



A Comparative Study of the Effects of Wiki-Mediated Task Types on EFL College Students and their Perceptions*

Il-Sun Hyun (Hansung University)

Hyun, Il-Sun. (2022). A Comparative study of the effects of wiki-mediated task types on EFL college students and their perceptions. *Multimedia-Assisted Language Learning*, 25(4), 9-34.

This study explored the comparative effects of two wiki-mediated tasks on 76 EFL college students and their perceptions of its use regarding reading and writing skills. For 10 weeks, 32 students were involved in a wiki-mediated task collaboratively while 44 were engaged in it wiki-mediated Tasks individually. Upon completing the tasks, the students responded to a questionnaire eliciting the perceived effects of the wiki-mediated tasks on their reading and writing skills. The pre- and post-test scores were collected and analyzed with an independent-samples *t*-test, and their responses to the questionnaire were analyzed by frequency analysis. No statistically significant differences were found in the post-test scores between the two groups, but the students reported different perceptions of the two types of wiki-mediated tasks. While the students involved in tasks individually felt that their reading and writing skills had improved, those who engaged in groups believed that only their reading skills had improved. Nevertheless, the students of both groups showed positive attitudes toward the wiki-mediated tasks as the tasks, which enhanced their self-regulation, interests, confidence, and peer interaction.

Key words Wiki-mediated tasks, wiki modes, collaborative learning, English reading and writing
doi: 10. 15702/mall.2022.25.4.9

I. INTRODUCTION

Collaborative learning has long received attention in the communicative learning approach in L2 classrooms. In response to this need, many attempts have been made to implement collaborative learning methods. Further, studies have proved the benefits of collaborative L2 learning (Dobao, 2012; Oxford, 1992; Storch, 2009; Villarreal & Gil-Sarratea, 2020; Wigglesworth & Storch, 2009, 2012). With the advanced multimedia technology tools, diverse

* This research was financially supported by Hansung University.

collaborative tasks have become available in L2 classes. One of the multimedia tools, the wiki, a tool formulating a group project environment where L2 learners co-edit in a collaborative way which is limited due to the COVID-19 pandemic, should be considered into online classes. As Godwin-Jones (2003) states, “Wikis are intensely collaborative. Such a system only works with users serious about collaborating and willing to follow the group conventions and practices.” (Godwin-Jones, 2003, p. 15).

Many previous studies explored the way to implementing the wiki-mediated tasks for L2 learning and researchers found their effectiveness positive on L2 learning (Han, 2015; Oh, 2014; Godwin-Jones, 2003; Kessler, 2009; Storch, 2011; Warschauer, 2010; Yang, 2019; Zou et al., 2016). For instance, a wiki-assisted collaborative writing task was effective in improving EFL secondary school students’ writing skills (Han, 2015), and in enhancing the collaborative writing process of EFL students’ revision behavior, and their strategy use (Oh, 2014). Zou et al., (2015) also found that EFL learners at a university-level were more actively engaged in error correction on the wiki-page, and Yang (2019) reported EFL undergraduates were active in exchanging corrective comments on peer writings within wiki-assisted tasks. Surely, wiki-mediated L2 tasks can lead to pedagogical benefits to enhancing students’ participation in writing classes. Besides the positive effects of wiki-mediated task on improving L2 learners’ writing skills, the positive aspect of wiki-use to L2 reading class has been well documented (Li et al., 2020; Stockwell, 2007). For example, researchers have found that wiki-assisted reading provided L2 learners with opportunities to reflect on what they have learned (Li et al., 2020), but the number of studies on exploring the effects of wiki-assisted tasks on reading skills has been limited.

Taken together, most previous studies adopting wiki-assisted L2 learning methods focused on writing skills (Barile & Durso, 2002; Chao & Lo, 2011; Han, 2015; Li, 2013; Liou & Lee, 2011; Storch, 2011; Zou et al., 2015; Yang, 2019), which outnumbered over those discussing L2 reading skills (Stockwell, 2007; Li et al., 2020; Wiseman & Belknap, 2013). In addition, only a few studies have attempted to include integrative ways of teaching reading and writing skills via wiki-mediated tools (Liou & Lee, 2011; Suparat, 2014). It should be noted that little research has ever discussed the extent to which the wiki-mode might have a different impact on improving EFL learners’ language skills. Thus, the need exists to provide empirical evidence that could support for using specific technology among a variety of technologies (Stockwell, 2007). Again, it seems necessary to ask how two wiki-mediated tasks modes differ in contributing to EFL learners’ outcome and which one might be more effective for specific skills. To fill the gap, this study compared the wiki-mediated tasks for reading and writing skills

in two modes: collaborative and individual and surveyed the students' perception of them.

II. LITERATURE REVIEW

1. Collaborative L2 Reading and Writing

On the sociocultural theory, collaborative and cooperative learning certainly has potential to L2 classes (Oxford, 1992). Oxford (1992) noted that, "collaborative L2 learning is more explicitly oriented to negotiating and fulfilling the potential of each L2 learners" (Oxford, 1992, p. 449). In parallel with the communicative language learning approach, collaborative learning principle is a way to support language learners in small groups or pairs. To prove this, empirical studies have consistently demonstrated the benefits of collaborative reading and writing in L2 classrooms.

Given the benefits of collaborative learning, researchers examined the characteristics and effectiveness of collaborative L2 writing (Dobao, 2012; Storch, 2009; Wigglesworth & Storch, 2009). For example, Dobao (2012) conducted a comparative study exploring the effectiveness of the collaborative L2 writing task, including group, pair, and individual work. As a result, it was reported that the texts by the group featured more Language-Related Episodes (LREs), and the highest level of accuracy. Similar results were also found in the study by Wigglesworth and Storch (2009), who found those who worked in pairs or groups produced more accurate L2 written texts, but their written texts were not good with fluency and complexity. Besides the linguistic factors, collaborative learning is beneficial to affective aspects. Researchers found that collaborative learning sustained L2 learners' motivation for learning languages (Kowal & Swain, 1994; Swain & Lapkin, 1998). This is despite students' difficulties with gathering together for collaborative work (Kim, 2020). Moreover, excluding the time constraints, it seems to be practical to implement collaborative L2 reading and writing tasks. It was found that L2 learners engaged in collaborative writing earned the highest scores than individual and pair groups (Villarreal & Gil-Sarratea, 2020). And it provides multiple L2 writers to deliberate about problem solving (Li, 2020).

In addition to the evidence on the benefits and pitfalls of collaborative writing approach, studies have explored the effects of collaborative L2 reading on L2 learners (Jung, 2017; Karabuga & Kaya, 2013; Pan & Wu, 2013). Employing an extensive reading program, Jung (2017) examined how 14 college-level students responded to it, and she found her students

achieved better reading skills and sustained higher motivation to read. Pan and Wu (2013) explored the implementation of cooperative reading instruction and its effect on 44 EFL college-level students. By analyzing the test scores between the pre- and the post-test, Pan and Wu (2013) found that the students receiving the cooperative reading instruction achieved higher scores than those in the traditional class. Also, they found that the students receiving the cooperative reading instruction were highly motivated toward learning English. Similarly, Karabuga and Kaya (2013) studied the effects of *Collaborative Strategic Reading* (CSR) among 40 EFL learners and found that CSR positively affected the increase in the students' interest in L2 reading, making them feel more comfortable and confidence in reading activities.

Recently, a pedagogical rationale for the collaborative L2 reading based on wiki seems well supported by empirical evidence. Accordingly, studies on the application of wiki for L2 reading have examined its usefulness for skill improvement (Stockwell, 2007). Considering the dynamic environment that wiki-mediated L2 learning environment provides, researchers have adopted wikis for collaborative reading tasks (Li et al., 2020). In practice, Li and her colleagues (2020) adopted "Literature circles" as a collaborative reading activity with 19 groups, allowing them to share and synthesize ideas to complete a final article. Their analysis on the data obtained from the Online Self-regulated English Learning questionnaire revealed that their students belonging to reflection-oriented competent profile were more actively involved in collaborative tasks. Therefore, it seems that more effort is needed on various teaching methods that integrate English reading and writing using the wiki to promote collaborative learning in L2 context.

2. Wiki-based L2 Reading and Writing

Wiki, one of the asynchronous multimedia tools, has been known as an effective tool in promoting collaboration among L2 learners (Kessler, 2009; Kim, 2020). Kessler (2009) reported that students utilized a wiki while focusing on meanings rather than grammatical accuracy. Storch (2011) suggested implementing collaborative writing tasks through wikis as a way to promote collaboration in L2 classes. In addition, Kim (2020) argues that wiki can be an alternative to L2 learners' difficulties in gatherings in person, which could be free from time and space constraints. Given an ongoing global COVID-19 Pandemic threat, wiki-mediated learning has received much more attention, as it is believed to contribute to development of L2 learners' linguistic, cognitive and affective aspects (Kang, 2021).

In addition to overcoming the constraints of limited time and spaces caused by COVID-19 Pandemic, more empirical studies on wiki-based L2 instructional tasks have shown the

improvement of L2 writing skills, and positive effects of them on L2 learners (Aydin & Yildiz, 2014; Barile & Durso, 2020; Li, 2020; Liou & Lee, 2011). A comparative study of task types-collaborative and individual-by Liou and Lee (2011) found collaborative tasks were more effective in providing the students with opportunities to improve their writing skills. Aydin and Yildiz (2014) also found that wiki-mediated collaborative tasks led to better writing quality regardless of genre types. A study by Li (2020) who conducted a study exploring the types of LREs found that distinctive features in the LREs of the wiki-based collaborative writing task group in which the students used language for content negotiation, affective purposes and solving language problems with co-constructed positive emotions (i.e., respect, trust, proud). In addition, Zou et al. (2015) provided the empirical evidence showing their students' writing skill improvement at a statistically significant level.

Beyond the usefulness of wiki for teaching and learning for L2 writing skills, wiki has also been considered a useful tool to teaching L2 reading. Wiseman and Belknap (2013) argue how wiki dovetails with features of a *good reading task*. According to the explanation by Wiseman and Belknap (2013), wiki is easily accessible for authentic reading passages and materials, and it includes collaborative writing and reading projects, and even promotes collaboration between students and texts. In practice, Behjat et al. (2012) compared the students' post-test scores of two groups: one was involved in weekly reading comprehension exercises through web blogs, the other one was through wiki pages. In their results, there was a statistically significant difference between the pre-test scores and the post ones in the two groups. However, their study did not show any further evidence in their asserts stating that wiki was more effective than web blogs, but concluded that wiki-based reading was better than web blogs in that it fosters their students' interest in EFL reading due to its easy accessibility.

Apart from reading and writing skills, wiki-mediated L2 tasks were also positive to students' affective aspects. Chao and Lo (2011) observed L2 learners involved in wiki-based collaborative writing has positive perception on their writing process. In a similar vein, Zou (2010) remarked that collaborative learning in the CALL environment was attributed to positive effects on L2 learners' confidence and motivation. Zou et al. (2015) also noticed that L2 learners' enjoyable efforts for correcting errors on wiki-mediated editing tasks and their writing skills improvement.

Despite numerous benefits from the use of wiki-assisted L2 writing tasks within a collaborative way (Aydin & Yildiz, 2014; Chao & Lo, 2011; Zou, 2010; Zou et al., 2015), there has been comparatively limited number of empirical research which explored wiki-mediated integrated reading and writing tasks usefulness in classes (Suparat, 2014). Much research has

more focused on L2 writing skill, perception toward the wiki-based tasks, and mutual collaborative interaction while completing a wiki-based work (Barile & Durso, 2002; Chao & Lo, 2011; Li, 2013; Liou & Lee, 2011; Zou et al., 2015). Indeed, more varied plausible tasks using wiki should be suggested so that L2 teachers can easily be implemented to their instruction. To achieve the goals of the study, two research questions are formulated:

RQ. 1. Are there any different effects from the wiki-mediated task modes on EFL college students' reading and writing skills?

RQ. 2. What is the students' attitude toward the wiki-mediated tasks in the two modes?

III. METHOD

1. Participants

The total number of the participants was 76 undergraduates enrolled in a general English course in the fall semester in 2021. In two intact classes, 44 participated in a wiki-mediated task individually while 32 worked on the same tasks collaboratively in groups. They were all new to wiki-mediated tasks of the modes, and most of them were not confident with English writing in particular. As they were all freshmen students who were most likely to spend English reading a lot for preparing for the Korean examination, not many had experienced English writing tasks. Their average age was 21 and they were from the Department of Creative and Social Science.

Although both groups were assigned to the intermediate level by their placement test scores, the researcher examined their current proficiency level concerning reading and writing skills by conducting a pre-test prior to conducting an experiment. The pre-test was composed of 15 test items which were excerpt from a placement test battery for an A2 level referenced Common European Framework of Reference for Languages, which *Oxford University Press* published. To assure the homogeneity of the groups, the researcher ran the independent-samples *t*-test on the pre-test scores of the two groups (e.g., individual and collaborative wiki-mediated tasks). The results are presented in TABLE 1.

(TABLE 1) Homogeneity of the Groups

Wiki mode	<i>M</i>	<i>N</i>	<i>SD</i>	<i>t</i>	<i>p</i>
Individual	16.11	44	4.091	.932	.797
Collaborative	15.20	32	4.360		

As seen in TABLE 1, the mean of the individual wiki-mediated task group is higher than that of collaborative group. However, there is no statistically significant difference in the mean between the two groups, which implies that the students of the two groups are homogeneous regarding their proficiency levels of English reading and writing skills.

2. Instruments

1) The Pre-test and the Post-test

The pre- and the post-test were developed based on the placement test targeting A2 level referenced by CEFR, which was published by Skills for Success 2 by Oxford University Press. Both tests consist of a reading passage including six T/F questions, and 11 writing test items which require the students to find a sentence with errors in it, out of three, and to rewrite it. The total questions of each pre-test and post-test were 17, resulting in 30 scores, in sum (APPENDIX 1).

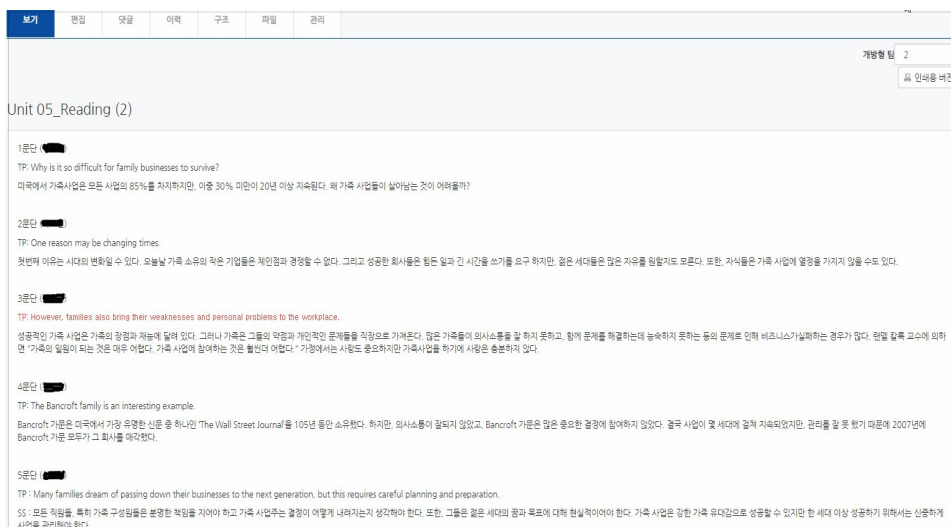
2) The Collaborative Wiki-Mediated Task

Prior to conducting the 10-week experiment, the researcher introduced the two wiki modules on the e-classroom. In the first week, the students participated in the both wiki-mediated tasks for practice. In the following the week, the researcher divided the class into two groups so that the students were engaged in the same wiki-mediated tasks different modes, individual and group. As for the collaborative wiki-mediated task, the task itself is like the jigsaw activity in which the students in groups should contribute to a given task completion. Up to date, the jigsaw technique has been known to be an effective EFL teaching method in a cooperative learning setting (Aronson et al., 1978; Mengduo, & Xiaoling, 2010; Slavin, 1995).

In practice, the researcher introduced the students the traditional the jigsaw activity in a wiki-mediated one. To be specific, the students in the collaborative wiki-mediated group were required to divide a whole article among the number of the group. Then all members would contribute to synthesizing their works including a topic sentence and a brief summary of what

they were in charge of in order to complete a summary of the whole article on a collaborative wiki-page. The screen shot of the wiki page is illustrated in FIGURE 1.

As illustrated in FIGURE 1, the cooperative works by four students in a group posted their works on the same wiki-page supported by a school e-class board system. In their works, each student found a topic sentence and summarized supporting details in Korean.



(FIGURE 1) The Screen Shots of the Collaborative Wiki-Mediated Tasks

3) Reading Materials

The reading materials for the students of the two wiki-mediated task groups were excerpted from the course book, *Skills for Success: Reading and Writing 2* by Oxford Press. The book includes two readings in each unit so there are sixteen readings in it. Out of the sixteen readings, the researcher chose the six which seem to be interesting to the students. The description of the themes, the number of paragraphs and word counts is summarized in TABLE 2.

As seen in the summarized description of the readings in TABLE 2, the themes of each reading include familiar topics such as color, virtual reality, and family business. The readings also do not exceed 10 paragraphs in one reading, which falls in seven on average. And each article includes approximately 450 words on average, and the vocabulary of each article was taught before the students' working on the wiki tasks. For those factors, familiar topics and mid-short reading in two pages, the students of this study could read themselves and find topic sentences and supporting details without much difficulties. Moreover, the students were taught

words and phrases included in each reading before working on the wiki-mediated tasks.

(TABLE 2) Description of Six Readings

Unit	Title of the Reading	Number of Paragraph	Objectives of Reading
1	Unusual Ideas to Make a Buzz	six	Identifying the main idea of a paragraph
2	The Importance of Color in Business	five	Gather information about how color affects the way we feel
3	Being Polite from Culture to Culture	eight	Identifying supporting details
4	Virtual Reality for Medical Students	nine	Gather information about how students are learning with virtual reality
5	The Challenge of Running a Family Business	five	Skimming for understanding the main ideas of the readings
6	Brain Secrets of the Most Successful Students	nine	Gather information about secrets of successful students

4) Questionnaire

At the end of the experiment, a questionnaire was conducted to elicit the opinions of the students in the two groups. The questionnaire was developed on the previous studies, which examined the L2 learners' perceived writing skill improvement through wiki-mediated tasks (Zou et al., 2015). The researcher included five questionnaire items asking the advantages and disadvantages of the wiki-mediated tasks in two modes, and their perceived effectiveness of wiki-mediated task use in affective aspects, such as confidence, motivation, and willingness for further use (APPENDIX 2).

3. Procedure of Collaborative Wiki-Mediated Task

In practice, the researcher adopted a collaborative wiki-mediate task, 'a wiki-mediated jigsaw task' in class. The baseline framework of the task is described as followed. To begin, the students of both wiki-mediated mode groups (i.e., individual and collaborative modes) listened to audio clips of reading materials at a pre-task stage. For 10 weeks, the students of the both wiki-mediated task modes group read six reading articles excerpted from the course book, *Skills for Success 2: Reading and Writing*. After their first listening, the students of the two wiki-mediated mode groups listened to the same audio clips again to figure out the gist of the articles and to find topic sentences of each paragraph of the article.

Moving on to the next stage, the students in the two wiki-mediated mode groups participated in the wiki task differently. First of all, those who were involved in the collaborative wiki-mediated mode met as a group in separate online meeting sessions to share what they had found at the previous stage such as the topic sentences, and what they had understood from it. After discussing these points, they decided who would be in charge of which paragraphs and posted a topic sentence with a summary of the paragraph in Korean. In fact, the wiki-mediated task employed in the collaborative group was a jigsaw activity, in which each student would take one or two paragraphs of the article, and then post their works in order to complete the whole article. On the other hand, the students participating in the wiki-mediated tasks individually had to post what they found as topic sentences of each paragraph and to write brief summaries of the paragraphs in Korean. With their works done, the students were asked to post the topic sentences of each paragraph in the whole article with summaries of supporting details in Korean briefly.

Finally, at a post-wiki task stage, the students of the two wiki-mediated task mode groups received the teacher's comments on their works during a week in common and were required to provide responses to them by revising errors in colored texts. In the case of the students engaged in the task collaboratively, peer corrections were encouraged on their wiki pages. Any peer corrections or feedback were required in color blocks so that the researcher could recognize each student's participation. Accordingly, the students in the both groups could communicate with the researchers in the process of completing their wiki-mediated tasks either they belonged to individual or group modes.

4. Data Analysis

Firstly, an independent samples t-test was conducted on the pre- and the post-test scores to explore to what extent the two modes in the wiki-mediated tasks contribute to improving the students' L2 reading and writing skills. To do so, the researcher rated the students' answers to both tests, which are multiple choice questions. In terms of the rating the writing questions, the researcher provided a half point for the students who chose the incorrect sentences out of the three choices although they could not correct them perfectly.

Additionally, the researcher conducted a questionnaire to elicit the students' perceived usefulness of the wiki-mediated tasks for learning English reading and writing skills. The questionnaire includes four open-ended questions asking about the overall benefits of wiki-mediated task use for L2 learning, the weaknesses and strengths of its use, their

wiki-mediated task mode preferences, and the willingness for the future use. With collected responses, the researcher analyzed them and found repeating themes in the student's responses. Then, the researcher set sub-category to the themes and ran a frequency analysis for sub-category.

IV. RESULTS

1. Effects of Wiki-Mediated Task Modes on the Students

Independent samples *t*-test was conducted on the post-test scores of both groups: individual and collaborative wiki mode to examine any differences existing due to the modes in wiki task. The results are summarized in TABLE 3.

(TABLE 3) Effects of Wiki-mediated Task Modes on Test Scores

Wiki-mode	<i>M</i>	N	<i>Std.</i>	<i>t</i>	<i>p</i>
Individual	17.61	44	5.217	1.259	.457
Collaborative	16.18	32	4.387		

As seen in TABLE 3, the mean of the individual wiki-mode group is higher than that of the collaborative wiki-modes. This result does not support the previous studies which reported that the writing skills by the students in group achieved highest scores than those in pair or those who participated in the tasks individually (Dobao, 2012), and collaborative writing tasks were effective in improving L2 learners' writing skills (Liou & Lee, 2011). However, there is no statistically significant difference in the mean between the two groups, which indicates that the modes of the wiki-mediated task is not a predictor explaining the improvement of reading and writing test scores in this study.

2. Students' Perceived Usefulness of Wiki-Mediated Tasks

Upon the completion of the experiment, the researcher conducted a survey eliciting the students' perceived usefulness of the wiki-mediated tasks in the two groups respectively. The students responses on the four open-ended questionnaire items were analyzed by the repeating themes and the frequency analysis was run according to each sub-category.

1) Students' Opinions in Individual Wiki-mode Task Group

First, the responses of the students in the collaborative wiki group on the question 1 (i. e., *What are your perceived usefulness of the wiki-mediated task?*) and the question 2 (i.e., *What are the strength and weakness of the wiki-mediated tasks?*) are analyzed by SPSS 28.0 and presented in TABLE 4 and 5 respectively.

(TABLE 4) Students' Perceived Usefulness : Individual Mode Wiki Tasks

Question	Sub-category	N	%
The usefulness of the wiki-mediated task	Help from others	13	29.5%
	Improved reading skill	10	22.7%
	Improved writing skill	9	20.5%
	Teacher feedback	4	9.1%
	Better participation	2	4.5%
	Long-term memory	2	4.5%
	Interest enhancement	1	2.3%
Missing	System	3	6.8%

As shown in TABLE 4, majority of the students involved in the individual wiki-mode task show satisfaction with being helped by others (29.5%) and improved reading (22.7%) and writing skill (20.5%). In addition, some students state that the instructor provided the usefulness of the individual wiki-mode task (9.1%). In addition, they believe the individual wiki-mode helped them to remember what they have studied (4.5%) and they could participate in the task better than the traditional paper-based one (4.5%).

The students provided their opinions on the strength and the weakness of the wiki-mediated task and the analyzed results are presented in TABLE 5.

As shown in TABLE 5, most of the students believes that the wiki-mediated task enhanced their self-regulation in English learning (29.5%) and the task was efficient compared to paper-based task (22.7%). Some state that the efficiency in typing on the co-editable page, they worked on the task in their styles and they could finish the task at their own pace. The students perceive better English skill (20.5%) and show satisfaction with no time constraints (4.5%). Moreover, the students were helped to remember well through the wiki-mediated task (4.5%). In contrast, the students point out the lack of instant feedback from others (38.6%) is the worst weakness of the wiki-mediated task as summarized in TABLE 5. Following that, the students were not able to enjoy with the individual task since they could not

communicate with others (20.5%) and felt their tasks as an unnecessary assignment (11.4%).

(TABLE 5) Students' Perceived Strength and Weakness of Individual Mode Wiki Tasks

Question	Sub-category	N	%
Strength of the wiki-mediated task	Self-regulated learning	13	29.5%
	Efficiency	10	22.7%
	Improved skills	9	20.5%
	Teacher feedback	4	9.1%
	No time constraint	2	4.5%
	Long-term memory	2	4.5%
	Others	1	2.3%
Missing	System	3	6.8%
Weakness of the wiki-mediated task	Lack of instant feedback	17	38.6%
	No interaction	9	20.5%
	Annoyance	4	11.4%
Missing	System	13	29.5%

Additionally, the students' wiki-mediated task preference is examined in the question 3 (i.e., *Which wiki-mediated task mode do you prefer?*) and their willingness to use the wiki-mediated task for the future use is asked in the question 4 (i.e., *Would you like to be involved in wiki-mediated tasks in the future?*). The results with some excerpts from the students' rationales are followed in TABLE 6 and 7.

(TABLE 6) Students' Wiki-Mediated Task Mode Preference and Rationales

Question	Sub-category	N	%
Task Mode Preference	Individual	28	63.6%
	Collaborative	16	36.4%

As seen in TABLE 6, most students prefer the individual wiki-mediated task mode (63.6%). It seems that this result reflects the students' person preferences in learning styles. For instance, a student mentioned *that reading should be an individual work as he needed his own time and pace*. In addition, some argue that *they naturally like to work alone and to have their own time without being anxious to complete given tasks in a hurry*. In this regard, the following excerpts explain their rationales.

Excerpt 1

Compared to the collaborative wiki-mode which allows me to focus on the parts I am in charge of, I could understand the overall content of the articles through the individual mode, so that it seems more effective for me to get the gist of the whole article.

Excerpt 2

I prefer the individual wiki-mode since I could complete the task at my pace without any pressure from time and conflict with others. In that sense, it looks efficient for time saving.

Excerpt 3

I think that reading activities should be done on your own by finding things you don't know more quickly. It's a shame that I could not have a full grasp of the flow of the article while working on the cooperative task as I cover only one or two paragraphs. In addition, team members are often busy reading and not helping each other.

Lastly, the researcher examined the students' willingness to use wiki-mediated task in the future in the question 4 (i.e., *Would you like to continue using the wiki-mediated task?*) and the result is presented in TABLE 7.

(TABLE 7) Willingness to Use the Wiki-Task in the Future with Rationales

Question	Sub-category	N	%
Willingness for the future use	Positive	42	95.5%
	Negative	2	4.5%

As seen in TABLE 7, majority of the students show the positive attitude toward the wiki-mediated task with strong willingness to use it in the future. Except a few, the students said they prefer individual wiki-mediated tasks. Some excerpts for their rationales are as followed:

Excerpt 4

While completing my task on the wiki page, I could summarize what I've read. And, I thought this experience helped me to improve my English skills.

Excerpt 5

Personally, I consider the wiki-mediated activity suitable for this course. Especially, I could compose simple sentences without using any translators and have opportunities to make sentence on my own.

2) Students' Opinions in Collaborative Wiki-Mode Task Group

With the same questionnaire items provided to the individual wiki-mediated task group, the students of the collaborative wiki-mode group remarked their opinions about the overall usefulness of wiki-mediated tasks. Their responses to the questionnaire are analyzed by running a frequency analysis and the result is presented in TABLE 8.

[TABLE 8] Students' Perceived Usefulness of Wiki-Mediated Tasks: Collaborative Wiki Group

Question	Sub-category	N	%
The usefulness of the wiki-mediated task	Improved reading skill	12	36.4%
	Enhancing interests	7	21.2%
	Bond with peers	6	18.2%
	Efficiency	4	12.1%
	Better participation	3	9.1%
	Improved writing skill	1	3.0%

As shown in TABLE 8, most students perceive their improved reading skill (36.4%) through the collaborative wiki-mediated tasks. They also argue that the wiki-mediated task enhanced their interest in learning (21.2%), which is in line with previous study by Karabuga and Kaya (2013) and Zou (2010), both found that wiki-assisted learning enhanced their students' confidence and motivation for L2 learning. Some mentioned that the wiki is new and easy to use. Moreover, the students believe that they could build up peer ship while working on the collaborative work. For instance, the students were satisfied with building bond with peers (18.2%) and they could participate in the task more actively (9.1%). Their perceived collaboration, and peer ship are supported by the findings of previous studies (Wiseman & Belknap, 2013). However, the students involved in the collaborative wiki-mediated group do not think their writing skill does improve as much as reading skills (3.0%), which is contradictory to the findings of the study by Liou and Lee (2011), and Aydin and Yildiz (2014) those who found collaborative task effective for L2 writing skill improvement.

Next, the analysis of the students' opinions about the strength and weakness of the

collaborative wiki-mediated tasks is summarized in TABLE 9.

As can be seen in TABLE 9, the students pointed out different positive aspects of them. For instance, they liked the task as it provided them opportunities to interact with peers (42.4%). This results is in consistent with the previous study by Dobao (2012) who found more LREs when the students worked in group rather than individually. In fact, their classes were limited to online classes due to the COVID-19 pandemic at the time of conducting the study, the students who were freshmen had no choice but to meet their peers in online real-time classes. In this sense, their desire to meet peers could be fulfilled this collaborative task-mediated tasks. Additionally, the students feel they were helped by others (2.12%), and were cooperative with peers (15.2%).

(TABLE 9) Students' Perceived Strength and Weakness of the Collaborative Mode Wiki Tasks

Question	Sub-category	N	%
Strength of the wiki-mediated task	Interaction with peers	14	42.4%
	Help from others	7	21.2%
	Efficiency	5	15.2%
	Cooperation	5	15.2%
	Enhanced interest	1	3.0%
	others	1	3.0%
Weakness of the wiki-mediated task	Discomfort with peers	8	24.2%
	Conflicting opinions	7	21.2%
	Inconvenient editing system	5	15.2%
	Others	6	18.2%
Missing	System	4	12.1%

On the other hand, most students felt discomfort with unfamiliar peers in groups (24.2%). Some commented on conflicting students' opinions, which hampered group work (21.2%), and the inconvenient editing system of the wiki-editing page which does not allow more than two students to edit simultaneously (15.2%). The students' task mode preference was surveyed in the question 3, and the result is presented in TABLE 10 with their rationales.

(TABLE 10) Students' Preferred Wiki-mediated Task Mode and Rationales

Question	Sub-category	N	%
Preferred wiki Mode	Individual	10	30.3%
	Collaborative	21	63.6%
Missing	System	2	6.1%

As seen in TABLE 10, more than half students prefer the collaborative wiki-mediated task (63.6%). Not only this result supported the previous studies' (Chao & Lo, 2011; Godwin-Jones, 2003; Zou, 2010) findings, but that could be the fact that the students had no opportunities to meet their peers in person due to the COVID-19 pandemic so that they might feel satisfied the ways to cooperate with others through the task.

Additionally, some excerpts supporting the students' opinion on their preference are presented:

Excerpt 6

Working with others decreased my burden for the task and I could get help by others.

Excerpt 7

I personally believe that a team-work is one of the important value to learn at the college level. And I enjoyed myself with communication with others and broadening my thoughts with their different ideas.

Lastly, the students' willingness to use the wiki-mediated task in the future was surveyed and the result with their rationales is presented in TABLE 11.

(TABLE 11) Willingness to Use the Wiki-Task in the Future with Rationales

Question	Sub-category	N	%
Willingness in the Future	Positive	29	87.9%
	Negative	2	6.1%
Missing	System	2	6.1%

As seen in TABLE 11, most students are likely to be involved in the wiki-mediated task actively in the future (87.9%) and here are some excerpts from their responses:

Excerpt 8

Learning English through the wiki-mediated task was very impressive and fun. I could comprehend the articles better with little pressure. Definitely, it helped me to improve my reading skill.

Excerpt 9

To me, the wiki-mediated task is new and interesting. Personally, I would like to participate in the future, if any, there are some opportunities in other courses. I could remember much better when studying by the wiki task.

V. CONCLUSION

The present study explored the effects of modes in wiki-mediated tasks in the two groups: the collaborative wiki-mediated tasks and the individual ones regarding reading and writing skills and the students' perception toward them. To compare the modal effects of the wiki-mediated task, the pre- and the-post test scores of each group were analyzed and the questionnaire was conducted to elicit the opinions of both groups concerning the strength and the weakness of it, their wiki-mediated task mode preference, and willingness to use of it in the future.

The study found that the wiki-mediated task mode is not a predictor of college students' English reading and writing skill improvement at a statistically significant level. However, the perceived benefits that the students of the two groups had about the two wiki-mediated modes differed in relation to L2 skills. First, regardless of the wiki modes, overall students of both groups had a high level of satisfaction with their L2 learning experience through the wiki-mediated tasks as found in the previous studies (Chao & Lo, 2011; Zou, 2010; Zou et al., 2015). Second, the students of both groups perceived differently their reading and writing skills improvement. That is, the students' of the collaborative group believed that their writing skill did not improve as much as reading skill (3%) through the collaborative task. This finding is not in line with the previous findings (Aydin & Yildiz, 2014; Liou & Lee, 2011) which found collaborative task was more effective to improving L2 writing skill. In addition, the analysis on the responses to the questionnaire discloses that the students of both groups have a strong willingness to be involved in the wiki-mediated tasks later, as they felt it helped their English reading and writing skill improve and enhanced their interest in language learning, which

supported many previous study results (Chao & Lo, 2011; Zou, 2010; Zou et al., 2015).

Despite the findings of this study, there are some limitations to generalize its findings. For most, the students participating in this study are limited to a less proficient level, A2 at a tertiary level. Thus, more students from different levels should be included in subsequent studies. Also, the wiki-mediated tasks of this study focus L2 reading skills rather than writing. For this reason, the students might have not felt that their English writing skills improved as much as reading skills, so that more balanced and well-designed reading and writing integrative tasks are needed.

In sum, these results indicate that there is a great responsibility for teachers to develop wiki-mediated tasks which are tailored to the students' needs in L2 learning with ease and joy. As Wiseman and Belknap (2013) said, L2 teachers should provide students authentic materials through wiki by providing reading and writing integrative tasks. Although there is no definite answer for L2 students on whether they could be benefited more from the individual or the collaborative tasks, it seems that the individual wiki-mediated mode would work better for those who need time to reflect their learning outcome at their own pace without any pressure and the collaborative one could work better for those who are more likely to be dependent on the helps from others and to wish for peer communication.

REFERENCES

- Aronson, E., Blaney, N., Sikes, J., Stephan, C., & Snapp, M. (1978). *The Jigsaw Classroom*. Sage.
- Aydin, Z., & Yildiz, S. (2014). Using wikis to promote collaborative EFL writing. *Language Learning & Technology*, 18(1), 160-180. <http://ilt.msu.edu/issues/february2014/aydinyildiz.pdf>
- Barile, A., & Durso, F. (2002). Computer-mediated communication in collaborative writing. *Computers in Human Behavior*, 18, 173-190. [https://doi.org/10.1016/S0747-5632\(01\)00040-1](https://doi.org/10.1016/S0747-5632(01)00040-1)
- Behjat, F., Bagheri, M. S., & Yamini, M. (2012). Web 2.0-assisted language learning: Using technology to enhance reading comprehension. *International Journal of Social Sciences & Education*, 2(1), 247-258.
- 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. <https://doi.org/10.1080/10494820903298662>
- Dobao, (2012). Collaborative writing tasks in the L2 classroom: Comparing group, pair, & individual work. *Journal of Second Language Writing*, 21(1), 40-58. <http://doi.org/10.1016/j.jslw.2011.12.002>
- Godwin-Jones, R. (2003). Blogs and wikis: Environments for online collaboration. *Language Learning &*

- Technology*, 7(2), 12-16. <https://www.learntechlib.org/p/95551/>
- Han, J. I. (2015). A study on the effective use of wiki software in the teaching of English writing. *Multimedia-Assisted Language Learning*, 18(3), 302-325. <https://doi.org/10.15702/mall.201518.3.302>
- Jung, S. K. (2017). Extensive reading through collaborative approach: A case study at college level. *The Journal of English Language and Literature*, 22(2), 295-320.
- Karabuga, F., & Kaya, E. S. (2013). Collaborative strategic reading practice with adult EFL learners: A collaborative and reflective approach to reading. *Procedia-Social and Behavioral Sciences*, 106, 621-630. <https://doi.org/10.1016/j.sbspro.2013.12.071>
- Kessler, G. (2009). Student-initiated attention to form in wiki-based collaborative writing. *Language Learning & Technology*, 13(1), 79-95.
- Kang, N. H. (2021). The effectiveness and perceptions of wiki-based English process writing project. *Multimedia-Assisted Language Learning*, 24(1), 10-36. <http://doi.org/10.15702/mall.2021.24.1.10>
- Kim, J. K. (2020). The effects of collaborative writing activity on EFL learners' writing ability. *Korean Journal of General Education*, 14(2), 131-145. <https://doi.org/10.46392/kjks.2020.14.2.131>
- Kowal, M., & Swain, M. (1994). Using collaborative language production tasks to promote students' language awareness. *Language Awareness*, 3(2), 73-93. <https://doi.org/10.1080/09658416.1994.9959845>
- Li, M. (2013). Individual novices and collective experts: Collective scaffolding in wiki-based small group writing. *System*, 41(3), 752-769. <https://doi.org/10.1016/j.system.2013.07.021>
- Li, M. (2020). Language in wiki-based collaborative writing: Functions and mediating factors. In W. Suzuki, & N. Storch (Eds.), *Language in language teaching and learning: A collection of empirical studies* (pp. 158-323). John Benjamins Publishing Company.
- Li, Y., Li, X., Su, Y., Peng, Y., & Hu, H. (2020). Exploring the role of EFL learners' online self-regulation profiles in their social regulation of learning in wiki-supported collaborative reading activities. *Journal of Computers in Education*, 7(4), 575-595. <https://doi.org/10.1007/s40692-020-00168-3>
- Liou, H. C., & Lee, S. L. (2011). How wiki-based writing influences college students' collaborative and individual composing products, processes, and learners' perceptions. *International Journal of Computer-Assisted Language Learning and Teaching*, 1(1), 45-61. <https://doi.org/10.4018/ijcallt.2011010104>
- Mengduo, Q., & Xiaoling, J. (2010). Jigsaw strategy as a cooperative learning technique: Focusing on the language learners. *Chinese Journal of Applied Linguistics*, 33(4), 113-125.
- Oh, H. (2014). Learners' writing performance, revision behavior, writing strategy, and perception in wiki-mediated collaborative writing. *Multimedia-Assisted Language Learning*, 17(2), 176-199.

- Oxford, R. L. (1992). Research on second language learning strategies. *Annual Review of Applied Linguistics*, 13, 174-187. <https://doi.org/10.1017/S0267190500002452>
- Pan, C. Y., & Wu, H. Y. (2013). The cooperative learning effects on English reading comprehension and learning motivation of EFL freshmen. *English Language Teaching*, 6(5), 13-27. <http://dx.doi.org/10.5539/elt.v6n5p13>
- Slavin, R. (1995). *Cooperative learning theory, research and practice* (2nd ed.). Allyn & Bacon.
- Stockwell, G. (2007). A review of technology choice for teaching language skills and areas in the CALL literature. *ReCALL*, 19(2), 105-120. <https://doi.org/10.1017/S0958344007000225>
- Storch, N. (2009). The impact of studying in a second language (L2) medium university on the development of L2 writing. *Journal of Second Language Writing*, 18(2), 103-118. <https://doi.org/10.1016/j.jslw.2009.02.003>
- Storch, N. (2011). Collaborative writing in L2 contexts: Processes, outcomes, and future directions. *Annual Review of Applied Linguistics*, 31, 275-288. <https://doi.org/10.1017/S0267190511000079>
- Suparat, W. (2014). *The development of a wiki-based collaborative reading instructional model for EFL university students*. [Unpublished Doctoral dissertation, Suranaree University of Technology]. Suranaree University of Technology.
- Swain, M., & Lapkin, S. (1998). Interaction and second language learning: Two adolescent French immersion students working together. *The Modern Language Journal*, 82(3), 320-337. <https://doi.org/10.1111/j.1540-4781.1998.tb01209.x>
- Villarreal, I., & Gil-Sarratea, N. (2020). The effect of collaborative writing in an EFL secondary setting. *Language Teaching Research*, 24(6), 874-897. <https://doi.org/10.1177/1362168819829017>
- Warschauer, M. (2010). New tools for teaching writing. *Language Learning & Technology*, 14(1), 3-8. <http://dx.doi.org/10125/44196>
- Wigglesworth, G., & Storch, N. (2009). Pair versus individual writing: Effects on fluency, complexity and accuracy. *Language Testing*, 26(3), 445-466. <https://doi.org/10.1177/0265532209104670>
- Wigglesworth, G., & Storch, N. (2012). Feedback and writing development through collaboration: A socio-cultural approach. In R. Mancho'n (Ed.), *L2 writing development: Multiple perspectives* (pp. 69-101). De Gruyter Mouton. <https://doi.org/10.1515/9781934078303>
- Wiseman, C. S., & Belknap, J. P. (2013). Wikis: A knowledge platform for collaborative learning in ESL reading. *Tesol Journal*, 4(2), 360-369. <https://doi.org/10.1002/tesj.83>
- Yang, J. (2019). EFL learners' use of collaborative peer revision strategies and peer feedback in wiki-based writing. *STEM Journal*, 20(1), 145-164. <https://doi.org/10.16875/stem.2019.20.1.145>
- Zou, B. (2010). Computer-supported collaboration in language learning. In A. Juan, T. Daradoumis, F.

Xhafa, S. Caballé, & J.. Faulin (Eds.), *Monitoring and assessment in online collaborative environments: Emergent computational technologies for e-learning support* (pp. 218-234). IGI Global.
<https://doi.org/10.4018/978-1-60566-786-7.ch012>

Zou, B., Wang, D., & Xing, M. (2015). Collaborative tasks in wiki-based environment in EFL learning. *Computer Assisted Language Learning*, 29(5), 1001-1018.
<https://doi.org/10.1080/09588221.2015.1121878>

APPENDIX

Appendix 1.

Part 1. Read the following texts and answer the questions with T(true) or F (false)

Monopoly

Some claim that the original version of the game Monopoly started around 1900, and that it was developed as a way of explaining tax laws. The best-known version of the story, however - and the one that is generally accepted as correct - is that it was invented in 1934 by a man named Charles B. Darrow from Germantown, Pennsylvania. Darrow made the game himself and sold it on a small scale to friends and some small stores, before it was taken over by the games company, Parker Brothers. At that time, the world was going through a severe financial crisis, and the idea of becoming very rich - even in a game - appealed to many.

The object of the game is to make as much money as possible. Players do this by buying up 'properties' as they go around the board. They can then choose to spend money developing these properties with the purpose of charging a higher 'rent' to other players who land on them. Players aim to own as many properties as possible so that they eventually make their opponents so poor that they have to leave the game. The winner is either the player who owns so many properties that the other players have to drop out or the player with the most money after an agreed time limit. Of course, it's only Monopoly money, made out of small pieces of paper that come with the game, and which is looked after by the 'banker'. It isn't the players' own money.

Part of the fun of the game is enjoying seeing your opponents losing their money. This has led to a certain amount of criticism, however. Some people point out that it is not healthy to encourage young people to value money so highly. They also say that the game is based on unhealthy competition and does not teach good moral values. Although a lot of people say that the game helps develop useful skills for real life, some feel that it is unfair to make fun of people because they become poor.

Despite the criticism, there is no doubt that the game has been extremely popular. The number of games sold throughout its history is measured in the hundreds of millions. Several changes have been made in the last 80 years and many updated versions have appeared in different countries. One version, made with gold and silver pieces, sold for \$25,000.

1. Darrow created the game of Monopoly.
2. The object of Monopoly is to make as much real money as possible.
3. Players buy properties which other players pay rent for when they land on them.
4. People criticize Monopoly because it encourages negative values.
5. Playing Monopoly can help people develop practical experience.
6. Monopoly hasn't changed since it was first designed.

Part 2. Choose one incorrect sentence and rewrite it.

7. a. I don't live in the city.
b. He doesn't lives in the city.
c. My children don't go to school.
8. a. I didn't went on holiday.
b. He spoke English well.
c. She played hockey over the weekend.
9. a. He watched TV when the phone rang.
b. We were living in Paris when we met.
c. When you came home I was cooking dinner.
10. a. She has been a teacher for two years.
b. He has wrote two books.
c. I've lived here since I was six.
11. a. We haven't met before, have we?
b. You don't like Chinese food, do you?
c. She moved to France last year, hasn't she?
12. a. Coffee has been grown in South America for a long time.
b. Arabic spoken in Baghdad.
c. She wasn' born until 1979.
13. a. She won' be ready until 5.
b. Breakfast will be served at 9.
c. By six, I have been here for an hour.

14. a. He had been married before.
b. I've met the manager already.
c. I wish I have more time.

Part 3. Choose an appropriate word to given sentences.

15. He is my aunt's son, so that means he's my _____.
a. cousin. b. brother c. nephew
16. In order to _____ your English, you must communicate every day.
a. increase b. better c. improve
17. The students worked all night because they'd made a _____ to turn in their project the next day.
a. commitment b. solution c. problem
18. Some lights can _____ when you are in the room.
a. sense b. occur c. discover
19. I'm looking for a more _____ work schedule that will let me home at the same time every evening.
a. successful b. stable c. sensitive
20. Graduating from college is a great _____ in a person's life.
a. reward b. achievement c. performance
21. Ads often _____ that a product is perfect for you.
a. imply b. prove c. ignore
22. _____, his application was not successful on this occasion.
a. usually b. significantly c. unfortunately

Appendix 2. Questionnaire Items

1. What are your opinion about the Wiki-mediated tasks?
2. What do you think were the advantages and disadvantages of the Wiki-mediated tasks?
3. If you were able to choose two Wiki-mediated modes, which one would you like to choose?
4. Are you willing to participate in learning activities as a wiki activity in the future?

Applicable level: tertiary education

Author: Il-Sun Hyun (Hansung University, Assistant Professor); astella77@hansung.ac.kr

Received: October 31, 2022

Reviewed: November 20, 2022

Accepted: December 15, 2022