

JURNAL BASICEDU

Volume 6 Nomor 3 Tahun 2022 Halaman 4282 - 4288 Research & Learning in Elementary Education <u>https://jbasic.org/index.php/basicedu</u>



The Effectiveness of Using Google Classroom for Self-Directed Learning (SDL) Students in Learning English

Basar Lolo Siahaan[⊠] HKBP Nommensen Pematangsiantar University, Indonesia E-mail: <u>lolosiahaan89@gmail.com</u>

Abstrak

Kursus ini bertujuan untuk mengeksplorasi penggunaan Google Classroom untuk meningkatkan pembelajaran siswa (SDL) belajar bahasa Inggris. Menggunakan penelitian yang komprehensif, 50 mahasiswa Pendidikan Bahasa Inggris di HKBP Nommensen Universitas Pematangsiantar diuji sebelum ditawarkan dukungan bahasa Inggris yang didukung oleh penggunaan Google Classroom selama satu semester. Setelah perlakuan, siswa melakukan tes setelah menggunakan instrumen PRO-SDLS untuk melihat apakah ada perbedaan statistik antara hasil pre-test dan post-test. Hasil penelitian menunjukkan bahwa terdapat perbedaan yang signifikan pada siswa SDL antara awal tes dan pasca tes. Oleh karena itu, dapat disimpulkan bahwa penggunaan Google Classroom dapat membantu siswa mengembangkan keterampilan SDL mereka dalam belajar bahasa Inggris.

Kata Kunci: self-directed learning, google classroom, sistem manajemen pembelajaran, pembelajaran bahasa inggris.

Abstract

This course aims to explore the use of Google Classroom to improve student learning (SDL) learning English. Using comprehensive research, 50 English Language Education students at HKBP Nommensen Pematangsiantar University were tested before being offered English language support supported by the use of Google Classroom for one semester. After the treatment, the students took a test after using the PRO-SDLS instrument to see if there was a statistical difference between the results of the pre-test and post-test. The results showed that there was a significant difference in SDL students between the beginning of the test and the posttest. Therefore, it can be concluded that the use of Google Classroom can help students develop their SDL skills in learning English.

Keywords: self-directed learning, google classroom, learning management system, learning English

Copyright (c) 2022 Basar Lolo Siahaan

ISSN 2580-3735 (Media Cetak) ISSN 2580-1147 (Media Online)

Jurnal Basicedu Vol 6 No 3 Tahun 2022 p-ISSN 2580-3735 e-ISSN 2580-1147

INTRODUCTION

Education is a learning process for individuals or students who are expected to have an understanding of something and make students think critically in thinking, education is applied to the learning process (Slavin, 2019). The learning process has several types in the implementation of the 2013 curriculum, it is hoped that the learning process carried out can provide freedom in determining learning activities, evaluating learning outcomes, planning learning systems independently (more student-centered) Palupi, (2018); Thoyyibah et al., (2019). One type of learning that is more student-centered is self-directed learning. The SDL model can be interpreted as a learning process that can arouse curiosity and give students the freedom to determine the learning environment for students independently Merriam & Baumgartner, (2020); Geng et al., (2019). The goal of education today cannot be separated from the need to improve technology as a skill that teachers and students should have. Internet technology, for example, today has lost all of our education, all in terms of teaching, learning, teachers, students, and parents. The variety of conveniences and benefits offered by information technology is one of the concepts of using technology in teaching and learning methods. The utilization of technology has also become a research tool related to the promotion of education (Taber, 2018). The convenience referred to is like gathering and sharing information, discussing in groups, for interaction between teachers and students in one medium that can be accessed anywhere and anytime using computer technology and the internet advances in information technology also have a positive impact on learning activities, one example being the use of e-learning in the application of Self-Directed Learning methods and the use of elearning in which students are expected to be able to apply the learning process independently in basic learning programming materials.

For example, the learning social media application or learning management system (LMS) that has been widely used today can provide alternatives that can be obtained by teachers and various teaching materials, interactions between teachers and students to the exam venue. Edmodo, for example, as one of the most popular social media applications dedicated to learning has many features that teachers and students can use inside and outside the classroom via the internet. Various studies were also conducted to find evidence of the benefits and consequences of using social media applications in the teaching and learning process (Abbas et al., 2019). One example of research conducted shows that the use of Edmodo in learning can help develop Self-Learning (SDL) skills. Independence can only be understood as deep learning without the help of others and seeing the learning objectives to be achieved (Cox et al., 2020). In addition, SDL is also one of the forms of learning needed to address the challenges of this adult learning objective, which is a form of learning.

Several lessons and lessons related to the use of social media application in teaching and learning done by Safapour et al., (2019) titled a place for personal study, Social Media, and Self-Learning: A natural form of integrating formal and informal learning that aims to create a sense of the relationship between the Personal Learning Environment, Social Media and Self-Learning, and offers three-step. a plan to use social media to create a Personal Learning Area supports student self-study. This study concludes that teaching students to learn effective self-help can help them acquire basic and complex personal knowledge management skills that are essential to creating, managing, and maintaining a Personal Learning Environment using a variety of social media applications available. This conclusion can certainly support this research further as a basis for testing and finding evidence. In addition, the study also demonstrates that integrated learning strategies integrated into historical learning platforms greatly enhance support and help address issues that contribute to students 'successful learning of a foreign language in question. With these results, the opportunity to use social networks in language learning becomes increasingly evident in the ability of individual students to self-study, which independently requires the ability to solve the problem (Xuan et al., 2020). In addition, to improve online-based learning, learning needs to be studied to understand how strategies can be effectively implemented in onlinebased learning itself (Colomo-Magaña et al., 2020).

See several results research and recommendation research beforehand to test using different apps for Upgrade Self-Directed Learning (SDL) in learning English, so this study aims to test user application Google duplicate the English language.

Self-Directed Learning is one of many ways to improve student skills. As part of independent learning, of course, the SDL chart cannot be separated from the role of students in planning student learning needs and goals independently, the same thing as stated by González et al., (2018) that SDL is a learning model that considers student learning styles and provides autonomy on students in preparing lesson plans, determining the activities of Mandarin students. Seeing several definitions above, it can be concluded that Self-Directed is a student's affective ability needed to support students in carrying out their learning activities. Namely the ability to make learning plans, determine learning models, control, and evaluate learning outcomes independently in a regular process.

Research conducted by Shapiro et al., (2017) entitled A Conceptual Model for Understanding Self-Directed Learning states that teaching and learning activities using self-directed learning can be evaluated from several aspects of independent learning. Some aspects that can be measured include the desire to learn (desire for learning), self-control (self-control) learning independence in the management of the learning system (selfmanagement). The independent learning model allows students to learn to build self-efficacy, as an alternative to managing self-exploration, and independence this learning model provides learning freedom for students to develop and achieve optimal learning success.

Research on e-learning by Suartama et al.,(2020) claims that the use of websites can increase the value of e-learning learning outcomes and students' cognitive aspects. Research by Natalia & Julia, (2018)Under the heading Learning Material Comments on Moodle LMS noted that students who took online courses had a better understanding of the subject than students who only studied in traditional classrooms, as online learning was facilitated. Interesting media that can be accessed without the monopoly of online learning with a success rate of 20% higher than students who teach traditionally.

Sandybayev, (2020) in a study entitled Social Web Applications in Implementing Student-Centered Learning Systems, a study argues that technology-based learning helps students to exchange knowledge so that students can acquire skills through collaborative learning. In class, with the help of technology, e-learning can be applied as a learning medium, shifting the learning process from student-centered activities to student-centered activities.

In addition to web 2.0 technology applications, Edmodo applications such as digital penetration, memory competitors, and features are available on Edmodo, as well as Moodle LMS, Schoology, Blackboard, and Google Classroom. This application referred is a Social Networking Site or Learning Management System (LMS) that offers a system that can be used by teachers, students, and parents in carrying out Learning, Teaching, and Evaluation activities. For example, Edmodo has several applications that are used for reasons of easy use, support interaction between teachers and students, discussion, sharing theory in the form of text, images, sound, and video and can be accessed via a browser and mobile (Ekici, 2017). If students want to read more about it, features like the ones mentioned above are almost basic features that all Edmodo-like apps like Google Classroom have.

Google Classroom is one of the applications provided by Google and the virtual system is based on web application applications that can be used by users who use the web browser or mobile app. Google Search Engine Optimization with Google Classroom is a platform that users can use to connect to a device.

METHOD

The main design that will be used in this research is quasi-experimental (Galama et al., 2018). A total of 50 students of the English Education Study Program at HKBP Nommensen Pematangsiantar University in this study were given a PRO-SDLS pre-test which tested their orientation scale on Self-Directed Learning before

being given treatment in the form of learning English supported by the use of the Google Classroom application. The PRO-SDLS instrument is a Personal Responsibility Orientation to Self-Direction on a Learning Scale that can measure the melfuness scale of independent learning participants with 25 items originating from 4 SDL factors (*Initiative, Control, Self-Efficiency, and Motivation*). Each item was measured with a 5-point Likert scale. PRO-SDLS is one of the mainstay theories of the SDL and the theory of Brockett and Hiemstra. The reliability and validity of this instrument have been tested in many previous studies and are very suitable for use at participating universities (Purba et al., 2021). Treatment is also carried out by sharing online theory learning methods, online discussions, quizzes, and assignments done online in the Google Classroom application for one semester of learning. After that, students are welcome to write a PRO-SDLS post-test to help students organize orientation in Self-Direction Learning. Procedures are used to improve the use of the Google Classroom application by using the Self-Directed.

RESULT AND DISCUSSION

After the test of pre-test and post-test data, statistics were compiled for the hypothesis as follows:

 H_0 : Get a Google Classroom account using the Self-Directed Learning System.

Ha: There's a whining use of Google Classroom against lifting ability Student Self-Directed Learning.

Ratio Pre-test and Post-test results

Following is chart results obtained _ from Pre-test and Post-test PRO-SDLS based on four SDL factors (Initiative, Control, Self-Efficacy, and motivation) on 50 students.



Graph 1. Comparison of 4 factor SDL on Pre-test and Post-test PRO-SDLS

It can be seen in the graph that there is a significant increase in the average value for each SDL factor before and after treatment.

Results Paired t_{test}

Table 1										
Descriptive Statistics of Pre-Test and Post-Test Results										
	Mean	Ν	Std. Deviation	Std. Error mean						
Pre-Test	63.72	50	4,463	0.631						
Post-Test	83.84	50	5.092	0.720						

Based on the table, it is known that the average value of the pre-test is 63.72 while the average value of the post-test is 83.84 with a total sample of 50 students. Calculate the rate at which statistical analysis is performed with pre-test and post-test in the case of hypothetical data. Then, we get the test results as in the table below.

Table 2											
Results Paired t test											
Paired Difference											
95 Confidence											
Std.		Std. Error		Interval of the Difference		Sig. (2-					
	mean	Deviation	mean	lower	Upper	t	df	tailed)			
Pre Test	-20,120	6,400	0.905	21,939	-18,301	-22.228	49	0.0001			
Post Test											

Based on the results test on the value of t_{count} 22.228> t_{value} of 2.231 (df = 49) which means that H₀ is rejected and H_a accepted.

Discussion

This results naturally in line with the results study previously the goal main is test use application similar however on different samples. Obtained significant results to lifting SDL capability student. This thing Besides could be seen from the statistical test above, which can be understood simply from the results of the PRO-SDLS pre-test and post-test which showed enough boost significant in each SDL aspect. For example on aspect initiatives that get lifting Sufficient average score significant if compared to aspect others, namely from 15.36 to 20.62. This thing strengthens a theory that explains that SDL is a learning model that provides autonomy to college students in learning. Featured in the Google Classroom application that has the most aspects of the SDL as well as features, features as well as notifications, various publishing materials (Video, Text, and image). Feature notification makes it easy student for by independently check the availability of Theory learning, quizzes, and newly assigned tasks by the teacher. So with feature notification, students are required initiative to carry out activity existing learning in the application. Several studies, such as that conducted by Gallego-Gómez et al., (2021), relevant to this study, found that the Covid-19 epidemic activated digital literacy-based selflearning. Providing educational sites as learning resources for school children, namely online learning through the creation of educational applications and home-based learning programs as learning resources for school children from the National Television Channel of the Republic of Indonesia. Recently, research by Sumuer, (2018) found that students' readiness for independent learning is still moderate, so it is important for students to identify their own learning needs and develop a comprehensive online curriculum. Then another study revealed that the application of SDL can improve students' mental skills by studying physics online for Newton's Laws (Puspitaningrum & Prastowo, 2021). Besides, there are various theories and learning activities to develop students' learning motivation as a comment on column comment with gift theory in the form of videos.

CONCLUSION

This study concludes that it has a significant effect on the self-directed learning ability of students who get the learning process by using Google Classroom as a supporting medium for learning English. The results of the PRO-SDLS pre-test and post-test PRO-SDLS statistics are available in this database. Then, based on these findings, the researcher recommends the use of Google Classroom and other learning processes. Doctors claim to know about self-study, often apply SDL, and claim that SDL has a very influential impact on students. Lecturers still have difficulty in handling online learning, especially in pre-activity and post-activity. This activity is included in the SDL indicator but is still not effective because there is no follow-up activity after giving feedback. There is a discrepancy between the teacher's perception and the actual action. There are indications that lecturers of English education study program are still having difficulties in carrying out independent learning to increase student learning independence, especially in online learning.

REFERENCES

Abbas, J., Aman, J., Nurunnabi, M., & Bano, S. (2019). The Impact of Social Media on Learning Behavior for

Sustainable Education: Evidence of Students from Selected Universities in Pakistan. *Sustainability*, *11*(6), 1683. https://doi.org/10.3390/su11061683

- Colomo-Magaña, E., Soto-Varela, R., Ruiz-Palmero, J., & Gómez-García, M. (2020). University Students' Perception of the Usefulness of the Flipped Classroom Methodology. *Education Sciences*, 10(10), 275. https://doi.org/10.3390/educsci10100275
- Cox, C. R., Moscardini, E. H., Cohen, A. S., & Tucker, R. P. (2020). Machine learning for suicidology: A practical review of exploratory and hypothesis-driven approaches. *Clinical Psychology Review*, 82, 101940. https://doi.org/10.1016/j.cpr.2020.101940
- Ekici, D. I. (2017). The Use of Edmodo in Creating an Online Learning Community of Practice for Learning to Teach Science. *Malaysian Online Journal of Educational Sciences*, 5(2), 91–106.
- Galama, T. J., Lleras-Muney, A., & Van Kippersluis, H. (2018). The Effect of Education on Health and Mortality: A Review of Experimental and Quasi-Experimental Evidence.
- Gallego-Gómez, C., De-Pablos-Heredero, C., & Montes-Botella, J. L. (2021). Change of Processes in the COVID-19 Scenario: From Face-to-Face to Remote Teaching-Learning Systems. *Sustainability*, 13(19), 10513.
- Geng, S., Law, K. M. Y., & Niu, B. (2019). Investigating self-directed learning and technology readiness in blending learning environment. *International Journal of Educational Technology in Higher Education*, 16(1), 17. https://doi.org/10.1186/s41239-019-0147-0
- González, A., Conde, Á., Díaz, P., García, M., & Ricoy, C. (2018). Instructors' teaching styles: relation with competences, self-efficacy, and commitment in pre-service teachers. *Higher Education*, 75(4), 625–642. https://doi.org/10.1007/s10734-017-0160-y
- Merriam, S. B., & Baumgartner, L. M. (2020). *Learning in adulthood: A comprehensive guide*. John Wiley & Sons.
- Natalia, K., & Julia, O. (2018). New use of MOODLE tools for distance English language learning (experience of Krasnoyarsk State Agrarian University). *International Multidisciplinary Scientific GeoConference:* SGEM, 18(5.4), 225–232.
- Palupi, D. (2018). What type of curriculum development models do we follow? An Indonesia's 2013 Curriculum Case. *Indonesian Journal of Curriculum and Educational Technology Studies*, 6(2), 98–105. https://www.learntechlib.org/p/209313/
- Purba, Y. O., Fadhilaturrahmi, F., Purba, J. T., & Siahaan, K. W. A. (2021). *Teknik Uji Instrumen Penelitian Pendidikan*. https://repository.penerbitwidina.com/publications/349518/teknik-uji-instrumen-penelitian-pendidikan
- Puspitaningrum, H. Z., & Prastowo, T. (2021). High Order Thinking Skills Students Through Multi-Representation Test on Newtons Law Study. *Journal of Physics: Conference Series*, 1805(1), 12010.
- Safapour, E., Kermanshachi, S., & Taneja, P. (2019). A Review of Nontraditional Teaching Methods: Flipped Classroom, Gamification, Case Study, Self-Learning, and Social Media. *Education Sciences*, 9(4), 273. https://doi.org/10.3390/educsci9040273
- Sandybayev, A. (2020). The impact of e-learning technologies on student's motivation: Student centered interaction in business education. *International Journal of Research in Tourism and Hospitality (IJRTH)*, 6(1), 16–24.
- Shapiro, H. B., Lee, C. H., Roth, N. E. W., Li, K., Çetinkaya-Rundel, M., & Canelas, D. A. (2017). Understanding the massive open online course (MOOC) student experience: An examination of attitudes, motivations, and barriers. *Computers & Education*, 110, 35–50.
- Slavin, R. E. (2019). Educational psychology: Theory and practice.

Suartama, I. K., Triwahyuni, E., Abbas, S., Hastuti, W. D., Subiyantoro, S., & Salehudin, M. (2020).

Development of E-Learning Oriented Inquiry Learning Based on Character Education in Multimedia Course. *European Journal of Educational Research*, 9(4), 1591–1603.

- Sumuer, E. (2018). Factors related to college students' self-directed learning with technology. *Australasian Journal of Educational Technology*, 34(4).
- Taber, K. S. (2018). The Use of Cronbach's Alpha When Developing and Reporting Research Instruments in Science Education. *Research in Science Education*, 48(6), 1273–1296. https://doi.org/10.1007/s11165-016-9602-2
- Thoyyibah, N., Hartono, R., & Bharati, D. A. L. (2019). The Implementation of Character Education in the English Teaching Learning Using 2013 Curriculum. *English Education Journal*, 9(2), 254–266. https://doi.org/10.15294/eej.v9i2.30058
- Xuan, Q., Shu, X., Ruan, Z., Wang, J., Fu, C., & Chen, G. (2020). A Self-Learning Information Diffusion Model for Smart Social Networks. *IEEE Transactions on Network Science and Engineering*, 7(3), 1466–1480. https://doi.org/10.1109/TNSE.2019.2935905