

The Effect of Using Wikis on EFL Learners' Writing Performance

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Received: Dec. 2014 & Published: Feb. 2015

Abstract: Due to the significance of writing for academic improvement and survival, there is an active interest today in new theoretical approaches to the study of written texts as well as approaches to the teaching writing that incorporate current theory and research findings (Brown, 2001). Erben et al. (2009) emphasize that using contemporary technologies afford us thousands of instructionally rich opportunities which might, otherwise, be missed not using such technologies. Wikis are thought to be useful in improving EFL students' writing ability through the various features they provide for wiki members. Learners can benefit from the shared space to write, discuss, comment, edit, reflect, and evaluate (West and West, 2009) each other's work for the attainment of the shared outcome of better writing ability. The present endeavor attempted to investigate if the use of wikis would have any effect on EFL learners' writing performance. The study included two 16-member groups of EFL students attending the Advanced Writing course at JD KU who were randomly selected from a population of 60 EFL students. The wiki group, attending the language lab, acted as the experimental and the other group as the control group. The result of the study revealed that the wiki group outperformed the traditional writing class. Based on the obtained data dealt with in details in the study, it could be understood that the use of wikis would enable writing students to perform better.

Keywords: Wiki, Writing, EFL Students, Advanced Writing

1. Introduction

Traditionally, writing functioned primarily to support and reinforce patterns of oral language use, grammar, and vocabulary (Alderson & Bachman, 2002). Today, "the ability to write effectively is becoming increasingly important in our global community, and instruction in writing is thus assuming an increasing role in both second-and foreign-language education"(Weigle, 2002, p.1). Writing, in the sense of making language visible, always involves the application of technology of some sort, whether a quill, a pencil, a type writer, the printing press (Lankshear & Snyder, 2000) or the computer.

To harness the affordances of new technologies, the classroom design seems to have been influenced by the rapid advances of

the information technology as a computer, linked to the internet, may be found in most classes in the future. Technology can provide both collaborative writing opportunities and individualized skill development using computer-based programs (Butler-Pascoe & Wiburg, 2002) that make use of CALL tools like wikis. Being a powerful tool for online work because of their simple flexible nature, wikis offer a quick way for learners to collaborate and share ideas textually while creating a content rich website (Martinez & Jogenethon, 2002).

In line with identifying influential contexts in developing the writing ability and promoting effective educational practices for teaching, the current research is an attempt to check the effectiveness of using wikis in promoting the writing ability of EFL learners in Iran. It is also

performed in response to the renewed interests in writing because of the influence of new multimedia communications through the use of technologies like wikis.

Thus attempt is made to answer the following question:

“Does the use of wikis have any effect on EFL learners’ writing performance?”

Hence, the following null hypothesis was formulated:

“There is no significant difference between the comparison (non-wiki) and experimental (wiki) groups in EFL students’ writing performance.”

1. Literature Review

1.1 Technology and Writing

Technology has had a tangible impact on EFL classrooms since the 1990s and writing instruction now makes (or can make) considerable use of computer technologies (Gerrard, 2003). While some teachers have welcomed the new developments enthusiastically, seeing the integration of new technology-based pedagogies as a means of enlivening instruction, improving students’ writing skills, and facilitating collaboration, cooperation, and interaction both within and beyond the classroom, others regard this expansion as another manifestation of the escalating corporatization of education or as a threat to the essentially human interactions on which teaching is based (Hyland, 2003) and believe they are undermining our culture (Keen, 2007).

However, anyone who uses a word processor to write, e-mail to converse with friends or colleagues, a software dictionary (installed on a mobile phone) to find a word, or the web to find information will understand the attraction of new technologies. “Computers make research, writing, revising, and collaborating easier” (Gerrard, 2003). Although some might find electronic technology threatening, spoiling, and unnecessary in teaching writing by arguing that composition can be taught well with traditional technologies like a blackboard, pen, and paper electronic technologies are at hand almost everywhere and

are widely used by millennials and, thus, “can enrich a course in ways that traditional technologies cannot” (Gerrard, 2003).

As mentioned, technology was first experimented in the 1960s by a few teachers (Gerrard, 2003) and its use seemed to be helpful in enriching the traditional classes. Therefore, along with the developments in technologies, teachers and researchers tried to incorporate these new technologies including *word-processing* and *error-identifying* programs whereby there was a shift from *product-based* to *process-based* composing (Gerrard, 2003).

Going online, computers were networked and extended their role in writing instruction using synchronous and asynchronous spaces. Exploiting synchronous writing, students “communicate in real time via discussion software on Local Area Networks (LAN) or internet chat sites with all participants at their computers at the same time” (Hyland, 2003, p.151). Among the many synchronous tools and programs, the following seem to be more prominent and prevalent: grammar and style checkers, Online Writing Labs (OWLS), Hypertext/Hypermedia, Local Area Network (LAN) Conferencing, and internet conferencing resources.

Asynchronous writing occurs whereby students, who are using networked computers, communicate in a delayed way (Hyland, 2003). This time- delayed communication includes emails, weblogs, forums and wikis. The major advantage of asynchronous writing is that the nonsynchronicity of the communication means that a text can be composed and edited prior to transmission at a more leisurely pace, rather than being co-constructed by participants (Hyland, 2003). This probably means that students would provide more reflective and considered responses and less proficient learners would have greater participation (Hyland, 2003). As the present study focuses on the application of wikis, the other asynchronous writing spaces are not discussed below.

2.2. Challenges in Writing Instruction and Technology Use

Practicing writing requires a specific amount of time and attention dedicated to it in language classes; however, this itself has led writing to the

periphery of instructional settings (Raimes, 2002). Due to confined classroom timetables, teachers usually prefer to assign few writing assignments throughout the whole term, semester, or course, which do not appear to be sufficient for developing students' writing skill (Etter & Merhout, 2007). The situation worsens in the case of FL learners who do not have some crucial knowledge of the target language patterns and forms (Reppen, 2002). Besides being time consuming, the writing skill itself is so demanding that some teachers do not feel qualified enough to teach it (Raimes, 2002). Also, learners find the process of organizing their ideas and producing a coherent piece of writing with the quality of persuading the readers a very difficult task (Richards & Renandya, 2002).

In other words, it can be claimed that one of the most challenging issues in learners' writings is the fact that they very often lack coherence (Reinhart, 1980), adequate markers of cohesion (Thompson, 2004), or do not even present a persuading viewpoint (Cockcroft & Cockcroft, 2005) especially those leaning English in settings like classes we have today. Technology can stand as one possible way for doing away with some of the challenges confronting the writing skill. Below come the reasons why there is an increasing attention towards using CALL in today's classes. It is followed by pointing out the major benefits of using wikis as a tool that could be used to enhance the writing ability of English language learners.

2.3. The Reasons Behind the Increasing Attention Toward CALL

Providing opportunities for out-of-class practice, together with the interest of learners in computers as both learning and communication tools can, to some extent, account for the attentions computers have received in personal and educational settings (Donaldson & Haggstrom, 2006). Another reason for the mounting attraction of computers might be because their use helps learners to compensate for the time and space confinements of traditional learning environments (Inan & Lowther, 2007). In addition, the flexible nature of CALL for learning, along with easy access to information and resources, has turned CALL into an appropriate technique for student-centered learning. Citing Warschauer and Healey (1998), Brown (2001, p. 145) classified the merits of the application of computers for education into seven categories:

1. Multimodal practice with feedback,
2. Individualization in a large class,
3. Pair and small-group work on projects, either collaboratively or competitively,
4. Real-life skill building in computer use,
5. Variety in the resources available and the learning styles used,
6. Exploratory learning with large amounts of language data,
7. The fun factor.

2.4. Wikis as User-friendly Tools

A wiki is an online workspace that allows members to collaboratively create a series of web pages, edit and revise their and others' work, provide feedback, keep track of the changes and publish information online without requiring HTML knowledge, using no more complicated technology, than a web browser. The first wiki was created and developed by Ward Cunningham and was used as a composition system, a discussion medium, and a collaborative tool (Leuf & Cunningham, 2001). Cunningham, claiming that wiki is inherently democratic, believes wiki technology will facilitate the evaluation of knowledge creation and publishing.

Wikis may be used for a variety of purposes. A simple wiki may be used as a "scratchpad" for brainstorming on a text or as a place to achieve shared content and link to resources such as a group calendar or external Web sites. More sophisticated wikis with additional technical features can be used in a more dynamic and ambitious fashion, such as in support of a corporate intranet or a massive documentation project like the Wikipedia. As social tools and appearing to benefit from the wisdom of the group, wikis that allow users to hold a stake in the community and develop a reputation ultimately can foster close, productive group work (Ciffolilli, 2003).

The advantages of wikis include promoting collaborative writing, providing open-editing, allowing non-linear text structure, encouraging multiple modalities and providing a simple editing environment. As the first advantage, the wiki environments are most widely believed to

help acquire collaborative writing skills (Engstrom & Jewett, 2005; Keith, 2006; Lamb & Johnson, 2007). The collaborative context provided by the wikis encourages users to negotiate, collaborate with others, and learn from other people's work (Keith, 2006). Wikis emphasize on the process of learning while discouraging outcome-oriented learning (Lamb, 2004).

Users can change their and others' work using the open-editing facility. Wikis provide an easy way for completing collaborative projects, extending group work by continuing it asynchronously outside the course, and they also encourage learners to participate in discussions on their own in the online environment (Lamb, 2004; Farabaugh, 2007). The third advantage, non-linear text structure facility, enables associating web pages with non-linear navigation structures which provide easy connection of meaning previously unknown to learners and increase the speed and variety of content development (Ebersbach, Glaser, & Heigl, 2006; Farabaugh, 2007; Keith, 2006).

Another advantage of wikis is encouraging multiple modalities. Wikis are able to incorporate graphics, audio, video, and animation that allow learners to express themselves and communicate the meaning that may not be fully expressed in the text format (Jewett, 2005; Kress, 2003). And last, but not least, is providing a simple editing environment. Using wikis, the users are required to make little navigation and fewer clicks. The easy editing process enables ordinary users to participate in a collaborative work (Chang, 2004; Raitman et al, 2005).

As indulging in all the possibilities provided by the CALL tools could perplex the learners, it was decided to use the open-editing facility along with its simple editing environment in the present study. As explained in the procedure section, a process-based approach (Rankin-Brown, 2006; Clark, 2005), a non-evaluative context (Borich, 2004), and an error-pattern identification technique (Reeves, 1997; Wachholz & Etheridge, 1996) were used in both the experimental and comparison groups in this study.

3. Methodology

3.1. Participants

The participants in this study were 32 Iranian students majoring in TEFL at Jihad-e-daneshgahi Institute of Higher Education (JDKU), Iran. They were selected from a population of 60 students who were to take part in the *Advanced Writing* (AW) course which is a part of the requirements of the program to obtain a B.A. degree. They were asked to write an essay. Their essays were scored based on the IELTS'S Holistic Writing Rubric. Those who scored one standard deviation above and one standard deviation below the mean were excluded from the study. The remaining 32 students were randomly assigned to the experimental and comparison groups, 16 students in each class. As there were 14 males and 18 females, they were assigned to the two groups equally in order to have equal number of males and females in each class. Sixteen (7 males and 9 females) students attended the wiki and 16 (7 males and 9 females) attended the non-wiki class. The age range of the students was between 19 and 29. The researcher took part in the study as the teacher.

The students had already passed *Grammar and Writing* courses as the prerequisite for the *Advanced Writing* course they were taking, which, if not passed, they would have to repeat the following term.

3.2. Materials

The materials used for both comparison and experimental classes were the same with the exception that students in the experimental group worked with their wikis for cooperation on the writing assignments.

The book used was *Developing Composition Skills* by Ruetten (1997). It should be noted that there were other texts and sources introduced to both experimental and comparison groups. The book mentioned was selected because it met the requirements put forth by the syllabus of the course and also the researcher found it suitable for the following reasons:

1. The selected book had a fine language which turned it into an easily-understandable source for intermediate students.
2. Developing composition skills included detailed discussions of the parts of a paragraph and an essay as well as exclusive discussion and practice on the characteristics of a written piece (unity, coherence, and cohesion).
3. Sections on how to use punctuations correctly was included in the book.
4. The book used sample paragraphs and essays which students used to discuss topics that were raised in each section. Different types of essays and paragraphs were focused in these discussions so that students had a clear understanding of the points introduced.

3.3. Instrumentation

The overarching research goal of the study was to investigate the impact of using wikis on Iranian EFL students' writing performance. The instruments used included the *pre-treatment* and *post-treatment writing exams*.

3.3.1. The Pre-treatment Writing Exam

A pre-treatment essay writing test was administered to students in both classes on the first class session as explained in the procedure section below. The results were later used to obtain the gain scores of the students after the administration of the post-treatment writing exam. The topic of the essay was taken from Cambridge IELTS 7 (2009) which was also the source from which the topic of the post-treatment essay was extracted.

3.3.2. Post-treatment Exam

Both the experimental and control groups took part in a post-treatment writing exam as their final exam. The writing samples were scored based on IELTS holistic scoring rubric. Perkins (1983) notes that "when one is attempting to assess the overall proficiency level

of a given written sample, holistic scoring has the highest validity" (pp. 340-341).

3.4. Procedure

The overall goal of the advanced writing course is to enhance EFL learners' paragraph writing ability. The students are usually expected to be able to write a coherent one-paragraph essay by the end of the term. The book used for both Advanced Writing classes was *Developing Composition Skills* By Ruetten (1997).

The first class session in both groups (i.e., wiki and non-wiki classes) started with an introduction to the materials covered for the course. They were briefed on the course requirements and objectives. The students were assigned to groups of two for the cooperative tasks they performed on writing explained below. Students in both classes were asked to write a paragraph which was used as a source of pre-test. The experimental (wiki) group was asked to attend the language lab, which is equipped with 24 computers, the following session.

On the second day of each class, information about different sections of the book, the cooperative tasks they would engage in, the number of essays they would write, and the evaluation procedure (which was based on IELTS'S writing rubrics) was provided. The students in the wiki class were asked to do a search on the Net and learn about wikis by the next session.

On the third day of the wiki class, the instructor spent some time to verbally introduce wikis to the students and demonstrate the basic functions of a wiki by using the class wiki projected in front of the whole class as an example. The students then logged on to their computers and registered for an account with Wikispaces.com, which is free of charge and user-friendly. The instructor walked around the lab assisting students as needed. He took his time until all groups registered and logged into the wiki. Once every group was logged into the wiki, the teacher drew the students' attention to the big screen and showed them how the wiki tools worked and could be modified. The

instructor continued to answer questions and assist students for a few more minutes to make sure everyone knew about the application of the wikis.

Then, in both classes (i.e., wiki and non-wiki), students' attention was drawn to the appendix section of the book which introduces strategies for getting ideas (i.e., brainstorming, drawing a sketch, free writing, etc.) and some grammatical points on writing sentences (i.e., clauses, connectors, verb tenses, etc.). They were instructed to refer to appendices for more help while writing and revising their essays. Students in both classes were asked to write a one-paragraph essay for the following session. They were required to cooperate as described below.

Learners in the experimental and comparison groups wrote seven out-of-class essays the topics of which were selected by students with the teacher guiding them in their selection. For example, topics were selected that students were involved with in their daily or academic affairs and they were familiar with. As there were suggestions for the writing activities at the end of each chapter, the suggested topics were also discussed and some of the topics were also chosen based on the suggested topics. Students' suggestions were also taken into consideration in some cases.

The assignments were iterative in nature and involved a preliminary draft and revised versions. After each student wrote his/her essay, his/her peers in the sub-group acted as editors. *Advanced Writing* students in both the experimental and comparison groups went through the pieces written by their peers in the sub-groups and, following guidelines set for each upcoming lesson, edited their peers' writing in a way that problems were eliminated. Every student in each group who also acted as an editor, then, rewrote the modified version and handed the first version and the modified one to the original writer. Following this, the original writer of each piece of writing went through the edited version and wrote a final version of his work entitling it "The Final Version of Assignment No. X."

The difference between the wiki groups and the paper-based groups were in the form of providing the edited version. In the case of the wiki classes, all learners were required to post their primary drafts in the wiki by saving that version. The peers in the sub-groups, also, went to the same page where the first draft was saved, made their edits and posted the edited version by saving them. The original writer was required to review the page and save his/her last version or final draft in the wiki. The students were asked to deliver a copy of the last version next session.

As wikis are asynchronous tools, the students in the experimental group could make use of the additional time provided by the asynchronicity of the tool in their editing and rendering the final versions. This would make it possible for them to have more time to work on their essays and also refer to sources available on the Net or provided by their peers and other members of the class on the wiki before posting the final version.

In the paper-based groups, students in each sub-group were required to have a reviewing-editing session one or two days before the next class session in order to have enough time to go through the revised versions and be able to prepare the last version to be delivered to the instructor the following session. In order to make sure that all students took part in the reviewing-editing session, a particular time and a specific class was determined which was supervised by a colleague. Students' attendance was also checked and reported to the researcher. The following class session, the students were required to hand in the last version along with the first and the revised versions as well.

The fourth, fifth and sixth sessions of the course focused on "*introducing the paragraph.*" First, a reading was introduced which was read by all the students and they were asked to answer few general questions to check their understanding of the piece. This prepared the class for going through the parts of a paragraph including the *topic sentence*, *support*, and the *conclusion*. Included in the first chapter of the book are the characteristics of a piece of writing including *unity*, *coherence*, and *cohesion*. Along with doing the activities of the lessons, the

students were required to write paragraphs for the following sessions engaging in cooperative tasks explained above.

Students worked on writing *cause and effect* (analyzing reasons), *comparison and contrast*, *process*, and *classification* paragraphs for the following eight sessions, each topic was covered in two sessions. Together with writing a paragraph for each session, students were required to do the activities on the topics covered for each class session.

At the beginning of each session, questions regarding the activities of each covered chapter were attended to such that students discussed and pointed out their views about the activities of the book which was followed with the instructor’s explanations when needed. As the teacher had spent some time on reading students’ essays online in the wiki and the essays delivered by the paper-based groups (i.e., the versions students wrote) and made notes on different aspects of students’ essays regarding the elements and the characteristics of a paragraph as well as some major grammatical points (e.g., the use of tenses, subject predicate agreement, clauses, etc.), explanations were provided to the whole class following the discussion on activities pointed out above. Questions were answered, if there remained any.

In addition, the students were also asked to do identification tasks in which they were required to identify, say, the topic sentence of a few paragraphs before the next class meeting. Needless to say that the characteristics and specifications of each paragraph type were also mentioned and it was attempted to draw students’ attention to differences in types of paragraphs they studied.

Session fifteen was dedicated to a recap of the covered paragraph types. During session sixteen, both groups took the post-test exam.

3.5. Design and Data analysis method

The design of the study was true experimental. The method of analysis used was independent-samples t-test which was performed after ensuring that the obtained data were normally distributed. In order to make sure if the data were normal, they were exposed to normality check of skewness and kurtosis before actually referring to Levene’s test for equality of variances.

4. Results and Discussion

4.1. Results

4.1.1. Normality of the Data

It could be observed from the table below that the writing exam gain scores are distributed normally because kurtosis and skewness are within the acceptable range of +2 and -2 (Tabachnick & Fidell, 2007).

Table 1

Descriptive Statistics for the Normality of the Data

	N	Mini	Maxi	Me	Std.	Skewness		Kurtosis	
		mum	mum	an	Deviation	Statistic	Std. Error	Statistic	Std. Error
GS	32	.00	11.50	5.5781	2.69441	-.110	.414	-.534	.809
Valid N (listwise)	32								

4.1.2. Testing the Hypothesis

As observed in Table above, the data were distributed normally. Thus, independent samples t-test was used to analyze the data. As observed

in table below, Levene’s statistic is not significant which signifies the equality of variances in the experimental and comparison groups.

rejected. It means that the wiki group outperformed the non-wiki group in that EFL learners in the experimental group showed a better writing performance.

Independent samples t-test for gain scores indicates that there is a significant difference [t(32) = 5.212, p = .000] between the wiki (experimental) and non-wiki (comparison) groups and, thus, the null hypothesis was

Table 2

Descriptive Statistics for the Writing performance

group	N	Mean	Std. Deviation	Std. Error Mean
GS 1	16	7.4063	1.80941	.45235
GS 2	16	3.7500	2.14476	.53619

Table 3

Independent-samples T-test for the Writing Gain Scores

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
GS Equal variances assumed	1.485	.232	5.212	30	.000	3.65625	.70151	2.22357	5.08893
GS Equal variances not assumed			5.212	29.173	.000	3.65625	.70151	2.22186	5.09064

4.2. Discussion

It has been reported in the literature that the technologies “make existing practices more efficient” (Butler-Pasco & Wiburg, 2003, p.4) and also offer unique opportunities to engage English language learners in functional uses of language by providing them a collaborative learning environment (as cited in Butler-Pasco & Wiburg, 2003).

This study set out with the aim of investigating the effect of using wikis on EFL learners’ writing performance. The results of the study show the positive effect of using wikis on EFL learners’ writing performance. The results obtained seem to be in line with findings by other scholars including Papadima-Sophocleous and Yerou (2013), Martinsen and Miller (2012), Li (2012), Schuetze (2011), Mohammed (2011), Bradley, Lindstrom, and Rystedt (2010), Bromley and Arabsarhangi (2011) as well as Bagheri, Yamini, and Behjat (2013).

There are several possible explanations for this result. A possible explanation might be that using wikis facilitates the writing process by allowing the users to write whenever they are inspired to (Bradley, Lindstrom, & Rystedt, 2010). Another possible explanation might be that wikis allowed students to easily revise and edit their compositions and therefore helped them avoid the tedious recopying and increase students’ enjoyment of writing, as mentioned by Butler-Pasco and Wiburg (2003) regarding word processors. The third possible explanation might be related to the nature of collaboration on wikis as opposed to the nature of collaboration in a paper composition as stated by Martinsen and Miller (2012). The main finding reported by them is that the use of wiki tended to foster greater collaboration. Bromley (2010) mentioned in the findings that when a wiki is used, students felt a sense of ownership over their work. This feeling of ownership might

be another possible explanation for the results obtained in that they might have worked harder on the pieces they wrote.

5. Conclusion

However, it should be remembered that technology on its own is not the panacea for foreign language pedagogy (Lin & Huo, 2007) and that CALL is not a methodology, the results obtained from the present study indicated that the use of wikis enhanced EFL learners’ writing performance.

The following limitations should be acknowledged regarding the present work. Although the study had a true experimental design, the number of the population from which the sample was selected was not large enough. The slow internet in Iran might have been frustrating for the students in the wiki class. The study was limited to the analysis of the writing skill only, do the results might not be applicable for other skills. The participants included only Iranian university students. Thus, generalizations could not be made to students from other nationalities on the basis of the present endeavor.

Writing teachers are thus recommended to vary their strategies and techniques of teaching the writing skill using modern technologies like wikis to help ameliorate some of the traditional ways of teaching writing.

References

- Bagheri, M.S., Yamini, M., & Behjat, F. (2013). Blending Technology in EFL Writing Instruction International J. Soc. Sci. & Education, 3(2), 422-434.
- Borich, G. D. (2004). *Effective teaching methods*. Fifth Edition. New Jersey.
- Bradley, L., Lindstrom, B., & Rystedt, H. (2010). Rationalities of collaboration for language learning in a wiki. *ReCALL* 22(2), 247–265.
- Bromley, L. (2010). Wikis and collaborative learning: Is it an option for elementary school children. *Access to knowledge*, 2(1).
- Brown, H. D. (2001). *Teaching by principles: an interactive approach to language pedagogy*. London: Longman.
- Butler-Pascoe, M. E., & Wiburg, K. M. (2002). *Technology and Teaching English Language Learners*.
- Ciffolilli, A. (2003). *Phantom authority, self-selective recruitment and retention of members in virtual communities: the case of Wikipedia*. 8(12). Available at: <http://www.firstmonday.org/issues/issue8-12/ciffolilli/index.html>
- Clark, D. (2005). *Explorations into writing anxiety: Helping students overcome their fears and focus on learning*. ISSOTL Conference.
- Cockcroft, R., & Cockcroft, S. (2005). *Persuading people an introduction to rhetoric (2nd edition)*. Nottingham: Palgrave.
- Donaldson, R. P., & Haggstrom, M. A. (2006). *Changing Language Education through CALL*. NY: Routledge. Ebersbach, A., Glaser, M., &
- Heigl, R. (2006). *Wiki: Web collaboration*. New York: Springer.
- Emig, J. (1971). *The composing processes of twelfth graders*. Urbana, IL: The national council of teachers of English.
- Engstrom, M. E., & Jewett, D. (2005). Collaborative learning the wiki way. *Tech trends: Linking Research and Practice to Improve Learning*, 49(6), 12-16.
- Erben, T., Ban, R., & Castañeda, M. (2009). *Teaching English language learners through technology*. NY: Routledge.
- Etter, S. J., & Merhout, J. W. (2007). *Writing across the curriculum in integrating information and communications technologies into the classroom*. NY: Lawrence Erlbaum.
- Farabaugh, R. (2007). The isle is full of noises: Using wiki software to establish a discourse community in a Shakespeare classroom. *Language Awareness*, 16(1), 41-56.
- Hyland, K. (2003). Genre-based pedagogies: a social response to process. *Journal of Second Language Writing* 12(1), 17–29.
- IELTS 7, (2009). *Examination papers from University of Cambridge ESOL examinations: English for speakers of other languages*. Cambridge: Cambridge University Press.
- Jewitt, C. (2005). Multimodality, reading, and writing for the 21st century. *Discourse: Studies in the Cultural Politics of Education*, 26(3), 315-331.
- Keen, A. (2007). *The cult of the amateur: How today's internet is killing our culture*. NY: Doubleday/Currency.
- Ketih, M. (2006). Wikis and student writing. *Teacher Librarian*, 34(2), 70-72.
- Kress, G. R. (2003). *Literacy in the new Media Age*. London: Routledge.
- Lamb, A., & Johnson, L. (2007). An information skills workout: Wikis and collaborative writing. *Teacher Librarian*, 34(5), 57-59.

- Lamb, B. (2004). Wide open spaces: wikis, ready or not. *Educause Review*, 39(5), 36- 48.
- Lankshear, C., & Snyder, I. (2000). *Teachers and techno-literacy*. Australia: Allen & Unwin.
- Leuf, B., & Cunningham, W. (2001). *The Wiki way: Quick collaboration on the Web*. Upper Saddle River, Addison Wesley.
- Li, M. (2012). Politeness strategies in wiki-mediated communication of EFL collaborative writing tasks. *The IALLT Journal*, 42 (2).
- Martinez, M., & Jagannathan, Sh. (2002). Social networking, adult learning success and model. In social computing section IV. PP. 280-292.
- Martinsen, R. A., & Miller, A. (2012). Collaboration through wiki and paper compositions in foreign language classes. *The IALLT Journal* 42 (1), 73.
- Mohammed, M.M.K. (2011). *Using wikis to develop writing performance among prospective English as foreign language teachers*. Retrieved from the Net at:
www.nauss.edu.sa/En/DigitalLibrary/.../2011/articles_2011_1766.pdf
- Papadima-Sophocleous, S., & Yerou, C. (2013). *Using wikis in an English for specific academic purposes (esap) context*. *Teaching English with Technology*, 13(2), 23-54.
- Perkins, M. R. (1983). *Modal expressions in English*. New Jersey: Norwood.
- Raimes, A. (2002). Ten steps in planning a writing course and training teachers of writing. In J. C. Richards, & W. A. Renandya (Eds.), *Methodology in language teaching an anthology of current practice*. Cambridge: CUP.
- Raitman, R., Augar, N., & Zhou, W. (2005). *Employing wikis for online collaboration in the e-learning environment: Case study*. Proceedings for the Third international Conference on Information Technology and Applications.
- Rankin-Brown, M.S. (2006). Addressing Writing Apprehension in Adult English Language Learners. Proceedings of CATESOL State Conference. Retrieved from the Web at :
http://www.catesol.org/Rankin-Brown_1.pdf
- Reeves, L. L. (1997). Minimizing Apprehension in the Learner Centered Classroom. *The English journal*, 86, 38-45.
- Reppen, R. (2002). A genre-based approach to content writing instruction. In J. Richards & W. A. Renandya (Eds.), *Methodology in language teaching: An anthology of current practice*(pp.21-328). Cambridge: CUP.
- Richards, J. C., & Renandya, W. A. (2002). *Methodology in language teaching: An anthology of current practice*. Cambridge: CUP.
- Ruetten, M. K. (1997). *Developing composition skills*. London: Heinle & Heinle Publishers.
- Schuetze, U. (2011). Do wikis affect grammatical aspects of second- language writing? *The Iallt Journal*, 41 (1).
- Tabachnick, B. G., & Fidell, L. S. (2007). *Using Multivariate Statistics*. Boston: Pearson.
- Thompson, B. (2004). *Exploratory and confirmatory factor analysis: Understanding concepts and applications*. Washington, DC: American Psychological Association.
- Wachholz, P. B., & Etheridge, C. P. (1996). Writing self-efficacy beliefs of high- and low-apprehensive writers. *Journal of Developmental Education*, 19(3), 16-24.
- Warschauer, M., & Healey, D. (1998). Computers and language learning: An overview. *Language Teaching*, 31, 57-71.
- Weigle, S. (2002). *Assessing writing*. Cambridge: Cambridge University Press.
- West, J. A., West, M. L. (2009). *Jossey-bass guides to online teaching and learning Using Wikis for Online Collaboration: The power of the read-write web*. NY: John Wiley & Sons, Inc.