

# Evaluation of Online Learning: An Empirical Investigation on Lecturers' and Students' Perceptions in Higher Education

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**Abstract** - This study was aimed to investigate the lecturers' and students' perceptions of the implementation of online learning at State Islamic University of Mataram as the result of the new normal era, which later the result could be used to evaluate the weaknesses. This study employed quantitative approach with survey design. The subjects of this study were 69 lecturers and 1488 students. The ten items in questionnaire were administered online with the cooperation of Quality Assurance Unit (QAU) in the university. The result stated that 1) both lecturers and students had overall equal perceptions toward online learning, as shown by 88.3% lecturers' satisfaction score and 87.1% for students; 2) there were high percentage gap in term of the preparation of online attendance form where the students' satisfaction was higher than the lecturers and in term of lecturers' online class design which demanded students to be more active; and 3) both subjects stated the online class should be accompanied with students' comprehension measuring instrument. Thus, this study implies the urgency to evaluate the low scores items in survey to escalate the quality of online learning in higher education and the enrichment of survey items in further study is needed.

**Index Terms:** evaluation; online learning; higher education; quality of education; quality assurance; lecturers and students' perceptions; new normal era

## 1 INTRODUCTION

The pandemic Covid-19 has not yet stopped in 2021 though it has been more than a year creating crisis in various sectors in 213 countries (WHO, 2020). Due to cope the pandemic problem, many countries struggle hardly to invent the Covid-19 vaccine with the hope to halt the spread of this virus which has made huge shift in education policy all over the world. Some countries terminate the students to attend learning in school (Huang, et al., 2020) and some other countries shift from face-to-face (FTF) class model to online model (Muslimin & Harintama, 2020). As in the early 2021 the pandemic has not yet showing inclination of victim numbers, the governments in all countries including Indonesia have proclaimed that the people should meet new normal era. It means that by the time goes by, the citizen should live and survive together with the virus to create herd immunity. Consequently, the education in Indonesia must continue to keep the quality of human resources though the practices are done online with regular schedule.

Online learning has been widely implemented in Indonesia since March 2020 in various level of education including higher education or university level (Siswati et. al, 2020). The government, the ministry of education, together with the institutions hand in hand to implement online learning. Lecturers or educators strive to find best practices to teach students online using various platforms (Aritonang et. al, 2020). Also, the students with no experience of attending online learning class search for the best aid to mediate their negative perception and deficiencies in order to be successful in class (Dhawan, 2020).

Understanding the definition of online learning, Bartley and Golek (2004) explain that online learning is a form of distance education or learning that has been implemented in American education system. The online learning can be formed fully

and partially. The partial online learning form is called as blended or hybrid learning and the full online learning form is called purely online learning (Hoic-Bozic et. al, 2009). Furthermore, the Indonesia education system requested all higher education institutions to hold purely online learning.

Due to the implementation of online learning, some previous studies depicted the students' perception and attitude toward it. A study that was conducted by Kabilan, Ahmad, & Abidin (2010). They stated that the students consider online group discussion feature as an online learning environment can assist them to facilitate and support their language learning. Moreover, the students at a low level of proficiency feel more comfortable and less threatened when they participate in online discussion than face-to-face in class, which are mainly dominated by the high proficiency learners (Al-Hammody, 2014). Haverback (2009) investigates that the students feel more motivated while they are involved in online group discussions, and they can grasp a better understanding of the learning materials. It indicates that when the online learning environment can make the students feel more comfortable and confident in learning, they will be easier to understand the materials given and they can be more motivated to learn. From the perspectives of teachers, Windiarti et. al (2019) states that teachers found obstacles such as the capacity to operate electronic tools, sufficiency of technology pedagogy, the capability to manage the time, and developing students' motivation to learn online. Similar idea is also stated by Todd (2020) with the additional finding. He says that teacher was ambivalent about the significances of the online learning with the raise of obstacles to achieve learning objectives and gauging the students' reactions. The previous researches show different responses and perception toward the implementation of online learning in different location and different profession such as students and teachers.

According to some aforementioned previous studies as well as the implementation of online learning in Indonesia has taken two semesters. It needs the evaluation as the reflection for gaining better education practices in the future (Windhiyana, 2020). The evaluation can be started from knowing the perception of both lecturers and students who become the actors in online learning class. They experience, they feel, they score, and they compare with their previous learning model. The responses they make are very useful to set the evaluation of the online learning implementation.

State Islamic University of Mataram (UIN Mataram) which is situated at West Nusa Tenggara, Indonesia also has implemented online learning for a year. The university always strives for giving best academic service to produce qualified graduate with academic professionalism and religiosity. Consequently, the university with the help of Quality Assurance Unit (QAU) in university are never exhausted to evaluate the implementation of education meeting with the Indonesia education national standard (SNP) including the online learning implementation.

Reviewing the aforementioned explanations, this study was intended to evaluate the implementation of online learning as it was reflected from the State Islamic University of Mataram lecturers and students' perceptions through empirical investigation toward it. The discussions would cover items of the comparison of overall perceptions between lecturers and students, the possible gaps would appear from lecturers' and students' responses, and the evaluation of the lowest responded item that need for improvement. Hence, the present study was entitled According to the previous description, the present research was intended to discuss the implementation of AQA to monitor the Faculty of Education and Teachers Training, UIN Mataram lecturers' performances by looking at different department where they teach and items of performances in the questionnaires point of view. Hence, the present research was entitled academic quality assurance survey in higher education.

## 2 METHOD

The present study implemented quantitative approach with survey research design with the consideration of relevance with the objectives of the study. The respondent of this study were the 69 lecturers as the representation of all lecturers in all departments and 1344 students from all departments at State Islamic University of Mataram in academic year 2020 – 2021. The data were collected using two questionnaires which were administered through google forms embedded in academic system for lecturers and students on 26 November – 11 December 2020. The aims of the first questionnaire

were to know the overall perceptions on the implementation of online course, to compare the perceptions of lecturers and students toward the same survey item, and to evaluate the lowest performance items in survey for evaluation in later online learning. The questionnaire covered ten questions regarding accomplishment of minimum classroom meeting, the types of platform to conduct online learning, setting the course matching and integrated with online learning platform, the existence of online attendance form, students' participations in online class, lecturers' active learning design; the existence of comprehension measuring instrument in online class; the implementation of online test, the lecturers' commitment to the class schedule, and the class commitment to the class meeting duration. The second questionnaire was administered due to as for clarification toward high gap found from the responses and the reason why some items in first questionnaire showed low percentage. Since the respondents were Indonesia native, the questionnaire was delivered in Bahasa Indonesia.

### 3 RESULTS

This study acquired data from the questionnaire which comprised ten items as explained in method. Hence, the results were presented in items according to the administered questionnaire.

#### 3.1. The accomplishment of minimum classroom meeting



Figure 1. The accomplishment of minimum classroom meeting

The university regulation mentions that all lecturers must conduct at least 14 meetings in each course in a semester. According to the chart, the data show that all of lecturers (100%) agree that they had met the minimum class meeting while there were 8% students disagreed. Only 92% students agreed that the lecturers had met the minimum class meeting in the courses.

#### 3.2. The types of platform to conduct online learning



Figure 2. The types of platform to conduct online learning

The questionnaire question number two discusses on what are the variations of online learning platform employed in class whether it was single platform or combinations of various platforms or multi-platforms (zoom meeting, WhatsApp group, google classroom, etc.). The results showed that both lecturers and students implemented combined online learning platform in class. In more detail information, google classroom and WhatsApp group were the most popular combinations in many classes.

#### 3.3. Setting the course matching and integrated with online learning platform

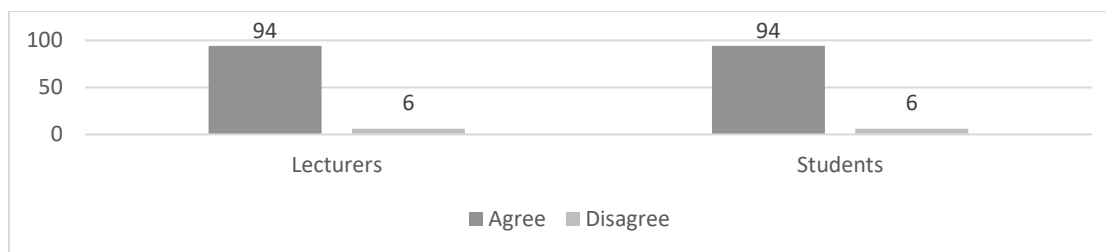


Figure 3. Setting the course matching and integrated with online learning platform

Regarding the situation that hinder the possibility to conduct FTF class, both lecturers were required to embodied online learning platform in teaching and learning process. The questionnaire result said that only 94% from both parties agreed that the classes were designed with the online learning platform. It means that there were 6% respondents who did not meet the use of online platform during some classes.

### 3.4. The existence of online attendance form

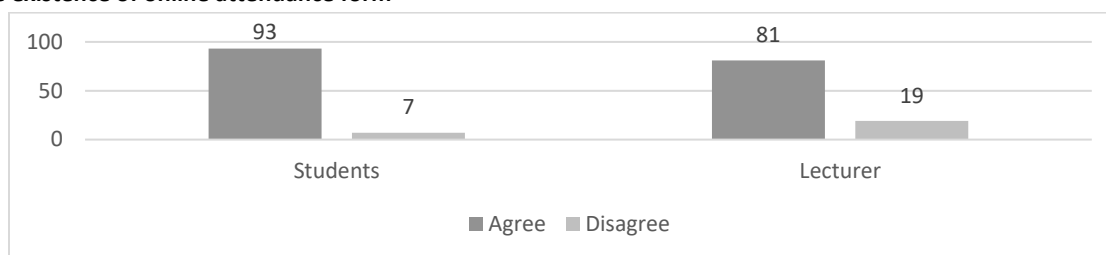


Figure 4. The Existence of online attendance form

The chart explains the data collected related to the preparation of lecturers before conducting the online class. 93% of students agree that the lecturer made the online attendance form though only 81% lecturers believed they had done it. These data shows that there was high gap between students' and lecturers' perceptions toward the existence of online attendance form in online classroom.

### 3.5. Students' participations in online class

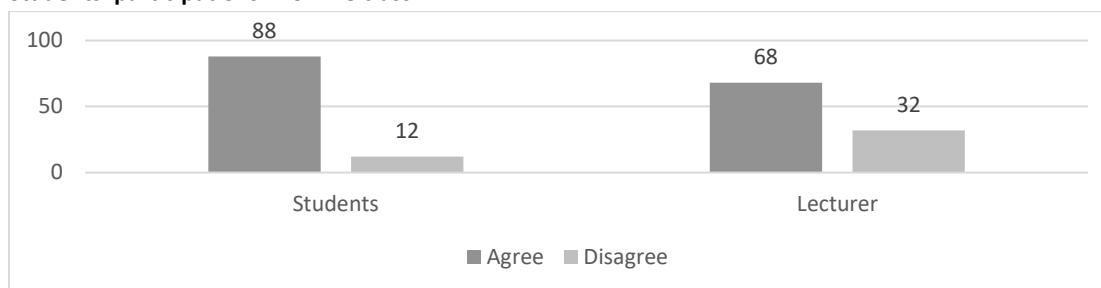


Figure 5. The students' participations in online class

The existed data from the questionnaire related to the students' active participations in online class revealed that students' show better positive perceptions as reflected by higher percentage than the lecturers. The implementation of online class only triggered 68% lecturers' agreement that students were active in online class. While students thought more students actively participated in online class with the 88% agree statement. The data show higher gap between lecturers and students responses compared to the pervious question item. There was 20% difference gap to show different perceptions between lecturers and students regarding students' online classroom participation.

### 3.6. The lecturers' attempt to design active learning nuance class

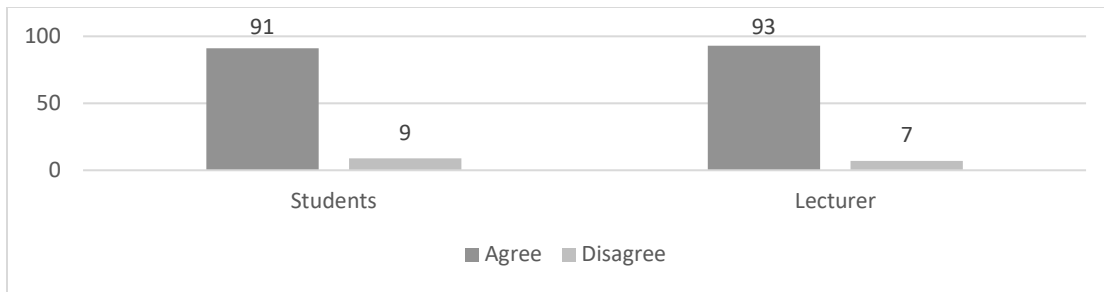


Figure 6. The online class was designed for active learning model

The acquired data showed that both parties had similar perception that the lecturers had designed the class to create active learning nuance. There were 91% of students and 93% of lecturers agreed with the statement. Only small in percentage of both parties see that the class was not designed for active learning model.

### 3.7. The existence of comprehension measuring instrument in online class

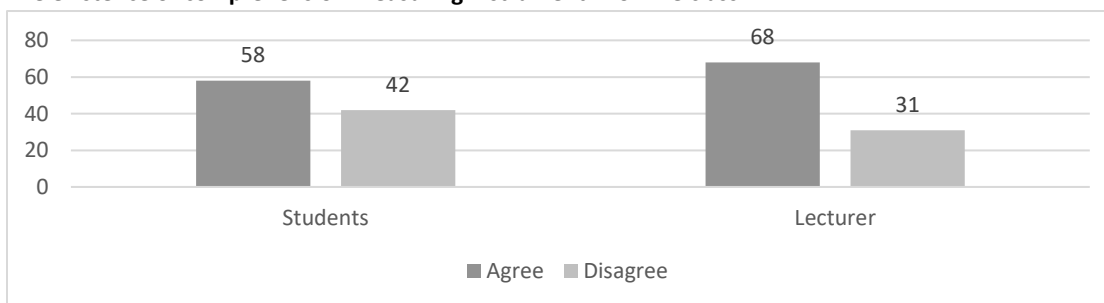


Figure 7. The existence of comprehension measuring instrument in online class

The seventh questionnaire item discussed about the lecturers' preparation before holding the online classroom regarding how to evaluate students' learning performance or comprehension. The lecturer might create formative, sub summative, or summative test as the instrument to measure students' achievements. Both parties showed doubt to stand for agree that lecturers had prepared the instrument. Only 58% agree responses were delivered by students and 68% by the lecturers. These responses were the lowest from all questionnaire items responses.

### 3.8. The implementation of online summative test

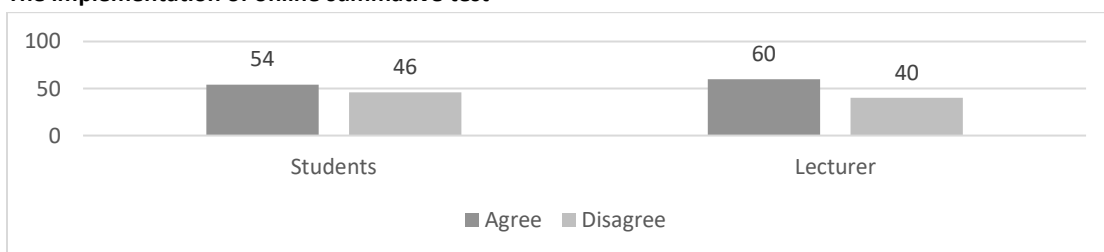


Figure 8. The implementation of online summative test

The figure shows that almost half of both lecturers and students did not find online summative tests during the online learning. There were only 54% responses from the students to say that they experienced online summative tests and admitted by 60% responses from the lecturers. The responses showed that lecturers had more positive responses than students.

### 3.9. The lecturers' commitment to the class schedule

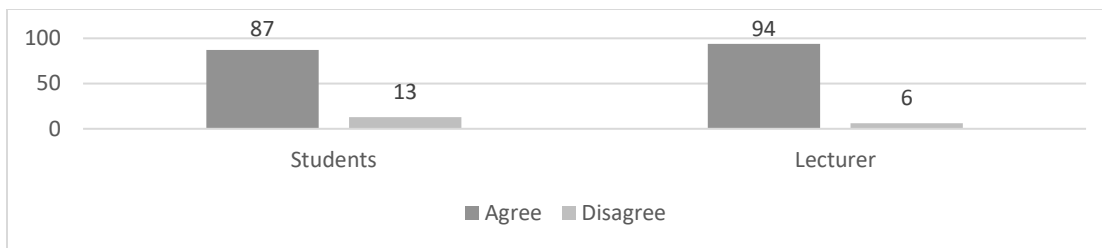


Figure 9. The lecturers' commitment to the class schedule

The data collected from the questionnaire stated that both parties mostly agree that the online class was implemented according to the schedule that had been set by the university. There were 87% of students agreed and 94% of lecturers agreed with the statement. However, the small percentage of students (13%) and lecturers (6%) thought there were changes of class schedules from the schedule set by the university.

### 3.10. The class commitment to the class meeting duration

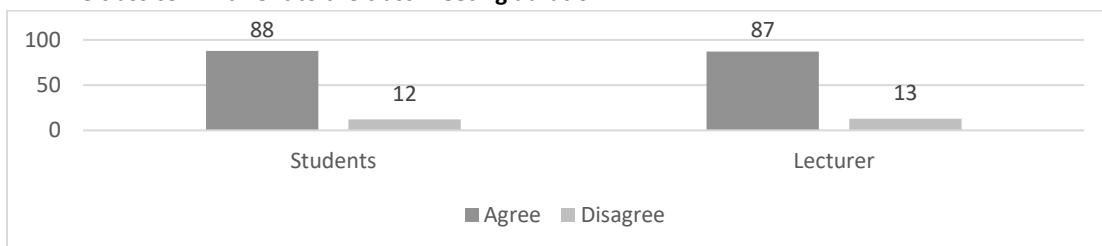


Figure 10. The class commitment to the class meeting duration

The chart explains that both lecturers and students had very similar perceptions on the punctuality of online class implementation. Most of respondents from both parties believed that the online class had been done in full time duration (100 minutes per meeting) as mentioned by the university academic guideline. There were 88% of students agreed and 87% of lecturers agreed with the statement number ten.

### 3.11. Overall calculations of questionnaire percentage

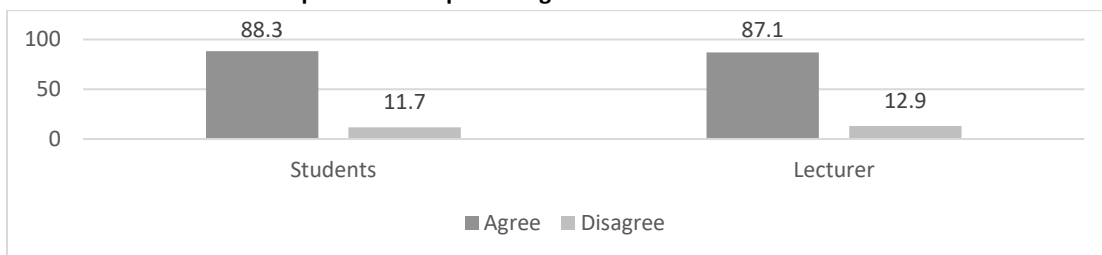


Figure 11. Overall calculations of questionnaire percentage

After collecting all responses from both lecturers and students in percentage, the researcher calculated the average percentage from questionnaire item 1 to 10. The result showed that both parties had very slightly different percentage with similar stand that most of them agree with statements in questionnaire. There average percentage of students' perceptions toward the implementation of online class at State Islamic University of Mataram was 88.3%. Then, the lecturers' average percentage was 87.1% with 12.9% disagreements.

## 4 DISCUSSION

This study was aimed to investigate the lecturers' and students' perceptions of the implementation of online learning at State Islamic University of Mataram as the result of the new normal era, which later the result could be used to evaluate the weaknesses. Furthermore, the discussion would be described in three important points: 1) the overall perceptions from both lecturers and students toward the implementation of online learning at State Islamic University of Mataram; 2) the gap of lecturers and students' responses toward similar questionnaire item; and 3) evaluation of low agreement as the

response toward the statement in questionnaire item.

#### 4.1 The Overall Perceptions from Both Lecturers and Students toward the Implementation of Online Learning at State Islamic University of Mataram

The results of this study revealed that both parties, the lecturers and students, responded positively toward the implementation of online learning at State Islamic University of Mataram as shown by figure 11. The positive responses explained that the online learning was applicable in odd semester of academic year 2020-2021 at the university. This positive perception would lead to recommendation for similar best online practices in the next semester (Lupton & Chaqman, 2010). The positive perceptions were gained from some aspects such as: First, the class had met the minimum class meeting requirements. Second, the lecturer used multi-platform in online class. Sari, Pramesti, and Kusuma (2020) states that most lecturers used Google classroom, WhatsApp, and zoom meeting and it was similar with most lecturers at State Islamic University of Mataram practices; Third, the materials were designed in accordance for the implementation for online class; Fourth, the class had been embodied with online attendance form; Fifth, the model of the online class was designed for active learning. Sixth, the students' opportunities to participate actively in class. The teacher should be ready before teaching by preparing best online classroom design to trigger students' active participation (Kebritchi, Lipschuetz, & Santiago, 2017). Furthermore, Abbad and jaber (2014) emphasized that the teacher's role influenced a lot toward the level of students' participations; and seventh, the commitments on keeping the schedule and each meeting time allotment of the online class.

#### 4.2 The Gap of Lecturers and Students' Responses toward Similar Questionnaire Item

Based on the numerical data found from the result of the questionnaire administering, there were two items in the questionnaire that show high score gaps gotten from the lecturers' and students' responses. The items were about the lecturers' activeness on creating online attendance and the lecturers' classroom preparation to design the online learning with active learning design. Regarding the high gaps between the respondents, the researcher administered the second questionnaire to ask form clarifications toward the issues.

The first high gap in percentage in the questionnaire was resulted from the item about the existence of online attendance form as shown in figure 4. Students had more positive responses toward the lecturers' readiness to teach by preparing the online attendance form compared to the lecturers themselves. There were 12% gap of percentage between both parties' responses. The second questionnaire which was shared to some lecturers who show negative perception to the questionnaire item explained that the lecturers felt that asking students to answer his or her greeting Google Classroom or WhatsApp group chat was not an online attendance form. While, the students thought any signs to show their attendance in online class was considered as online attendance form. Hung (2015) in the research about teacher readiness for online learning said that preparing online attendance form is one of characteristics to show that the teacher is ready to teach online.

The second high percentage gap appeared in figure 5. There was a different perception in one of the questionnaire items related to the design of online class that was prepared for active learning model as shown in figure 5. According to Budiman and Apriani (2019), the lecturer has responsibility to develop class which lead to make students more communicative and active. Unfortunately, the students optimistically gave higher positive responses compared to the lecturers that had lower percentage. This fact shows that there is possibility for having different perception between lecturers and students (Oktarina, Emzir, & Rafli, 2018). Regarding to this different result, the researcher requested for clarification on why some lecturers were not sure or agreed that they had made active learning online class model by administering open ended questionnaire. The results of the questionnaire are:

1. Some lecturers thought that online learning made them hardly instructed students to do physical practices while they were only able to see through screen.
2. Some lecturers thought that the online learning model with its many obstacles such as internet connection and gadgets technical problems hindered the ability of lecturers to make all students to accomplish similar activities at the same time.
3. Some lecturers found it was difficult to supervise students to acquire knowledge by themselves through

learning process while the students away and only seen from screen. Moreover, some of students turn off the video camera.

According to the lecturers' reasons written in the second questionnaire, some lecturers said they preferred to prepare the online class merely with the aim of delivering the course materials. Students had to master the day materials for being ready for the test. Hence, some lecturers thought they did not prepare the online class design meeting the active learning model.

Also, the researcher sent second questionnaire with open-ended model to students to clarify why most of them admitted that the lecturers had design the online class with active learning model. The result showed that they found many of their friends actively joining the online class and lecturers asked them many questions during the online discussion which they believed these were the characteristics of active learning model. Referring to the theory, the lecturer has obligation to develop students' curiosity and boosts students' motivation to response and ask question to the teacher by providing enchanting stimulus (Pratama, 2015).

#### **4.3 Evaluation of Low Agreement as the Response toward the Statement in Questionnaire Item.**

The present study revealed fact that the lowest percentage appeared for the respond to the existence of comprehension measuring instrument as seen in figure 6. Almost half from both lecturers' and students' sides stated that there were no comprehension measuring instruments in online class. This finding had similar perception results with the existence of online summative tests in online learning as depicted in figure 8.

Correlating the questionnaire items, no 6 and no 8, Najahah (2015) defines the comprehension measuring instrument is an achievement test that comprises of formative, sub-summative, and summative tests. When, the learning mode is implemented online, the test should be designed for online administration (Dell et. al, 2008). Unfortunately, some of students at State Islamic University of Mataram did not experienced online summative test as some lecturers did not prepare it as part of online learning. Regarding this result, similar with the previous discussion, the researcher administered the second questionnaire containing open-ended question to ask why some lecturers did not create online summative test. The responses from the lecturers were 1) preparing online summative tests took longer time than the offline tests; 2) the online test model made the lecturers work twice and spend more internet data if the test was not in multiple choice format. They had to score students works by reading every single answer online. Later on, they should input the score to the system that again took more time. So, it was hard for lecturer to assess students open answer responses online (Alruwais, 2018); and 3) the lecturers found it was difficult to assess group work as they should score both individual and group performance. Moreover, lecturers had to give feedback and check their communication skills by only seeing through screen (Ridgway, 2008).

Evaluating to the low percentage of perception for this item and the inability to hold face-to-face meeting in the classroom during the new normal era in pandemic covid-19, the lecturers are recommended by the quality assurance nit (QAU) in the university to develop online summative tests as the implementation of online comprehension measuring instrument which must exist inside the teaching and learning (Tosuncuoglu, 2018). In addition, there are many researches which discussed the benefit of having online test during the online learning. First, online test model helps students to prepare themselves best in terms of the most convenient time and place (Sari, Pramesti, & Kusuma, 2020); Second, online test gives instant score or provides immediate feedback compared to paper test (Gilbert et. al, 2011); Third, online test improves students' performance as they are motivated more (Marriott, 2009); Last, it is easy and fast to do (Eljinini & Alsamarai, 2012).

## **5 CONCLUSION**

The present study was aimed at investigating the lecturers' and students' perceptions of the implementation of online learning at State Islamic University of Mataram as the result of the new normal era which then the low results became crucial item of evaluation. Hence, the conclusion of this study states that both lecturers and students had positive

perceptions toward the implementation of online learning at State Islamic University of Mataram. However, there were percentage gap according to the responses from the lecturers and students for items discussing the existence of online attendance form and active learning online classroom design. Therefore, the second questionnaire administration revealed the reasons behind the gaps which recommend both parties to have similar concepts on what are meant by online attendance form and active learning design. The role of QAU in the university to initiate the inhibition of the academic pedagogy input to the academicians is also recommended to avoid misjudgment of academic concept. Finally, as the lowest percentage score in the questionnaire, the university needs to help the lecturers to cope with the challenges that hinder them to develop online test as the representation of online comprehension measuring instrument. The trainings and introduction of alternatives to develop online summative tests are required to hold in university.

This study expands the insight of the implementation of online learning from the lecturers' and students' perceptions data. However, this study had limitation as it does not reflect various attitudes that can exist in the respondents or even in different higher education institutions. Hence, the present study provides wide opportunity for further research since sudden shift of learning model from face-to-face to online as the impact of new normal era and the familiarity with technology are most influential factors upon the academicians' perceptions. Moreover, the future research should explore other variables that give influential effects to the perceptions such as the availability of facilities, internet connection, respondents' backgrounds, and others.

## REFERENCES

- Abbad, M. M., & Jaber, F. N. (2014). Evaluating E-Learning Systems: An Empirical Investigation on Students' Perception in Higher Education Area. *ijET* 9(4). 197-212. DOI: <http://dx.doi.org/10.3991/ijet.v9i4.3480>
- Al-Hammody, A. (2014). *When a facebook group makes a difference: Facebook for language learning*. Available online: <https://www.semanticscholar.org/paper/When-a-Facebook-Group-Makes-a-Difference%3A-Facebook-Al-Hammody/>
- Alruwais, N., Wills, G., & Wald, M. (2018). Advantages and Challenges of Using e-Assessment. *International Journal of Information and Education Technology*, 8(1), 34-37. DOI: 10.18178/ijet.2018.8.1.1008
- Aritonang, K., Tan, A., Ricardo, C., Surjadi, D., Fransiscus, H., Pratiwi, L., Nainggolan, M., Sudharma, S., & Herawati, Y. (2020). Analisis Pertambahan Pasien COVID-19 di Indonesia Menggunakan Metode Rantai Markov. *Jurnal Rekayasa Sistem Industri*, 9(2), 69-76
- Bartley, S. J., & Golek, J. H. (2004). Evaluating the Cost Effectiveness of Online and Face-to-Face Instruction. *Educational Technology & Society*, 7(4), 167-175.
- Budiman, W. & Apriani, E. (2019). Students' Perception of Lecturers' Role in Enhancing EFL Learners' Communication Ability. *The 3rd English Language and Literature International Conference (ELLiC) Proceedings*, 3, 223-237. Electronic ISSN: 2579-7263 CD-ROM ISSN: 2579-7549
- Dell, C. A., Hobbs, S. F., & Miller, K. (2008). Effective Online Teacher Preparation: Lessons Learned. *MERLOT Journal of Online Learning and Teaching*, 4(4), 602-610
- Dhawan, S. (2020). Online Learning: A Panacea in the Time of COVID-19 Crisis. *Journal of Educational Technology Systems*, 1(1), 1-18. doi: [10.1177/0047239520934018](https://doi.org/10.1177/0047239520934018)
- Eljinini, M. & Alsamarai, S. (2012). The impact of e-assessments system on the success of the implementation process. *Mod. Educ. Comput. Sci.*, 4(11), 76-84
- Gilbert, L., Whitelock, D., & Gale, V. (2011). *Synthesis report on assessment and feedback with technology enhancement*. Southampton.
- Haverback, H. R. (2009). Facebook: Uncharted territory in a reading education classroom. *Reading Today*, 27(2), 34. ISBN: 9781787351950
- Hoic-Bozic, N., Mornar, V., & Boticki, I. (2009). A Blended Learning Approach to Course Design and Implementation. *IEEE Transactions on Education*, 52(1), 19-30. doi:10.1109/TE.2007.914945

- Huang, R., Liu, D., Tlili, A., Yang, J., & Wang, H. (2020). *Handbook on facilitating flexible learning during educational disruption: the Chinese experience in maintaining uninterrupted learning in covid-19 outbreak*. Beijing: Smart Learning Institute of Beijing Normal University.
- Hung. (2015). Teacher Readiness for Online Learning: Scale Development and Teacher Perception. *Computers & Education*, 94. DOI: 10.1016/j.compedu.2015.11.012
- Irfan Tosuncuoglu, I. (2018). Importance of Assessment in ELT. *Journal of Education and Training Studies*, 6(9), 163-167. DOI: 10.11114/jets.v6i9.3443
- Kabilan, M. K., Ahmad, N., & Abidin, M. J. Z. (2010). Facebook: An online environment for learning of English in institutions of higher education?. *The Internet and Higher Education*, 13(4), 179-187. ISSN: 1096-7516
- Kebritchi, M., Lipschuetz, A. & Santiago, L. (2017). Issues and Challenges for Teaching Successful Online Courses in Higher Education: A Literature Review. *Journal of Educational Technology Systems*, 46(1), 4–29. DOI: 10.1177/0047239516661713
- Lupton, R. A. & Chaqman, K. J. (2010). Russian and American college students' attitudes, perceptions and tendencies towards cheating. *Educational Research*, 44. DOI: <https://doi.org/10.1080/00131880110081080>
- Marriott, P. (2009). Students' evaluation of the use of online summative assessment on an undergraduate financial accounting module. *Br. J. Educ. Technol.*, 40 (2), 237–254
- Muslimin, A. I. & Harintama, F. (2020). Online learning during pandemic: Students' motivation, challenges, and alternatives. *Loquen*, 13/2, 60-68.
- Najahah (2015). Potensi Daya Serap Anak Didik Terhadap Pelajaran. *Jurnal Lentera: Kajian Keagamaan, Keilmuan dan Teknologi*, 1(2), 159-171. P-ISSN: 1693-6922 E-ISSN: 2540-7767
- Oktarina, S., Emzir, & Rafli, Z. (2018). Students' and lecturers' perception on academic writing instruction. *English Review: Journal of English Education*, 6(2), 69-76. doi: 10.25134/erjee.v6i2.1256.
- Paratama, Y. (2015). Science teacher competence to design active learning. *Proceedings of Matrices for IITTEP – ICoMaNSEd*. ISBN: 978-602-74204-0-3
- Ridgway, J., McCusker, S., & Pead, D. (2004). *Literature review of e-assessment*. Bristol
- Sari, W. P., Pramesti, D. & Kusuma, A. I. (2020). Student's Perception of Online Learning in Pandemic. *Proceeding "international webinar on education 2020"*
- Siswati, S., Astiena, A. K., & Savitri, Y. (2020). Evaluation of Online-Based Student Learning: Models During New Normal Pandemic Covid-19 in Indonesia. *Journal of Nonformal Education*, 6(2), 148-155. DOI: <http://dx.doi.org/10.15294/jne.v6i2.25599>
- Todd, R. W. (2020). Teachers' Perceptions of the Shift from the Classroom to Online Teaching. *International Journal of TESOL Studies*, 2(2), 4-16 DOI: <https://doi.org/10.46451/ijts.2020.09.02>
- WHO. (2020). *Coronavirus disease (COVID-19) pandemic 2020*. Retrieved from <https://www.who.int/>
- Windhiyana, E. (2020). Dampak Covid-19 terhadap kegiatan pembelajaran online di sebuah perguruan tinggi kristen di Indonesia. *Perspektif Ilmu Pendidikan*, 34(1), 1–8.
- Windiarti, S., Fadilah, N., Dhermawati, E., & Pratolo, B. W. (2019). Teachers' Perception toward the Obstacles of E-Learning Classes. *Ethical Lingua: Journal of Language Teaching and Literature*, 6(2), 117-128. <https://doi.org/10.30605/25409190.v6.117-128>

