EM 11 (2) (2022) 240-247

Educational Management

http://journal.unnes.ac.id/sju/index.php/eduman

Comparing Online and Offline Learning: Impact on Students' Motivation and Learning Achievement in English Subjects at HSPG Semarang Community Learning Activity Center

Audi Hifi Veirissa✉, **Eko Handoyo**, **Nina Oktarina**

Universitas Negeri Semarang, Indonesia

Article Info

Article History:
Recived 20th january 202
Accepted 02th march 2022
Published 15th August 2022

Keywords:
Online Learning, Offline Learning, Learning Motivation, Learning Achievement

Abstract

The aims of this study is to analyze the differences in student motivation and achievement between students who were taught by online learning and students who were taught by offline learning in English subjects at PKBM HSPG Semarang either partially or together. The methodology used in this research is quantitative research. The population in this study were grade C students at PKBM HSPG Semarang, 16 students in total. The sampling technique used by the author is non-probability sampling using saturated sampling. The methods of data collection using questionnaires and documentation. The collected data were analyzed using descriptive test techniques, normality tests, homogeneity tests, correlation tests, and manova tests to test the research hypothesis. The results of this study there were simultaneous significant differences in the average motivation and achievement of students between students who were taught by online learning and students who were taught by offline learning. The effect of online and offline learning on student motivation and achievement is 30.7%. The effect of online and offline learning on student motivation is 16%. The effect of online and offline learning on student achievement is 14.3%. The conclusion of this study is the average motivation and achievement of students taught by offline learning is better than the average motivation and achievement of students taught by online learning.

✉Correspondence Address:
Pascasarjana Unnes Kampus Pascasarjana Jl.Kelud Utara 3 Sampangan Semarang
E-mail : audihifi@students.unnes.ac.id

p-ISSN 2252-7001
e-ISSN 2502-454X

INTRODUCTION

Education is a conscious and systematic effort carried out by people who have more knowledge and are given the responsibility to be able to influence students to be able to have traits and characters in accordance with educational ideals. Learning is a process of interaction that occurs between teachers and students either directly, such as face-to-face activities or indirectly, by using media, models and learning methods. The learning process is an activity with educational value that gives meaning to the interactions that occur both between teachers and students and between students and students. The development of information and communication technology in the Industry 4.0 era has had a major influence on the teaching and learning process. The ease of access to technology has been used by teachers to improve the quality of education.

Online learning means learning that is done virtually using learning applications or social networks. Online learning is done without face-to-face meetings, but through available platforms. All forms of learning materials are distributed online, communication is also done online, and the tests are also conducted online. This online learning system is assisted by several applications, such as Google Classroom, Google Meet, Edmodo and Zoom. Online learning itself can be understood as formal education organized by schools where learners and instructors (teachers) are located in separate locations, thus requiring interactive telecommunication systems to connect the two and the various resources needed therein. Offline learning can be interpreted as a form of learning that is not at all connected to the internet or intranet network. Learners and teachers can learn using physical handbooks, modules, and so on. This offline learning usually also takes place face-to-face and usually takes place in the classroom. Learners must come to class to learn and meet face-to-face with the teacher or other learners.

By looking at the background that has been described above, several problems can be identified, including technological developments encourage learners to be able to adapt to online learning systems. Online and offline learning have their own advantages and disadvantages. The changing of learning conditions also has impacts on changes in students' motivation and learning achievement.

Based on the data collection of these problems, the application of online learning and offline learning to the motivation and achievement of English language learning for students at PKBM HSPG Semarang is an important and urgent problem to be resolved through research.

The objectives of this research are to analyze the difference in student motivation and achievement between students who are taught with online learning and those who are taught with offline learning in English subjects at PKBM HSPG Semarang. The study aims to explore the variations in student motivation levels, comparing the experiences of those engaged in online learning with those involved in traditional offline learning. Additionally, the research seeks to examine the disparities in student achievement between these two groups. By conducting a comprehensive analysis, this study aims to shed light on the effects of different instructional approaches, online and offline, on student motivation and academic performance in English subjects at PKBM HSPG Semarang.

Apart from having an impact on learning motivation, online learning also influences student learning achievement. Online learning is a learning mode that is carried out by teachers and students using the internet network and did not worked in the same room. Online learning directly affects student learning achievement because this is a new thing for the majority of students and teachers. They are required to be able to carry out online learning with all the limitations that exist. In online learning, students and teachers can use more varied learning media, for example using the *Quiziz* and *Wordwall* applications to attract students' interest in learning. For the assessments, teachers can also use the Edmodo application or Google Form to distribute exam questions. Students must be able to use some of these applications to support the

learning process, this is of course very influential on student achievement. The better the students take part in online learning, the better the learning achievement of students.

Offline learning or face-to-face learning can provide direct learning experiences to students through interactions that are created between teachers and students during learning activities. Considering that online learning is still a new thing for students and they are used to offline learning, it is easier for them to participate in face-to-face learning. This certainly also affects the learning achievement of students. Student learning achievement will increase if they can enjoy the learning process and do not feel burdened in the learning process. Students who are able to adapt well to offline learning will show better learning achievement than when they do online learning.

The hypothesis is a temporary answer to the research problem formulation, where the research problem formulation has been stated in the form of a question sentence. It is said to be temporary because the new answers given are based on relevant theory, not yet based on empirical facts obtained through data collection.

Based on the aforementioned statement, the hypotheses formulated for this study are temporary allegations or statements that require empirical testing to determine their validity. The study aims to investigate the impact of online and offline learning on student motivation and achievement in English subjects at PKBM HSPG Semarang.

There is a significant difference in the average student motivation between students who are taught with online learning and those who are taught with offline learning. This hypothesis aims to examine whether the mode of instruction, either online or offline, has a discernible influence on students' motivation levels in their English studies.

The study suggests that there is a significant difference in the average student achievement between students who are taught with online learning and those who are taught with offline learning in English subjects at PKBM HSPG Semarang. This hypothesis aims to assess whether the instructional approach, whether online or offline, has a measurable impact on students' academic achievements in the English subject.

The study posits that there is a simultaneous significant difference in the average student motivation and achievement between students who are taught with online learning and those who are taught with offline learning in English subjects at PKBM HSPG Semarang. This hypothesis aims to investigate the combined effect of instructional mode on both student motivation and achievement, providing a comprehensive understanding of the relationship between these variables.

METHOD

In this study, researchers used quantitative research. This research includes a type of research using comparative research. The populations of this study were grade C PKBM HSPG Semarang students who were 16 in total. the sample in this study were all of the population taken, grade C PKBM HSPG Semarang students who were 16 in total. the data collection techniques used in this study were documentation and questionnaires. Data collection techniques used in this study were documentation and questionnaires. In this study, the documentation method was used to collect data in the form of records, tracking of students' English first semester final exam scores in the 2021/2022 school year and the English first semester final exam scores in the 2022/2023 school year at PKBM HSPG Semarang to obtain information related to research problems. The questionnaire method was used in this study to measure online learning and offline learning variables by making research instruments.

RESULTS AND DISCUSSIONS

Descriptive statistical tests

Descriptive statistical tests are statistics used in analysing data by describing the data that has been collected. This test aims is to provide an overview or describe the data in the variables known from the mean and standard deviation. The results of the descriptive statistical test research can be seen in the table below.

Descriptive Test of Students' Motivation Data

Table 1. Students' Motivation Data of Descriptive Test Results

Learning mode	N	Mean	Std. Deviation
Offline learning	16	68.25	7.33
Online learning	16	60.13	11.43

Based on the table above, the average of students' motivation taught with online and offline learning is 68.25 and 60.13. From this average, it is known that the average of students' motivation taught with offline learning is greater. This means, descriptively, offline learning is better than online learning. Furthermore, the standard deviation of students' motivation in online learning is greater than the standard deviation in offline learning, which means that the variance of motivation deviation data in online learning is more diverse.

Descriptive Test of Students' Achievement Data

Table 2. Students' Achievement Data of Descriptive Test Results

Learning Mode	N	Mean	Std. Deviation
Offline learning	16	85	5.67
Online learning	16	80.88	4.70

Based on the table above, the average of students' achievement taught with offline learning and online learning is 85 and 80.88. From this average, it is known that the average of students' achievement taught with offline learning is greater. This means that descriptively, offline learning is better than online learning. Furthermore, the standard deviation of students' achievement in offline learning is greater than the standard deviation of online learning, this means that the variance of achievement deviation data in offline learning is more diverse.

Normality Test

The normality test was carried out using the Shapiro Wilk test, because the amount of data in each class was less than 50. The basis for decision making in the test can be done through a probability approach, the significance used is $\alpha = 0.05$. The basis for decision making is to look at the probability number, with the following conditions.

- If the Sig value. > 0.05 then the normality assumption is met.
- If the value of Sig. <0.05 then the normality assumption is not met.

Normality Test of Students' Motivation Data

Table 3. Students' Motivation Data of Normality Test Results

Learning Mode	N	Sig.
Offline Learning	16	0.192
Online Learning	16	0.075

Based on the normality test results in the table above, it is known that the Sig. value of students' motivation data in each learning model is greater than 0.05. Thus, motivation data in each learning model is normally distributed.

Normality Test of Students' Achievement Data

Table 4. Students' Achievement Data of Normality Test Results

Learning Mode	N	Sig.
Offline Learning	16	0.209
Online Learning	16	0.075

Based on the normality test results in the table above, it is known that the Sig. value of students' achievement data in each learning model is greater than 0.05. Thus, achievement data in each learning model is normally distributed.

Data Homogeneity Test

Data homogeneity test was conducted using Levene's Test statistical technique. The basis for decision making in the Levene's Test, can be done through a probability approach, the significance used is α = 0.05. The basis for decision making is to look at the probability number, with the following conditions:

- If the Sig value. > 0.05 then the assumption of homogeneity is met.
- If the value of Sig. <0.05 then the homogeneity assumption is not met.

Students' Motivation Data Homogeneity Test

Table 5. Students' Motivation Data Homogeneity Test Results

F	df_1	df_2	Sig.
1.569	1	30	0.220

Based on the results of the data homogeneity test in the table above, it is known that the Sig. value for the students' motivation data is 0.220, this sig. value is greater than the 0.05 significance level. This means that the students' motivation data between students taught with online and offline learning have homogeneous data variances students'.

Achievement Data Homogeneity Test

Table 6. Students' Achievement Data Homogeneity Test Results

F	df_1	df_2	Sig.
0,155	1	30	0.696

Based on the results of the data homogeneity test in the table above, it is known that the Sig. value for the students' achievement data is 0,696, this sig. value is greater than the 0.05 significance level. This means that the students' achievement data between students taught with online and offline learning have homogeneous data variances students'

Variance Matrix Homogeneity Test

The homogeneity test uses Box's M test with a significance level of $\alpha = 0.05$. The decision criteria taken if the resulting significance value is more than 0.05 then the variance-covariance matrix in both classes is the same or homogeneous.

Table 7. Homogeneity Test Results of Variance Matrix

Box's M	7.148
F	2.210
Sig.	0.085

Based on the results of box's m homogeneity test in the table above, it is known that the sig. Value is 0.085, this sig. Value is greater than the 0.05 significance level. This means that the students' motivation and achievement data between students taught with online and offline learning have a homogeneous data variance matrix.

Correlation Test

The correlation test was carried out on the dependent variable to determine the level of correlation between the achievement variable and the motivation variable. The test was carried out using Pearson's product moment test with a significance level of 5%. The basis for decision making is to look at the probability number, with the following conditions:

- If the Sig value. > 0.05 then there is no correlation.
- If the Sig value. <0.05 then there is a correlation.

Table 8. Correlation Test Results

		Students' Motivation
Students' Achievement	Pearson Correlation	-0.011
	Sig. (2-tailed)	0.954
	N	32

Based on the table above, the sig. value of 0.954 is greater than the significance value of 0.05. This means that there is no relationship between achievement variables and motivation variables.

Manova Test

After all the prerequisite tests for the manova test are met, then hypothesis testing can be carried out. The hypothesis sounds as follows.

Hypothesis I

H0: There is no significant difference in the average of student motivation between students taught with online learning and students taught with offline learning.

H1: There is a significant difference in the average of student motivation between students taught with online learning and students taught with offline learning.

Hypothesis II

H0: There is no significant difference in average of student achievement between students taught with online learning and students taught with offline learning.

H1: There is a significant difference in average of student achievement between students taught with online learning and students taught with offline learning.

Hypothesis III

H0: There is no significant difference simultaneously in the average of student motivation and achievement between students taught with online learning and students taught with offline learning.

H1: There is a simultaneous significant difference in the average of student motivation and achievement between students taught with online learning and students taught with offline learning.

The basis for decision making can be done through a probability approach, the significance used is α=0.05. The basis for decision making is to look at the probability number, with the following conditions:

- If the Sig. > 0.05 then H0 is accepted.
- If the value of Sig. <0.05 then H0 is rejected.

Table 9. Partial Manova Test Results

Dependent Variable	df	Mean Square	F	Sig.	Partial Eta Squared
Motivation	1	528.125	5.731	0.023	0.160
Achievement	1	136.125	5.018	0.033	0.143

Based on the table above, it is known that first, the sig. value of the motivation variable is 0.023 which is smaller than 0.05. Thus, H0 is rejected or there is a significant difference in the average student motivation between students taught with online learning and students taught with offline learning. Furthermore, the partial eta square value is 0.160, it means that the effect of online and offline learning on students' motivation is 16%. Second, the value of sig. achievement variable of 0.033 is smaller than 0.05. Thus, H0 is rejected or there is a significant difference in the average students' achievement between students taught with online learning and students taught with offline learning. Furthermore, the partial eta square value is 0.143, which means the effect of online and offline learning on achievement is 14.3%. Furthermore, a simultaneous test was conducted to answer hypothesis III. Based on the analysis, the results are as follows.

Table 10. Simultaneous Manova Test Results

	Sig	Partial Eta Squared
Pillai's Trace	0,000	0.307
Wilks' Lambda	0,000	0.307
Hotelling's Trace	0,000	0.307
Roy's Largest Root	0,000	0.307

Based on the table above, it is known that the sig. value for Pillai's Trace, Wilks' Lambda, Hotelling's Trace, and Roy's Largest Root is smaller than 0.05. Thus, H0 is rejected or there is a simultaneous significant difference in the average student motivation and achievement between students taught with online learning and students taught with offline learning. Furthermore, the partial eta square value is 0.307, which means the effect of online and offline learning on motivation and achievement is 30.7%.

Based on the results of the study, it was found that the average motivation and achievement of students taught with offline learning was better than the average motivation and achievement of students taught with online learning. There is a significant difference simultaneously in the average student motivation and achievement between students taught with online learning and students taught with offline learning. There is a significant difference in the average student motivation between students taught with online learning and students taught with offline learning. There is a significant difference in average student achievement between students taught with online learning and students taught with offline learning. The effect of online and offline learning on student motivation and achievement is 30.7%. The effect of online and offline learning on student motivation is 16%. The effect of online and offline learning on student achievement is 14.3%.

The average motivation and achievement of students taught with offline learning is better than the average motivation and achievement of students taught with online learning because in offline learning students can interact directly with the teacher and the process of teaching and learning activities becomes more controlled. This is in line with constructivism learning theory that individuals are active in constructing their knowledge through experience and reflection on the experience. Offline learning provides an opportunity for students to build their knowledge through direct interaction with the teacher and fellow students in the classroom. In this environment, students are given the opportunity to ask questions, discuss and collaborate with their peers to build a shared understanding of the material being studied. In constructivism learning theory, knowledge is considered the result of mental construction that occurs in the mind of the individual. Therefore, the teacher not only acts as a source of information, but also as a facilitator and mobilizer for students to build their own understanding. Offline learning can provide an opportunity for teachers to act as facilitators and direct students to construct their own knowledge through reflection and discussion.

CONCLUSION

We can conclude from this research that the difference in student motivation between students taught with online learning and students taught with offline learning in English subjects at PKBM HSPG Semarang is 16%, the difference in student achievement between students taught with online learning and students taught with offline learning in English subjects at PKBM HSPG Semarang is 14.3%, the difference in student motivation and achievement between students taught with online learning and students taught with offline learning in English subjects at PKBM HSPG Semarang amounted to 30.7%.

REFERENCES

Allan, B. (2007). Blended learning: Tools for teaching and training. Facet Publishing.

An, Y., Kaplan-Rakowski, R., Yang, J., Conan, J., Kinard, W., & Daughrity, L. (2021). Examining K-12 teachers' feelings, experiences, and perspectives regarding

online teaching during the early stage of the COVID-19 pandemic. Educational technology research and development, 69, 2589-2613.

Browning, M. H. E. M., Larson, L. R., Sharaievska, I., Rigolon, A., McAnirlin, O., Mullenbach, L., Cloutier, S., Vu, T. M., Thomsen, J., Reigner, N., Metcalf, E. C., D'Antonio, A., Helbich, M., Bratman, G. N., & Alvarez, H. O. (2021). Psychological impacts from COVID-19 among university students: Risk factors across seven states in the United States. PloS One, 16(1), e0245327.

Cahyani, A., Listiana, I. D., & Larasati, S. P. D. (2020). Motivasi belajar siswa SMA pada pembelajaran daring di masa pandemi covid-19. IQ (Ilmu Al-qur'an): Jurnal Pendidikan Islam, 3(01), 123-140.

Cheung, S. K. S., Wang, F. L., & Kwok, L. F. (2023). Online learning and blended learning: new practices derived from the pandemic-driven disruption. Journal of Computing in Higher Education, 35(1),

Cobb, C. A., Watson, C. T., & Ellis, S. R. (2018). Establishing best practices for effective online learning modules: A single institution study. Medical Science Educator, 28, 683-691.

Cohen, J. A. (2021). A fit for purpose pedagogy: online learning designing and teaching. Development and Learning in Organizations: An International Journal, 35(4), 15-17.

Comas-Quinn, A. (2011). Learning to teach online or learning to become an online teacher: An exploration of teachers' experiences in a blended learning course. ReCALL, 23(3), 218-232.

Kim, J. (2020). Learning and teaching online during Covid-19: Experiences of student teachers in an early childhood education practicum. International Journal of Early Childhood, 52(2), 145-158.

Koh, J. H. L., & Daniel, B. K. (2022). Shifting online during COVID-19: A systematic review of teaching and learning strategies and their outcomes. International Journal of Educational Technology in Higher Education, 19(1), 56.

Margolin, E. J., Kurtzman, J. T., Gordon, R. J., Anderson, C. B., & Badalato, G. M. (2021). Efficacy of an Online Blended Learning Curriculum to Improve Medical Student Urologic Education. Medical Science Educator, 31, 2007-2015.

McNamara, J., & Brown, C. (2009). Assessment of online discussion in work-integrated learning. Campus-Wide Information Systems, 26(5), 413-423.

Ragazzoni, L., Conti, A., Caviglia, M., Maccapani, F., & Corte, F. (2019). DisasterSISM: A Multi-Level Blended Learning Program in Disaster Medicine for Medical Students. Prehospital and Disaster Medicine, 34(S1), S83-S83.

Zapalska, A., & Brozik, D. (2006). Learning styles and online education. Campus-Wide Information Systems, 23(5), 325-335.