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STUDENT'S LEARNING EXPERIENCE IN THE UTILIZATION OF ZOOM AND MICROSOFT TEAMS IN ONLINE LEARNING SETTING

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ABSTRACT

Teachers around the world currently struggled to find the most suitable learning tools and learning models to be implemented in the online classroom setting. Limited time and low attention span in online setting triggered teachers to set strategies to ensure the students experienced effective and rich learning process. One of the strategies to provide the effective learning experience was by utilizing technological tools. This research aimed to investigate the utilization of Zoom in synchronous sessions and Microsoft Teams during the asynchronous sessions. Experimental research design was implemented. 323 students from various majors in 11 classes were observed. E-questionnaire, video observation, pre/post-test, and students learning results were examined. Findings showed that experimental group students had better learning-experiences on interaction, knowledge test result, project result, critical thinking output, technological tools exposure, and student's engagement during the synchronous sessions.

Keywords: *Student's learning experience, onlinel Learning, technology-enhanced learning (TEL*)

INTRODUCTION

In this new normal situation, students and teachers faced various challenges in the learning process. Teachers had to make sure the learning took place well so that the students can achieve the targeted learning outcomes. Besides, the pandemic situation forced the teachers to improve the lesson delivery, instruction and interaction in the teaching-learning process (Selvanathan et al., 2020). The results also highlighted the students who struggled with the learning from home situation. The students were unsatisfied with some of the learning experiences during this situation. They have limited improvement on their learning during the learning from home period (Engzell et al., 2021) (Refaat & Said, 2021). Answering the issue, the utilization of technology in facilitating the students in online learning setting is suggested to enhance the students learning experience (Chun, 2015). The solid technological tools utilized in both synchronous and asynchronous session play important roles in ensuring the students to achieve the expected learning experience. The technological tools should be able to facilitate the communication between the teachers and the students, as well as communication among the students (Refaat & Said, 2021).

There were four dimensions of student's online learning experiences examined by Bouilheres et.al. (Bouilheres et al., 2020), namely 1) the comparison on the flexibility and easiness of traditional and online learning, 2) the clarity of online course requirement, 3) the interaction between teacher and students, the interaction among students, as well as the interaction between the students and the

learning materials, and 4) the student's engagement on the learning process.

Further, this study will focus on the third dimension and the fourth dimension. Yet, this study also will also find out the student's online learning experience on utilizing the technological tools during both synchronous and asynchronous sessions. In Bina Nusantara University, zoom meeting platform was officially utilized to facilitate the synchronous sessions. Besides, the institution also has LMS to facilitate the asynchronous sessions - BINUSMAYA. Nevertheless, in this study, Microsoft Teams was also utilized to enrich the students learning experience during the asynchronous sessions. The additional materials and additional assignments were distributed on Microsoft Teams.

Thus, this study aimed to investigate the students learning experience in using Zoom for the synchronous sessions and Microsoft Teams for the asynchronous sessions in English for Business Communication Course in Bina Nusantara University. The research question of this study is "To what extent do Zoom and Microsoft Teas maximize the students' learning experience in English for Business Communication Course?".

RESEARCH METHOD

To answer the research question: "To what extent do Zoom and Microsoft Teas maximize the students' learning experience in English for Business Communication Course?", this study implemented experimental research method to gain findings, results, and conclusion. Experimental research was chosen since it could help the teachers to find out the influence of specific treatments and measure the differences between the experiment and the control groups success factor in their learning experience (Creswell, 2012).

11 classes consisted of 323 students were investigated on this study. The students were majoring on Architecture Department, Business Law Department, Chinese Literature Department, Civil Engineering Department Computer Engineering Department, Computer Science Department, Cyber Security Department, School of Information System, Japanese Literature Department, and Elementary School Teacher Study Program. The students were enrolled in English for Written Business Communication (EWBC) Course in the even semester, 2020/2021 Academic Year were observed. 5 classes consisted of 64 students were given treatment. Further, 6 other classes consisted of 259 students became the control groups.

To gather the data various instruments were utilized. First, e-questionnaire in Microsoft Forms were distributed to the students on both experimental and control group. Second, the recorded video conference sessions were observed. Third, knowledge tests were also conducted to support the findings from two previous instruments. The knowledge test instruments were pre-test and post-test that were held on Microsoft Forms as well. Fourth instrument utilized to gain conclusion were the students learning results, on this case was their final project as the final assignment on this course. As the learning platforms, Zoom were chosen as the learning platforms on synchronous sessions and Microsoft Teams were chosen to be used during the asynchronous sessions.

FINDINGS AND DISCUSSION

Knowledge Improvement

Measuring the student's improvement, knowledge tests were taken to portray the first and final position of the students. The pre-test was taken on the first session of teaching and post-test was

taken after the teaching session done at the end of the semester. The result of the pre-test and post-test on both groups can be seen on Table 1 below.

Table 1: Knowledge Test Improvement Percentage

Class No	Type of group	Pre-test Score	Post-test Score	Improvement (%)
1	Experiment group	67	78	16%
2	Experiment group	70	76	9%
3	Experiment group	71	74	4%
4	Experiment group	71	73	3%
5	Experiment group	68	75	10%
6	Control group	71	73	3%
7	Control group	71	77	8%
8	Control group	69	72	4%
9	Control group	70	76	9%
10	Control group	69	75	9%
11	Control group	69	72	4%

The result showed the experiment group made more improvement on the knowledge test than the control group. The highest improvement on knowledge test was 16% in Class 1 experiment group. The least improvement was 3% in Class 4 experiment group and Class 6 control group.

Learning Experience Dimension: Communication and Engagement

This study examined the communication in the synchronous session while Zoom Meeting application was utilized. Both experiment and control groups were examined. The result shown in Figure 1 showed that the students in experiment groups were more active both written and spoken than the students in control group classes. Besides, the students in experiment groups were also participated better on class discussions.

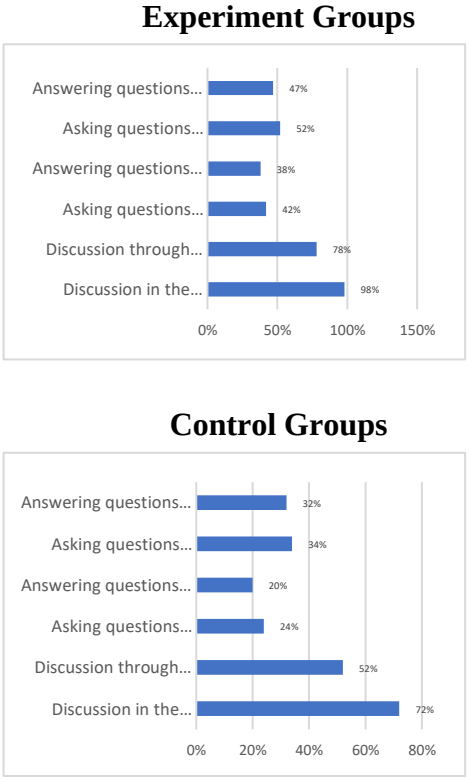

Figure 1: Communication among Students in the Synchronous Session (Zoom)

Further, from the Figure 1 above, the student's engagement in experiment groups was better than the students in control group. It can be seen from the percentage number when the students actively asking and answering the questions to their students in the classroom activities on Zoom session. While the students in control groups tended to less active with lower percentage.

Besides, Figure 2 below showed the communication between the teacher and the students during the synchronous session while Zoom Meeting application. The result also showed that the students in experiment groups were more active both written through chat room and spoken by unmute their speaker rather than the students in control group classes. Besides, the students in experiment groups were also participated better on class discussions.

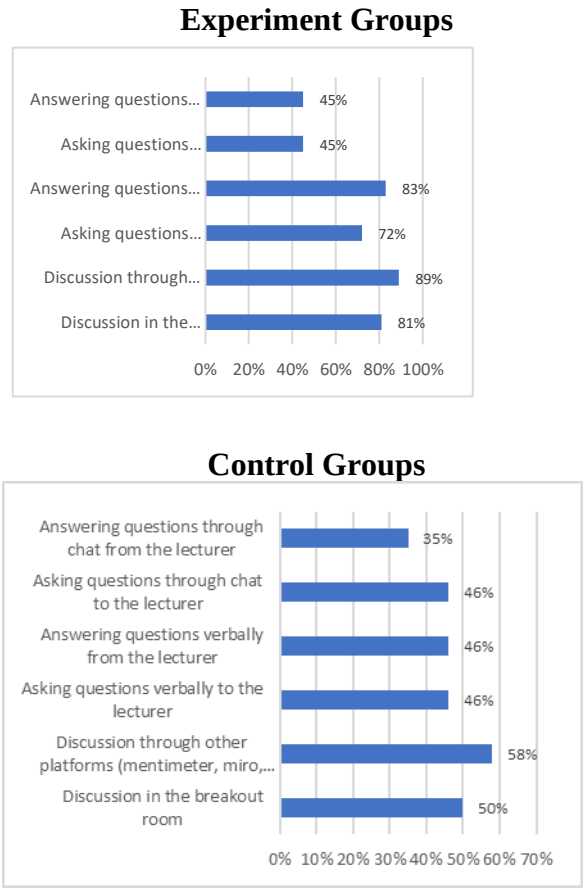

Figure 2: Communication between Teacher-Students in the Synchronous Session (Zoom)

Further, Figure 2 also showed the students in experiment groups had better engagement than the students in control group. More students in experiment group actively engage in the discussion sessions provided by the teacher.

In the asynchronous session, only experiment group classes were given experience in utilizing Microsoft Teams. The control group classes were not given any experience in using Microsoft Teams. Yet, both groups had another communication and learning channels in the asynchronous session through Learning Management System (LMS) and LINE application. The LMS were utilized to distribute given assignments and other learning resources during the asynchronous session as well as provided discussion forum. Providing faster respond and fun communication for the students, LINE application was utilized since this application provides stickers and features to send files that can be discussed in the group.

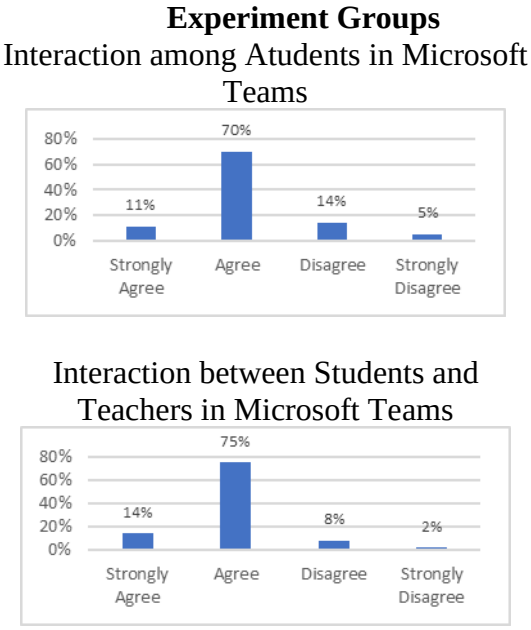

Figure 3: Interaction in the Synchronous Session (Microsoft Teams)

Figure 3 showed that students in experiment group classes had positive experience in utilizing Microsoft Teams during the asynchronous sessions. Microsoft Teams enables the students to have active interaction during the asynchronous session both with the fellow students and the teacher in the class.

Learning Experience Dimension: technological tools utilization

In utilizing the technological tools during the synchronous and asynchronous sessions, observation in the video learning and student's behavior during the asynchronous sessions were analyzed. The result showed that both students in experiment groups and control groups didn't have any difficulties in utilizing the technological tools. The technological tools exposed to the students were MIRO, Padlet, Quizizz, Microsoft Forms, OneDrive, Kahoot, Mentimeter, and

Socrative. The students only needed adjustment when they were introduced to MIRO for the first time. But, in the second session of class, the students were already able to utilize the features available in MIRO well.

In the utilization of ZOOM, the students from experiment groups and control groups also found no difficulties. The group agreed that the user interface on ZOOM and Microsoft Teams was easy to follow. Yet, the group also agreed that the material in Microsoft Teams was easier to access and well-organized rather than the materials given in ZOOM during the in-class session. The students could look back and find the materials in Microsoft Teams whenever, wherever.

Figure 4 below showed students in both experiment and control groups learning experiences in utilizing Zoom during the synchronous sessions.

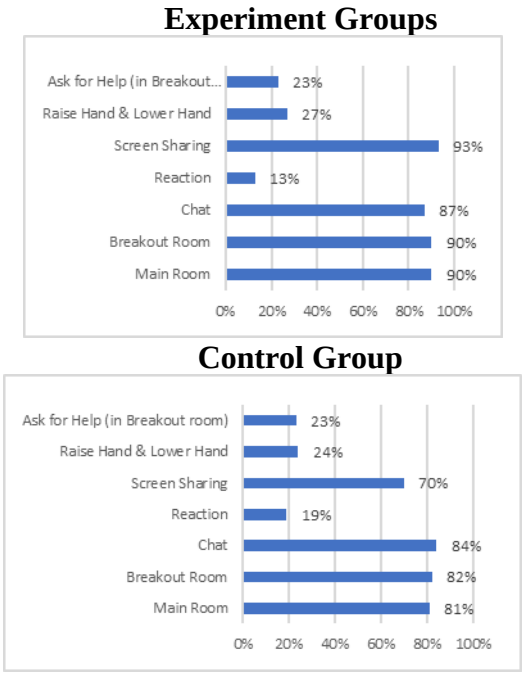

Figure 4: Student's Learning Experience in Technology Utilization in Synchronous Sessions (Zoom)

As shown in Figure 5, the students did not find any difficulties in utilizing Zoom application. Figure 5 also showed how Zoom helped the students experience the learning to express their ideas, communicate their thought, and sharing their learning to the other students and the teacher.

As mentioned earlier, students in experiment group classes had positive experience during asynchronous session, table 6 below supported the statement by showing the students agreement on the extent Microsoft Teams could help improving their confidence before having the synchronous sessions. In the Microsoft Teams, the students were given learning resources such as reading materials, videos, and articles. The students also had quizzes and assignment in the Microsoft Teams before they have the synchronous sessions. The impact of this activities, the students could perform better in the synchronous session by having more discussion on certain cases and topics so that the teacher did not have to focus on theoretical things and the course could run more practice on the discussed language skills and topics.

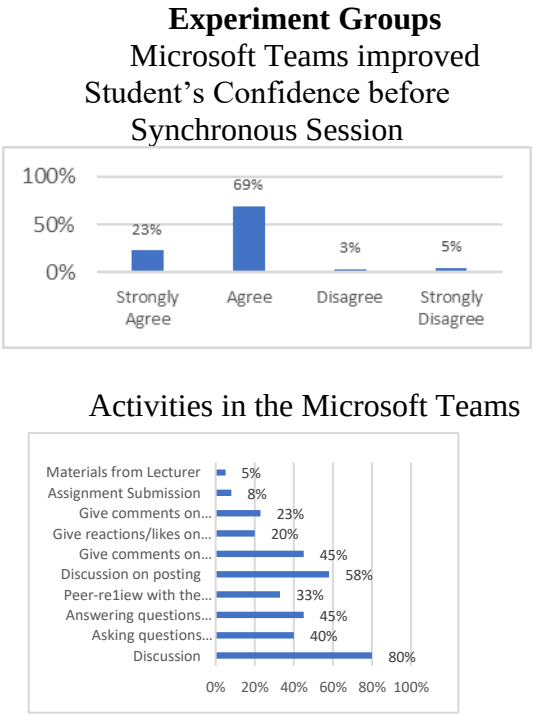

Figure 5: Microsoft Teams Utilization in Asynchronous Sessions

Further, Table 6 also showed how the students in Experiment Group classes utilized Microsoft Teams in the asynchronous sessions. 80% of the students used Microsoft Teams to discuss the topics or given assignment in the asynchronous sessions. Yet, since learning materials assignments were also given in the Learning Management System (LMS), the students just needed to repost their work in Microsoft Teams. Besides, Microsoft Teams also provided reaction button that enable the students to react on the other's posts or opinion. This feature was suitable for the students who were digital native and loved to do simple thing to express their ideas and opinion.

From those discussion, it can be concluded that both groups had positive learning experience in utilizing the technological tools in the classroom both on synchronous and asynchronous sessions.

CONCLUSION AND SUGGESTION

Based on the discussed findings and results, it can be concluded that students in experiment groups preferred spoken and direct communication than the control group. These findings could be associated to the situation that experiment group classes experienced discussion and interaction in Microsoft Teams before their synchronous sessions. So that the students in experiment group classes had more confident to discuss verbally in the synchronous sessions. The findings also showed both groups, experiment and control groups, had good learning engagement.

For the learning experience in technology utilization, the students in experiment group and control group classes didn't find any difficulties in operating the technologies applied in the synchronous sessions and asynchronous sessions. The students could operate the features available on Zoom, Microsoft Teams, MIRO, Padlet, Quizizz, Microsoft Forms, OneDrive, Kahoot, Mentimeter, and Socrative well.

Further, this research only focuses on capturing the student's learning experience. It is suggested the future research to look closer on how the ZOOM and Microsoft Teams might influence the student's motivation in learning.

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