

## The use of seamless learning strategy on student vocabulary mastery

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### ABSTRACT

*This study aims to see empirical evidence of the effect of unlimited learning on students' vocabulary mastery. Researchers used experiments in class I MTs Darussalam Gapluk Purwosari Bojonegoro. It aims to increase students' awareness by expanding their room from home and school to their everyday lives. Seamless learning allows for continuous learning experiences in several environments, such as school or home, while seamless learning is spread across multiple environments. Seamless learning is a flawless network where learning takes place anywhere and anytime. Some of the benefits of using a seamless approach include: 1) students can study classes and time without limits, 2) students can study at any time, and anywhere 3) integrated learning between formal and non-formal education. Based on the post-test outcome, the average post-test score was 82.6667, while the pretest average was 52000. It means that the average post-test is 52000. The score is higher than the Pretest.*

**Keywords:** seamless learning, vocabulary mastery.

### I. INTRODUCTION

Vocabulary is one of the word expressions that should be learned. Vocabulary is crucial because we can talk, distance, and listen to learn vocabulary first. Lack of encouragement and most learning systems in English vocabulary also makes it difficult for students to understand and master English (Wu, 2018). As a result, to help students learn English vocabulary in an

ever-evolving period, teachers need to update their time and adapt it to their teaching. Mobile and Internet technologies help formal and informal study processes, individual and social, and physical and virtual learning environments (Wong & Looi, 2011), which are conducive to "boundless research-based science learning" or "boundless scientific research" (Song & Kong, 2014).

In this sense, educators support a paradigm change from teaching-centered teaching to instruction-centered learning. The latter approach helps learners to develop skills in the 21st century through daily learning. Twenty-first-century skills include a wide variety of general skills required to overcome the daily challenges of the twenty-first century, including analysis skills, critical thinking skills, communication skills, and teamwork skills (Kong & Song, 2013). Good quality self-study will lead to heated communication, debate, and improved problem-solving skills (Yarbrough, 2018) (Hwang, Lai, & Wang, 2015)

Good quality self-study will lead to heated communication, debate, and improved problem-solving skills. As a result, in the reverse classroom process, students behave as Productive learners and use expert assistance to explain relevant concepts (Masriadi, 2019). This method is beneficial at this time for students to learn, particularly now that the coronavirus has not yet been resolved. School teachers should create meaningful Learning experiences intended to help students understand fluently and quickly, in particular, to link what they have learned in school with What they've encountered in their everyday lives. Some of the benefits of using a seamless

approach include: 1) students can study classes and time without limits 2) students can study at any time, and anywhere 3) integrated learning between formal and non-formal education (Hamid, Setyosari, & Kuswandi, 2019).

## II. LITERATURE REVIEW

### A. Seamless learning

Seamless learning is described as a continuous learning experience in various contexts (Chan et al., 2006). It aims to enhance students' awareness by extending their room from home and school to their everyday activities (Song, 2018). Seamless learning allows continuous learning experience in several settings, such as school or home (Milrad et al., 2013), while seamless learning is spread through various environments (Toh, So, Seow, Chen, & Looi, 2013). Seamless learning is seamless networking, where learning occurs anywhere and at any time (Safiah, Degeng, Setyosari, & Ulfa, 2020).

Seamless learning refers to the seamless integration of the learning environment in several dimensions, including formal and informal learning contexts, individual and social learning, and the physical and virtual world (Toh et al., 2013) through various processes and spaces. Study (inside or outside the classroom).

Combines the two learning models and combines the two, optimizing the benefits of each environment. It improves students' learning tasks through structured and interactive learning (L. H. Wong & Looi, 2011).

Thus, learning that utilizes seamless learning can assist students in completing assignments and learning experiences in an informal environment that impacts overall student achievement (L.-H. Wong, 2013). Thus formal and informal learning complements each other in achieving learning objectives.

It also underlines the need to design activities both inside and outside the classroom. In addition, it allows students to apply the skills they have gained in school to daily life. The seamless learning model is continuously applied both in terms of time, location and meaning. It is important to design seamless learning by the Islamic economic system to realize the learning process. It is necessary to use seamless learning to help students understand the vocabulary that is blocked by structures and spaces, and the approach will "sew" two different dividers.

## **B. Vocabulary Mastery**

Vocabulary is the cumulative number of words that students have learned to create

a language of communication(Kholis & Aziz, 2020). The role of vocabulary in foreign language learning cannot be ignored. A rich vocabulary can help students learn English and their four fundamental skills., which involve listening, speaking, reading, and writing. The value has been demonstrated by Thanh Huyen & Thi Thu Nga(Rohani<sup>1</sup> & Pourgharib, 2013), who describe vocabulary as a language aspect combining four language skills, like listening, speaking, reading and writing while studying a foreign language. In addition, (Hornby, Gatenby, & Wakefield, 1963) defines vocabulary in 3 directions, which includes (a) the total number of terms that make up the language; (b) any word that a person knows or uses in books, subjects, etc. (c) a list of words having their meaning(Richards & Renandya, 2002). The value of vocabulary has been noted, stating that vocabulary plays an important role in learning foreign languages and that language skills can influence how well learners speak, listen, read, and write. (Utami, 2014), however, it underlines the value of vocabulary for communication by asserting that communication at the survival level can occur very intelligently when people simply put words together-without applying any grammar rules. It was once. In this sense, vocabulary is considered one of the key factors that offer a lot of power to people's

communication(Ikhlās, 2019). Therefore, vocabulary should be an integral aspect of language learning, and a great deal of focus should be placed on putting it into effect.

### III. METHOD

In this exploration, the scientist used quantitative analysis that implemented a pretest plan with one Pretest and post-test structure and non-randomized. (Suen & Ary, 1983) argues that experimental research is the only discovery approach that can evaluate the theory of cause and effect relationships. This research design would like to address classroom problems related to learning the language of instruction. The Pretest was offered to the under-study before treatment. The post-test was given to the post-treatment undergraduates to find out the motivation of students and students' skills in writing descriptive texts.

The design suggests that the instructor gave them a pretest before using seamless and then gave them a post-test after promoting seamless everyday use.

#### A. Population and sampling

This exploration is the first grade of Mts Darussalam Gapluk Purwosari Bojonegoro that consists of 30 students.

#### B. Data collection

In this study, researchers used a questionnaire and Pretest, and post-test. The researcher made 15 statement items related to unlimited learning in vocabulary mastery. Researchers also collected information on Pretest and post-test ratings. Specialists give a pretest before the learning process and provide a post-test after the learning procedure is complete.

#### C. Data analysis technique

After collecting the information from the questionnaire and the Pretest and post-test scores, the researcher analyzed the information. The researcher used a quantitative analysis approach using a statistical method. This technique is used to consider the extraordinary distinction in vocabulary abilities of students before and after smooth learning. The researcher used the application of IBM SPSS Statistics for windows to analyze data.

In the analysis of the results, the researcher checked the normality before measuring the t-test to assess the normal distribution.

### IV. RESULT

This section presents the subtleties of the inquiry and the details obtained during the information analysis process. Look at the mastery of vocabulary before and after using

seamless learning by using a t-test. Before the t-test was computed, the analyst tried the normality of the details.

### A. Pretest

Pretest that given to the students before applying seamless learning on vocabulary mastery. The result of the students' score in the Pretest can be seen as follows:

	N	Mini mum	Maxi mum	Mean	Std. Devia tion
PRETEST	30	40,00	70,00	52,0000	8,469 01
Valid N (listwise)	30				

### B. Post-Test

Post-test that is given to the students after applying seamless learning. The post-test is done to know about the final score and the differences before and after applying Cooperative-project based online learning. The result of the students' score in Post-Test can be seen as follows:

	N	Mini mum	Maxi mum	Mean	Std. Deviation
POSTTEST	30	70,00	90,00	82,6667	6,91492
Valid N (listwise)	30				

### C. Final Inquiry

In this study, the researcher used T-Test to analyze and detect differences between Pretest and post-test.

Paired Samples Statistics					
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	PRETEST	52,0000	30	8,46901	1,54622
	POSTTEST	82,6667	30	6,91492	1,26249

The Pretest and post-test speaking scores are shown in the table to react to the purpose of this report. Referring to Table 1, 30 students participated in this study. The results show that the student's average pretest score is 52,0000, and the average post-test score is 82.6667. As shown in Table 1, the statistical analysis results show that there are significant differences between pre- and post-test scores. The findings support

the hypothesis that "the effect of seamless learning on vocabulary mastery."

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	PRETEST-POSTTEST	-30,6667	10,14833	1,85282	-34,45611	-26,87722	-16,551	29	,000

From the table, the value to be considered (Sig. 2 tailed) is 0.000, the value <0.05, then the critical value and the value obtained is -16,551 at the fundamental level of 0.05 and the level of opportunity 34. It indicates there is something to be considered in seamless learning. (Field, 2004)explains, "If the value is less than 0,05, the mean of the two conditions is substantially different."

## V. DISCUSSIONS

Concerning research conducted in the first grade of Mts Darussalam Gapluk Purwosari Bojonegoro, it is considered that there is a major difference between student

vocabulary mastery taught using seamless learning and those taught not using seamless learning. Based on the findings of the post-test estimate, the average post-test score was 82.6667, while the pretest average was 52000. It means that the post-test average score is higher than the Pretest.

Researchers have found that there was a major impact of smooth learning on vocabulary mastery. It can be seen from the test hypothesis that indicates the existence of Sig. (2 tailed) 0.000 lower than the 0.05 degree of importance. It means that Ha is welcomed while Ho is denied.

## VI. CONCLUSION

Based on the results of the research and discussion mentioned, it can be concluded that there are differences in vocabulary learning among students. It appears to be shown that the significant value (Sig. 2 tailed) is 0.000, the value is <0.05, so it is significant.

As seen from the post-test results, most students are more advanced in their learning process—proven evidence in the table indicating good outcomes.

The findings have shown that seamless learning can enhance learning outcomes. It is consistent with the findings of research conducted by (Song & Kong, 2014)which

show that learning experiences using seamless learning can improve learning outcomes. Furthermore, seamless learning is also successful in enhancing field observation efficiency (Hung, Hwang, Lin, Wu, & Su, 2013). There is a consistency of learning experiences in different situations or environments of smooth learning.

Seamless learning architecture tends to affect awareness of the student's overall progress (L.-H. Wong, 2013). Informal learning allows the group to assist in the teaching of digital social skills of students. When in social interaction, students appear to gain a deeper understanding of the concepts taught (Alcántara, 2014)

Interviews with students and the community on the benefits of using mobile/cellular technologies were performed in the design of informal learning (L.-H. Wong, 2013). Cell phones are designed to meet users' needs and across formal and informal boundaries (Impedovo, 2011). There are many benefits associated with mobile devices, such as portability, timeliness, independence, and encouragement to learn (Zakaria, Abas, Masrom, Mohdali, & Mohamed, 2019). There are two features of cellular learning: 1) the ability to take place in a mobile environment and 2) the ability to

recreate student learning skills (L.-H. Wong, 2013).

## VII. REVERENCES

- Alcántara, J. E. (2014). *Essentials of Online Course Design: A Standards-Based Guide*. By Marjorie Vai and Kristen Sosulski. New York, NY: Routledge Press, 2011. 204 pages. ISBN 978-0-415-87300-0. \$34.95. *Teaching Theology & Religion*, 1(17), 88–89.
- Chan, T.-W., Roschelle, J., Hsi, S., Kinshuk, Sharples, M., Brown, T., ... Norris, C. (2006). One-to-one technology-enhanced learning: An opportunity for global research collaboration. *Research and Practice in Technology Enhanced Learning*, 1(01), 3–29.
- Field, A. P. (2004). *Discovering statistics using SPSS*. Sage, London. *Discovering Statistics Using SPSS. 2nd Ed. Sage, London*.
- Hamid, A., Setyosari, P., & Kuswandi, D. (2019). The Implementation of Mobile Seamless Learning Strategy in Mastering Students' Concepts for Elementary School, 7(December), 967–982.
- Hornby, A. S., Gatenby, E. V., & Wakefield, H. (1963). *The advanced learner's dictionary of current english*.
- Hung, P.-H., Hwang, G.-J., Lin, Y.-F., Wu, T.-H., & Su, I.-H. (2013). Seamless connection between learning and assessment—applying progressive learning tasks in mobile ecology inquiry. *Journal of Educational Technology & Society*, 16(1), 194–205.
- Hwang, G.-J., Lai, C.-L., & Wang, S.-Y. (2015). Seamless flipped learning: a mobile technology-enhanced flipped classroom with effective learning strategies. *Journal of Computers in*

- Education*, 2(4), 449–473.  
<https://doi.org/10.1007/s40692-015-0043-0>
- Ikhlas, M. (2019). Perancangan dan Implementasi Multimedia Interaktif Berbasis Android pada Mata Pelajaran IPA di Sekolah Menengah Atas. *Indonesian Journal of Instructional Media and Model*, 1(2).
- Impedovo, M. (2011). Mobile learning and activity theory. *Journal of E-Learning and Knowledge Society*, 7(2), 103–109.
- Kholis, M., & Aziz, I. N. (2020). The Effect of Project-Based Learning on Students Vocabulary Achievement at Second Grade of Islamic Junior High School. *JEET, Journal of English Education and Technology*, 1(01), 1–19. Retrieved from <http://jeet.fkdp.or.id/index.php/jeet/article/view/1>
- Kong, S. C., & Song, Y. (2013). A principle-based pedagogical design framework for developing constructivist learning in a seamless learning environment: A teacher development model for learning and teaching in digital classrooms. *British Journal of Educational Technology*, 44(6), 209–212.  
<https://doi.org/10.1111/bjet.12073>
- Masriadi, M. (2019). Perancangan Multimedia Pembelajaran Mesin Mobil Menggunakan Software Adobe Flash untuk Siswa Sekolah Menengah Kejuruan. *Indonesian Journal of Instructional Media and Model*, 1(1).
- Milrad, M., Wong, L.-H., Sharples, M., Hwang, G.-J., Looi, C.-K., & Ogata, H. (2013). Seamless learning: An international perspective on next-generation technology-enhanced learning.
- Richards, J. C., & Renandya, W. A. (2002). *Methodology in language teaching: An anthology of current practice*. Cambridge university press.
- Rohani<sup>1</sup>, M., & Pourgharib, B. (2013). The Effect of Games on Learning Vocabulary.
- Safiah, I., Degeng, I. N. S., Setyosari, P., & Ulfa, S. (2020). Design and development of seamless learning to improving learning outcome of Islamic economic course: a case study in Indonesia. *Journal of E-Learning and Knowledge Society*, 16(3), 60–67.
- Song, Y. (2018). Improving primary students' collaborative problem solving competency in project-based science learning with productive failure instructional design in a seamless learning environment. *Educational Technology Research and Development*, 66(4), 979–1008.
- Song, Y., & Kong, S. C. (2014). Going beyond textbooks: a study on seamless science inquiry in an upper primary class. *Educational Media International*, 51(3), 226–236.  
<https://doi.org/10.1080/09523987.2014.968450>
- Toh, Y., So, H.-J., Seow, P., Chen, W., & Looi, C.-K. (2013). Seamless learning in the mobile age: A theoretical and methodological discussion on using cooperative inquiry to study digital kids on-the-move. *Learning, Media and Technology*, 38(3), 301–318.
- Utami, Y. S. (2014). student vocabulary mastery using crossword puzzles for grade VII of SMP N 2 srandakan in the academic year of 2013/2014. *Yogyakarta State University*.
- Wong, L.-H. (2013). Analysis of students' after-school mobile-assisted artifact



- creation processes in a seamless language learning environment. *Journal of Educational Technology & Society*, 16(2), 198–211.
- Wong, L. H., & Looi, C. K. (2011). What seams do we remove in mobile-assisted seamless learning? A critical review of the literature. *Computers and Education*, 57(4), 2364–2381. <https://doi.org/10.1016/j.compedu.2011.06.007>
- Wu, T. T. (2018). Improving the effectiveness of English vocabulary review by integrating ARCS with mobile game-based learning. *Journal of Computer Assisted Learning*, 34(3), 315–323. <https://doi.org/10.1111/jcal.12244>
- Yarbrough, J. R. (2018). Wiki Based Dynamic Quizzes: A Bridge Between Online Students and Instructors? *Journal of Instructional Pedagogies*, 20, 1–39.
- Zakaria, W. N. W., Abas, H., Masrom, M., Mohdali, R., & Mohamed, N. N. N. (2019). Development of Self-learning Economics App for Secondary School Students in Malaysia Based on Information Processing Model. *TEM Journal*, 8(3), 908.