eleven pages:

- Express your view
- Important files
- Hahaha, very funny (jokes page)
- Listening comprehension
- Grammatical terms
- Can you solve this puzzle or riddle
- Students' writings
- Students' poems
- Question-answer
- Suggestions
- Archive

The most active pages in the wiki were the grammatical terms, question-answer, and jokes pages.

3.1 Did the wiki increase student motivation in English language studies?

Students were very enthusiastic about the wiki and wanted to see more technology activities included in other English language classes. The wiki proved to be a powerful tool for increasing student motivation. Student comments regarding this included:

- I could frankly say that this wiki was the main reason that pushed me to be the best student in my college.
- I need the wiki's information to encourage me to do my best for learning English.
- Because wiki was my first chance to improve and practice my English grammar.
- It helped me to not only get interest in English in the lectures but also it was a method to get extra information from different website in internet like (engvid.com, enots).
- I used to hate grammar stuffs but now I am doing great. I improved a lot.
- The wiki makes studying more interesting.
- In general wiki was teaching you through practice and fun, but classes through rules.
- The workspace proved to be useful, especially for those students who were too shy to ask questions or participate in the class. They were able to work through exercises in private, without fear of failure. One student noted, "There is definitely difference between the two [traditional classes and the wiki environment] because you could write freely on the workspace and discuss the topics that you are not allowed to say in the class or might not have time to discuss there." One final piece of evidence supporting increased motivation in English language studies is that even though the instructor no longer works directly with these students, many of them are still very active in the wiki.



3.2 Did the wiki increase student learning in English language studies?

Students who participated in the wiki generally did better in the midterm and final exams than those who didn't participate. This provides evidence that the workspace was a useful follow-up and extension of in-class activities and lectures. Students also identified increased learning through the wiki:

- I got benefit from it and my grammar improved very well.
- Even my skill in English grammar came to a point to ask questions that teachers were not able to answer.
- I appreciate the wiki, it helps the students learn and understand the subjects easier.
- I decided to participate in the wiki in order to improve and increase my skill and learning in English grammar and language.

3.3 Did the wiki promote positive student-student interaction?

All students who completed the survey indicated that they liked the opportunity for student to student interaction and five of the respondents indicated that they wished that more students had been active in the wiki. Even though they wished for more peer participation, students still enjoyed the camaraderie that came from this experience:

- The wiki gave me a chance to practise and gave me many ideas through other friends' experience.
- I liked the way that the wiki brought students closer to each other.

3.4 Did the wiki promote positive student-instructor interaction?

Most courses at Salahaddin University follow a traditional lecture/exam model for instruction. Faculty are well-respected, but rarely have opportunities for more casual interactions with students. The student surveys indicated that they appreciated the opportunity to develop a closer relationship with the instructor through the wiki. Comments from students regarding the instructor included:

- The wiki affected me about my instructor, that he tried to help us and I really appreciate it.
- Yes, personally I have been told before that [instructor] is not coordinating very well with his students, better to say he is not in good terms with them. But in the wiki I saw something completely different. He helped us a lot.
- Yes, it helped me maintain my relations with my instructor, and let us know that he is enthusiastic in teaching us (which pushed us to pay more attention to syntax).
- When I can only see my instructor in class, I can not be his friend. Actually being friend with tutors is the best way to practice English and find confidence that speaking any language is easy. [Instructor] is sweet and respectful and by helping me in the wiki he becomes greater.

4. Conclusions

While the wiki proved to be a successful teaching and learning strategy in these English Language classes, a number of obstacles impede wide-spread implementation of this technology at Salahaddin University.

4.1 Obstacles

Even though originally half of the students signed up for the wiki, only about 20 became regular participants. This may have been due to the fact that it was an optional assignment or it could have been due to lack of reliable access to technology. It is estimated that half of the students in this college do not have personal computers and/or have access to the Internet at home. Additionally, there is no facility in the College of Languages where students can use university supplied computers. There is only a small library that provides a wireless Internet service for those who have laptops. If the university provided computer and Internet access to students through a computer lab, the instructor would have considered making this a required assignment in the classes.

4.2 Recommendations

Students overwhelmingly stated that they wanted more technology assignments like this in their courses. One recommendation from this study is to make the Salahaddin University website more interactive through a learning management system like Blackboard or by incorporating university-hosted wiki and blog software for pedagogical purposes. The university should also consider developing computer labs in each college where students and instructors can have access to computers and the Internet. Once instructors were ensured that students have equitable access to technology through computer labs, then they could incorporate a wide variety of web-based pedagogies into their courses. A final recommendation is for the university to provide relevant technical training for students and instructors in order to make the best use of the technology in improving higher education.

References

- [1] Sampson, A. M. (2010). *UC launches US-Iraqi Linkages program*. Retrieved from: <http://www.cech.uc.edu/headline/uc-launches-us-iraqi-linkages-program/>
- [2] Wheeler, S., & Wheeler, D. (2009). Using wikis to promote quality learning in teacher training. *Learning, Media and Technology*, 34(1), 1-10.
- [3] Bhattacharya, K. (2011). Constructing democratic learning environments the wiki way. *Technology, Humanities, Education, and Narratives*, 8, 39-64.
- [4] Wichadee, S. (2010). Using wikis to develop summary writing abilities of students in an EFL class. *Journal of College Teaching and Learning*, 7(12), 5-10.
- [5] Kraiger, K. (2008). Transforming our models of learning and development: Web-based instruction as enabler of third-generation instruction. *Industrial and Organizational Psychology*, 1, 454-467.



[6] Moore, M. G. (1989). Three types of interaction. *American Journal of Distance Education*, 3(2), 1-6.

[7] Garrison, D. R. (1993). A cognitive constructivist view of distance education: An analysis of teaching-learning assumptions. *Distance Education*, 14, 199-211.

[8] Watson, J. (2008). *Blended learning: the convergence of on-line and face-to-face education*. Retrieved from http://www.inacol.org/research/promisingpractices/NACOL_PP-BlendedLearning-Ir.pdf