

The Effect of Online Learning during Covid19 on Students' Performance on Reading Skill

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Abstract— This study was to know the effect of online learning during covid19 pandemic on students' performance on reading skill. The data was taken by google form questionnaire for online survey and multiple choice and essay test for reading skill. This research used mix method. The sample was 35 students Informatics Engineering Computer Science Faculty. The result showed that the average score on reading multiple choice was 55.14 or considered low. The average score on reading essay test was 71.57 or considered middle.

Keywords — Online learning, Reading Skill, Performance

I. INTRODUCTION

COVID-19 pandemic has affected all levels of the education system. Educational institutions around the world in 192 countries have either temporarily closed or implemented localized closures affecting about 1.7 billion of student population worldwide (1). All campus activities use online learning to minimize and decrease the transmission of virus. The total number of students who are potentially at risk from primary to high school education is 577,305,660. On the other hand, the number of students who are potentially at risk from higher education is 86,034,287 people (2). Currently in Indonesia, several universities are starting to implement policies on teaching and learning activities from a distance or online lectures. Based on medical research, global consensus among infectious disease specialists and public health officials limited face-to-face classes as a means of protecting the students and the community at large from the spread of the pandemic (3).

This study seeks to understand the effect of online learning during the COVID-19 pandemic on students performance especially on reading skill. Online teaching is not new and this topic have been deeply discussed. As a meta-study book entitled 25 Years of Ed Tech (1994 to 2018). This book contained the introduction of technologies in education. Integrating technology can support, enhance and at times create engaging learning environments for over two decades(4). By 1994, the first online high school CAL Campus came into existence. Some experts refer to the education in 21st century as a multimedia network education. Educational information is being accepted and promoted by all the nations around the world. According to the National Centre for Statistics, 18 million students enrolled in some online program worldwide in 2008. Under this situation, the education system and the teaching methods and many other things related to the education field are changing.

This Covid19 pandemic has shown the consequences. Many countries have introduced lockdown protocols from the outset to cope with it (5). Duta bangsa University, educational have also been shut down since March 2020. Therefore, universities have resorted to continuing lecturers online through websites such as Google meet, zoom. E-learning and social media such as whatsapp group. This has an effect on communication as communicating virtually.

Most authors define online learning as accessing learning experiences through the use of certain technology (6). Online learning is more modern form of distance learning that enhances access for learners identified as both nontraditional and ineffective to

educational opportunities. Many scholars discuss the usability, connectivity, mobility and interactivity of online learning (7). This is as UNESCO support countries in their efforts to mitigate the immediate impact of school closures and to facilitate the continuity of education for all through remote learning as solution to stop the spread of COVID 19 Pandemic.

E. Learning was used the first time since 1960 in the University of Illinois that students could listen to recorded lectures of a course. E-learning has experienced significant change due to the exponential growth of the internet and information technology [8]. New e-learning platforms are being developed for tutors to facilitate assessments and for learners to participate in lectures [8, 9]. Both assessment processes and self-evaluation have been proven to benefit from technological advancement. The inclusion of e-Learning tools in higher education implies that a greater amount of information can be analyzed, improving teaching quality [9-11]. In recent years, many studies have been performed analyzing the advantages and challenges of massive data analysis in higher education [12]. For example, a study of Gasevic et al. [13] indicates that time management tactics had significant correlations with academic performance.

II. METHOD

This study is mixed methods research. Mixed methods research is the type of research in which a researcher or team of researchers combines elements of qualitative and quantitative research approaches for the broad purposes of breadth and depth of understanding and collaboration (14). The population is students of Computer Science Faculty Duta Bangsa University majoring Informatics Engineering in the first semester in academic year 2020 /2021. The sample is thirty five Class B students who eligible for evaluation. Eligibility for evaluation class included 75% requirement of attendance. Data collection was done using link to the online goggle form questionnaire survey. An online questionnaire survey was designed and an initial test was done on 50 participants to ensure the understandable of draft questionnaire. An online google form questionnaire was shared with Whats app groups. The first section included 10 questions about online learning survey (experience on learning online, device used to study online, time spent per day in online learning, effect online learning, the support from university in online learning, time management, how the lectures helpful). The second was evaluation of students participation in joining online learning. The last is the students' score on reading test. The data will be presented in, figures and tables.

III. RESULT

3.1 Online learning survey

The result of online survey can be seen from the following tables:

Table .3.1 Summary of online learning survey

Questions	Criteria	Participants	Percentage
How do you feel overall about online learning?	Poor	1	1 %
	Below average	7	20 %
	Average	14	40 %
	Good	13	37 %
	Excellent		
Do you have access to a device for learning online?	Yes	24	68 %
	Yes, but it doesn't work well	9	25,7 %
	No. I share with others	2	5,7 %
What device do you use for online learning?	tablet		
	Laptop	8	22.8 %
	desktop	4	11.4 %
	Smartphone and laptop	8	22.8 %
	smartphone	12	34.28%

Questions	Criteria	Participants	Percentage
How much time do you spend each day on an average online learning?	1 - 3 hours	11	31.4%
	3 - 5 hours	16	45.7 %
	5 - 7 hours	8	22.8 %
	7 - 10 hours		
How effective has remote learning been for you?	Not at all effective	2	5.7 %
	Slightly effective	16	45.7 %
	Moderately effective	15	42.8 %
	Very effective	2	5.7 %
How helpful your University has been in offering you the resources to learn from home?	Not at all helpful	2	5.7 %
	Slightly helpful	13	37.1 %
	Moderately helpful	17	48.5 %
	Very helpful	3	8.57 %
How stressful is online learning for you during the COVID-19 pandemic?	Not stressful	5	14.28 %
	Slightly stressful	12	34.2 %
	Moderately stressful	14	40 %
	Very stressful	4	11.4 %
How well could you manage time while learning remotely?	Not at all	6	17.1 %
	Slightly well	10	28.57 %
	Moderately well	16	45.7 %
	Very well	3	8.57 %
Do you enjoy learning remotely?	Yes, absolutely	7	20 %
	Yes, but I would like to change few things	19	54.28
	No. there are a quite few challenges	7	20 %
	No, not at all	2	5.7 %
How helpful are your lecturers while studying online?	Not at all helpful		
	Slightly helpful	8	22.85 %
	Moderately helpful	18	51.42 %
	Very helpful	9	25.7 %

3.2 The students' participation during online Learning

The participation during covid19 for Informatics Engineering students were mostly active especially during English online learning. The students joined link google meet on schedule. Even though they do not give much interaction with the lecturer, at least they listen to the explanation during online classes for about 30-45 minutes with consideration of quota package. Google meet used to explain the material and also as the attendance. Besides using link google meet , there are also E- learning and Whats app group. E-Learning application can be accessed through the SIAKAD online university website. In E-learning lecturers and students can use various features provided, such as: Forum, External tool, File, Quiz , Interactive content, Lesson, Survey. URL, Attendance, Page, Folder, etc. And the last is Whats app group class that it is for confirmation the students all the things related to topic. All of these online learning media and applications are technologies that support teaching and learning through computers and web technology. These media allow communication between lecturers and students in conducting lectures.

3.3 Students' performance on reading skill

The test was done twice. The first is in the form of multiple choice quiz in E- learning. There are 20 questions in 30 minutes limit time to finish. The topic is about incomplete sentence and text completion adopted from TOIEC application. The second is the form of essay . There are 5 essay in 25 minutes time limit. It is reading comprehension about message, memo, letter. E-mail, notice etc. The contents are Here the students to explain more their answers using their own language not just rewrite the answer from the reading text.

Figure 3.2 Overall Number of Students Achieving Grades Ranges on Multiple Choice Test

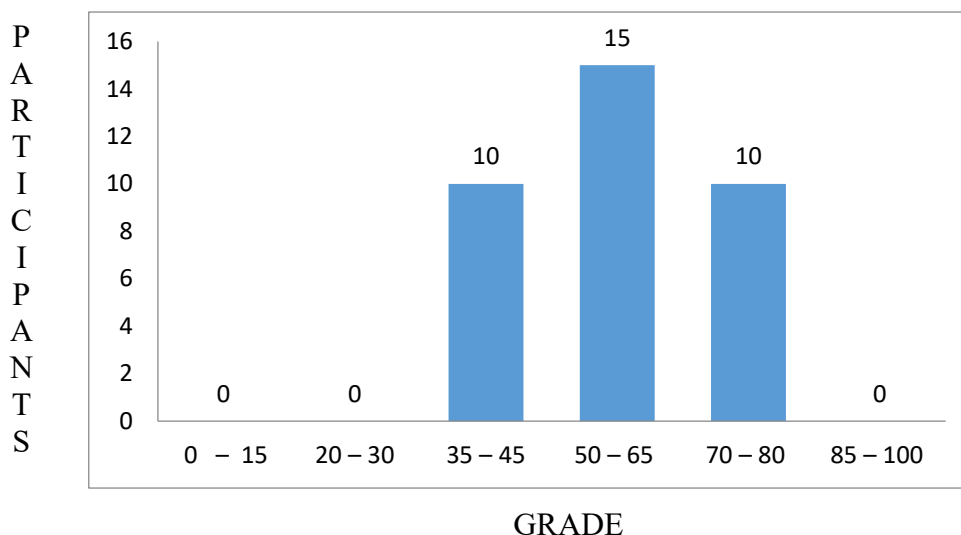
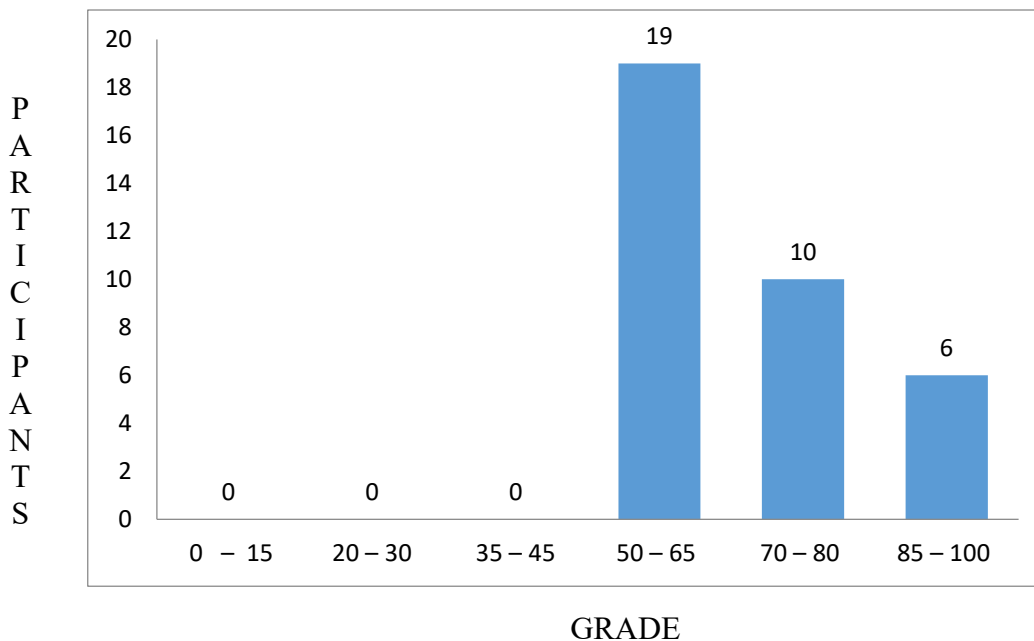


Figure 3.3. Overall Number of Students Achieving Grades Ranges on Essay Test



IV. DISCUSSION

Based on the results of online survey, it can be seen that 40 % students feel average overall about online learning, 37 % felt good, 20 % felt below average and 1 % fell poor. 68 % students have access to a device for learning online, 25,7% have access to device but it doesn't work well, 5.7% students doesn't have access to device, they share with others. 34.28% students use smartphone for online learning. 22.8% students use smartphone and laptop, 22.8% use laptop and 11.4% use desktop. While the percentage of students who spend each day on an average online learning is 45.7% for about 3 - 5 hours, 31.4% for 1 - 3 hours and 22.8% for 5-7 hours. In terms of the effectiveness remote learning for students, 45.7% students said slightly effective, 42.8 % moderate effective, 5.7% very effective and 5.7% not effective at all. University has been helpful in offering students the resources to learn from home is 48.5 % moderately helpful, 37.1 % slightly helpful, 5.7% very helpful, 5.7 % not all helpful. Online learning during the COVID-19 pandemic, 40 % students felt moderately stressful, 34.2 % slightly stressful, 14.28 % not stressful, 11.4% very stressful. Time management while learning remotely is 45.7 % moderately well, 28.57 % slightly well, 17.1 % not at all and 8.57 % very well. 54.28% students enjoyed learning remotely. 20% did not enjoy because there are a quite few challenges. 20 % absolutely enjoyed and 5.7% did not enjoyed at all. The results how Lecturers are helpful while learning online were 51.42 % moderately helpful, 25.7 % very helpful.; and 22.85 % slightly helpful.

The score of reading test was done via E- learning provided by University. The students could access because most of students have devise especially by laptop and smartphone. The students also got quota package from campus and government. In order to get better assessment during the test, there was limit time. The average score of reading multiple choice test was 55.14. While the average score of reading essay test was 71.57.

V. CONCLUSION

Online survey indicated that students could access the learning process and most of the lectures are moderately helpful. Even though some of the students felt stressful. Learning during the COVID-19 pandemic gave effect on students performance especially on reading skill. The average score on reading multiple choice considered low. The average score on reading essay test considered middle.

REFERENCES

- [1] UNESCO. Education: From Disruption to Recovery. (2020). Available online at: <https://en.unesco.org/covid19/educationresponse>
- [2] Nugroho, R. S. (2020, March 14). Corona: 421 juta pelajar di 39 negara belajar di rumah, kampus di Indonesia Kuliah Online. Retrieved March 28, 2020,
- [3] Murphy . 2020. "COVID-19 and Emergency eLearning: Consequences of the Secularization of Higher Education for Post-pandemic Pedagogy doi:10.1080/13523260.2020.1761749.
- [4] Weller, M. (2020). 25 years of ed tech. *University of Athabasca Press*.
- [5] Alawamleh, M. (2020), "COVID-19 and higher education economics", *Journal of Economics and Economic Education Research*, Vol. 21 No. 2, pp. 1-2.
- [6] Benson, A.D. (2002), "Using online learning to meet workforce demand: a case study of stakeholder influence", *Quarterly Review of Distance Education*, Vol. 3 No. 4, pp. 443-452.
- [7] Ally, M. (2004), "Foundations of educational theory for online learning", *Theory and practice of online learning*, Vol. 2, pp. 15-44.
- [8] Biasutti M. A comparative analysis of forums and wikis as tools for online collaborative learning. *Computers & Education*. 2017. 111;158–171.
- [9] Molins-Ruano P, Sevilla C, Santini S, Haya PA, Rodrı́guez P, Sacha GM. *Designing videogames to improve students' motivation*. *Computers in Human Behavior*. 2014; 31;571.
- [10] Caballero-Hernandez JA, Balderas A, Palomo-Duarte M, Delatorre P, Reinoso AJ, Dodero JM. *Teamwork Assessment in Collaborative Projects Through Process Mining Techniques*. *International Journal of Engineering Education*. 2020; 36;470–482.
- [11] Palomo-Duarte M, Dodero JM, Medina-Bulo I, Rodriguez-Posada EJ, Ruiz-Rube I. Assessment of collaborative learning experiences by graphical analysis of wiki contributions. *Interactive Learning Environments*. 2014; 22;444–466.
- [12] Maldonado-Mahauad J, Perez-Sanagustin M, Kizilcec RF, Morales N, Munoz-Gama J. Mining theory based patterns from Big data: Identifying self-regulated learning strategies in Massive Open Online Courses. *Computers in Human Behavior*. 2018; 80;179–196.
- [13] Gašević D, Matcha W, Jovanović J, Pardo A. Analytics of time management strategies in a flipped classroom. *Journal of Computer Assisted Learning*. 2019; 36(1);70–88
- [14] Johnson BR, Onwuegbuzie AJ, Turner LA. Toward a definition of mixed methods research. *Journal of Mixed Methods Research*. 2007;1:112–133. doi: 10.1177/1558689806298224.