Indonesian Journal of Sustainability
Vol. 1 No. 2, December: 56-64
P-ISSN 2827-8526
E-ISSN 2827-8917

INDONESIAN JOURNAL of SUSTAINABILITY

Comparative study of online and offline learning results in Arabic course: Learning model in sustainability perspective

Resi Agustien
Institut Agama Islam Bakti Negara (IBN) Tegal
agustienresi@gmail.com

ABSTRACT

This study aims to compare online and offline learning results based on the analysis of students' learning results in Arabic course. This study used a quantitative approach with a comparative method. Data collection was carried out after the online and offline learning process was completed in a different semester. The sample of this study was the grade one college students of Islamic Education majoring in FITK IBN Tegal. It consisted of 51 students from 2019/2020 year academic and 37 students from 2020/2021 year academic. It generated 88 students in total for the sample. The students enacted as the sample of research were grade one student, since the Arabic course as the research object was taught in grade one. The compared data research was students' learning results on the 1st Arabic course. It encompassed four valuation components namely attendance, tasks, mid-term exam, and final exam scores compiled during online learning in 2019/2020 academic year and offline learning in 2020/2021 academic year. The data in the form of students' scores were analyzed using normality, homogeneity, and t-test analysis technique. The result of this study shows that there is a difference in result scores in online and offline learning which shows the number of 06,58. Based on the result, it can be concluded that offline learning generates higher Arabic scores than online learning.

Keywords: *online learning; offline learning; comparison study*

INTRODUCTION

The Covid-19 epidemic has been engulfing almost all countries in the world including Indonesia. Since then, Indonesia has been facing several problems including the educational sphere. Most learners are not being able to do offline learning in school. This is homework for the government or Ministry of Education and Culture to look for an alternative so that the learning process can be conducted despite the fact of the pandemic. It considers the importance of education for every human being in establishing national character and enhancing the potential of qualified human resources. Due to this necessity, on March 24, 2022, the Minister of Education and Culture issued Circular Number 4 of 2020 on the Implementation of Education Policy amidst the Covid-19 outbreak, namely a learning process implemented online (within a network). Thus, during the pandemic, every educational institution implements online learning activities

to reduce the risks of spreading the Coronavirus.

Online learning is a formal learning process implemented by schools whose teachers and students are in different places and connected by an interactive telecommunication system[1]. In common, the format of online media can only be accessed via the internet which consists of text, photo, video, and audio as online communication means (Romli, 2012). The online learning model is divided into two kinds, virtual face-to-face and learning management system (LMS). The virtual face-to-face is carried out via conference video, teleconference, and discussion in social media groups. Whereas, the LSM can be carried out via google classroom, online classes such as *Ruang Guru*, *Zenius,* and so on[2].

Online learning has many advantages. One of them is that teachers can easily give materials to their students either in the form of photos or videos. Further, the online learning model facilitates teachers in making questions from anywhere and at any time [3] . However, behind its advantages, online learning has several disadvantages such as the lack of interactions between teachers and students or among the students themselves, the lack of learning spirit in students, or the lack of qualified internet facilities at students' houses[4].

Before the enactment of regulations on online learning during the pandemic, the learning process in Indonesia is implemented offline. Offline learning is a conventional learning model which brings teachers and students together in one room to learn in a planned way, oriented to a place, and have social interaction[5]. For a strategic level of competency achievements, offline learning activities need to be designed well and implemented effectively and efficiently to achieve an optimal learning objective[6].

The switch from an offline learning model to an online one becomes a new problem in the learning process. Let alone the system switching is considered abrupt and not well-prepared. This case affects students' learning results. According to Rusman, two factors affect students' learning results, namely internal and external factors. The internal factors include students' motivation, intelligence, perseverance, attitude,

[1] Subron, dkk. *Pengaruh Daring Learning terhadap Hasil Belajar IPA Siswa Sekolah Dasar,* (Jurnal Prosiding "Seminar Nasional Sains dan Interpreneurship, Vol. IV tahun 2019), 3.
[2] Kemendikbud No. 15 tahun 2020. *"Pedoman Penyelenggaraan Belajar dari Rumah dalam Masa Darurat Penyebaran Covid-19"*, 10.
[3] *Ibid*, 2.
[4] Dewi Salam P & Dewi, *Mozaik Teknologi Pendidikan*, (Jakarta: Persada Media Group, 2008), 201.
[5] Bonk dan Graham, *Handbook of Blended Larning*, (2006), 122.
[6] Depdiknas, *Pembelajaran Tatap Muka, Penguasaan Terstruktur, dan Kegiatan Mandiri Tidak Terstruktur*, (Direktorat Pembinaan Sekolah Menengah Atas, 2008)

preference and consideration, as well as health and physical state. While the external factors are derived from family, school, and society[7].

Offline and online learning has been implemented in Institut Agama Islam Bakti Negara (IBN) Tegal. This study aims to compare students' learning results in Arabic course in the Islamic Education major of the Teaching and Education Science Faculty. Further, data on students' learning results are analyzed using a comparison test of two correlated samples.

RESEARCH METHOD

This study uses a quantitative approach with a comparative study method. Data collection was carried out after the online and offline learning process was completed in a different semester. The sample of this study was the grade one college students of Islamic Education majoring in FITK IBN Tegal. It consisted of 51 students from 2019/2020 year academic and 37 students from 2020/2021 year academic. It generated 88 students in total for the sample. The students enacted as the sample of research were grade one students since the Arabic course as the research object was taught in grade one. The compared data research was students' learning results on the 1st Arabic course. It encompassed four valuation components namely attendance, tasks, mid-term exam, and final exam scores compiled during online learning in 2019/2020 academic year and offline learning in 2020/2021 academic year. The data in the form of students' scores were analyzed using normality, homogeneity, and t-test analysis technique.

RESULTS AND DISCUSSION

Description of the 1st Semester Arabic Learning Results of Offline Model

Offline learning is conducted face-to-face directly in the class. The offline learning was conducted before the Covid-19 pandemic or before the issuance of the Circular of the Minister of Education and Culture on the online learning process, from September until December 2019. The score results of Arabic using face-to-face or offline model are as follows:

Table 1. Score averages of offline learning model

No.	Evaluation Aspects	Average Score
1	Attendance	96,81

[7] Ibrahim M Jamil, *Faktor-faktor yang Mmepengaruhi Prestas Belajar Anak* (Yogyakarta: Deepublish: 2018), 21-22.

2	Tasks	83,53
3	Mid-term Exam	80,63
4	Final Exam	63,73
	Final Score	**77,72**

The evaluation aspects of online and offline learning processes are similar, namely on attendance, tasks, mid-term exam, and final exam aspect. The difference is only in the evaluation technique. The attendance scores in offline learning were obtained from students' attendance and liveliness in class. Tasks scores are gained from the tasks completed by students. Mid-term and final exam scores are gained from mid-term and final exam results which were accomplished directly in class and supervised directly by the exam supervisor.

Description of the 1st Arabic Learning Results of Online Model

Online learning is managed online via an internet network. Online learning is conducted after the Covid-19 pandemic or after the issuance of the Minister of Education and Culture's Circular on the online learning process. Online learning on the 1st Arabic course was conducted from September until December 2020. The score results of Arabic using the online model are listed below:

Table 2. Score averages of the online learning model

No.	Evaluation Aspects	Average Score
1	Attendance	91,72
2	Tasks	83,00
3	Mid-term Exam	66,76
4	Final Exam	59,30
	Final Score	**71,14**

The evaluation aspects in online learning are similar to those in offline learning, namely the evaluation that includes attendance, tasks, mid-term exam, and final exam aspect. The differences are in the process and the evaluation technique. In online learning, the attendance scores were obtained from students' attendance and liveliness during the learning process. The attendance list was fulfilled via Google Forms and the learning process was organized via google meet and WhatsApp. Tasks

scores were gained from the tasks completed by students. The task was made in video format and shared to social media such as YouTube, Facebook Reels, Tiktok, and Instagram. Mid-term and final exam scores are gained from mid-term and final exam results which were accomplished online.

Comparison of Arabic Learning Results of Offline and Online Models

The comparison of learning results of offline and online learning models can be observed in the table below:

Table 3. The difference in score averages of offline and online class

No.	Evaluation Aspects	Average Score
1	Attendance	05,09
2	Tasks	00,53
3	Mid-term Exam	13,87
4	Final Exam	04,43
	Final Score	**06,58**

Based on the above data, it can be concluded that the average score of students' attendance in offline learning is 96,81 higher than in online learning which the average score is 91,72. The average scores for tasks, mid-term exams, and final exams of offline learning are also higher than online learning with score differences of 00,53 for tasks, 13,87 for mid-term exams, 04,43 for the final term, and 06,58 for the final score.

The Result of the Normality Test, Homogeneity, and Independent T-Test on Students' Learning Results of Offline and Online Learning in One Semester

Table 4. Data description

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Kelas Luring	51	60	95	77,80	7,874
Kelas Daring	37	62	89	70,97	6,173

The above data explains that the total subject of an offline and online class is different. The total subject of the offline class is 51 students and the

total subject of the online class is 37 students. The lowest, highest, and average scores are also different. The lowest score for offline classes is 60 while for the online class is 62. The highest score for the offline class is 95 while the online class is 89. The average score for offline classes is 77,80 while for the online class is 70,97. Fortunately, both scores are in the average range of the "good category".

Table 5. The result of the normality test, homogeneity, and independent t-test on students' learning results of offline and online learning in one semester

No.	The tests results	Conclusion
1	**Std. Deviation** Offline class 7,874 Online class 6,173	Good Category
2	**Test of Normality** Offline class Sig. 0,069922 Online class Sig. 0,139218	Normal
3	**Test of Homogeneity Sig.** 0,00446	Homogenous
4	**Independent Sample Test** Sig**.** 1,987934	Any difference

The results of the data test above were carried out using Excel. The data was obtained based on the learning results of offline and online learning models in one semester. The above data explains that the standard deviation for offline learning is 7,874 and for online learning is 6,173. Both are in the range of good category for standard deviation since the standard deviation result of the two data groups is lower than the Mean.

Further is the normality test of both groups. The X data (offline learning result/ L-value) is 0,069922 with the score of the L table being 0,124. While the Y data (online learning result/L-value) is 0,139218 with the score of the L table being 0,145. Both data have normal distribution because L-value is lower than the L-table.

Table 6. Normality test of offline and online class

Normality Test	Offline Class (Variabel X)	Online Class (Variabel Y)
Mean	78	71
Std. Deviation	7,874	6,713

L value	0,069922	0,139218
L table	0,124	0,145

The next test is the homogeneity test. This test is carried out to analyze the average of the two data groups for whether they have similar variants or not. The homogeneity test in the table above shows sig.0,00446 < 0,60534 (F table). It can be concluded that the homogeneity assumption is fulfilled. Thus, the data of online and offline learning results have a similar variant (homogenous).

F-Test Two-Sample for Variances

	Variable 1	*Variable 2*
Mean	77,80392	90,13514
Variance	62,00078	13908,45
Observations	51	37
df	50	36
F	0,004458	
P(F<=f) one-tail	0	
F Critical one-tail	0,605344	

After the data is verified as normal and homogenous, further, an independent t-test will be carried out to find the comparison between the two data groups. The decision-making is based on the significant value beginning with determining the H0 and the alternative hypothesis (Ha) at first.

H0 = There is no difference in the learning result using online and offline learning model

Ha = Any differences in learning results using online and offline learning model

The result of the independent t-test is presented below:

t-Test: Two-Sample Assuming Equal Variances

	luring	*daring*
Mean	77,80392157	70,97297297

Variance	62,00078431	45,69369369
Observations	51	37
Pooled Variance	55,17456033	
Hypothesized Mean Difference	0	
Df	86	
t Stat	4,25849548	
P(T<=t) one-tail	2,6172E-05	
t Critical one-tail	1,662765449	
P(T<=t) two-tail	5,2344E-05	
t Critical two-tail	1,987934206	

The above data shows that t-value (t Stat) is 4,2585 higher than the t-table (t critical two-tail) in which the score is 1,9878. Based on the decision-making criteria, if the t-value is higher than the t-table, it can be concluded that there are some differences in learning results using the offline and online learning models. In another word, it can be concluded that the alternative hypothesis is accepted.

In this study, several factors are found as a cause for the online learning results being lower than offline learning. The major problem is the unstable internet network caused by the uneven infrastructure of the internet network. This problem is mostly faced by students who live in mountainous areas. The internet network is often unstable or even inaccessible. In line with Hendrastomo (2008), he stated in his research that the availability of internet access is urgently needed in online learning due to the characteristic of this learning which always requires and utilizes an internet network. Another obstacle is the limitation of direct interaction between students and lecturers during the learning time. According to Argaheni (2020), learning which includes direct interactions can stimulate students' feelings and thoughts as well as give a special significance to students.

Based on the elaboration above, the results of this study show that the offline learning process is more effective than the online one. Further, the offline learning results are higher than the online results. Furthermore, the learning materials delivered in offline learning are way easier to understand.

CONCLUSION

The research results conclude that there are differences in students' offline and online learning results. The learning results of the offline model are higher than the online one. This is proved by the students' attendance in offline learning which is higher than in online learning. Further, the students' involvement index in the offline learning process is higher than in the online one. Moreover, the score averages of mid-term exams, final exams, and final scores are higher when the offline learning process is conducted.

REFERENCES

Aditya Dewantara, Jagad. (2020). *Efektifitas pembelajaran daring di masa pandemi covid 19 bagi mahasiswa universitas PGRI yogyakarta*. Yogyakarta: Jurnal Basicedu – Vol.5 No. 1

Argaheni, N.B. (2020). *Sistemik review: dampak perkuliahan daring saat pandemicovid-19 terhadap mahasiswa indonesia*. Placentum: Jurnal Ilmiah Kesehatan dan Aplikasinya, 8 (2), 99-108

Depdiknas. (2008). *Pembelajaran tatap muka, penguasaan terstruktur, dan kegiatan mandiri tidak terstruktur*. Jakarta: Direktorat Pembinaan Sekolah Menengah Atas.

Graham dan Bonk. (2006). *Handbook of blended learning*.

Hendrastomo, Grendi. Dilema dan Tantangan Pembelajaran E-Learning. Majalah Ilmiah Pembelajaran: Volume 4 Nomor 1, 2008.

Kemendikbud No. 15. (2020). *Pedoman penyelenggaraan belajar dari rumah dalam masa darurat penyebaran covid-19.*

M Jamil, Ibrahim. (2018). *Faktor-faktor yang mempengaruhi prestasi belajar anak*. Yogyakarta: Deepublish.

Meliniawati, Alda, dkk. (2021). *Perbedaan hasil belajar PPKn pada pembelajaran luring dan daring menggunakan media visual kelas IV b SDN 60 kota Bengkulu*. Jurnal Riset Pendidikan Dasar - Vol. 4 No.1

Mustofa, Mokhamad Iklil. (2019). *Formulasi model perkuliahan daring sebagai upaya menekan disparitas kualitas perguruan tinggi*. Semarang: Walisongo Journal of Information Technology – Vol.1 No. 2.

Salam P, Dewi. (2008). *Mozaik teknologi pendidikan*. Jakarta: Persada Media Group.

Subron. (2019). *Pengaruh daring learning terhadap hasil belajar IPA siswa sekolah dasar.* Jurnal Prosiding: Seminar Nasional Sains dan Interpreneurship, Vol. 4.

Sugiyono. (2010). *Metode penelitian pendidikan*. Bandung: Alfabeta.