# Zoom vs. Microsoft Teams: Students' Preference

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| ARTICLE INFO | ABSTRACT |
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| | Learning is a process from knowing nothing to knowing more and it can be done by ourselves or teachers. However, normally learning with a teacher is done face-to-face, but due to the pandemic, much of the learning was changed to online. Online learning is done virtually, usually using media as a learning platform; the media used for online learning is Zoom and Microsoft Teams. This article aims to discover student's preference between Zoom and Microsoft Teams as the media for online learning and their reasons for choosing the media. In addition, this research was conducted using a survey approach; the researchers distributed a Google form to students, which contained several questions they had to answer related to the Zoom platform and Microsoft Teams as a medium for online learning. They also had to tell the reasons they chose the media. The result of this research is divided into two categories: completeness of features and convenience of use. Zoom and Microsoft Teams have some of the same features and also have their advantages and disadvantage. Most students choose Microsoft Teams because of the complete features, but they mostly choose Zoom for convenience. From the results obtained, it is hoped that in the future, people who read this paper find it easier to choose what platforms they can use for online learning and choose the right media. It is hoped that it can increase the enthusiasm of students to learn. |
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## Introduction

As human beings and students, one of our tasks is to learn. Learning means the knowledge gained from studying (Hornby et al., 2015). This definition has the understanding that learning is an activity to achieve intelligence or knowledge. Baharuddin and Esa in Nurfitrianah & Faridatul (2013) said that learning is a human process to achieve various competencies, skills, and attitudes. Learning starts from human birth until the end of life. In short, learning is a process by which we, who initially do not know about something, become aware and know about something. Learning can be done in 2 ways: with teachers at school or studying alone at home. Learning at school is generally done with face-to-face meetings in a room that we usually call a class, where we, as students and teachers, will later help teach us and provide teaching materials. Learning is one of the important processes that we will go through in our life.

However, this face-to-face learning method is now inhibited due to the COVID-19 pandemic. The COVID-19 pandemic, which has become a global pandemic, requires people to work and study from home. We who were originally able to learn face-to-face with the teacher now have to turn to virtual learning because of this pandemic. Therefore, to keep helping the learning process, several platforms are available for online learning media, such as Zoom and Microsoft Teams. Zoom dan Microsoft Teams are the platforms we can use as online learning media so we can learn and meet face-to-face virtually with our friends and teachers at home; these two applications also provide and offer various features to use to help our online learning process at home. Several articles discuss learning media in this pandemic era. For example, e.g., Sunarti (2020), Djamdjuri & Kamilah (2020), and Arifin & Merdekawati (2020). However, those previous studies just discussed students' responses and the effectiveness of using the media but did not compare it with other media. The present study will compare two learning media, i.e., Zoom and Microsoft Teams. Therefore, this study aims to identify which media students prefer to use as online learning media between Zoom and Microsoft Teams and the reasons. In line with the objective, this study aims to address the following research questions: (1) Which media do students prefer to use for online learning? And (2) What are the reasons for students choose the media?

## A. Theoretical Framework

### 1. The Definitions of Media

The word "media" derives from the Latin word "medium," which means "middle, intermediary, or introduction." The term "medium" in Indonesian means "between" (stating one's position) or "being in the middle" (starting size). In general, "media" refers to anything used as a container, tool, or means of communication (Prawiro, 2020). In general, media is an intermediary or introductory tool that channels messages or information from a source to the message's recipient. Furthermore, several experts weigh in on the definition of media. Djamarah (2002) believes that the media is a tool that can be used as a channel for messages to achieve goals. Meanwhile, Rohani (1997) defines media as "anything that can be captured by the human senses and serves as an intermediary, means, or tool in the communication process." As a result, it is possible to conclude that the media is a tool that can be used to communicate.

### 2. Types of Media

When it comes to media, there are three types; they are audio media, visual media, and audio-visual media. Audio media is a type of media that can only deliver a voice, such as a voice call. Visual media can deliver a visualization but not a voice, such as a picture or paper maps; you can see and touch them, but they do not produce sound, so you cannot hear anything. Finally, there are audio and visual media that can deliver both visual and audio at the same time (Prawiro, 2020). An example of audio-visual media is the online learning media we are discussing: Zoom

and Microsoft Teams. Zoom and Microsoft Teams allow you to hear each other voices and see each other faces at the same time. This kind of media is called audio and visual media.

## 3. The Media for Online Learning

Online learning, also known as electronic learning (e-learning), is a type of learning system that uses the internet and technology. This type of learning relies heavily on technology and the internet as its primary source of information (Setiawardhani, 2013). Some people still use the website, but others have moved on to applications. So, how does this online learning system function? As previously stated, online learning relies heavily on technology and the internet as its primary source of information. So, to run online learning, we need devices that can open the website or download the applications we use, such as Zoom or Microsoft Teams, and an internet connection. After that, we can open the application, register our name, and begin creating a study room, or we can join someone else's room by entering the code or clicking the link shared by the room owner.

Zoom is one of the most popular media among teachers and students in both schools and universities. Zoom is a communication application using video and can be used on a variety of devices, both mobile and desktop. This application is usually used to conduct face-to-face remotely with many participants (Winarso, 2021). There are two options for using Zoom, the first is when you use Zoom but not premium, then it can only accommodate a maximum of 100 participants and can only last for 45 minutes, after which the meeting will automatically end. However, if you use premium Zoom, you have to pay for it, but on the other hand, Zoom will not have a participant limit and time limit.

Microsoft Teams are now very popular too among teachers and students. Microsoft Teams also has the same function as Zoom, which can be used to communicate using video and voice. Almost all the features provided are the same; only a few features are available in Microsoft Teams but not in Zoom, and the Microsoft Teams view differs from Zoom. Microsoft Teams does not have a time limit or participant limit. We must buy the premium version for Zoom, and for Microsoft Teams, we can get it for free. Then for Microsoft Teams, teachers can give quizzes, upload learning videos, upload files, and use them to chat even when they are not doing online videos. Microsoft Teams can function like a regular chat platform.

Using Zoom and Microsoft Teams and face-to-face learning in class is the same; the only difference is that the room we use in Zoom or Microsoft Teams is a virtual room, not a real room, and we need a code or link to join it. That way, we can learn online and with teachers and friends by staying at home.

## B. Literature Review

Before I conducted this research, several types of research discussed online learning and media in online learning. Nonetheless, in this research, I will focus on referring to two media in online

learning, namely Zoom and Microsoft Teams. Based on Kobayashi (2017), online students prefer email and text messages because of their convenience. Although social networking is popular among the younger generation, students perceived it to be less useful when compared to other asynchronous media. The outcome could be attributed to faculty attitudes; social media are not regarded as pedagogical tools.

Furthermore, students rated online videos far higher than CDs/DVDs. The findings reflect the current student population; roughly 70% to 95% of undergraduate students in the United States own at least one smartphone or other mobile devices. As a result, online videos may be more convenient and easier to access than CDs/DVDs. Online discussion boards, chat groups, and collaboration tools (e.g., Wiki, Google Docs) are used to encourage peer interaction. Online collaboration tools were rated as the most useful of the three media. According to Morris' research, students did not find online discussion boards useful. Although online collaboration tools and online discussion boards are asynchronous media, their uses differ. This suggests that online students prefer individual learning unless the assignment requires collaboration.

Moreover, according to Nurmala et al. (2021), online learning at ARS University using the Zoom application during the Covid-19 virus can be effective. It is just that there are some technical stumbling blocks when it comes to online learning. Using Zoom as a distance learning tool is an option for lecturers and students. ARS University's online learning has been quite effective, thanks to the Zoom application developed during the current covid-19 pandemic. Flexible learning and its implementation make it easier for students to participate in online or remote learning activities. Students responded favorably to the use of the Zoom application for learning. The numerous features that make it simple are a plus for making online learning easier. In the first research, they conducted research on students' preferences in online learning media thoroughly and widely. There are still many media being compared in it, whether it is sound media, visual media, or sound and visual media. They only focus on the voting results and the reasons but not the effectiveness of the media. However, in the second study, they explained and focused on one medium, namely Zoom. They also discussed how this media could function in student life in that study. They explained the effectiveness of using Zoom during the covid-19 pandemic and mentioned several obstacles during its use this time.

## Method

This research uses survey approach to determine the students' online learning preferences. The data were collected by distributing questionnaires through Google Forms. There are two types of questions, the first is multiple choice, and the second is open-ended questions, which have been shared via Google Forms link to the respondents. In filling out the questionnaire, there are two criteria for the respondents, such as:

1. Have experience undergoing distance learning/online learning and understand online learning.
2. Have experience in using both Zoom and Ms. Teams.

Questionnaires are distributed voluntarily to those willing, and there is no coercion for those not willing to fill out the questionnaire. Names and personal data of those who fill out the questionnaire and are counted in the survey will not be published, and personal data will be kept confidential. The questionnaire is divided into two forms of questions, namely multiple choice and open-ended questions, and the total of respondents that fill up this Google form is 29. Still, however, one respondent is excluded because the respondent is not fulfilling the criteria. To get maximum results, this research is conducted openly for students at one university and from other universities. It could also be filled by students from any major as long as they meet the criteria. In the end, 28 respondents were filling out the questionnaire.

## Result and Discussion

### A. Result

This study found results after researchers distributed questionnaires and compiled questions on the Google form platform about Student's Preference Between Zoom and Microsoft Teams as The Media for Online Learning.

### 1. Multiple Choice

Table 1. Multiple-choice question list

| No | Questions | Zoom | Microsoft Teams |
|----|-----------|------|-----------------|
| 1 | Between the two applications (Zoom and Ms Teams). Which one takes up more memory/heavier/take up more space? | 15 | 13 |
| 2 | Which application requires a stronger signal to get better-quality audio and visual? | 18 | 10 |
| 3 | Which application consumes the most quota when using it? | 20 | 8 |

This table shows that the respondent's choice for the first question is mostly Zoom. Students think that the application that takes up more memory/takes up more space between Zoom and Microsoft Teams is Zoom. However, from this table, we can also see that many students choose Microsoft Teams. If you look at the comparison, this number only has a slight difference, namely two votes, which means that these two applications consume much memory. Fifteen students chose Zoom, and 13 students chose Microsoft Teams. Indeed, it only has a difference of 2 votes, but in terms of Zoom, it is superior, and that means most students do choose Zoom as an application that takes up more memory/takes up more space.

The table shows that the respondents' choice for the second question is mostly Zoom. Students think Zoom needs a stronger signal for better audio and visual quality. However, the

gap is further in this question than in the previous questions. If the difference was only two votes on the previous question, but on this second question, the difference is eight, which means six votes are different from the previous question. On this second question, Zoom got 18 votes, while Microsoft Teams got ten votes. There is a difference of 8 votes between the two choices. So in this question, it is more certain to confirm that most respondents think that Zoom is an application that needs a stronger signal to get better audio and visual quality.

From the table, the third time, we can see that the respondent's choice for the third question is mostly Zoom. Students believe which application uses more quota when using it is Zoom. In this question, the gap is further away than in the previous two questions. In the first question, the gap is two votes. In the second question, the gap is eight votes, but in this third question, the gap is even further, which is 12 votes. Zoom got 20 votes on this question, while Microsoft Teams got eight. There is a big gap between the two choices, namely 12 votes. That way, it can be decided with certainty that students believe that Zoom is an application that uses more quota when using it.

## 2. Open-ended Question

The results of the open-ended questionnaires are displayed in Table 2 below.

Table 2. Respondents' answers to a question

| NO | Q: Which of these two applications do you think have more complete features and is more convenient? |
|---|---|
| 1 | Zoom, because the recorder feature provided is more accessible and zoomed-in, also offers settings to beautify the face/to symmetrical the face so that we can be more comfortable conducting online meetings. |
| 2 | Zoom, with various advantages, is offered, including virtual backgrounds and cursor access by meeting members. |
| 3 | Zoom. |
| 4 | Microsoft Teams, because it has no time limit and can access everything. |
| 5 | Microsoft Teams. Because in Microsoft Teams, there is a record feature to watch again and an assignment feature where lecturers can hold quizzes via Teams during class. Also, through Ms Teams, we can call friends when they have not entered the meeting room. In this case, the feature name is "ask to join". |
| 6 | Microsoft team because it is easier to apply and more comfortable, in my opinion. In contrast, Zoom requires a very strong signal when you want to use it and drains more quota. But it is a bit difficult if the email has not been registered because Microsoft Teams is part of the Microsoft company, so when registering, if it is not an email from the school/university, it will cost a lot because you have to subscribe. Oh yes, one more thing, Ms Teams can be used unlimitedly, while the Zoom account must be premium if you want to use more than 30 minutes. |
| 7 | Zoom. |
| 8 | Zoom, because I use Zoom more often than Microsoft Teams. |
| 9 | In my opinion, the application that has more complete features is Zoom. In the Zoom application, in addition to the features mentioned above, there are other features such as webinars, live streaming, live transcripts, breakout rooms, and photo and video filters. What I like the most is |

| | |
|---|---|
| | the studio effects feature where this feature allows us to apply eyebrow filters and lip color. In addition, the video quality on Zoom is more HD than Ms. Teams. |
| 10 | Microsoft Teams, because apart from having features for video meetings. It also has features to listen to audio, take quizzes, collect assignments, create rooms for learning |
| 11 | Personally, I think I am more comfortable using Zoom. In addition to its features, Zoom Meeting is buffering less often than Ms Teams. And also, a lot of unknown problems often occur in Ms Teams, such as meetings not being available, not being able to join meetings at critical times, etc., and the Ms Teams application, which requires a large enough space than the Zoom meeting, slightly fills the internal memory and causes a slow response when opened Ms Teams itself which makes me more comfortable using zoom meeting |
| 12 | In my opinion, Microsoft Teams is superior in features and easier to use. |
| 13 | Both applications have different features, such as Ms Teams can send files in the application, and recordings are automatically stored there, but the virtual background is not as good as Zoom. I am more comfortable with Zoom. The virtual background is easier because I can add my photos, filters, and breakout rooms, and the UI of Zoom is more comfortable to look at than the UI of Ms Teams |
| 14 | Zoom, because in the daily learning process, more lecturers/teachers use Zoom than MS Teams. The features in Zoom are also easier to understand how to use. |
| 15 | Zoom has more complete features, rarely found bugs and a fast application. |
| 16 | Teams, because it includes everything like ppt, word, excel, etc. |
| 17 | Microsoft Teams. Because it is complete, it can be used for learning, and it can also be used for video conferences. |
| 18 | Besides being used for meetings, Microsoft Teams can also create a shared channel for online learning activities. |
| 19 | Teams, because there are various features available, easy to use, does not take up a lot of data. |
| 20 | Both have the same features, but I chose Zoom because it is lighter and faster when opened than steaming, which is heavy and long, so I really have to prepare before class. |
| 21 | Teams have more features considering that Teams are not only an application used for video meetings but can also be used by lecturers/teachers for class management and information distribution. However, it is not always compatible with many devices and is still not familiar, so it is difficult to operate. |
| 22 | In terms of complete features, I think Microsoft Teams is more complete because it has the Assignments feature and the Class Notebook feature, which Zoom does not have. However, for convenience of use, I think Zoom is more comfortable because the application is not heavy and laggy. |
| 23 | Zoom because I never use Ms Teams |
| 24 | Actually, Microsoft Teams is more profitable for students because the features provided by Microsoft Teams are free. However, the Microsoft Teams application is very heavy to run on a laptop that is only devoted to lectures such as making assignments such as papers etc. In contrast to Zoom, which is much lighter than Microsoft Teams, which is very friendly with students' laptops, which are only devoted to learning. |
| 25 | I prefer Zoom because it is more convenient to do activities remotely. |
| 26 | Zoom. |
| 27 | Zoom. |
| 28 | Zoom, filters! Make it look ready even though you have not showered yet |
| 29 | I personally prefer to use Ms Teams because in Ms Teams, it looks like a group, so there is a history of chats and meetings. The grid display is also square and can be set like sitting in class. |

From this table, we can see many answers from respondents, and their answers are very diverse; 17 students chose Zoom, and 12 students chose Microsoft Teams. However, four respondents chose Zoom but not saying the reasons and one respondent chose Zoom because he/she never used Microsoft Teams, which cannot be counted because it does not fulfill the criteria. From the table, we can conclude that respondents tend to choose Zoom over Microsoft Teams for the convenience of using the application because 16 students chose Zoom and 12 students chose Microsoft Teams.

## B. Discussion

According to the findings of this study, students' media preferences for online learning are extremely diverse. The results indicate that the participant's answers are divided into two categories: completeness of features and convenience of use. Respondents prefer Microsoft Teams as a media that has more complete features because they cannot only make video calls, but they can also take quizzes, call friends who have not joined, record without having to ask permission, rewatch recordings, upload files, take notes, view assignments, work on, and collect assignments from the teacher, interact privately or in groups, etc. Zoom has similar features. Zoom also has features such as screen sharing, recording, filters, virtual backgrounds, and chat rooms. The advantages of Zoom are the breakout room feature, live transcript, live streaming, display name and background change. Microsoft Teams can also use a virtual background, but only the background is provided, and we cannot change the display name because the displayed name will match the email we use to log in. However, Microsoft Teams is indeed classified as more complete because we cannot do quizzes on Zoom, upload files, or re-watch video recordings in the application. On Microsoft Teams, video recordings can be saved in the Microsoft Teams group chat, but the video recording will be saved in the gallery of the device used to record on Zoom.

On the other hand, respondents prefer Zoom as an application that is more comfortable for them to use because Zoom video quality is more HD. The use of virtual backgrounds on Zoom feels more comfortable because a participant can change it freely. Even though Zoom is heavier and needs a more stable Internet connection than Microsoft Teams, Zoom has fewer errors and lags. Sometimes Microsoft Teams has an error like the meeting does not exist even though the meeting is in progress. The display in Microsoft Teams is also more complicated than Zoom, which is simple, so it is easier to understand its use. However, Zoom has a limitation of time and participants, so if the participant wants to delete that, they must buy Zoom premium. Also, if they are not the conference host, they must get permission from the video conference organizer to record the Zoom meeting. In conclusion, they feel more comfortable using Zoom even though they must have many quotas and a strong signal.

The respondent's opinion regarding the completeness of the features in this Microsoft Teams application follows the perspective of Hikmah (2022), who stated that to connect with teachers and other students, Microsoft Teams use video conferencing. Teachers can use Microsoft Teams to send student evaluations and receive immediate feedback. According to Sulz (2020), Microsoft Teams allows for rapid data editing and sharing from anywhere and a large one-drive storage capacity. Furthermore, managing study groups is simple; students are placed in courses or groups based on their level or type of subject, ensuring that they are not confused or missing lectures. The video and audio quality in Microsoft Teams is also superb. Another advantage is the ability to communicate in secret or groups. It can be used to save important conversations or chats. Microsoft Teams also allows teachers to monitor and summarize student work in real-time.

Moreover, according to Nurmala (2021), online learning at ARS University utilizing the Zoom program during the Covid-19 virus was beneficial. It is just that some technical issues arise when online learning is in progress; for example, a student remarked that it was frequently confusing during learning because of the speaker factor, which was periodically missed depending on the signal strength and sound during learning. The issue is that internet services are not readily available. Students claim to have a greater data quota. Apart from that, Zoom has many advantages, the first of which is that it is free to download and can accommodate up to 100 people. Second, they can change the display name freely. Third, they can use virtual background freely, not just the background provided but also their photos, and then live transcript features are helpful because sometimes we may interpret the pronunciation incorrectly or mishear the word. but with the live transcript feature, it becomes more helpful to understand. the layout set in the zoom is simpler. Hence, it is not difficult to use it. Finally, Zoom Cloud Meeting works on Android, iOS, Windows, and Mac computers.

## Conclusion

In conclusion, this research found that the respondents' answer is real diversity, and they all have their own perspectives about the media they prefer to use in online learning. They are divided into two parts, the first is those who are more concerned with features, and the second is those who are concerned with comfort. Most respondents choose Microsoft Teams for applications that have a complete feature, take less memory, need less signal, and have less quota for online learning. Nevertheless, the majority of the respondent choose Zoom as the application, which is more comfortable for them to use even though it takes up much memory, takes up more data/quota, and need a stronger signal.

However, from this paper, we finally know which application students prefer to use for online learning. Moreover, we also know about the advantages and disadvantages of each application. From this paper, people will learn about other people's opinions about each application. This paper

is expected to help them choose applications they will use later in online learning. If they use applications that match what they want, it is hoped that their interest in learning will increase, even though only through virtual video learning. If learning feels fun and comfortable, then it will increase their desire to learn, even if only face-to-face and online.

For future studies, it is recommended to use different methods (e.g., as mixed-methods) from the present study. It is also important for future researchers to increase the number of samples and expand the scope of the sample. By using a different method, a larger number of samples, and a wider sample scope, the researcher can get more diverse answers and more valid results. Finally, the author hopes that later researchers can compare more existing application applications to make the results more varied.

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