

Investigating Student Responses of Online Learning during the Covid-19 Pandemic in Performing Art Education

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Abstract— The Covid-19 pandemic has had a massive impact on human life, including arts learning in higher education. The problems that arise cause the learning community in the classroom to be limited. Face-to-face teaching is suddenly replaced by online learning. This study aims to determine an Edmodo-based online class's feasibility by conducting a user response survey, namely students. The questionnaire was given to all active students majoring in Performing Arts Education from three batches, totaling 125. Data analysis was performed using descriptive statistics in the form of tabulation and data visualization, used ANOVA for comparing the responses of male students with female students. The results show that the online class as an alternative to class meetings was declared good by the students. The respondents' preference in terms of the choice frequency and the mean score on each aspect of the assessment indicator shows a High level. There is no significant difference between the responses of male and female students. The data from this research can further be used as a productive study for the application of distance learning in the field of Performing Arts Education.

Keywords—online learning, edmodo, art learning, covid-19

I. INTRODUCTION

Covid-19 has been bothering academicians in Indonesia since the end of March 2020, marked by the existence of an official circular distributed by the government regarding implementing educational policies in the emergency period of the spread of the Coronavirus. One of the circular contents is that the learning process has to be carried out from home by online/distance learning. Later, several colleges have also issued some circulars regarding online learning and working from home (WFH). Therefore, online learning has been implemented by every lecturer and student.

It cannot be denied that the rapid development of information technology and the internet has brought significant changes, especially in education and learning. The Indonesian government has long responded to this matter by releasing a distance education policy written in Law No.12/2012 concerning Higher Education [1] (more specifically, in Minister Regulation No.109/2013) [2]. However, equitable distribution of infrastructure and availability of human resources are the determinants of the implementation of it. The Covid-19 pandemic seemed to trigger the awareness of academics to prepare competency provisions to provide internet-based learning. Various kinds of tools and resources have been abundant in the era of daily information disclosure; based on daily observations and

student's reports, some teachers have been using technology supports that match their abilities, for example, WhatsApp groups, teleconferences, social media, and online file archives (Google Drive, One Drive, e-Mail).

Besides, there are several alternative platforms like Social Learning Networks that have capabilities, such as e-Learning which offers their respective special features (Google Classroom, Schoology, Weebly, Lectora, Edmodo, etc.). Edmodo and Google Classroom are two tools that have been used massively as a digital classroom [3]. Researchers have implemented online learning based on the Edmodo platform. It is carried out in four pedagogical competency courses (Instructional Technology, Learning Assessment and Evaluation, Introduction to Curriculum and Instruction, and Classroom Management).

Each course has its class. Learning tends to be with a direct instruction strategy, and the material delivery is asynchronous. Each class meeting consists of a topic module, explanation by the lecturer via video or podcast, chat discussions, and assignments or quizzes. Student attendance was obtained based on a quiz or assignment. On the one hand, lectures gave several enrichments through online conferences. The assignments given were quite diverse, such as assignments with document templates, multiple choice quizzes, entries, matchmaking quizzes, and true-false quizzes. Edmodo's online classroom documentation is shown in Fig. 1.

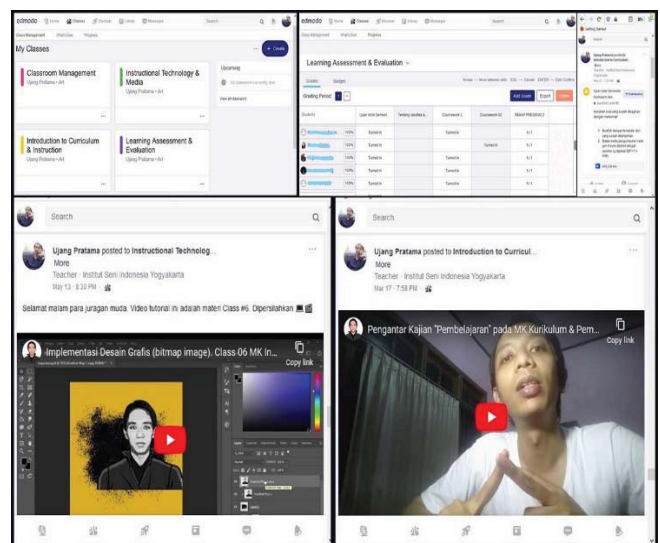


Fig. 1. Edmodo's online classroom documentation

The implementation of Edmodo-based online learning was in Performing Arts Education Study Program, with a total of three classes and the total active students according to attendance data of 125. Based on this, it is necessary to evaluate the use of online class application facilities through user surveys or evaluations. This study can be used to further study web-based learning designs for institutions, with distinctive characteristics of art students.

Edmodo, Social Media, and Moodle learning management system are beneficial to develop active interaction [4]. Several previous studies have found various benefits of Edmodo implementation in learning, even in higher education. Edmodo-based online learning has been implemented to teach reading course in the Pharmacy department [5], is integrated into ICT teaching for Adult Education and Training course [6], is used for online learning in the Business Education department [7], and is integrated to support the Blended Classroom in a Kenyan University [8]. Edmodo is also considered effective in improving the Vocational Student's management project [9]. This study attempts to determine whether Edmodo-based online learning is also able to facilitate student's learning in performing arts pedagogy. Furthermore, the development of online learning in the realm of performing arts pedagogy is still very interesting to be improved.

The urgency of this research is to find out the response of users of learning facilities, so that millennial student who has been flooded with information by the internet are encouraged to use their gadgets for the sake of study. The data generated by this study can be used for various interpretations related to the study of learning methods, learner's characteristics, learning evaluation, and online teaching design for further research and development. Thus, the purpose of this study is to determine the feasibility of implementing Edmodo-based online classes based on learner's perceptions so that its function as an alternative learning facility and supporting teacher performance can be measured more clearly.

II. LITERATURE REVIEW

A. Previous Research

Studies related to Edmodo-based online learning (virtual classroom/course-ware) have been widely researched; in this case, several studies relevant to the context of this research were selected. In one study, pre-service teachers who used flipped learning with Edmodo courseware were surprisingly able to obtain significantly higher achievement test scores and final scores than the traditional teaching group [10]. In the study, pre-service teachers as respondents in both the test and control groups obtained classroom environment perceptions scores that were not much different.

In other research, the Edmodo platform is considered capable of providing rich and colorful teaching resources, so it has the potential to stimulate interest in learning and improve the student's abilities. This Edmodo-based reverse class design and application was developed for teaching English listening for first-year students [11]. The results of subsequent studies state that students have a high level of readiness in using Edmodo to learn. The positive results of this study indicate that Edmodo can be used to achieve learning outcomes for each subject, especially at higher education [12].

In the field of science learning, a study concludes that there were significant differences in student learning outcomes

through the use of Edmodo (experiment) compared to conventional classroom teaching (control). Edmodo is considered effective for improving media learning outcomes [13]. In line with this, in the aspect of sharing content, Edmodo as a collaborative tool can make it easier for students to share images and texts. Edmodo is used most commonly as a social space where images can be uploaded and commented on [14]. The aforementioned studies provide sufficient evidence of the usefulness of Edmodo in learning various aspects and fields of study. Therefore, this research attempts to find out its specific benefits in the field of performing arts pedagogical competence.

B. Theory Basis

Edmodo's features are simple but almost complete; the basic activities in classroom teaching can be applied through various functions in the application. The implementation of Edmodo-based learning can be done with the class meeting unit model; each meeting can be filled with one discussion material, one class attendance, one assignment, which at the end of the assignment, the data on learning outcomes per unit can be generated. Study material content can be presented in the form of text documents (doc, txt, pdf), video, audio, or links to multimedia external links (articles, YouTube, podcasts, link to files). The assignments can be in the form of attached document templates or quizzes in various formats (multiple choice, filling in, matchmaking, true-false, and multiple answers). Besides, polling and wellness checks are also available. Thus, this platform is one of the application choices for an alternative learning facility outside class meetings. Edmodo can be obtained through the Edmodo page and the Google Play Android app store (Play store).

Distance learning is a virtual classroom simulation; Edmodo can be considered "an online web-service that allowed the teacher to use a blog or a microblog" [15]. This discussion focuses on Edmodo as an alternative to face-to-face teaching. Among several learning social networking applications, Edmodo is considered to have more benefits as an e-learning system, because its target users are teachers/tutors, its content characteristics can be formal or non-formal, and it serves a two-way connectivity model. Based on its e-learning functions, namely: (1) the type of the teaching material; (2) the source of the teaching material; (3) the moderator of the learning process; and (4) the storage of the learning outcomes, Edmodo is considered to have the most complete e-learning function by allowing its users to choose roles as teachers or students and providing assignments and recording learning outcomes [16].

There are distance education principles, application of distance teaching, and learning, management, and evaluation of distance education [17]. The research results are relevant examples for understanding the perspective of teachers, serving as support for researchers, developers, instructors, and online learning communities [18]. Along with the abundance of technological products that enable learning to occur, studies to determine the quality of each of these technology applications are indeed important.

A description of evaluation on distance learning which consists of five levels, namely: (1) level 1 related to reactions; (2) level 2 related to learning; (3) level 3 related to transfer; (4) level 4 regarding results; and (5) level 5 to return on investment [17]. In this case, the level of evaluation in the research carried out is at level 1, because after the implementation, the most important thing to know is the

opinion of the users, namely the students themselves. Therefore, the approach employing the survey method is a suitable way.

The survey is also designed for educational research. This method is something that people are familiar with. This method is commonly used to record opinions, record the product's approval, and measure trends towards election candidates [19]. Survey research only needs to use a questionnaire instrument. Moreover, a survey in educational research is one aspect that can be developed for a broader procedure in further research design.

III. METHOD

A. Type of the Research

This research is quantitative research using the primary survey method, so at the initial stage, the researchers determined what symptoms to be explored. In this study, the symptoms are aspects of the feasibility of implementing Edmodo as an online learning facility for students. The survey is an appropriate design because this research aims to study the attitudes, opinions, beliefs, and practices of individuals regarding the implementation of Edmodo-based online learning that the respondents have been through.

In more detail, the results of the adoption of the survey research stages are as follows: (1) ensuring that the survey is the best design to use; (2) identifying the research questions; (3) identifying the population and sampling frame; (4) determining the survey design and data collection procedures; (5) developing / selecting the instrument; (6) administrating the instrument; (7) analyzing the data to answer the research questions; and (8) writing the reports [19].

B. Selection of the Respondents

The respondents of this study were all active students in the attendance data who took Edmodo classes for Introduction to Curriculum and Instruction, Classroom Management, Instructional Technology, and Learning Evaluation courses. The respondents in this case were the students majoring in Performing Art Education of three batches. The number of the respondents was 125, with the reference frame coming from the id student in Edmodo class.

C. Data Collection Procedures

The survey design chosen was a cross-sectional survey, in which data collection was carried out at a specified point in time. Therefore, the respondents gave an opinion regarding the symptoms in the actual view (present view). The data collection instrument employed questionnaires. The instrument was adapted through the guidelines provided by Simonson et al. [17] which includes three aspects of assessment, namely: (1) aspect of teaching and learning which contain 7 measuring items; (2) aspect of developing a community of learners, which contains 5 measuring items; and (3) aspects of the instructor which contains 7 measuring items. This device is known as the OCIE (Online Course Evaluation Instrument). The OCIE instruments were produced in two forms, first printed and secondly online with Google Form.

D. Data Analysis

The data analysis process consisted of: (1) recording all responses; (2) adding up the results of the responses; (3) checking for response bias; (4) conducting analysis; (5) interpreting data; and (6) answering research questions

descriptively. In this case, descriptive statistics were needed in the form of tabulation and visualization to explain the survey's results. ANOVA was used to compare the responses of male students with female students. To help understand the conversion of the attitude assessment, the perception level criteria used are shown in Table 1.

TABLE I. PERCEPTION LEVEL CRITERIA

Mean	Category
> 4.2	Very High
> 3.4 – 4.2	High
> 2.6 – 3.4	Medium
> 1.8 – 2.6	Low
≤ 1.8	Very Low

IV. RESULTS AND DISCUSSION

After the data collection was carried out through distributing the questionnaires, the data records were collected and compiled to be calculated as a whole. The evaluation by the students was intended to determine the quality of the online learning that has been conducted for 8 meetings. The total number of the questions posed was 19. The data were grouped based on the frequency of choices selected by the students.

A. Students' Perception of the Teaching and Learning

The survey results for the Teaching and Learning aspects seemed satisfactory. The clarity of the learning objectives, the consistency of the activities and objectives, and the accuracy of the learning planning were considered good. The students also considered that the material provided through Edmodo could lead to the main concepts of the course. Besides, the class assignments also helped to build an understanding of concepts and principles related to the material being taught.

Students claimed that the Edmodo online class presented skills and techniques that are appropriate to the course, even met the developmental needs in the field. 54% of the respondents expressed a "High" preference in their response to this aspect. Only 4% of the respondents expressed a "Low" preference. In conclusion, it can be seen that Edmodo-based online classes were able to satisfy in terms of Teaching & Learning. The survey results can be seen in Table 2.

TABLE II. PERCEPTION LEVEL CRITERIA OF TEACHING AND LEARNING

Item	VL	L	M	H	VH
1	0	3	27	73	22
2	1	3	25	78	18
3	0	5	37	62	21
4	0	3	22	68	32
5	1	6	37	61	20
6	0	7	32	65	21
7	1	8	24	68	24
f	3	35	204	475	158
%	0%	4%	23%	54%	18%

B. Students' Perception of the Developing a Community of Learners

The survey results for the aspect of Developing a Community of Learners is also considered good even though positive preferences decreases. The students shared their opinions on the advantages of online classes for collaborative work and providing peer learning opportunities. Furthermore, this aspect also emphasizes effective judgment. The encouragement of tolerance and discussion, the application of mutual respect, and equal opportunities to contribute were considered good by the students.

This is indicated by the results of the survey, 48% of the students agreed that the development of learning communities could be facilitated by Edmodo-based online classes. There were 6% of respondents who disagreed (Low) and 2% strongly disagreed (Very Low). The distribution of preferences in this aspect is still the same as the previous aspect, in that the preference for "High" is still the highest, followed by preferences of "Medium", "Very High", "Low", and finally "Very Low" respectively. Table 3 shows the distribution of these data.

TABLE III. PERCEPTION LEVEL CRITERIA OF DEVELOPING A COMMUNITY OF LEARNERS

Item	VL	L	M	H	VH
1	2	4	49	55	15
2	3	12	45	53	12
3	3	14	43	55	10
4	0	4	34	63	24
5	2	4	12	72	35
f	10	38	183	298	96
%	2%	6%	29%	48%	15%

C. Students' Perception of the Instructor/Facilitator

In the aspect of The Instructor, the survey results show that the instructor in the Edmodo class was considered satisfactory by the students. Several indicators in this aspect include the instructor's clarity in using the assessment methods and indicators, variations in assessment methods, ability to motivate, mastery of technology, and understanding of the teaching materials. The affective aspects of the teacher regarding respect for different points of view and wisdom in answering questions were also assessed by the students.

Regarding this aspect, 54% of the students gave the "High" preference. In other words, the teacher was considered capable of providing good support for learning in online classes. The next preference was "Very High" which was obtained from 22% of the students. In this aspect, there is a difference in the second-order regarding the frequency of the data found, which is different from the two previous aspects. Therefore, the teacher in online classes is considered to satisfy the learning needs of their students. Table 4 shows the data distribution related to the instructor aspect.

Further discussion regarding the data acquisition based on survey scores can be seen in Table 5 that both in terms of the aspect category and as a whole being measured; the alternative learning with Edmodo online class is considered satisfying the students. Following Table 1, all mean results fall within the satisfactory criteria or the "High" preference. In other words,

the quality of the learning is considered good according to student evaluations. The overall mean score is 3.83, which is included in the criteria for the level of "High" or in other qualitative languages is "Good". The Instructor aspect gets the highest average score followed by Teaching and Learning, then the Developing Learners Community.

TABLE IV. PERCEPTION LEVEL CRITERIA OF THE INSTRUCTOR

Item	VL	L	M	H	VH
1	0	4	21	74	26
2	0	5	26	70	24
3	0	2	14	73	36
4	2	8	50	46	19
5	2	3	18	72	30
6	1	1	35	71	17
7	0	3	12	67	43
f	5	26	176	473	195
%	1%	3%	20%	54%	22%

TABLE V. MEAN SCORES OF EACH ASPECT

Teaching and Learning	Developing Learners Community	The Instructor	Overall
3.86	3.69	3.95	3.83
High	High	High	High

Fig. 2 provides a clearer visualization of the data regarding the frequency with which the survey scores were tabulated. It is depicted that the choice of the respondents tends to be the "High" option in every aspect. The maximum frequency for the Teaching & Learning aspect and The Instructor aspect is 875 and contains 7 question items. Meanwhile, the aspect of Developing a Community of Learners is 625 because it contains 5 question items.

Based on the ANOVA test results, the P-value obtained was 0.86723. If the significance level used is 5%. Then the P-value > 0.05, which means there is no significant difference between male students and female students' responses. This result means that all students using Edmodo-based online classes have no significant differences based on gender. Female and male students have the same perception tendency in gaining learning experience from the platform used. The results of this comparison shown in Table 6.

Based on the findings, it can be interpreted that the average student's perception of teaching and learning has a high score indicating a positive response. This is in line with the previous studies which explain that studying and learning in good online learning offerings are those that can provide a challenging presentation [10], [13]. Besides, online learning needs to be supported by interesting features such as video conferences, forums, assignments, discussions, and feedback on each assignment done by students [3], [4].

Improvisation of online learning design needs to be developed in the form of project-based learning. Through project-based learning, students are required to be responsible for the assigned task. In practice, students will work together to complete projects even in online learning designs [20].

Another thing that needs to be considered in online learning practice is the learner analysis feature which aims to monitor the activity level of learners in online learning services. The learning analytics dashboard (LAD) can provide constructive feedback for users [21]. Besides, an online learning platform needs to be supported with personalized learning features [22], [23], [24].

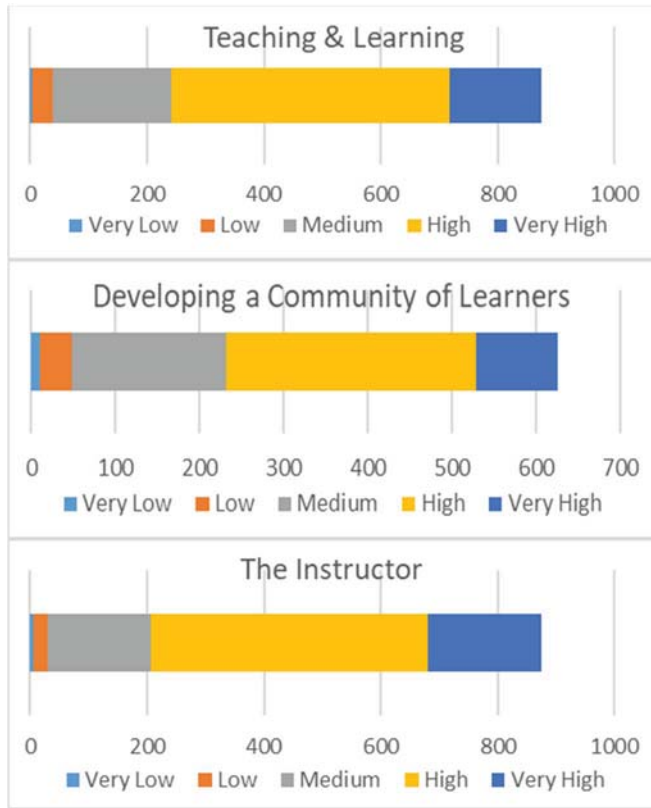


Fig. 2. Score frequency distribution

TABLE VI. ANOVA RESULTS FOR STUDENT RESPONSES BASED ON GENDER

SUMMARY						
Groups	Count	Sum	Average	Variance		
Male	78	299.526315	3.8400809	0.240273577		
Female	47	181.210526	3.8555431	0.265863915		
ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	0.00701	1	0.00701	0.02806	0.86723	3.918177
Within Groups	30.7308	123	0.249843			
Total	30.7378	124				

V. CONCLUSION

Based on the results of the survey and data analysis of this study, it can be concluded that the students’ responses related to the use of Edmodo as an alternative to class meetings were declared good. The preference of the respondents’ choice leads to the “High” level both in terms of the frequency of choices and the average score on each aspect of the assessment indicators. The feasibility criteria proposed consisted of: (1) teaching and learning, (2) developing a community of learners, and (3) the instructor. Therefore, Edmodo-based online learning to support the pedagogical competence of

performing arts is proven to be good from the perceptions of the majority of the students. ANOVA results show that there is no significant difference between the responses of male and female students. Thus, during the Covid-19 pandemic when online learning becomes a priority, Edmodo online classes are a viable alternative to teaching classes.

This research was limited to teaching subjects related to pedagogical competence. The result will be different if the competencies taught are related to the practice of performing arts skills. To find out more about online learning for performing arts education, further research studies that need to be carried out are the ones related to online learning designs for the performing arts pedagogy category.

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