Vocabulary Enhancement Through Multimedia Learning Among Grade 7th EFL Students[1]

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Abstract

Educational online games and educational videos are classroom methods that incorporate multimedia into language teaching. Previous studies have suggested that the use of online games and educational videos in language learning enhances student performance. However, no studies have been done using three different groups to examine whether online games or educational videos are more beneficial for language learning than conventional teaching, if at all. This study intended to fill the existing gap in research about vocabulary acquisition, using an experimental research design with a pre-test at the beginning of the program and a post-test at the end of the program. These tests were administered to 93 seventh grade EFL students. The participants were divided into three groups and taught using educational videos, online educational games, and conventional teaching respectively. Statistical analysis showed that there was a significant difference among these three groups. The use of educational online games resulted in higher achievement than the educational videos and conventional teaching. These results suggest that multimedia learning has a significant effect on vocabulary enhancement.

Resumen

Los juegos educativos en línea y los videos educativos son métodos de instrucción que incorporan multimedia en la enseñanza de idiomas. Estudios anteriores han sugerido que el uso de juegos en línea y videos educativos en el aprendizaje de idiomas mejora el desempeño de los estudiantes. Sin embargo, no se han realizado estudios con tres grupos diferentes para examinar si los juegos en línea o los videos educativos son más beneficiosos para el aprendizaje de idiomas que la enseñanza convencional. Este estudio pretendía llenar el vacío existente en la investigación sobre la adquisición de vocabulario. Se utilizó un diseño de investigación experimental con una prueba previa al comienzo del programa y una prueba posterior al final del programa. Estas pruebas se administraron a 93 estudiantes de inglés como lengua extranjera de séptimo grado. Los participantes se dividieron en tres grupos que fueron seleccionados al azar por el investigador. Los tres grupos recibieron instrucción utilizando videos educativos, juegos educativos en línea, y enseñanza convencional, respectivamente. El análisis estadístico mostró que hubo una diferencia significativa entre estos tres grupos. El uso de juegos educativos en línea resultó en un mayor rendimiento que los videos educativos y la enseñanza convencional. Estos resultados sugieren que el aprendizaje multimedia tiene un efecto significativo en la mejora del vocabulario.

Introduction

In many countries, English is taught as a foreign language with a high priority in the school curriculum. Indonesia is one of these countries; however, Katemba (2019) stated that “Indonesian students often experience problems when learning English because English differs from Bahasa Indonesia (the Indonesian language) in its structure, pronunciation, and vocabulary” (p. 88). To address these difficulties, English teachers have begun using computer technology to attract students' attention and increase their interest in learning the English language. In classrooms that mostly used computers and the Internet compared to teacher dominated classrooms, studies have shown greater student interest in the lesson, motivation, autonomy, and a willingness to learn, which suggests a positive correlation between online instruction and learner performance (Alharbi, 2019; Davidson et al., 2018, Flavin, 2016; Johnson, et al., 2016; Katemba, 2019; Katemba, 2021). Many studies have been done on vocabulary enhancement using educational videos or educational online games separately, often with an experimental group and control group; one group used technology and the other group did not use it. The researcher is not aware of any previous studies comparing the two multimedia groups i.e., two experimental groups, one using educational online games and one using educational videos, and a control group involving no technology). This study aimed to bridge this gap in knowledge and research by comparing whether online games, video learning, and conventional teaching differed in their impact on English vocabulary acquisition. This study is very useful during the world pandemic Covid-19 where many of the schools are locked-down, and students do not meet face to face with the teacher. Instead they meet via technology. In this study, three groups are compared, two experimental groups using technology—online games and educational video learning—and they were also compared against conventional teaching methods–a control group that did not utilize technology.

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Several studies showed that watching videos enhanced students' vocabulary learning and content comprehension (Hsieh, 2019; Montero Perez, 2019; Suárez & Gesa, 2019). Similarly, many studies have shown that online games enhance and improve learning (i.e., ultimately increasing English vocabulary) and enhance students' positive learning experience (Chen & Hsu, 2019; Ebrahimzadeh et al., 2016; Enayat & Haghighatpasand, 2019; Zou et al., 2019; Katemba & Sinuhaji, 2021; Peterson, 2016; Yip & Kwan, 2006).

Vocabulary is one component of language competence that enhances overall language skill. Cameron (2001) proposed that vocabulary is central for learning a foreign language at the primary level. In Indonesia, English is taught in elementary school, but unfortunately, most junior high school students in Indonesia lack extensive vocabulary, which results in poor overall achievement in the English language. Vocabulary acquisition in a foreign or second language (L2) is increasingly recognized to be multidimensional and difficult (Kim, et al., 2018; Pellicer-Sánchez, 2016). According to Wilkins (as cited in Thornbury, 2002), very little can be communicated without grammar, but nothing can be expressed or spoken without vocabulary. Restricted foreign/second language vocabulary hinders effective communication. Learning a language is impossible without knowing the words, and not knowing words prevents adequate expression of thoughts and intentions to others. According to Anisha (2011), words are like bricks used to build a small house or a big building. It is a lengthy process to create enough vocabulary to be able to interact in the target language. (Yip & Kwan, 2006.

This study seeks an answer to the following research questions:

1. *Which group of students—those taught by using educational videos, educational online games, or conventional teaching—has the highest achievement?*
2. *Besides ranking, are there differences in vocabulary learning between those students who are taught using educational videos, educational online games, and conventional teaching?*

Literature Review

Multimedia learning is a classroom instructional tool used by teachers to deliver and create effective teaching-learning activities. Multimedia utilizes all elements of technology, as it combines video, sound, image, drawing, and text (Fouda, 2008). Multimedia refers to any mediated software or interactive application that contains text, color, graphical images, animations, and any combination of auditory and visual effects.

According to Taj et al., (2017), students' performance in vocabulary increased when instruction was supported by technology such as computers and mobile phones. Several studies showed that vocabulary acquisition increased when technology such as computers, mobile phones, and courseware was used (Gonen, 2018; Taj et al., 2017; Yue, 2017). Multimedia learning promotes students' active learning and allows them to focus on course content and cooperative learning, ultimately engaging students' higher order thinking skills and representing ideas through a variety of media (Ivers & Baron, 2002).

Vocabulary teaching through educational videos

Lee and Pyo (2004) suggest a teacher should choose a compatible video depending on the learners' stage and proficiency level. This has become increasingly possible due to fact that videos, such as movies, dramas, documentaries, news reports, interviews, talk shows, and commercials, are easily accessible on the Internet. Also Montero Perez et al. (2018) and Nova et al. (2017) said learners can enhance their vocabulary through videos. Likewise, in a study done by Alhammami (2016) there was a statistically significant change in the memorization of the meanings of words associated with pictures and videos.

Vocabulary teaching through online games

Regarding the learning process, Thomas & Brown (2011) claimed that game-based learning is one of the most successful ways of learning because games can help develop content mastery, higher-order reasoning abilities, and social skills. Games are seen as an enjoyable element in language learning, which have been used to improve motivation and authentic communication practices (Macedonia, 2005). When creative video games are used for language learning, they increase students' motivation to learn. For instance, the gaming experience provides players with a sense of accomplishment as they complete missions and puzzles (Enayat & Haghighatpasand, 2017). This feeling may also enhance the students' motivation and lead to gains in incidental language learning (Liu & Chu, 2010). When students' motivation is boosted, the learning process is also accelerated and enhanced (Hwang, et al. 2016). Research shows that male participants typically play

video games more than women, in relation to the relationship between gender and video games language results, which may promote better vocabulary learning for males than females. (Sylvén & Sundqvist, 2012).

According to Thomas and Brown (2011), using online games can be an effective way to improve higher order thinking skills, content mastery, and social skills during the learning process, since vocabulary learning is often boring and monotonous for language learners, especially to those who grew up in the digital age. According to Donmus (2010), when games and education are mixed, it can be educational thus learning experiences can be fun (p.1499) Moreover, online games facilitate the production of the target language (Peterson, 2016). Students who learn to use games acquire optimistic attitudes and are inspired to learn while playing. People are also more relaxed, less tired, and more active when they do something they love, like playing games (Tobing, 2016; Taebenu, & Katemba, 2021). Students benefit from the enjoyment and relaxation that digital games provide during the learning process. (Katemba, 2019; Li et al., 2019; Sandberg et al., 2011). They increase students' interest, attention, motivation, and engagement (Liu & Chu, 2010; Zou et al., 2019).

According to Macedonia (2005) and Zou, et. al (2019), games can reduce the anxiety and fear of making mistakes. While playing games, students can focus on their creativity and thinking skills, and they will face problems that they must solve themselves. In effective games, new words frequently occur to help learners understand the application of a word in a variety of contexts and meaningful sentences. These multiple exposures may support vocabulary learning by increasing the possibility that the understanding of a word moves from short-term memory to long-term memory (Mostafa & Mohsen, 2017). Taebenu & Katemba (2021); Katemba & Sinuhaji (2021) found that teaching vocabulary by using online games was significantly effective.

Research methodology

This study employed an experimental method with a pre-test and post-test design. The pre-test had two objectives. The first was to prove that no significant difference in proficiency existed between the groups (usually one experimental group and a control group; in this study, there were two experimental groups and one control group), and the second was to develop a baseline for comparison between "before treatment" and "after treatment." The pre-test was administered at the beginning of the instructional program, and the post-test was administered to all the participants immediately after the program. They met twice a week face-to-face in the classroom with the teacher for 16 hours total.

Students who participated in this study were the pupils of Grade VII EFL classes in Parongpong, Bandung. Their ages ranged from 12-14 years old, and they all had the same cultural background. There were 93 participants, divided into three groups: 7th-grade section D (31 students), who were taught using educational videos; 7th-grade section E (31 students), who were taught using educational online games; and 7th-grade section B (31 students), who were taught using conventional methods and acted as the control group of this study. All of the students' level of English was at the beginning level since English is officially introduced in the grade 7 curriculum, following the national curriculum. The content of the lessons learned for the three groups was the same because it was taught by the same researcher/teacher; the only difference was the way it was taught. The vocabulary that was taught to these groups was related to the following topics: a) daily routines, b) job and occupations, c) possessive adjectives, d) verbs, e) people, f) things in the classroom and house, g) time, h) animals, i) seasons, weather, j) fruits, vegetables, and other plants. All the groups learned the same vocabulary and met twice a week for two hours. The videos and the online games included all the vocabulary to be learned.

Data collection

In gathering the data, the researcher performed a pilot test on the instrument (a multiple choice vocabulary test: match words to pictures, match the words with the definition, choose the correct word and odd one out), containing 50 questions in total. The test was administered to a different class to determine whether the instrument was reliable, valid, and comprehensible using the Anatest software program. The pilot test results were analysed, 40 questions were found to be valid and reliable. All 40 of these questions were used in the pre-test (see Appendix 2, Table A). The pre-test assessed 12 nouns, 10 verbs, 10 adjectives, and 8 others. The pre-test was administered to all three grade 7 sections, before the treatment. Samples of the test can be found in Appendix C.

Treatment procedure

a. Procedures of Educational Video Instruction (experimental group)

-The researcher introduced the lesson to the student.

-The researcher showed an educational video to the students using videos that were downloaded from YouTube with English text script that described the lesson. This is a sample of educational videos that are similar to the educational videos used in this research: 7ESL Learning English (https://www.youtube.com/watch?v=-bcQpYpixn8) and Teacher Prix (https://www.youtube.com/watch?v=MnIQ2_G8rxM).

-The researcher and the students watched the video together. Then, the researcher asked questions and gave new words to the students to practice in each of their groups or practice repeatedly as a whole class.

-The researcher distributed worksheets to the students to write the words that they learned from the video. The students were given different worksheets about the videos for each meeting.

-Students wrote the words that they remembered from the video to see what they had learned.

-The researcher replayed the video so the students could check the words that they wrote.

b. Procedures of Educational Online Games (experimental group)

-The instructor explained how the students could play online games and instructed them step-by-step on how to play the online game.

-Students were asked to use the internet provided in the classroom to play the online educational games.

-Students in the online games group used a variety of words in context. Students wrote the vocabulary that they had acquired recently and understand the meaning of the words that they wrote. The researcher evaluated the vocabulary that the students recently learned.

-The students began playing the games from the lowest level and proceeded to higher levels as they responded correctly.

-This is a sample of the educational online games used in this procedure: *Daily Procedures* (https://learnenglishkids.britishcouncil.org/word-games/daily-routines) and *How to tell the time* (https://learnenglishkids.britishcouncil.org/how-videos/how-tell-the-time)

c. Procedures of conventional teaching (control group)

The control group was taught using a conventional method for teaching vocabulary, without the use of technology.

-The researcher introduced the lesson to the students.

-Lists of vocabulary were given to the students, and they could use dictionaries to look up meanings.

-The researcher asked the students questions regarding the meaning of the new words from the list.

-Through repetitions and question-answer drills, the students practiced the words repeatedly in the class.

-The researcher distributed worksheets to the students to write the acquired words the students have learned. They were given different worksheets for each meeting.

The students “milled” around the classroom to look for the meaning of the word on the card they were holding; they -also looked for synonyms by milling around the classroom.

-Flashcards were used to teach the vocabulary.

-Teacher described the meaning and students found the words in the word list. Students matched words to pictures

-Students wrote the words that they remembered from the vocabulary list to see what they had learned.

-The researcher/teacher evaluated the vocabulary that the students recently wrote/learned.

Procedures a, b and c were done towards the end of the class period for 20 minutes. The researcher still had to teach the requirements from the school to and discuss what is in their textbook, and the vocabulary activity enhancement was done at the end of the lesson from their textbooks.

Example materials for a meeting of the three procedures mentioned above can be found in Appendix 1. The school textbook was provided by the Indonesian Education Department which is the same for all schools in West Java.

Post-test

Immediately after instructional treatment, the students took a post-test. The post-test was used to investigate the impact of using educational videos, educational online games, and the conventional way of teaching on students’ vocabulary enhancement, and to see whether there was a significant difference among them.

Questionnaire

A questionnaire was used to investigate the responses of the subjects in the EOG (Educated Online Game), and EV (Educated Video) groups. The questionnaire was designed in the form of multiple-choice questions based on a rating scale of 1-4 with the following options: A for strongly agree, B for agree, C for slightly agree, and D for disagree. Option A received a score of 4, option B received a score of 3, option C received a score of 2, and option D received a score of 1. The questionnaire was written in Indonesian to prevent misunderstanding. At the end of the session, the questionnaire was disseminated, after the students provided their responses after the post-test.

Data analysis on pilot test

The researcher did a pilot test of the 50 items/questions for the vocabulary test that was to be used for the pre-test and post-test to determine whether the instrument of choice was sufficiently reliable and valid for the experiment. SPSS computer software program was used to analyze the gathered data. The data in Appendix 3, Table A shows the results for the validity of the vocabulary test. From the pilot test administered, the data was analyzed using Anates (statistical program software), and the results show that 10 items/questions were not valid among the 50 items/questions, while 13 were very low, 9 questions were low, and 18 questions were moderate. The 10 items that were not valid were discarded, so only 40 items were used for the pre-test and post-test of the study.

To know whether each of the items/questions in the vocabulary test was suitable for the students, the items were pilot tested to see their level of difficulty. Anates software was used, and the results are shown in Appendix 3, Table B shows 22 items/questions were categorized in the “Difficult” Index with a range of 0.00-0.30. Twenty-five questions fell under the “Moderate” Index item ranging from 0.31 – 0.70, and 3 items fell under the “Easy” Index Difficulty, with a range of 0.71 – 1.00.

Criteria for testing the hypothesis of the study (the significant difference).

To be able to answer the second research question statistically, this hypothesis for the research was formulated: (1). Ho – Vocabulary learning does not vary greatly in some way between those students who are taught using educational videos, educational online games, and conventional teaching (2). Ha – Vocabulary learning does vary greatly in some way between those students who are taught using educational videos, educational online games, and conventional teaching.

To determine if a significant difference existed between the vocabulary improvement with the educational online games, educational videos, and the conventional teaching methods, the following criteria were used. If (Sig.) ≤ α (.050): Ho is rejected. This means that there is a significant difference between students who are taught using educational videos, online games, and conventional methods in improving vocabulary.

If (Sig.) ≥ α (.050): Ho is accepted. This means there is no significant difference between students who are taught using educational videos, online games, and conventional methods in improving vocabulary.

Results

In gathering the data, the researcher administered a pre-test and post-test to assess the vocabulary knowledge achievement of the students before the treatment and after the treatment.

	N	Minimum	Maximum	Mean	Std. Deviation
PreOG	31	20.51	82.05	51.5355	14.82022
PostOG	31	51.28	94.87	78.6726	11.61206
GainOG	31	.15	.91	.5690	.18646
PreV	31	23.07	74.36	52.3610	11.48685
PostV	31	53.85	94.49	75.8835	9.89630
GainV	31	.00	.79	.4981	.19539
PreCon	31	28.00	65.00	53.3548	6.71093
PostCon	31	60.00	77.00	69.5161	4.90490
GainCon	31	.13	.48	.2739	.09742

Note: Pre-pretest, Post- Posttest, OG-Online Game, V-Video, Con- Conventional

Table 1: Descriptive statistics

Table 1 shows the results of the pre-test and post-test for all three groups. The two experimental groups are educational online games (OG) and educational videos (V), while the control group used conventional teaching methods (Con). The gain of the test results was computed based on the pre-test and post-test scores of the methods used in this study. Table 1 shows that the mean of the educational online game method pre-test was 51.5355, while the mean of the post-test was 78.6726, and the normalized gain was 0.507965. The mean of the educational video method's pre-test was 52.36097, and its post-test mean was 75.88339. The normalized gain was 0.490636. The mean of the conventional teaching method pre-test was 53.3548, and the post-test mean was 69.5161. Its normalized gain was .2739. Statistical analysis shows that all the three groups improved in their gain score, but the highest gain among these groups was the educational online games, followed by educational videos. On the other hand, the control group, which used conventional teaching methods, attained the lowest gain score.

The average of the normalized gain score was computed for all groups, and tested for normality, as shown in Table 2. Using the Shapiro-Wilk Statistic, the result of EOG (.728) ≥ α (.050), which indicates that the data of the educational online games is normally distributed. The data of the control group is also normally distributed, with a normality test of (.246) > α (.050). The educational video method's normality test yielded (.014) < (.050), so the data is not normally distributed.

Group	Shapiro-Wilk		
	Statistic	df	Sig.
Class(OG)	.977	31	.728
Class(V)	.912	31	.014
Class(C)	.957	31	.246

Note: a. Lilliefors Significance Correction.
* This is a lower bound of the true significance.

Table 2: Tests of normality

To test for significance improvements in this study, the Kruskal Wallis test was used, and the results are shown in Table 3. This test was used because one of the groups- educational video group is not normally distributed. As shown in Table 3, the Kruskal-Wallis Test result shows that the Asymp. Sig. (.000) < α (.005). The result showed significant (0.000) improvement for this group. Thus, the null hypothesis was rejected.

	Class (Result)
Chi-Square	36.740
Df	2
Asymp. Sig.	.000

Note: a. Kruskal Wallis Test.
b. Grouping Variable: Class(group)

Table 3: The Kruskal-Wallis test statistics[a,b]

To support these findings, the researcher did another statistical test on both of the groups that used technology, the educational online games, and the educational videos (See Appendix 3, Tables C-1 & C-2) The statistical analysis was done through independent sample t-tests and ANOVA; both were sig. two-tailed (0.321> α 0.05), and since the p-value was bigger than the alpha-level, there was no significant difference among the students in the EOG and EV.

Discussion

In this study, students were taught through educational videos (EV), educational online games (EOG), and conventional teaching methods, to enhance their vocabulary knowledge. The results ultimately address the two research questions of the study: (1) *Which among the group of the students who are taught using Educational Videos, Educational Online Games, as well as the group of students only using conventional vocabulary teaching, has the highest achievement?* (2) *Is there any significant difference in vocabulary enhancement between those students who are taught by using educational videos, educational online games, and conventional vocabulary teaching?*

The results reported above indicate a significant difference among the methods in enhancing vocabulary. In other words, there is a significant difference between students who were taught using educational online games, those who were taught using educational videos, and those who were taught with the conventional teaching methods in enhancing their vocabulary knowledge. Therefore, it is concluded that multimedia

methods are effective in enhancing students' vocabulary based on the statistical analysis. The teacher can use either method for vocabulary improvement. The students who used the educational video method could have been interested in the method because they found the videos to be good, and they wished to continue watching the videos. This is in accordance with the previous research done by Teng (2020), which found that videos produced significant effects on learning vocabulary knowledge. As for the students who used the educational online games method, they were excited to interact with the words that appeared on the screen and see the outcome. Likewise, Zou et al. (2019) found that online games foster interactions among learners and demonstrate positive effects in developing short-term and long-term vocabulary learning. Based on the researcher's observation in the class that Students who used this method were enthusiastic about learning., and they were very curious about the upcoming games while playing their current games. Furthermore, the increasing difficulty that came with higher levels challenged the students and kept them engaged with the material. The students in this group strived to attain the highest scores and outperform their classmates. Furthermore, the online games' utilization of a reward system may have led students to "thrive on instant gratifications and rewards," which had a positive impact on learning outcomes, similar results of the study by Calvo-Ferrer (2018). It was further found that on both post-tests, students who played online games substantially outperformed the learners in the control group and correctly answered more questions. The control group did not play online games. The students who did play online games expressed positive attitudes toward the game used and reported that it was helpful for language learning, particularly for learning vocabulary. Moreover, in general, interactive games have a positive influence on encouraging short-term and long-term vocabulary learning. (Huang & Xie, 2019).

Therefore, it can be concluded that there is a significant enhancement in student's vocabulary knowledge after using educational videos and educational online games. Students' vocabulary enhancement was statistically shown to be higher than the conventional group in this study. A questionnaire was distributed to the students who used online games, and many students responded positively and enjoyed the methods that the researcher used in their classes. Some of the students did not want their turn on the computer to end because they greatly enjoyed the games. Both approaches were seen by the students as a friendly, interesting, and inspiring approach to learning. Similarly, Zou et al (2019), Chen & Hsu (2019), and Li et al. (2019) found similar feedback in their studies. The implications of this study can help optimize teaching English in the countries where English is a second or foreign language. The actual gap in knowledge is that no other current studies have compared all 3 groups

Pedagogical implications

Based on the research findings, the following recommendations are given to English teachers, language learners, and future researchers.

For English Teachers: The researcher recommends that educational videos and educational online games be implemented in the classroom to improve vocabulary knowledge, because students become more engaged and interested in such methods. They will enjoy the process of teaching, learning, and entertaining themselves, and in doing so, they will learn vocabulary effectively.

For Language Learners (LL): Educational video and educational online games are recommended for language learners. Such methods can help language learners to understand the material more easily and learn in a fun way.

For Future Researchers: The researcher recommends that future researchers to perform another study using educational videos and educational online games on a different level.

Study limitations

A major limitation of this study was that it was only done over a period of two months (16 hours of instruction for each of the three groups). A longer study duration would have yielded more precise results. Also, this study was done in a rural school in Bandung that has a shortage of technology, so not all students had access to an individual computer; 2-3 students shared a computer. If the students had access to and worked on the computer individually, the researcher expects that they would have even gained higher scores than those achieved during the study.

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Appendix 1

Education Online Games Links

Edutorial: Kitchen games vocabulary:

http://www.eslgamesplus.com/kitchen-vocabulary-memory-game-for-esl-practice

Eslgameplus.com:

http://www.eslgamesplus.com/preposition-interactive-grammar-game-for-esl-wheel-game

ESL Games: Verbs-grammar games:

https://www.eslgamesworld.com/members/games/ClassroomGames/Billionaire/Action%20Verbs%20Grammar%20Billionaire/index.html

https://www.eslgamesworld.com/members/games/ClassroomGames/index.html

http://www/eslgamesworld.com/members/games/ClassroomGames/Billionaire/Action%20Verbs%20Grammar%20Billionaire/play.html

http://www.eslgamesworld.com/members/games/ClassroomGames/Billionaire/Action%20Verbs%20Grammar%20Billionaire/index.html

http://www.eslgamesplus.com/possesive-adjectives-game/http://www/eslgamesplus.com/countable-uncountable-nouns-game

https://www.eslgamesplus.com/countable-uncountable-a-an-rally/https://www.eslgamesplus.com/countable-uncountable-nouns-game

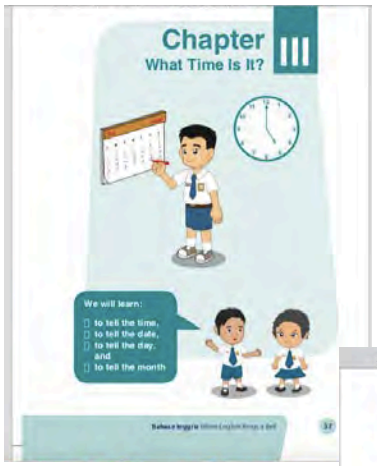
Video online:

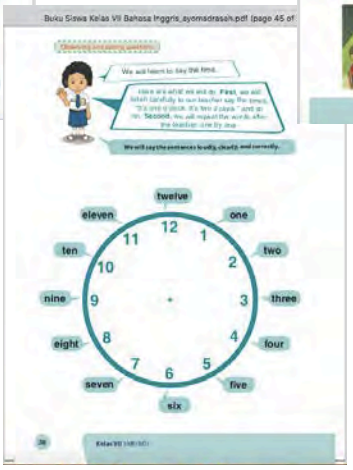
https://learnenglishkids.britishcouncil.org/word-games/daily-routines

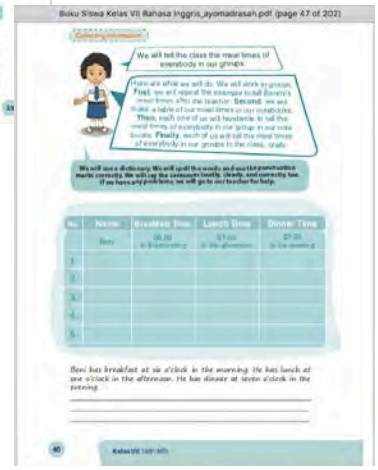
Appendix 2

Sample of Flash-out Materials Taught to the Students

(Wachidah, S., Gunawan, A., Diyantari, & Khatimah, Y. R. (2017), *Buku Guru Bahasa Inggris SMP/MTs Kelas VII - Kurikulum 2013 - Edisi revisi 2017*. Publishe Buku Sekolah Elektronik (BSE) ISBN: 9786022829805)







www.misteraidan.com

Name:_____

Class:_____

Read and answer the questions please.

This is Nelly. She's a nurse. She's tall and thin. She works at the hospital. She looks after sick people.

She gets up at six o'clock in the morning. She takes a shower and puts on her clothes. Then she eats breakfast at half past six. At seven o'clock, she drives her car to the hospital.

Nelly starts work at eight o'clock. She cleans the rooms in the hospital. Then, she helps the doctors. At twelve o'clock, she has lunch. She goes home at five o'clock.

At home, she takes a shower and she cooks dinner. She has dinner at half past six in the evening. Then, she watches TV. At ten o'clock, she goes to bed.

1. What's her name? _____
2. What is she? _____
3. **Where** does she work? _____
4. **Is she** fat? _____
5. **Can she** drive a car? _____
6. **Does she** get up at six o'clock? _____
7. **Does she** eat breakfast at seven o'clock? _____
8. **Does she** cook dinner at the hospital? _____
9. **Does she** help the doctors? _____
10. **Does she** go to bed at night? _____
11. **What time** does she have lunch? _____
12. **What time** does she have dinner? _____
13. **What time** does she go to bed? _____

Appendix 3

Tables A, B, and C: Results of the Pilot Tests.

Table A: Result of Validity Question

Item Number	r_{xy}	Interpretation
1,5,7,10,12,16,20,21,33,44.	≤ 0	Not valid
6,8,11,14,22,23,27,28,38,41,44,48,50	0.00 – 0.20	Very Low
2,3,13,15,19,25,26,36,49	0.21 – 0.40	Low
4,9,18,24,30,31,32,34,35,39,40,42,43,45,47,	0.41 – 0.60	Moderate
29,37,46	0.61 – 0.80	High
-	0.81 – 1.00	Very High

Table B: Result of Difficulty Level

Item Number	Index Difficulty (P)	Difficulty Degree
2,6,8,10,12,14,15,16,17,19,20,21,22,23,27,28,38,41,44,48,49,50	0.00 - 0.30	Difficult Item
3,4,7,9,13,18,24,25,26,29,30,31,32, 34,35,36,37,39,40,42,43,45,46,47	0.30 - 0.70	Moderate Item
1,5,33	0.70 - 1.00	Easy Item

Table C-1: Independent Sample t-test

	Levene's Test for Equality of Variances		**t-test for Equality of Means**						
	F	**Sig**	**t**	**df**	**Sig. (2-tailed)**	**Mean Difference**	**Std. Error Difference**	**95% Confidence Interval of the Difference**	
								Lower	**Upper**
Equal variances Gain assumed	2.222	.141	-1.000	60	.321	-3.61485	3.6147	-10.84517	3.61588
Equal variances Gain not assumed			-1.000	52.961	.322	-3.61465	3.6147	-10.84517	3.61588

Table C-2 ANOVA – Gain of EOG & EV

	Sum of Squares	df	Mean Square	F	Sig.
Between groups	202.518	1	202.518	1.000	.321
Within Groups	122.000	60	202.518	1.000	.325

Appendix 4

Samples of the Vocabulary Test (Pre-/Post-test)

Direction: Things in the classroom

1. The color is white, the shape is rectangle, and we can write something on it. What is it?
   a. whiteboard
   b. chalk
   c. marker
   d. blackboard
2. Have two short and long needles that indicate the time and hang on the wall. What is it?
   a. map
   b. clock
   c. door
   d. window
3. "I have 2 pencils". Which picture is suitable with the sentence?
   a. .
   b. .
   c. .
   d. .
5. Something that you cannot find in your class…
   a. table
   b. bag
   c. book
   d. frying pan
6. Chair is…. , but table is bigger than chair.
   a. big
   b. small
   c. tall
   d. short
7. Something that you can find in your dining room…
   a. a rice bowl
   b. a bed
   c. a blanket
   d. a whiteboard
8. Something that you cannot find in your dining room…
   a. a fork
   b. a bowl
   c. a spoon
   d. a ruler
9. We can find it in the kitchen and we use it to frying a food. What is it?
   a. a bowl
   b. a frying pan
   c. a spoon
   d. a fork
10. It is a big thing in the kitchen and we use it to freeze something. What is it?
    a. a refrigerator
    b. a frying pan
    c. an oven
    d. a stove
11. There is a rice bowl at the…
    a. dining room
    b. bed room
    c. bath room
    d. classroom
12. We have one library at the…
    a. school