WIKI AS AN ASSESSMENT TOOL: IMPROVING
SAUDI EFL LEARNERS’ WRITING ACCURACY
AND MOTIVATION

By

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Abstract
The present study aimed to investigate the use of wiki as an assessment tool to improve EFL students’ writing accuracy and motivation. Specifically, the study tried to investigate how using wikis can influence EFL students’ accurate corrections of errors and writing motivation while they are responding to teacher feedback. The study adopted the quasi-experimental pre-post-test control group design, and its sample consisted of 60 students selected from a Saudi university. The experimental group students received wiki-based writing instruction while the control group students received regular writing instruction. The students in both groups were assigned to write five articles with pre-determined topics about different genres of writing. The experimental group students’ writings were posted to their wiki. While writing the articles, students were introduced to use grammar checking. They were invited to correct each other’s errors and restate the writing by recommending new words and by the instructors’ guidance. The instruments of the study included: a pre-/post-writing skills test, and a motivation questionnaire. The study results revealed statistically significant differences between the students in both the control and the experimental groups on the post-test in favour of the experimental group students. There were also statistically significant differences between the mean scores of the experimental group in the pre-administration and post administration of the writing motivation scale in favour of the post-administration. Additionally, the number of grammatical errors has decreased dramatically during the peer feedback. As for the students’ motivation, the results showed that almost all students reacted positively to the amount of learning they have received. The results also revealed that the feedback was conducive to Saudi EFL learners’ writing self-reflection and self-confidence. It is concluded that collaborative writing via wiki only encourages students’ collaboration and self-reflection but also engages them in knowledge noticing and co-construction.

Keywords: wikis; assessment; writing accuracy; motivation enhancement; writing in Saudi Arabia
1.1 Introduction

In Saudi Arabia, English is treated as a foreign language (EFL), and students’ exposure to English is mainly in the classroom. They have few chances to communicate in English outside the classroom. As a result, Saudi EFL learners encounter difficulties in expressing what they want, particularly, in writing. Writing is a valuable tool for communicating one's thoughts to others. It helps students promote a sense of ownership and express their inner feelings. Writing is the commonest way of assessing students' performance in English especially in Arab countries (Anderson et al. as cited in Bahgat, 2011). Ismail (2001) emphasized that through writing; students can share ideas, arouse feelings, and convince other people. They are able to discover and articulate ideas in ways that only writing makes possible.

In fact, writing in a foreign or second language is not an effortless activity. It demands a lot of mental work to convert the meaning to words and structures. Salem (2007) argued, "Writing is a challenging task requiring much mental effort. In order to communicate our opinions and ideas, we engage in many conscious cognitive processes simultaneously" (p. 1). Moreover, writing is considered a complex skill even for native speakers, because it requires conscious mental effort (Abu Shawish & Abdelraheem, 2010). This sophisticated skill needs to be improved and developed by students. Instructors and teachers around the world are looking for ways to enhance learners’ motivation in using computerized materials in order to improve learners’ writing skills. In this regard, it has been stated that computers, in general, and language software, in particular, play a significant role in learning a second/foreign language (Salamsi et al., 2015).

The tremendous development of Web 2.0 tools has recently created a number of digital-assisted learning environments for learning in EFL context. These online tools enable learners to foster their personal knowledge development through meaningful negotiation and collaborative atmosphere. Specifically, this advancement of technology has allowed educators to bring into their classrooms such Web 2.0 authoring tools as blogs, wikis and podcasts. These tools are believed to enhance student learning in a host of manners; for example, they facilitate peer learning, encourage expression, foster literacy and communication skills and promote autonomous lifelong learning (Gray, Thompson, Sheard, Clerahan, & Hamilton, 2010 as cited in Huang & Hung, 2015).
A wiki, which is an easily accessible and editable website, is one of the main tools in web 2.0 that provides the opportunity for students to work on group projects without the barriers that arise from traditional group work. Whilst wiki use is becoming more common, its use in education is patchy and pedagogical reasoning and evaluation of such use is under explored (Davidson, 2015).

Wikis can be used as an important way to teach various skills and alleviate problems in learning environment. A wiki can be integrated in language teaching either in or outside the classroom. When students learn using wikis, they have the opportunity to work more on different tasks and reflect on their own learning. They have a great deal of time to think about words and phrases in a relaxed atmosphere. By using wiki, students can share a posted topic, not just with a teacher, another classmate, or the whole class, but also with any reader online. Cabiness, Irvine & Grove (2013) explain this as follows:

Through the use of wikis, groups of individuals collaborate on various topics by adding text, images, videos, as well as other multimedia elements into one cohesive final product. The intent of wikis is to foster collaboration in an asynchronous working environment. (p. 39).

In view of what have been said, researchers suggest that for a wiki to add a successful learning atmosphere, students should be familiarised with the wiki by learning from the tutorials available through the wiki, in addition by using informal group activities to provide an opportunity to become familiar with the functions and features of the wiki (Al Faqeeh, 2014). In fact, a wiki provides a useful method for keeping information by group work and inserting it on web pages. Wikis are different from other websites because they enable the users to participate, edit and update the content. Many researchers use wikis in their studies as a teaching tool (Mirzajani, et al. 2015).

The current study seeks also to enhance students' motivation. Motivation is considered one of the most important determinants of second language achievement and accordingly the last three decades have seen many studies that investigated the role of motivation in the second language learning process. Additionally, motivation has been regarded as one of the main factors that influence the speed and amount of success of foreign language learners. This study views that using technology can enhance students' motivation to learn English as a foreign language. Consequently,
students’ motivation plays an important role in successful web-based instruction implementation if it is used effectively (Ushida, 2005).

Motivation can be either instigated and sustained or weakened by certain factors, such as the teaching and learning method or institutional/linguistic challenges, all of which might be present throughout the learning process. Regarding the nature and the categories of motivation, the current study concurred with Deci and Ryan’s (1985) self-determination theory which introduces two widely accepted categories of motivation: intrinsic motivation (IM) (doing an activity for the pleasure and satisfaction derived from it) and extrinsic motivation (undertaking a task because of external pressures or rewards, not out of intrinsic interest). Deci and Ryan (1985) claim that IM leads to more effective learning in general, but those extrinsic incentives are more necessary in the education of children (Ruan et al., 2015).

Thus, the current study focuses on intrinsic motivation which is represented in the learners’ desires in writing a good piece of writing. Furthermore, those students have a pressing need in getting rid of the syntactic errors in their writing. In a similar vein, the study also focuses on the extrinsic motivation which is related to several and various factors such as reaching a mastery level of academic writing and communicating with others in an appropriate way.

In order to improve the learning motivation of EFL college students, specific teaching strategies are recommended, such as creating a supportive and non-threatening learning environment, maximizing learners’ participation and language practice, enhancing the cohesiveness and positive interdependence of learning groups, as well as facilitating learner autonomy (Busser and Walter 2013; Dörnyei 1997, 2001; Jacobs and Goh 2007; Liu 2007; Ning 2011 as cited in Ning and Hornby, 2014).

Many studies have explored the relationship between technology and motivation in the context of EFL classrooms. In his study, Pastor (2007) applied a web-based activity in the setting of English as a second language acquisition. The result of Pastor's study showed that students preferred the web-based activities to the text-based ones. Kessler (2009) outlined a collaborative wiki-based project where participants made corrections to each other's work throughout the project. This methodology raises learners' awareness of the types of the mistakes they make, allowing them to avoid repeating the error, and provides an opportunity for clarification of language points if disengagement occurs regarding the nature of the error. It is clear that the findings of these studies reveal that using technology has a positive
effect on students' motivation toward learning English as a foreign language. Furthermore, the findings of these studies agree with the findings of some other studies as Mazer, Murphy and Simonds (2007), Scheirier (2006), Shunk (2003), and Buckingham (2003).

1.2 **Context of the Problem**

Although writing is an essential skill for the students at the preparatory year in Sattam University, it was noticed by researchers that most of the students, enrolled in the preparatory year, are not capable of writing in an appropriate manner. Examining preparatory year students' pieces of writing, it was found that their writing reflects many problems, e.g., inexplicitness or fuzziness, shallowness of ideas, poor choice of appropriate words, grammatical errors, and mechanics mistakes. Moreover, when marking mid- and end-of-year exam papers of preparatory year students, it was also observed that most students write paragraphs that are full by a large number of grammatical errors. In other words, there is a lack of grammatical accuracy in their writing. In addition, there is a lack of confidence concerning students at this level. They become over anxious when they are about to write an essay on a certain topic. This, in turn, has a passive effect on preparatory year students' motivation, autonomy and confidence.

To shed light on the writing accuracy of preparatory year students writing, a pilot study was conducted on fifteen students. The pilot study was in the form of a diagnostic writing test. In this diagnostic test, students were asked to write about one issue in different genres. Students’ writing samples were analyzed and their errors were identified. Then, the errors for each sample were calculated (1/0) scale and the percentage of each error was calculated as well. Based on this in-depth analysis, the calculated errors with their percentages are listed as follows: (see appendix A)

1- 86.66% of students made errors in forming syntax.
2- 80% of the students made errors in using punctuation.
3- 80% of the students made errors in using definite and indefinite articles.
4- 80% of the students had spelling errors.
5- 73.33% of the students made errors in the use of verbs.
6- 73.33% of the students made errors in the use of conjunctions.
7- 73.33% of the students made errors in the use of capitalization.
8- 66.66% of the students had errors in sentence fragments.
9- 66.66% of the students used wrong word choice.
10- 60% of the students had errors in subject omission.
11- 40% of the students had errors in the use of pronouns.
12- 40.% of the students had errors in the use of prepositions.
13- 20.% of the students had errors in the use of adjectives.
14- 6.66% of the students had errors in the use of nouns.
15- None of the students had errors in the use of adverbs.
In the light of the analysis of the errors, it can be deduced that Saudi EFL learners encounter difficulties through their writing, particularly, in their accuracy, and this, in turn, has a passive impact on their success in different courses.
A proposed solution for these problems is to adopt a new approach that may provide students with opportunities to enhance their accuracy. The importance of the structural accuracy in writing is implied in helping students master the skills of writing which make them capable of academic writing. The use of wikis that reflects one of web.2 tools might be an appropriate assessment tool.
1.3 Statement of the Problem
The problem of the current study is demonstrated in preparatory year students’ poor level in essay writing and the lack of motivation towards writing. This weakness may be attributed to the shortage of the creative teaching methods that can be adopted to improve their writing accuracy. Therefore, this study sought to find an answer to the following main question:
How can the suggested assessment tool based on wiki be effective in improving Saudi EFL learners’ writing accuracy and their motivation?
In answering the above main question, the following sub-questions were also answered:
1- To what extent can wiki improve students' writing accuracy?
2- What is the role of wiki in enhancing students’ motivation towards writing?
1.4 The Purpose of the Study
The purpose of the study was to investigate the use of wiki as an assessment tool in improving students’ writing accuracy and enhancing their motivation.
1.5 Hypotheses of the Study
1- There is a statistically significant difference between the mean scores of the experimental group students and those of the control group students in the post-application of the overall writing accuracy test in favour of the experimental group.
2- There is a statistically significant difference between the mean scores of the experimental group students and those of the control group
students in the post-application of the overall writing motivation questionnaire in favour of the experimental group.

1.6 Delimitations of the Study

The current study is restricted to:

1. A sample of Preparatory Year students from Prince Sattam University, AlKharj, Saudi Arabia.

2. Focusing on accuracy in the writing of Saudi EFL learners.

1.7 Significance of the study

The results of this study may be significant to Preparatory Year EFL students as it represents an attempt to overcome the shortcomings in teaching writing in English language by offering a teaching strategy based on using wikis in writing classrooms. It also provides the experimental group with the overall benefits of peer interaction via collaborative writing. Meanwhile, this study may lead to the verification and testing of new methodologies in writing instruction. It may also be significant to EFL teachers and curriculum developers as it introduces them to an easy way to incorporate the internet represented in the use of wikis into writing classrooms to encourage writing performance and group work among EFL learners. Finally, merging technology in teaching writing may be helpful in enhancing preparatory year students’ motivation towards writing.

1.8 Definition of terms

Wiki

Lundin (2008) defines wiki as a user-editable website. By clicking edit on any wiki page, readers can add or delete text, create new pages and links, and otherwise modify the content of a single page or a network of pages. It is also defined by Chao and Parker (2007) as a web communication and collaboration tool that can be used to engage students in learning with others within a collaborative environment.

Regarding the operational definition of wiki as an assessment tool means that wiki mediated assessment includes both content and form feedback. Content refers to comments on organization, ideas and amount of details, while form involves comments on grammar and mechanics errors. Moreover, the researchers use a wiki as a class.

Motivation

Dörnyei (2001b) states that motivation is responsible for why the people decide to do something, how long they are willing to sustain the activity, and how hard they are going to pursue it. Similarly, Gardner (1985:10) cited in Zolt' n Dornyei (1988) defines foreign language motivation as the extent to which an individual works or strives to learn the
language because of a desire to do so and the satisfaction experienced in this activity and an attitude towards the act of learning the language. Further, it is viewed as an instrumental orientation to language learning (Fu Xiao, 2013).

Concerning the operational definition of motivation, it can be stated that Saudi EFL learners' strong desire towards writing different genres through reviewing and editing their pieces of writing via a wiki class.

**Writing Accuracy**

Writing accuracy can be defined operationally in this study as the syntactic errors that occurred during writing different genres of essays including argumentative, expository and narrative. Such errors include sentence structure errors, determiner errors, verb errors, semantic errors, vocabulary errors and mechanical error family.

**Literature Review & Related Studies**

Through the use of web 2.0 tools, learners became capable of creating and sharing information anytime and anywhere. While behaviourism and cognitivism regarded knowledge as something external from the learner which the learner must internalize, constructivism assumed that learners construct knowledge by themselves depending on the interaction with the world and with other learners. The constructivist view challenged the concept of knowledge as a finite body of information that could be transferred from instructor to student, and identified an active and proactive role for learners. Examples of web 2.0 tools are like wikis, Facebook, blogs, tagging, LinkedIn, virtual reality, social bookmarking, mashing, rss, podcasts, folksonomies, e portfolios (Foroughi, 2015).

Using a wiki in the current study requires shedding light upon social constructivism theory and connectivism theory, as well. Social constructivism, greatly affected by Vygotsky work (1978) assumes that learning is a process where knowledge is constructed in social environment. Wikis create such a constructivist learning environment that encourages students to construct meaning in collaboration, and gives them an opportunity to develop a collaborative atmosphere while learning. The ability to post and comment on each other’s ideas also enables them to participate in the social construction of knowledge and meaning making.

Furthermore, there is a linkage between wikis and connectivism theory. In this respect, Downes, 2012; Siemens, 2004 state that connectivism elaborates how learning occurs throughout networks. In contrast to conventional learning theories, connectivism which is reflection to a digital age supposes that knowledge is distributed across a network of
connections, and therefore learning consists of the ability to construct and traverse those networks. According to connectivism, learning occurs with the interaction of the individual on networks. The level of interaction clarifies the strength of learning. Wikis represent a basic tool of connectivism theory that improve collaborative and critical writing skill and help language users learn how to organize their writing. Wikis are also important as learners get feedback from other authors (Ataizi & Bozkurt, 2015).

Several studies have used a wiki as an independent variable in developing either cognitive variables or affective ones or both of them. Examples of these studies are (Robinson, 2006), Chao & Lo, (2011). However, to the knowledge of the researchers, it was noted that there is a lack of research concerning the use of web.2 tools as a method of assessment or as a feedback, in general, and in the use of wikis in particular.

In discussing the incorporation of digital technologies into teaching and learning, Barwell, Moore, and Walker (2011) argue that the assessment of Web 2.0 authoring works should differ from the conventional teacher-centered assessment approach. While the latter relies on tests to measure knowledge gains and skill development, the former adopts a learner-centered approach that draws on a variety of strategies to enhance students’ potential and offer students the opportunities to develop self- and peer-assessment abilities (Barwell et al., 2011).

As wiki is one of web.2 tools, learners who study English as a foreign or a second language use such tool in learning. In the same vein, the instructors in classes can use wiki as an assessment tool in different areas. Thus, using wikis represents the social constructivist learning environment that focuses on learning as an active, contextual and social act. It provides a social space where students can interact and support one another through giving and receiving feedback to reach the mode of collaborative learning.

According to Castaneda & Heum (2013), wiki writing contributed to students’ acquisition of grammatical knowledge and it helped to improve the students’ acquisition of the Spanish preterit and imperfect. The researchers, therefore, suggest that educators and researchers use wiki not only as a tool for writing but also for the improvement of grammatical knowledge.

Enhancing students' writing accuracy is a crucial factor in effective writing because the quality of a piece of writing will be determined, in part, by its accuracy. Although it is not easy for EFL students to reach writing accuracy, they should do their best to improve it to make their writing as
readable as possible (Baleghizadeh & Gordani, 2012). Therefore, many EFL teachers try hard to help their students produce accurate writings (Almasi & Tabrizi, 2016).

Literature reveals a handful of studies that have investigated the impact of using different approaches in enhancing writing accuracy. Salmasi et al. (2015) conducted a study to investigate the extent to which using two types of instructional computer-based materials vs. print-based materials—may affect Iranian EFL learners’ grammatical accuracy. At the outset of the study, thirty homogenous high school EFL learners were randomly assigned to experimental and control groups. Subsequently, a pre-test was administered to the participants to gauge their familiarity with the targeted grammatical structures before the treatment. During the treatment, the researchers used a grammar textbook to teach the learners in the control group, whereas for those in the computer group the very grammatical points were taught through computer-based materials in a language lab. After the treatment phase, a post-test was administered to measure learners’ achievement. The results revealed that utilizing computerized instruction with the experimental group led to highly positive gains. However, using computerized materials was not found to be that much effective, as the obtained results were in favour of the control group. Accordingly, it can be concluded that integration of computerized instructions in the EFL classrooms might help improve learners’ accuracy and enhance learners’ mastery of English grammar.

The above mentioned study is similar to the current study in using structural accuracy in writing as a dependent variable. Moreover, there are points of similarity in research design as both studies used quasi-experimental pre-post-test design. For the independent variables in the studies, it was noted that the current study used a wiki as an assessment tool, and this in turn, is one application of web.2 tools while Salmasi et al.’s study used a mixed method, namely, computer-based vs. print-based materials as an independent variable.

Seiffeddin and El-Sakka (2017) investigated the effect of direct-indirect corrective feedback via e-mail on the writing accuracy students at kindergarten section, Suez Faculty of Education, Egypt. The design of the study was a pre-post quasi experimental design. The main instrument of the study was a pre-post writing test. The participants were forty-eight junior EFL students at the kindergarten section, randomly divided into two groups: experimental group (n=25) and control group (n=23). Both groups were tested using the pre-post writing test before and after the experiment. During
the treatment, the experimental group received direct-indirect teacher corrective feedback on their writing compositions via e-mail while the control group received no feedback. Differences between the participants’ mean scores on the pre-test and post-test were calculated for each group separately using Paired Samples T-Test which revealed significant differences between the pre-test and posttest of the experimental group mean scores. Independent Samples T-Test was used to calculate the differences between the experimental and the control groups’ mean gain scores on the pre and post-test of writing. Significant differences existed in favor of the experimental group mean gain scores.

Moreover, the identification of specific error categories has been the goal of a number of studies. For example, Dipolog-Ubanan (2016) investigated the common errors in the paragraphs written by EFL Chinese undergraduates. The results showed that the most common errors were on word choice and word form, spelling, tenses, use of articles and determiners, number and agreement of subject and verb.

Commenting on the importance of motivation, it is noted by Dörnyei (2001a as cited in Moody, 2016) that one method of motivating someone is directly persuading one to do an action or think in a certain way. Another way to motivate someone is to indirectly influence the person by creating the appropriate conditions that would lead the person to act on a specific course of action. Regardless of the ultimate goal of motivating someone, it is always a long process. In a similar vein, Dörnyei (2001a) comments saying that during the process of mastering a foreign language, the learner’s enthusiasm, commitment and persistence are basic factors of success or failure.

Regarding the use of web.2 tools in enhancing motivation, Zhang et al. (2014) conducted a study using blogs as out-of-class assignments for the development of learners’ writing competence. There were 36 students of English majors from an intact second language (L2) writing class participating in this study. A mixed method design was employed to obtain both quantitative and qualitative data. The results showed that blog-based peer feedback had a statistically significant positive correlation with learners’ motivation, collaboration, and course satisfaction. The findings also revealed that the feedback was conducive to learners’ self-reflection and self-confidence in second language writing and could give rise to an enhanced second language writing experience. The study concluded that
group collaborative writing via blogging did not only encourage collaboration and self-reflection but also engaged learners in noticing and co-construction of knowledge.

Commenting on the previous study, it can be stated that there is a great deal of similarity between the current study and the above mentioned study as both of them used two tools of web.2, namely, a blog and a wiki as assessment or feedback tools. Another point of similarity that both studies used such tools to enhance motivation. Thus, the two studies participated in developing the dependent variable. However, the areas of differences between the two studies are implied in the points of participants, methodology and the experiment environment.

Furthermore, Kassem (2018) investigated the use of Hybrid Problem-Based Learning (H-PBL) approach for teaching a speaking course to the First-Year students of the English Department at Prince Sattam Bin Abdulaziz University, Saudi Arabia. The lack of motivation is due to the traditional, rigid and tedious teaching techniques adopted in speaking classrooms and partly due to the standardized curriculum of the speaking course where there is no scope for instructors to change their teaching approach or introduce new ideas in the curriculum. The H-PBL approach has been proved to be an effective model for teaching language skills; however, the existing literature still lacks an actual action plan or a methodology to introduce this approach as a pedagogical remedy for motivating EFL students and improving their speaking proficiency. The study addressed this gap by recommending the use of H-PBL approach in EFL speaking classes. The study used a pre-post speaking proficiency test, a students' motivation questionnaire, interviews and observation sheets as data collection tools. Results revealed that the H-PBL approach has a positive effect on improving the students' speaking proficiency, students' motivation significantly increased and, eventually, students tended to be more self-directed and independent. Instructors also applauded the use of H-PBL approach but recommended adapting the curriculum and the teaching

Sumtsova et al. (2016) conducted a study to improve motivation using web quest. A special attention is paid to the web quest–based role play organized by means of up-to-date Internet technologies as an approach to raise technical students’ motivation to studying foreign languages. Emphasis is upon applying this approach to organizing conference at National Research Tomsk Polytechnic University (TPU). The results showed that the
application of the educational internet technology webquest followed by the role play allows to form and develop analytical and searching skills, as well as language and verbal abilities. Unfortunately, there were some challenges in working with the webquest caused by lack of technical expertise and preliminary preparation for independent work on the part of learners. In general, it should be mentioned that the task type under consideration yields favourable results and can be applied in foreign language (FL) teaching to achieve a particular educational goal, such as acquiring language and verbal competences for instance. Students focus on FL communication thanks to the interaction with their peers and other participants of the project under discussion. Meanwhile, high rating grades obtained as a result raise the students’ extrinsic motivation to FL learning. The students feel satisfaction participating in the role play and observing positive results of their activity, professional development and self-improvement. Without doubt, all these benefits significantly contribute to intrinsic motivation. The previous study is similar to the current study as it aims to enhance intrinsic and extrinsic motivation. Furthermore, the focus of Sumtsova et al.’s study was on the participants who study English as a Foreign Language and this concurred with the current study.

Hussein (2018) recently attempted a study to develop high school students’ motivation using wikis. Specifically, a wiki page was used as a collaborative mediated tool to develop high school students’ motivation for translation. It was concluded that peer feedback that students received from each other during peer reviewing and peer editing created a supportive atmosphere for learning language skills when reviewing and editing translation skills. It is obviously clear that Hussein’s study concurred with the current study as both study used a wiki page as an assessment tool to develop students’ motivation toward learning English skills.

The previous study is similar to the current study as it aims to enhance intrinsic and extrinsic motivation. Furthermore, the focus of Sumtsova et al.’s study was on the participants who study English as a Foreign Language and this concurred with the current study.

**Method**

**Design**

The current study used the quasi-experimental pre-post control group design, where two intact classes were randomly assigned to either experimental group or control group.
Participants

Participants were 60 students from Preparatory Year Program (PYP) deanship, Prince Sattam University in AlKharj, KSA. The students were chosen randomly from the academic year 2017-2018. The students were assigned into two groups; an experimental group and a control one. Each group consisted of 30 students. The age of those students ranged from 19 to 20. They study writing as a separate course. They all live in Riyadh region with similar socio-cultural backgrounds.

Instruments

1. The writing pre/post test

The test was designed to investigate the effect of using wiki as an assessment tool in improving students’ structural accuracy in writing and their motivation towards writing. The test was divided into three parts: grammar, writing skills and writing a paragraph.

To ensure the validity of the test, the researchers submitted it in its initial form to a jury of TEFL faculty members and specialists in language testing to evaluate the test. Generally speaking, the jury members approved the test as a whole and the scoring rubric used to assess students' pieces of writing in the test.

The test reliability was obtained by administering the test to pilot study of 15 students who were excluded from the participants of the study. The purpose of the pilot study was to demonstrate the level of the paragraphs that could be written by the examinees and estimate the appropriate time for the test and measure its reliability. After twenty days, the same test was administered to the same group who were retested after twenty days. The calculated Pearson Coefficient Formula to test the internal consistency of the respondents was (0.831) which was acceptable for conducting such a study.

2. Writing motivation scale

The writing motivation scale was designed by the researchers for measuring motivation towards writing among participants before and after the treatment. Reviewing literature related to motivation towards writing and motivation towards learning English as a foreign language, the researchers conducted a 5 Likert scale from strongly agree to strongly disagree. The scale consists of 25 positive and negative statements. The positive statements fall into two dimensions: intrinsic motivation and extrinsic one towards writing. The responses on the motivation scale were scored by assigning the score of “5” to the “strongly agree” response, “4” to the “agree” response, “3” to the “neutral”, “2” to the “disagree” response,
and “1” to the “strongly disagree”. The negative statements were scored in the reverse order.

To achieve the scale validity, the writing motivation scale was submitted to a specialized jury in TEFL and educational psychology to decide on: the appropriateness of the scale items to the students' level, clarity and phrasing of the scale items and validity of the scale as a whole. Generally, the jury members found that scale items are clear and measure students’ motivation towards writing. They approved the scale as valid. Yet, they suggested to modify some phrases and omit others. To estimate the reliability of the scale, Cronbach's Alpha formula was used to estimate the reliability of the motivation scale as a whole which was (0.74). This value indicated a high degree of reliability.

**The Writing rubric**

Reviewing literature related to writing testing, the researchers designed a holistic scoring rubric to assess students' pieces of writing in the test. The rubric consisted of five criteria: content, organization, word choice, grammar usage and sentence structure, and mechanics. The five criteria are graded as a whole into five well defined indicators: 9-10, 7-8, 5-6, 4-1 and 0.

**The Treatment**

**The following steps were followed:**

- Setting up a wiki class

  To set up the main class wiki page for students to review and edit within collaborative groups their pieces of translation that they translated face to face in the classroom, the researcher followed the steps below:

  1. Choosing a wiki website: www.wikispaces.com was chosen to set up a class wiki for the students. It is the most popular wiki platform and it was chosen for many reasons:

     - Easy to use and has a step by step technology which guides students through using Wiki.
     - Students are able to develop communication skills within class using the computer.
     - Anyone can edit and it is easy to use and follow. This gives students the potential for being authors, not just researchers.
     - It provides opportunities for "active-learning" activities in the classroom through on-line peer reviewing and editing.
     - People located in different parts of the world can work on the same document and add their own parts. This builds a community of learners.
• Teachers can view "Recent Changes" on the student's Wikispaces which assists the assessment processes.
• Widens access to the power of web publishing to non-technical users
• There is a wide choice of open source software Wiki's to choose from so licensing costs make it more affordable (to installing an institutional Wiki).
• It has an email, a social network and MS word all in one which allows people to get the most of this site.

2. Creating an account and choosing a name for the wiki which is “PYP Writing Skills”
3. Editing a welcoming message to the students on the Homepage including procedures to be followed by students when using a wiki page.
4. Creating wiki pages for students such as “Peer Reviewing”, "Peer Editing" and “Groups Portfolio”.
5. Uploading some important resources, PDF, Checklists and tutorial videos to help students during reviewing and editing texts.
6. Sending invitations to the experimental group students to join wikis.
7. Holding an orientation session to them to explain how to join a wiki class.

• Experimental Treatment

According to the suggested methodology, the instructor trains students to write a paragraph through five stages: pre-writing, writing the first draft, peer reviewing via wiki, peer editing via wiki, and publishing. Thus, a wiki is a mediated tool used to assess students' pieces of writing through using peer feedback assessment during peer reviewing and peer editing. Following is a short description of the five stages mentioned above:

Pre-writing:

Students were asked to use different techniques for pre-writing as brainstorming, listing, clustering and searching the internet to gather and share ideas to discuss the topic and plan their writing task.

Writing the first draft.

In this stage, students collaborated to write their first draft on their wiki page. Each group to wrote their first draft taking in consideration the connection between ideas and choosing the appropriate words to write a coherent topic.

Peer reviewing via wiki

During peer-reviewing, students start reviewing their peer’s first draft for content, organization and word choice. The student- reviewers used a peer reviewing checklist to help them review other groups pieces of writing.
The students put comments on their peer first draft. In order to run peer reviewing smoothly, the teacher assigned time to each group to post their first draft paragraph for reviewing and other groups shared their comments on that paragraph.

**Peer editing via wiki:**
In this stage, students edit their peer’s pieces of writing in terms of grammatical accuracy and mechanics. Students can use different tools to help them during editing such as peer editing checklist, spelling check application, online dictionaries and so on.

**Publishing the final draft**
After receiving feedback from their peers, students publish their final paragraphs on “publishing” wiki page. Each group takes into consideration the other groups’ comments they leave when they review for content, organization, and word choice, and edit for structural accuracy and mechanics.

**Peer feedback assessment via wiki**
The experimental group students received peer feedback from each other on every writing task they do. They published their comments on what they write during peer reviewing and peer editing stages. They focused on reviewing content, organization and word choice during the peer reviewing stage. For checking writing accuracy and mechanics, they do peer editing before publishing the final product.

**Duration of the treatment**
The current study adopted a wiki-mediated assessment tool to develop students’ writing accuracy and their motivation towards writing. The treatment consisted of 16 sessions during which students review and edit each other's paragraphs via wiki. In the first four sessions, students were trained to review paragraphs in terms of content, organization and word choice. They used a revising checklist to help them review the paragraphs. In sessions 5, 6, 7, 8, students were trained to edit paragraphs using an editing checklist in terms of grammatical accuracy and mechanics. In the last four sessions, students paid much attention on how to publish their final draft taking in consideration the feedback they received on their first draft during peer reviewing and peer editing stages.

**Results of the study**
The results of the study are presented in terms of the study hypotheses using SPSS. Then, the findings are discussed and interpreted in view of
other previous studies conducted in the same field to compare and support the results obtained.

To test the first hypothesis, paired sample t-test was used to analyze the difference between the means of the two groups on the writing post-test scores.

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<th>Table 2</th>
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<td>T value</td>
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<tr>
<td>Control</td>
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<tr>
<td>Experimental</td>
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Table (2) shows the Findings of t-test between the means of the control and experimental groups in the overall post-writing test. As shown above in table (2), there is a statistically significant difference between the experimental and the control groups on the writing post-test in favour of the experimental group. This result can be attributed to the effect of using wikis as an assessment tool in developing students’ accuracy in writing. Thus, hypothesis one is confirmed.

To test the second hypothesis, paired sample t-test was used to analyze the difference between the means of the two groups on the writing post-motivation scale according to the results of the scale. Results of the t-test confirmed the hypothesis two as shown in table 3.

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<th>Table 3</th>
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Table (3) shows the findings of t-test between the means of the control and experimental groups in the overall post-motivation scale. As shown above in table (3), there is a significant difference between the experimental group and the control group on the post implementation of the writing motivation scale in favor of the experimental group. This indicates that using wikis in EFL writing classes is highly effective in developing students’ motivation towards writing.

**Discussion**

**Writing accuracy**

It was observed from the analysis of the results that using wiki as an assessment tool improved students' writing accuracy through collaborative assignments and providing feedback through the interactive environment of
The results also revealed that receiving peer feedback can have a significant effect on improving their grammatical accuracy in a writing task. These results are in line with other studies such as Al-Shumaimeri (2011) who found that using wikis improved students writing accuracy at the preparatory year in King Saud University in Saudi Arabia.

Furthermore, using wiki as an assessment tool through providing peer feedback in an interactive environment improved Preparatory Year Program PYP students’ grammatical accuracy and helped them reduce the syntactic errors in their pieces of writing. It is worth mentioning that the findings of the current study concurred with many studies. Examples of these studies are Koolivand and Iravani’s study (2013), that revealed students who received electronic corrective feedback made greater improvement than learners who received traditional feedback. Also, Hosseini’s (2013) study revealed that electronic feedback has positive effect on the writing accuracy of Iranian ESP students. Again, results are also consistent with Rezvani (2017) who investigated the effect of providing feedback in the interactive environment of wiki on improving the grammatical accuracy of Iranian EFL learners’ writing skill. The results revealed that using wikis to provide feedback on students’ writing can have a significantly positive effect on improving their grammatical accuracy in a writing task. Finally, using wiki in writing argumentative tasks promoted more peer-correction which led to the accurate use of structural accuracy. These results concur with the results of other studies such as Aiyden & Yildiz (2014), Franco (2008) and Cubric & Author (2007).

Motivation towards Writing

It was noted from the results of the post implementation of the motivation scale that wikis contributed positively to collaboration and cooperation, as they are powerful, collaborative tools for motivation towards writing. Concerning intrinsic motivation, students chose the appropriate topics they find more interesting to them. Furthermore, students’ intrinsic motivation was enhanced by providing them with a variety of topics that match their interest and needs. Moreover, using wikis as an assessment tool improved students' learning autonomy which enabled students to have their own responsibility as writers, reviewers and proofreaders. On the other hand, students’ extrinsic motivation was enhanced by receiving positive feedback and comments via wiki through peer reviewing and peer editing. Besides, involving students in collaboration through reviewing, editing and publishing a piece of writing on a wiki class page can have a positive impact.
on students’ motivation towards writing. These results concur with the results of other studies such as Amin’s study (2016) which concluded that using wikis in EFL classes enhanced students’ motivation towards writing at Al-Majma University. The results of some other studies also reached positive results in terms of the effect of wikis on motivation in foreign language learning. For example, Li et al. (2012) conducted a research on writing in Chinese among 59 primary four Chinese students using a Wiki-based Collaborative Process Writing Pedagogy (WCPWP). The results revealed that students perceived WCPWP was useful in improving writing motivation and group interactions. These results are consistent with the results of Ducate et al. (2011) and Nakamaru (2011).

**Conclusion**

A wiki is used as an assessment strategy that has been formulated and implemented in teaching writing for university students. The main motivation for use of wikis was to gain regular insight into students’ understanding, so to enable more targeted and frequent feedback. The results of the current study have shown that students like the idea of using wikis for learning, particularly if supported by well-defined learning and teaching writing based on comments and feedback (e.g. trigger, write, feedback, reflect cycle), where the feedback is provided by teacher or peers. Wikis are an interesting learning environment for group assignments to work, write, share and construct knowledge together with other peers. Previous research found that students use wikis for a great diversity of learning activities, such as to publish the final draft-social and behavioral assignments, maintain portfolios, peer review writing, post artwork, and review drills and grammatical accuracy for a piece of writing. As each contribution of every student in a wiki is published online, wikis have great potential for facilitating peer assessment which is an important feature to take into account when educators design learning environments. Based on the results of the present study, the following conclusions were reached:

- The study revealed that integrating wikis in the EFL classrooms provided support for the collaborative production of the shared knowledge, documents, and materials by means of group interaction through online reviewing and editing of writing texts.
- Peer reviewing and editing via wiki improved the quality of the final writing products.
- The study showed the benefit for receiving and providing peer feedback through peer reviewing/editing activity via wiki. When receiving feedback, learners invite peers to contribute experiences and
perspectives to enrich their own learning process. When providing feedback, learners actively engage in articulating their evolving understanding of the subject matter and apply the learned knowledge and skills when assessing others' work. As a result, learners are involved in thinking about quality, standards, and criteria that they may use to evaluate others’ work, which helps them become critical thinkers and reflective learners.

- Combining two kinds of assessment: formative assessment, in the form of online portfolio via wiki, and summative assessment, in the form of a final writing test, leads to better results.
- The online portfolio gave students the opportunity to see their progress and reflect on their work.

The findings in this study showed that using wiki as an assessment tool clearly improved students' writing performance after receiving peer feedback. This is in agreement with some other studies, which examined the quality and quantity of peer feedback in writing assignments, revealed that more specific and elaborated feedback stimulates better performance and outcomes. In this study, the results also showed a significant difference between the draft and final version of the writing product. Moreover, there is a significant difference in quality of the writing product in the light of writing accuracy. Feedback guides, motivates, and reinforces effective behaviors and reduces syntactic problems.

Recommendation

In the light of the findings and conclusions of the study, it is recommended that integrating wikis in the EFL curriculum is essential for developing collaborative writing skills and motivating students towards EFL writing. Additionally, using online peer feedback via wiki as an assessment tool is crucial for improving students' writing accuracy. So students should be encouraged to send and receive peer feedback via wiki.

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