

Identifying Best Practice for Improving Vocabulary Acquisition by Developing Learner Autonomy of EFL Students at a Japanese University

外国語として英語を学ぶ日本人大学生の
自律学習支援による語彙習得向上の実践報告

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Abstract

Vocabulary acquisition is critical for Japanese university students to develop their overall language proficiency. While the role of learner autonomy is sustained and vocabulary learning is well documented, instruction on ways to develop independent learning practices has been largely neglected. This qualitative study explores effective ways to support the vocabulary learning through autonomous learning, focusing on teacher facilitation, peer collaboration and the use of digital technologies including Quizlet. Seven university students were involved in pre- and post-tests to memorize 120 English words that frequently appear in the Test of English for International Communication (TOEIC) in a month. The results show that most students memorized more than 70% of the target words and improved their vocabulary levels. It was also indicated that an autonomous learner needs to have self-efficacy, which can be developed by successful learning experiences and collaborative learning.

Keywords : EFL / vocabulary acquisition / autonomous learning / Quizlet

I Introduction

According to Haddad (2016), the reason why teachers should promote learner autonomy is that each student has his/her own preferences to learn vocabulary. Since the time allocated for classroom learning is limited, students need to learn the majority of vocabulary by themselves. Therefore, by facilitating the students to become autonomous learners, teachers can support their students' vocabulary acquisition (Haddad, 2016).

Autonomy was defined as “the ability to take charge of one’s own learning,” (Holec, 1981, p. 3) and slightly modified as “the capacity to control one’s own learning” (Benson, 2001, p. 58).

An autonomous learner is also self-motivated and no direct supervision or prompting are necessary

(Wallace, 2015). Even without direct supervision, teachers' roles are still essential to implement autonomous learning. Some studies argue that social interaction with other learners is indispensable in the development of autonomy.

For example, Murray (2014) states that autonomy is developed only under social situations. This study focuses on these key elements of autonomous learning when designing and analysing teacher facilitation and collaborative learning that promote learner agency and motivation.

Almusharraf (2020) states that language teaching instruction needs to be student-centered, rather than teacher-centered to foster learner autonomy, proposing different teaching modalities including computer-assisted learning and online learning. Some of the characteristics of a student-centered classroom identified in his study include teacher's role as a facilitator, peer interactions, students' asking

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questions, integration of technology, cooperative learning and formative assessment. He describes the teaching practice as the environment in which learners “monitor their language learning, reflect on their intellectual process, elaborate on meaning structures, modify personal understanding, and transform knowledge, then assess their performance and make meaningful choices regarding their English learning development.” (Almusharraf, 2020, p. 17).

A study on the collaborative and autonomous wiki-based writing activity indicates that flexible learning environment combining group collaboration and individual work enabled students to engage in the process more, although the students continued to utilize the co-working platform, wiki, as a reflection space at the end of the activity to share thoughts with each other (Kessler & Bikowski, 2010). Another research on hybrid learning approach combining classroom learning and computer-assisted learning (CALL) shows that the learners become more self-reliant, responsible, cooperative, and active as they develop learner autonomy in vocabulary learning (Shams, 2013). After the hybrid course, the learners’ vocabulary knowledge of 30 unknown words among participants was tested and improved by 83.33% (Shams, 2013). Self-directed learning of students was also evident in their planning, monitoring, and evaluating their learning process (Shams, 2013).

Another research project investigated the use of a free mobile application, Vine, to create short videos for vocabulary learning. The participants of the study, university English learners in Turkey, found that the use of smartphones enjoyable, motivating, and effective (Kurt & Bensen, 2017). Furthermore, the sample student group significantly outperformed the control group in the vocabulary post-test (Kurt & Bensen, 2017). In the semi-structured interviews with the participants, the researchers found that the increased motivation and enjoyment were partly due to the interaction among peers. Other positive outcomes indicated by the study include collaboration in and out of class, prolonged retention effect of visual images, improved exam scores, and support from friends in

creating videos (Kurt & Bensen, 2017). A study on technical anxiety in a computer-assisted learning indicated that learning in virtual worlds reduced performance anxiety and there was no significant rise of technical anxiety (Grant, Huang & Pasfield-Neofitou, 2013).

Based on this literature review, the research question for this study was formulated as: How can EFL university students in Japan improve their vocabulary retention by developing learner autonomy in self-paced online learning? The study intends to explore the strategies that contribute to memorizing vocabulary and characterise autonomous learning.

II Research Methods

Participants

The participants were seven second-year English major junior college students: Momo, Miho, Anri, Mitsuko, Naomi, Mari, and Yoko (pseudonym), enrolled in a research class focusing on learning English as a foreign language. When the researcher called for participation, all the seven students volunteered to participate in this study. No requirement was set on English proficiency levels of the students for enrolment. Therefore, the proficiency levels varied across individuals; from A1 to B2 in the Common European Framework of Reference for Languages: Learning, teaching, assessment (Council of Europe, 2021).

The participants received a participant information sheet, a consent form, an invitation email, interview questions, and the details of the research project in Japanese. Before signing the consent forms, they were told that their participation or rejection would not affect their grades.

Collaborative and online learning

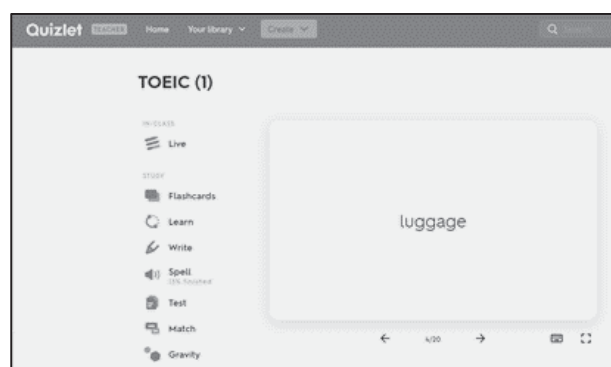
The participants met once a week on campus and online alternately for a month. Five consecutive 90-minute lessons were designed to enhance vocabulary by promoting autonomous learning through teacher facilitation, peer collaboration and online learning. The teacher encouraged the students to plan

Table 1: Lesson Schedule

Lesson	Delivery	Content	Teacher's facilitations
1	On campus	Pre-tests (40/120 TOEIC words, Nation's Vocabulary Size Test)	Group discussions: Effective ways to memorize words Introduction of online learning app: Quizlet Planning: How to memorize 120 words
2	Online	Google MEET	Group discussions: Sharing difficulties and successes Progress check of online learning app: Quizlet Planning: Preparing for the mid-test
3	On campus	Mid-test as a formative assessment (20/120 words)	Self-reflection: Results of mid-test Group discussions: Sharing difficulties and successes Planning: Revising the plan for improvement
4	Online	Google MEET	Group discussions: Sharing difficulties and successes Planning: Revising the plan for improvement
5	On campus	Post-tests (40/120 TOEIC words, Nation's Vocabulary Size Test)	Group discussions: Reflection on the results of post-tests and possible improvement for the future
	Online & On campus	Semi-structured interviews	Reflection on the study

their own learning approaches including the use of an online learning application tool, discuss and share the outcomes with the classmates throughout the study, and revise the plans to improve their learning strategies. The schedule of five lessons and interviews is shown in Table 1.

The teacher introduced available tools such as the six original study sets on Quizlet (See Figure 1), and raw data of vocabulary and sample sentences in a Microsoft Excel file, but did not provide specific instructions on how to use them to memorize the words. The test results were shared with the students immediately after the tests to allow them to critically reflect on their learning approaches for further improvement. In each 90-minute lesson, the students shared their experiences with autonomous learning and approaches for vocabulary acquisition. The class was divided into three groups to work together in and out of the classroom. For online discussions, students used Google Meet and Jamboard. Students made their plans, took actions, observed the outcome, discussed, revised their plans, and repeated the process during the study.

**Figure 1: Quizlet: a study set**

Data Collection: Vocabulary tests

The study employed two types of tests; pre-, mid- and post-tests of TOEIC 120 highly frequent words (hereafter “120 words”) to be memorized in five weeks, and the online Vocabulary Size Test by Paul Nation (Nation, 2021). The 120 words and example sentences are the excerpts from a book, “*Shin TOEIC TEST Derujundemanabu Vocabulary 990*” (New TOEIC TEST Learning 990 Frequent Vocabulary) (Kanzaki, 2009). In the pre- and post-tests, randomly selected 40 words among the 120 words were tested. In the mid-test, only 20 words were tested as a formative assessment and the results were not included

in Figure 3. The students also took the online Nation's Vocabulary Size Test before and after the study. Naomi failed to record the pre-test score, but she recalled that her score was around 3000, which is used as tentative data. Near the start of the paper or somewhere you could mention that each of the seven students will be referred to in this study by assigned or chosen pseudonyms.

Data Collection & Analysis: Interviews

After the post-test, the teacher conducted semi-structured interviews in Japanese with seven students. Five questions asked were:

1. *How do you memorize words? Any difficulties?*
2. *When learning online, what strategies characterise autonomous learning?*
3. *Did you use online applications? If so, what are some of the positive and negative effects of online learning?*
4. *Do you think memorizing 120 words in a month was adequate?*
5. *Were you able to learn the words autonomously?*

In addition, three private semi-structured interviews for about 10-20 minutes each were conducted for participants whose post-test scores were the highest, the average and the lowest to represent each group of learners to gather more detailed information and determine what caused the different learning outcomes. The interviews of two students with the highest and the average scores respectively were conducted in English, and it was in Japanese for the student with the lowest score. Themes chosen for thematic coding to analyse interview transcripts were self-motivation, learner agency, online application, and difficulties in autonomous learning. The transcript was analysed by color-coding according to these themes.

III Results

Vocabulary tests

The results show that most students memorized more than 70% of the target TOEIC words and improved their vocabulary levels. Test results in Figure 2 show that the scores of all participants increased from

pre-test to post-test of 120 words (40 questions).

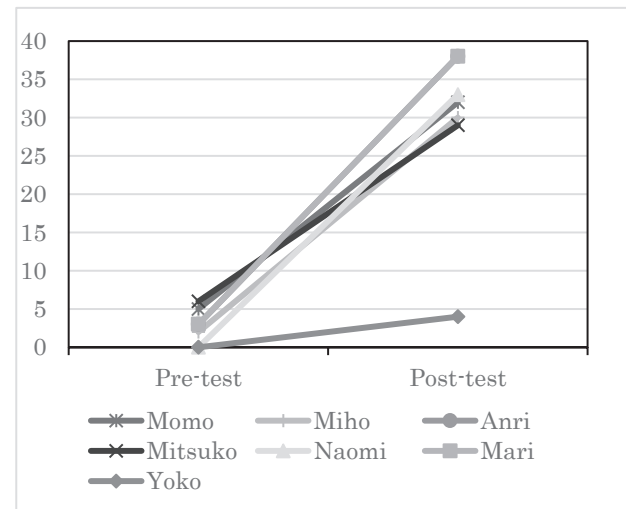


Figure 2: Test results of 120 words (quizzes on 40 words)

The results of Nation's Vocabulary Size Test in Figure 3 indicate that the scores of four students increased, but two students had nearly the same scores and one student's score dropped.

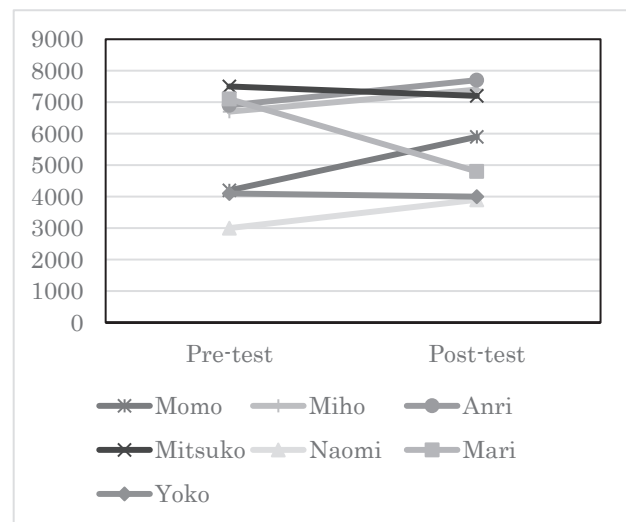


Figure 3: Test results of Nation's Vocabulary Size Test

Interviews

All students showed many signs of taking charge of their own learning. It ranged from reading aloud the words and sentences, checking collocations and pronunciation, writing them down, making daily plans to memorize words, taking mock quizzes, and trying to look at the words in their short spare time. Yoko, with the lowest score, spent about five minutes a day.

She “just looked at the words” when she had some free time. She also tried to memorize the words on the test date. She thinks that she needs to change her learning approach and believes that “each of us has some ways that are suitable for us.”

Four students used Quizlet to check the meanings in Japanese, pronunciation, and spelling of the words, using “Learn,” “Match” and “Write” functions on their smartphones (See Table 2). They acknowledged the effectiveness of visual images attached to the words. Momo, who had used Quizlet before, voluntarily created some study sets for the class. She used Quizlet at high school and found it very effective and suitable for her. The successful experience in the past might have motivated her to learn vocabulary using Quizlet. Mari said, “When we link the images with the words, it is easier to memorize.” She also used the “Write” function of Quizlet to practice spelling. She said, “Most people like to memorize by writing but I don’t. I like to learn with the sound.” Lastly, low-scoring Yoko did not use Quizlet because she did not know how to use it even though how to use the application was explained and demonstrated in class during the first lesson. She never asked for further instructions or support. After the final reflection in class, however, she wanted to try to use Quizlet because she heard from Mari with the highest score that the application was useful for her.

Table 2: Use of Quizlet

Momo	Yes
Miho	Yes
Anri	No
Mitsuko	No
Naomi	Yes
Mari	Yes
Yoko	No

Some students showed intrinsic and extrinsic self-motivation. An example of a student with intrinsic motivation is summarized in what Mari said, “I enjoy learning in my own way.” She loves watching movies

and listening to songs in English. Every time she notices that she can understand more, she feels more confident and motivated. Naomi tried Quizlet for the first time and found it easy to use. She said, “I was more motivated as I found a learning approach that suits me.” For extrinsic motivation, taking quizzes encouraged all students to work harder to a certain degree even though the quizzes were not graded. Six students had a different vocabulary quiz on the same day of the mid- and post-tests. Two students; Anri and Mitsuko, admitted in the interviews that they prioritised the graded quizzes. Anri still got the highest score of 38 and Mitsuko got the average score of 29 out of 40. Mitsuko said, “I want to be an English teacher in the future. So that motivates me to study English words.”

One of the major difficulties in online learning many students experienced was failing to study every day or consistently. Interestingly, most of the six students who got good scores mentioned that. They managed to do well, but they felt somewhat guilty for not studying every day as if it had been expected that they do so to become an autonomous learner.

IV Discussion

Reflection in groups after each test was apparently very effective to improve self-learning approaches. The students shared their learning experiences in group discussions and improved their approaches in the collaborative learning of 120 words. For example, after the mid-test, the students realized that “Learn” mode on Quizlet (See Figure 4) was effective for the test that required filling in the blanks in sentences with the missing words, because Miho who only used the “Learn” mode got the highest score. Then, other students started to use “Learn” mode. Most students actively participated in the group discussions, flexibly adjusted their learning approaches, and maintained motivation to get high scores.

Anri and Mitsuko did not use Quizlet but both achieved more than average scores. Their English proficiency level is CEFR B2, which is the highest in the class. At this level of proficiency, it is natural to



Figure 4: “Learn” mode on Quizlet

think that they are autonomous learners. They might have already established their own vocabulary learning styles and did not need to rely on new learning approaches using Quizlet. Mitsuko’s scores could have been higher because she mentioned in the interview that she intentionally spent more time studying for a vocabulary quiz in a different subject on the same day of the post-test because the quiz was graded. All six students, excluding Yoko, also had the same vocabulary quiz, however, some students such as Anri and Mari still managed to achieve the highest scores in the post-test.

Yoko, who had the lowest scores in both pre- and post-tests, almost never participated in the group discussions. She shared her opinion only when she was asked to, and she never asked questions of her classmates. Above all, she never changed her learning approach throughout the study, but all the others did. They shared their experiences and changed their approaches in the cooperative learning. Unfortunately, she was not able to participate in the collaborative learning. Although Momo and Yoko had approximately the same scores in the pre-test of Nation’s vocabulary size test; 4200 and 4100, respectively, their scores in the post-test were very different at 5900 and 4000. There seem to be two factors that might have influenced the performance of Yoko: technological anxiety and lack of self-efficacy.

First, Yoko was not familiar with electronic devices including smartphones and PCs. Online learning offers flexibility of time and place to the students. A qualitative study on the EFL university students’ views

on distance language learning, however, revealed that the learners faced technical problems associated with equipment and the Internet connection as well as postponing responsibilities (Altunay, 2019). The study also identified the problem with learner autonomy and motivation, calling for technical and academic orientation and support at the beginning of semesters (Altunay, 2019). Despite the orientation on how to use Quizlet on the first day, Yoko commented, “I didn’t use Quizlet because I didn’t know how to use it” in the interview at the end of the study. A teacher on Quizlet can monitor students’ progress online. More close monitoring of Quizlet progress may be necessary to support participants who is reluctant to use technology.

Second, Yoko may not have been confident in her autonomous learning due to the lack of successful experiences. She did not take charge of her own learning; therefore, learner agency was missing. Learner agency is essential in autonomous language learning. According to a study on learner agency in distance EFL learners suggests four areas in which agency play a central role: learners’ self-efficacy, identity, motivation, and metacognition (Xiao, 2014). Yoko was motivated and aware of the need to learn vocabulary, however she may need to improve her self-efficacy first to enhance learner agency.

To encourage students to believe that they have adaptive self-efficacy and competence, teachers need to give explicit and accurate feedback on what they can do to and provide tasks that are both manageable and challenging for the students (Pintrich, 2003). As for self-regulation issues, Ebner & Ehri (2013) propose the use of Structured Think-to-Yourself Directions and Checklist to ensure that students can see the consequences of their actions and constantly remind themselves of their goals. They specify the role of teachers as instructors on how to use or adapt the directions and checklist to support students’ online learning. The intention of the think-aloud procedure is to keep learners aware of their actions and goals and to make small steps toward the goals as well as visualizing the progress on the chart (Ebner & Ehri, 2013). A qualitative research on incorporating advising

strategies into tutoring to raise awareness in vocabulary learning shows that the private tutoring increased the learner's control over her vocabulary learning process (Aydin & Tütüniş, 2021). Language advising increased motivation, self-confidence, self-efficacy, autonomous attitudes of the student over time (Aydin & Tütüniş, 2021). Private tutoring may be more suitable for students with low confidence in their self-efficacy.

Limitations

One of the limitations of the study is that the test scores were not graded, and as a result, were not prioritized by some students who only marked the average scores in the post-test but marked the highest score in the different vocabulary quiz, which was graded, on the same day. There, the students might have achieved higher scores in the tests of this study if they had been graded.

Another limitation is that the difference of format between Quizlet and paper-based pre- and post-tests (See Figure 5). If the pre- and post-tests were conducted on Quizlet, more students might have used the application. Quizlet had the same list of words and visual images, however without example sentences that were included in the pre- and post-tests.

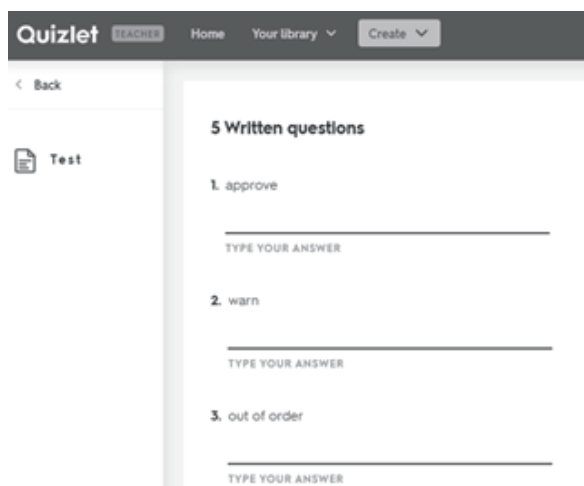


Figure 5: “Test” mode on Quizlet

This study used the test results as indicators of the vocabulary retention. It is, however, important for teachers to examine how tests are used in the

development of autonomous learning. A learning culture and an exam culture are often argued as two conflicting cultures (Hamp-Lyon, 2007). In the learning culture, classroom assessment focuses on learning and teaching, and in the exam culture, the focus is on preparation for an examination (Hamp-Lyon, 2007).

Lastly, the number of participants was small, only seven. Since their English proficiency levels varied widely, higher level students may have known some of the words tested before the study. To make the tests equally difficult among participants, unknown words could have been investigated before the study and been used as target words.

V Conclusion

Autonomous learning does not mean no teacher interventions. Teachers need to play a role as a facilitator while allowing the students to plan and choose their own learning approaches. Learning vocabulary may seem to be a daunting task especially for students who are at low proficiency levels. Giving students an approximate schedule and periodic assessments can help them achieve learning goals in small steps. Even though it was a small-scale research project with only seven participants, the learning approaches were all different, which means that one approach does not fit all. Next, autonomous learning does not have to be an individual task. Collaborative learning in and out of classrooms through sharing progress and ideas for improvement can increase motivation and enjoyment among learners. Lastly, online learning technologies may improve learner agency because learners can be more active and independent if they are well informed of the technological features of the online tools.

This study showed that an autonomous learner needs to have self-efficacy, which can be developed based on successful learning experiences. Collaborative learning using both online and traditional approaches promoted vocabulary learning among the remainder of six students who successfully achieved more than average scores in the post-test. The

motivation that helped learners to continue self-paced vocabulary learning varied from preparing to become an English teacher to just for pure enjoyment. Online learning was, however, apparently effective to support autonomous learners of four students who used Quizlet in their own ways. In the future study, more personalized supervision is required for learners who need to gain successful experiences to become autonomous learners.

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