Student Performance, Assessment and Language Skills Development in a Wikis Environment

Chao Geng, M.A., Zhuhai College of Science and Technology, School of Foreign Languages 11034geng@jluzh.edu.cn

Abstract- Communication technologies are used in every field of life in today's globalizing world and using them in foreign language teaching has become a requirement rather than a choice. Enabling learners who use information technology resources often in their daily lives to benefit from these tools while studying a foreign language can improve their learning and motivation to learn. Learning media is a tool to deliver learning material from the teacher to students. Due to the advancement of web 2.0, there are numerous learning media that has many contributions to the teaching and learning process in the classroom, including wikis, blogs, or video blogging etc. There continue to be emphasize on how wikis can encourage the students for learning a language and keep them motivated. Although the wiki was introduced more than ten years ago, its use is relatively new in academia.

Therefore, this research investigates and aggregate the available literature regardingthe experience of using wikis for foreign language learning. In conclusion, we aim to study various methods used for teaching a foreign language using wikis content. We focus on the role of wikis in foreign language learning out of classroom settings or impacts of motivation levels. This article advocates the use of wiki as a language learning tool, as wikis enable students to collaborate in the language learning process by allowing themto post and edit messages. Also, we think that wiki-based language learning can have a positive effect on learners.

Keywords: Communication technologies, Language Skills, language learning tool

I. INTRODUCTION

A foreign language education and technological advancements are not mutually exclusive. In a global economy and increasingly multilingual culture, learning a foreign language (FL) has become one of the most important goals. Ravichandran, Kretovics, Kirby, and Ghosh (2017) highlight that public writing is of the most difficult challenge that students face when learning a foreign language. Students are worried because they do not want to make mistakes. When learning a foreign language, it has a clear connection to a student's self-esteem being affected. According to Kavitha and Jain (n.d.) & Le (2021) in recent years, the Internet has become a prominent digital technology. The educational, industrial, and economic sectors of our world have all been affected by the effects of such a powerful technological weapon. Regardless of one's experience with the Internet, it is frequently mentioned. Whether or not one uses the Internet, it is important to know that we have entered a new knowledge age, and the Internet is here to stay. Since the Internet is used in so many different fields and domains. It is safe to say that technology and evaluation of Web 2.0 has a lot of educational potential, particularly in second and foreign language education.

Furthermore, Web 2.0 technology has allowed millions of people all over the world to interact and communicate in a variety of ways in recent years. In a recent study by Barrot (2021) mention that Web 2.0 frameworks do, in fact, take advantage of the Web's participatory capabilities. As a result, Web 2.0 networking has become an integral part of many students' daily and academic lives. Tens of thousands of educators have begun experimenting with the resources given by web 2.0, and this pattern is no exception in the field of second language (L2) education. Therefore, it can be concluded that the future effect of web 2.0 technology on language learning and teaching is groundbreaking S. Wang and Va´squez (2012) & AȘIKSOY (2018). For instance, Web 2.0 sites wikis, blogs, social media has been seeing sharp rise since the introduction Brodahl, Hadjerrouit, and Hansen (2011); Elola and Oskoz (n.d.).

Wikis are one of many Web 2.0 components that can be used to enhance the learn- ing process. A wiki is a web communication and collaboration tool that can be used to engage students in learning with others within a collaborative environment Parker and Chao (2007). For instance, a class wiki will provide the students with an endless supply of content and inspiration. When shy students are given the opportunity to voice their thoughts and opinions through wikis, they can often flourish. They find that engaging orally in class is more available once their interest has been boosted and they recognize their partnership. Students who often over participate in class can find an outlet on the wiki and then tend to give others a chance when they return to class. Additionally, important advantage of getting a class wiki is that it allows students to communicate with the language through the Internet. Students gain more respect as they are held

accountable and can communicate in the target language.

This study explores the current state of research on wikis and L2 learning, investigates the theoretical perspectives framing the recent research, and identifies some of the benefits of using wikis with subtitles and captions on L2 education, and pinpoint possible limitations in the existing research. This study is also designed to propose possible directions for future research.

II.   LITERATURE REVIEW

Researchers have looked at history, literacy, peer input, engagement, dialogue, knowledge building, communication skills, and instructional process comparisons in addition to the basic four language skills (listening, speaking, reading, and writing). Researchers have investigated the attitudes and expectations of learners, as well as their personalities, motivation, autonomy, and learning cultures. Researchers contrasted the impact of different technical tools on L2 learning in the third technology division.

To summarize, Web 2.0 developments have aided in broadening the reach of technology and language learning science, which was historically restricted to the four conventional language skills. New contexts for exploring new literacies, genres, personalities, and pedagogies have emerged because of Web 2.0 learning environments Cong-Lem (2018).

In this regards, various studies have investigated this integration. For EFL (English as a foreign language) students, a study Chao and Lo (2011) proposes a Wiki-based interactive writing approach to the writing process. An on-campus English composition course was combined with a five-stage computer-mediated collaborative writing project that included collaborative preparation, partitioned drafting, peer-revising, peer-editing, and individual publishing. Fifty-one L2 learners at a university in central Taiwan participated in this project. Students were given procedural and collective scaffolding to facilitate self-regulation and, as a result, the growth of their writing skills. To examine students' perceptions of Wiki-based collaborative writing and students' perceptions of their work at each point of collaborative writing, a cross-referencing questionnaire survey was used. According to the findings, a high percentage of students were satisfied with this Wiki-based collaborative writing environment, and the instructional design of implementing a Wiki-based collaborative writing project with a five-stage writing process does assist EFL learners in completing a collaborative writing task on the Internet with less time constraints.

In a similar thread, another research by Ducate, Anderson, and Moreno (2011) focuses on one such method, the wiki, and explains how three different wiki projects (micropedia, branching plot, and prereading) were implemented in three different university intermediate foreign language classes (French, Spanish, and German). The aim was to look at the form of collaboration that wikis encourage and how students perceive this collaborative work. A post-experimental questionnaire revealed that wikis have a positive impact on students' willingness to use the foreign language, while also revealing varying levels of satisfaction with collaborative work.

The focus of study Kessler (2009) is on pre-service Non-Native Speaker (NNS) English teachers' attention to form during the collaborative construction of a wiki. In an online content-based course, forty NNS pre-service teachers from a broad Mexican university were observed over the course of a sixteen-week semester. In a long-term collaborative task, this article investigates the extent to which these NNS EFL teacher candidates seek to correct their own and others' grammar errors. The article also looks at how accurate these participants are and how much emphasis they put on grammar revision versus material re-vision. Follow-up interviews with participants offered insight into these NNS pre-service teachers' perceptions of the value of grammar in the sense of interactive technologies. Additionally, Kuteeva (2011) examines the usage of wikis in effective English communication. Its aim is to explain how the course wiki was used to teach academic and professional writing, as well as to examine the effects of using the wiki on the writer–reader relationship. Several research methods were used in the case study, including participant observation, text interpretation, and a self-report questionnaire. Reader-oriented functionality and interactional meta-discourse tools were analyzed in the texts posted by students on the wiki. The findings show that when students used the wiki for writing tasks, they paid careful attention to grammatical correctness and structural coherence. Nearly 60% of students said that writing on the wiki forced them to think about their audience.

Lin and Yang (2011) present a research on Wiki technology and peer review in a writing class for English as a second language students. The goal was to see if this framework, as a shared forum, could help students develop their writing skills. The research looked at how students felt about combining a Wiki writing course

with peer reviews. There were 32 sophomores who took part in the study. Based on self-reported reflections about the project, impressions of student learning, interviews, and surveys, the study used a socio- cultural theoretical context to investigate students' perceptions of the efficacy of Wiki- based writing projects and experiences of social interaction in the writing process. Most students expressed trust in their ability to apply Wiki and peer input to writing instruction, according to the findings. Students' perceptions of the advantages of this collaborative writing method tend to be influenced by meaningful social interaction. Students did, however, face both practical and psychological barriers to using the modern technologies, reflecting the need to change their conventional learning habits to adopt new, technology-enhanced learning systems.

Also, Mak and Coniam (2008) present a research and it looks at authentic writing by year seven ESL students in a Hong Kong secondary school using wikis. The wikis were used as a shared writing medium to create wiki content that explains the various facilities and features of their school with limited feedback and help from their teachers. Over the course of two months, as part of their ESL homework, groups of students planned and put together a summary of their secondary school, which they had transferred to from primary school just a few months before, through a series of successive drafts. As part of their ESL homework, groups of students designed and put together a review of their secondary school, which they had moved to from primary school just a few months ago, over the course of two months through a series of successive drafts. The paper begins with an overview of how wikis work in terms of editing and revision before describing the process that one group of students went through. Students' intermediate and final drafts are sampled, as well as snapshots of the amount and styles of writing created at each point. The students' final draft was turned into a printed brochure for their 'new' school, which was handed out to parents. In light of this real-life 'outcome,' the pa- per considers the role of authentic writing in an ESL program, specifically in the realms of creativity and task-based learning.

The efficacy of three separate online writing practices in formal university education is examined in this paper: forums, blogs, and wikis Miyazoe and Anderson (2010). Constructivism, which promotes reflective and collaborative learning through scaffolding, is a major proponent of their use in education. The study also presents the results of the authors' exploratory research into the use of forums, blogs, and wikis in an EFL-blended learning course at a university in Tokyo, Japan. For triangulation, a mixed-method approach was used, with survey, interview, and text analysis being used. Students' positive views of the blended course design with online writings were revealed in the survey, with wikis being the most common, followed by blogs and forums. The ability to distinguish English writing types has improved, according to qualitative text review of forum and wiki writings. The interview script review revealed the various benefits that students saw in each activity.

Slides2wiki, a new scheme for conveniently providing shared lecture notes in O'Neill (2005). The slides2wiki approach, unlike previous web-based courseware systems, blends with existing techniques that computer-science course instructors use to plan their courses. This method is used to create a website where students can collaborate to create their own notes based on the lecture slides. Slides2wiki removes many of the stumbling blocks of previous approaches to web-based course support by taking a surprising low-tech approach that uses common methods and paradigms. Also, Purdy (2009) claim that Wikipedia pro- motes conceptions of revision, cooperation, and authority that writing studies purports to respect, while also expanding our understanding of information creation in public spaces, based on an analysis of measurable changes author-users made to three Wikipedia posts. It claims that Wikipedia forces us to reconsider our standards for the stability of research materials and who should be involved in the development of public information.

In study presented by Wichadee et al. (2010) looked at and contrasted students' ability to write English summaries before and after being taught using wiki, a powerful tool for fostering collaborative learning environments among students. The study employs a one- group pre-test and post-test configuration. The focus group consisted of 35 students who enrolled in Bangkok University's EN 111 courses (Fundamental English I) during the first semester of the academic year 2010. Students worked in groups of four or five for eight weeks to build a wikispace and create five pieces of overview written work. Every group worked on web page editing and revision until the team had a final paper that they sent to the instructor for assessment. (i) overview writing exercises, (ii) a questionnaire surveying their attitudes toward this instruction, and (iii) a reflection on cooperative learning through wikis were all used in this research. The results showed that after students were taught using wiki pages, their English summary writing mean score on the posttest was higher than on the pretest, and they had a good attitude toward learning. Most students

felt that working with participants on-line was a new experience when it came to cooperative learning. They put in a lot of effort; reading and rereading the members' postings to provide new details took a long time.

The impact of wiki-mediated collaborative writing on learners' L2 writing was examined in a report presented by Hsu and Lo (2018). A total of 52 foreign language learners enrolled in two intact junior writing classes at a Taiwanese university participated in the study. One class was designated as a wiki-collaborative writing group of 26 students, while the other was designated as an individual writing group of 26 students. Over nine weeks, both classes completed an individual pre-test writing, a writing assignment, and individual post-test writing. Students in the wiki community collaborated on an expository essay in pairs using wikis; students in the individual group wrote their essays on their own. On the pre-test and post-test, learners' written work was evaluated for quality and organization and linguistic difficulty and accuracy. The results showed that wiki-mediated collaborative writing significantly impacts learners' writing quality and linguistic accuracy in L2. Its effect on the organization and linguistic sophistication, on the other hand, was less noticeable.

Zou, Wang, and Xing (2016) investigate the impact of collaborative task error correction in an online (wiki) language exchange program (Chinese and English) between China and the United Kingdom for English as a Foreign Language learning. The current research included students enrolled in an English module at a Chinese international university. They collaborated on a joint writing project with students enrolled in a Chinese language course at a UK university. The findings show that learners liked using wikis for collaborative learning to practice their language skills, particularly when they were combined with specially designed tasks in their language classes. On the wiki, students enjoyed correcting each other's grammatical errors. Furthermore, the findings show that students' writing abilities were improved.

III.   RAISED AWARENESS AND POSSIBLE RE-POSITIONING

Wiki, a Web 2.0 component, is a tool introduced by Ward Cunningham. It is a web site that allows students to easily create and edit HTML-based documents through a browser Kear, Woodthorpe, Robertson, and Hutchison (2010). The students need a web browser and access to the Internet. In general, a wiki can be public or private. A public wiki is open to everyone, and an excellent example of a public wiki is Wikipedia. On the other hand, a private wiki is only accessible to a group of students determined by its creator, also known as the administrator. Students who are given access to the wiki can modify, i.e., make changes to the wiki's content as much or as little as they desire. Apart from typing or editing texts, students can add other features such as pictures, multimedia contents, widgets, links to video sources and a variety of other tools that a web site allows. If students can use a word processing program such as Microsoft Word, they will be able to perform all the tasks required on a wiki.

Language learning can be more entertaining, inspiring, and collaborative with Web 2.0 tools and their interactive, social, and collaborative functionality. The state-of-the-art and their results indicate that the integration of wiki resources has great potential to benefit language learning and teaching by multiple means. In addition, wiki resources can be used in several different phases of a language learning course, such as brainstorming, presentation, practice, testing, and so on, with the aim of engaging and motivating students in a learner-centered approach. For example, students may use the wiki to talk about other characters in a book, different chapters, or different events. They can ask questions, leave notes, upload music, images, or even draw pictures of what the characters would look like. It is even easier if students can create these images on their own and then photograph them to add to the wiki. This form of review encourages students to read further and aids in their overall understanding of the plot and literary elements. Students will read various books in groups and create a page about their favorite one, discussing events, characters, predictions, and other literary elements. With very little effort, the instructor will observe and even analyze these interactions.

It encourages students to work independently and strengthens their cooperation. Later, groups who have not yet read the book will consult the wiki page to determine whether they want to read it. Students may write reviews of novels, movies, TV shows, or books on various wiki pages and then discuss them with other students who share similar or opposing view- points. Students may also be asked to create ads for these things and post them on the wiki page. Students may add new terms that they come across or are interested in, and by the end of the term, the class will have a complete glossary. When students teach each other new

vocabulary words, it is much more inspiring and productive than when the instructor selects the words to be learned.

<div align="center">IV. POSSIBLE INTERVENTION</div>

Wikis are often compared to blogs because they both have easy-to-use publishing features. They both debuted about the same time, a little more than a decade ago, and both provide a simple publishing tool for disseminating information and soliciting public input. Early wikis were created to allow multiple users to generate information repositories, while blogs were designed to enable individuals to keep personal diaries. While they are distinct in several respects, they are becoming increasingly similar in terms of functionality.

In recent years, wikis have grown in popularity as teaching tools. While wikis have been used in many areas of education, such as composition, literature, distance education, philosophy, design engineering, symbolic logic, and mathematics, they still have a lot of untapped potential. The wiki, for example, is an excellent tool for software project collab- oration and communication due to its collaborative design and convenience features.

Teachers provide most of the classroom knowledge in a typical classroom environment. Students can generate a lot of the classroom knowledge collaboratively using wikis. Wikis enable students to become creators of information rather than users, making them an excellent resource for motivating students to develop critical thinking skills, learn from their peers, and improve their academic performance.

Wikis have similar advantages in conventional classrooms and hybrid or online courses as a means of collecting knowledge, assessing students, and fostering collaboration and interaction among students. Wikis in the classroom provide students with a special online experience. They would be able to exert leverage because of it. Teachers may inspire students to create content rather than consume it by giving them more control over the results of a project or assignment. Students are encouraged to learn from and absorb knowledge frankly because of this role reversal.

To use wiki effectively in a classroom, the teachers/instructors must first figure out which wiki website is best for them and their students. Therefore, there is still a lot of work to be done, especially in assessing its effectiveness Additionally, like all other learning tools, the use of wiki in a language classroom has its obstacles C.-m. Wang and Turner (2004). For example, (i) low bandwidth can affect access to wiki sites. This is especially true multiple access the site simultaneously. (ii) In the same light, the IT policy in an educational institution may prohibit students from accessing streaming media. This may hinder students' effort to embed or view video clips or other multimedia contents related to the task at hand. It may also discourage students from further experimenting with the wiki. Moreover, (ii) students cannot edit same pages simultaneously and that is not an ideal situation. Students must take turns if they wish to edit the same page.

Therefore, careful consideration is necessary to integrate wikis in a classroom environment. Authors in Zorko (2009) discuss various factors affecting the use of wiki in a class- room. However, as a result, we believe that more work needs to be done to strengthen accreditation processes and practices. This may assist in bridging the gap between it and the conventional educational establishment. The right partnerships, as well as the necessary amounts of sustainable funding, are re- quired to support the advancement of Learning 2.0 initiatives. To feed into future business models and policy initiatives to promote more development, more research is needed to gather evidence of Learning 2.0's cost-effectiveness.

<div align="center">V. CONCLUSION</div>

The use of educational technology will provide a space outside of the conventional class- room that can be used to help students with their writing processes and interactions. The current study's use of social Web technology was able to break down conventional class- room barriers, resulting in a less teacher-dependent learning community that was not solely focused on topics discussed in the textbook or by the instructor, but rather originated from the desires and experiences of all students. Wikis and other emerging technologies are starting to fill a gap in current practice. They allow extremely rich, versatile partnerships that have both

positive psychological and powerful competitive implications for their participants. In the coming years, collaborative innovation is expected to be a critical business ability. By familiarizing students with the simple technologies that allow collaborative networks, educational institutions can provide enormous value to their students.

Wikis enable students to collaborate in the language learning process by allowing them to post and edit messages. Many studies have shown that wiki-based language learning has a positive effect on learners. Today's students can not only handle, but in many cases, push potential business developments. Instead of being restricted to today's skills, students must learn potential skills. Educators must teach students not only what wikis and other social applications can do for business, but also how to use them. Educators will help train students to make creative uses of interactive software resources by integrating wikis into the classroom. Therefore, we advocate that further work is needed to strengthen the processes and requirements of using wiki for teaching a foreign language which is a potential solution to help to bridge the gaps between it and the conventional education establishment.

REFERENCES

1. AŞIKSOY, G. (2018). Elt students' attitudes and awareness towards the use of web 2.0 technologies for language learning. *Dil ve Dilbilimi Çalışmaları Dergisi*, *14*(2), 240– 251.
2. Barrot, J. S. (2021). Social media as a language learning environment: a systematic review of the literature (2008-2019). *Computer Assisted Language Learning*, 1–29.
3. Brodahl, C., Hadjerrouit, S., & Hansen, N. (2011, January). Collaborative Writing with Web
4. 2.0 Technologies: Education Students' Perceptions. *Journal of Information Technology Education:Research*, *4*, IIP73–IIP103. doi: 10.28945/1384
5. Chao, Y.-C. J., & Lo, H.-C. (2011). Students' perceptions of wiki-based collaborative writing for learners of english as a foreign language. *Interactive Learning Environments*, *19*(4), 395–411.
6. Cong-Lem, N. (2018). Web-based language learning (wbll) for enhancing l2 speaking performance: A review. *Advances in Language and Literary Studies*, *9*(4), 143–152.
7. Ducate, L. C., Anderson, L. L., & Moreno, N. (2011). Wading through the world of wikis: An analysis of three wiki projects. *Foreign Language Annals*, *44*(3), 495–524.
8. Elola, I., & Oskoz, A. (n.d.). COLLABORATIVE WRITING: FOSTERING FOREIGN LAN-
9. GUAGE AND. *Language Learning*, 21.
10. Hsu, H.-C., & Lo, Y.-F. (2018). Using wiki-mediated collaboration to foster l2 writing performance. *Language Learning & Technology*, *22*(3), 103–123.
11. Kavitha, M., & Jain, V. (n.d.). Recent impacts of internet on english language.
12. Kear, K., Woodthorpe, J., Robertson, S., & Hutchison, M. (2010). From forums to wikis: Perspectives on tools for collaboration. *The Internet and Higher Education*, *13*(4), 218– 225.
13. Kessler, G. (2009). Student-initiated attention to form in wiki-based collaborative writing.
14. *Language Learning & Technology*, *13*(1), 79–95.
15. Kuteeva, M. (2011). Wikis and academic writing: Changing the writer–reader relationship.
16. *English for Specific Purposes*, *30*(1), 44–57.
17. Le, P. T. T. (2021). Incorporating internet-based applications in teaching integrated lan- guage skills to efl students. In *17th international conference of the asia association of computer-assisted language learning (asiacall 2021)* (pp. 48–53).
18. Lin, W.-C., & Yang, S. C. (2011). Exploring students' perceptions of integrating wiki tech- nology and peer feedback into english writing courses. *English Teaching: Practice and Critique*, *10*(2), 88–103.