

## Teachers' Perception of the Use of Video Conferencing Applications in Online Learning

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### ABSTRACT

The objectives of this study were to analyze how the teachers' perception of the use of video conferencing applications in online learning, to identify the challenges that the teachers had when implementing online learning utilizing video conferencing applications, and to find out the solutions to solve the obstacles faced by the teachers. The data of this study were collected through interviews and observation of six English teachers who teach students at elementary, junior high, and senior high levels in an informal English School in Gorontalo. The methodology employed in participant selection was the utilisation of purposive sampling. The data underwent analysis through the utilisation of a descriptive qualitative approach. The process consisted of three stages: data reduction, data display, and verification. The findings of this study indicate that all of the educators exhibited a favourable impression of their motivation in using video conferencing applications for teaching purposes, their competence in operating video conferencing applications, and their recognition of the benefits provided by such programmes. However, only a subset of the teachers had a strong understanding of the dynamics of their interactions with students and their students' levels of motivation. In addition to the aforementioned factors, educators faced various obstacles when utilising video conferencing platforms for online instruction. These challenges encompassed suboptimal internet connectivity, an unsupportive academic atmosphere for students, inadequate access to educational resources, limited opportunities for teacher-student engagement, and diminished student motivation. Ultimately, the educators proffered several strategies to circumvent the obstacles that had emerged, specifically by ensuring a reliable internet connection for the faculty, furnishing educational games, and upholding effective communication with the parents.

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## 1. INTRODUCTION

The Indonesian government has mandated that all schools and institutions, including formal and informal, use online learning so that classes may be held from home and the Covid-19 virus can be contained. Students can participate in online courses from the comfort of their homes or from different locations (Nashir & Laili, 2021). My Liberty English School was one of the informal schools in Gorontalo that has been using internet instruction. The school used a form of online education called synchronous learning. Through the use of a webcam or video conferencing software, synchronous learning allows students and teachers to communicate in a manner comparable to that of a typical face-to-face classroom (D. Rahayu, 2020). My Liberty English School's online learning programme made use of video conferencing-based software to facilitate real-time instruction. The term "video conferencing" refers to the use of a network to transmit and receive audio and visual information in real time (Kristóf, 2020). Therefore, the use of a video conferencing tool can facilitate face-to-face teaching and learning between persons in different locations.

Online learning by using video conferencing applications brings several benefits to the teaching and learning process. The benefits are allowing the students to have direct interaction with the teachers, reducing the amount of time needed for attending school, allowing the teachers to replay the recorded lesson, reducing disturbance from students to the other students, helping the students to reduce anxiety when asking questions because of not being at the same place, and providing the supporting features for teaching and learning process such as virtual whiteboard and file sharing (Al-Samarraie, 2019; Marhami, Fonna, Mursalin, & Nuraina, 2020; Nambiar, 2020; Nashir & Laili, 2021; Nonthamand, 2020). It means that video conferencing application can be a good media to support the teaching and learning process because it provides some benefits and it helps the teachers and the students to have direct interaction like in real classroom situation.

However, based on the researcher's initial observations made, there were still some challenges that the teachers experienced when implementing online learning using a video-conferencing application. The challenges varied based on the level of the students (elementary, junior high, and senior high). Some of the challenges were related to internet connection issues, the decrease in students' motivation to learn, and students' engagement during the teaching and learning process. The quality of the internet connection and other technical issues can occasionally cause problems in video conferencing applications which may cause communication problems because the audio and video communications not be delivered or received (Al-Samarraie, 2019; Yu, 2018). The other challenges that may happen during the implementation of video conferencing applications are that the students' living environment is noisy, which may distract the students' concentration; some students do not participate in the teaching and learning process during the video conferencing since they choose to turn off their cameras; the teachers and the students get physical pain because of frequently using the devices for doing video conferencing (Massner, 2022; Nambiar, 2020). To sum up, video conferencing application not only provide some benefits but also brings some challenges in the teaching and learning process. Therefore, all the educational management should find solutions to overcome all the challenges.

In order to solve challenges that may happen in the teaching and learning process, it is important to analyze teachers' perceptions of online learning by using video conferencing applications. This includes how they see the performance of the teaching and learning process during online learning, how they can deal with challenges that arise, and how they can offer the best strategies for online learning itself. Analyzing teachers' perceptions of video conferencing activities is important because it allows them to adapt their teaching skills and preparedness so that they are able to adjust their teaching methods and strategies to match the student's needs and demands (Yu, 2018). Moreover, the teachers' perceptions can be analyzed from several aspects, namely, teachers' competence in using and operating the tools for online learning, teachers' perception of the interaction between teachers and students during online learning, and teachers' perception of the motivation of teachers and students (Arslan, 2021; Massner, 2022; Meşe, Sevilen, & Info, 2021; Nashir & Laili, 2021; Natalya & Halim, 2021; Rasmitadila et al., 2020; Windiarti, Fadilah, Dharmawati, & Pratolo, 2019; Yani, 2021). Finally, it can be said that the success of

instructional practices may depend on the teachers' attitude towards it. Then, analyzing teachers' perceptions and attitudes about their competence in applying online learning, the interaction between teachers and students, and the motivation of teachers and students can help encourage more meaningful activity in the educational environment, especially during online learning.

A previous study by Windiarti et al. (2019) which focused on teachers' perception towards the obstacles of E-learning classes, showed that the participants (two teachers) were not really familiar with E-learning because they were still learning things related to E-learning, so it caused some obstacles in teaching and learning process. The obstacles were related to devices for E-learning (internet connection, software availability, and students' ability to operate the devices); related to teachers' knowledge, in which the teachers still have low awareness towards the technology; related to time management, in which the students still found it hard to divide the time for the learning process and operating E-learning applications; and related to students' motivation, in which their motivation was decreased when they found difficulties in operating the application. Another study conducted by Rasmitadila et al. (2020) which attempted to explore the perceptions of primary school teachers of online learning during the Covid-19 pandemic period, showed that the teachers that participated in that research believed that technological readiness for online use or for offline use must be considered to support the success of online learning. Then, the teaching materials should be adapted to the situations of online learning and to the students' needs. In addition, the parents must understand the materials taught by the teachers because they would help the students to understand the subject in online learning. The challenge was that the students lost interest in online learning, so the teachers must use various instructional methods to get students enthusiastic about online learning. On the other side, Nambiar (2020), who discovered the impact of online learning from the perspective of students and teachers of universities in Bangalore City, found that the teachers felt that online learning was not really effective compared to classroom method. It was because of a lack of interaction between students and teachers and technical issues. The students' perspective also shows the same case. The students showed dissatisfaction when the teachers and students got the problem related to technical skills. As a result, the teachers and the students assumed that the teaching and learning process was not really optimal. The previous studies mentioned before have similarities with this research that all focus on the perception of teachers related to online learning. However, there are some differences in that this research more focus on synchronous learning, which uses one of the video conferencing platforms (Zoom Meeting application). Furthermore, this research attempts to discover the perception of teachers who teach students at three levels of education: the teachers who teach English to students at the elementary school level, students at the junior high school level, and students at the senior high school level.

Based on the elaboration of the cases above, the researcher focuses this study on analyzing the teachers' perception of online learning by using video conferencing applications, finding out the challenges faced by the teachers during the implementation of online learning using video conferencing applications, and finding out the solutions to solve the challenges faced by the teachers.

## 2. METHODS

This study used a descriptive qualitative method. Qualitative research is the process of collecting, analyzing, and interpreting non-numerical data to gain an understanding of such particular phenomena (Basuki Wibawa, Mahdiyah, & Jarnawi Afgani, 2019). This method is usually used to discover perspectives, ideas, and perceptions, so it is able to gain depth understanding of teachers' perception of online learning using a video-conferencing application. This study was conducted from February 2022 until August 2022. Six English teachers in My Liberty English School were interviewed in this study. They consisted of two teachers who teach students at the elementary level, two at the junior high level, and two at the senior high level. All the teachers used the Zoom Meeting application as the media for the video-conferencing application. The data of this study were collected through interviews

and observation. Interview as the main instrument was developed from some theories in the previous research mentioned in the previous chapter. There were seven questions asked in the interview session, namely; teachers' competence in using and operating video conferencing application, the interaction between teachers and students during online learning using video conferencing application, the teachers' motivation during online learning using video conferencing application, the students' motivation during online learning using video conferencing application, the advantages of using video conferencing application, the challenges faced during the implementation of online learning using video conferencing application, the teachers' solutions and suggestions to overcome those challenges (Al-Samarraie, 2019; Arslan, 2021; Nambiar, 2020; Nashir & Laili, 2021; Rasmitadila et al., 2020; Windiarti et al., 2019). The researchers employed observation to gather empirical evidence to directly ascertain the state of online learning and the difficulties teachers encounter in the instructional process. This approach was utilised to facilitate a comparison with the data gained through interviews. The researcher employed a structured observation method wherein six predetermined themes were produced. These subjects were directly linked to the questions posed during the interview session and were accompanied by brief descriptions.

The first step of collecting the data was interviewing the teachers. The researcher contacted six English teachers in *My Liberty English School* who still had teaching and learning processes by using online learning, and made an appointment with them for the interview schedule. The interview was done by giving seven questions to the participants related to their perception of online learning using video conferencing application, the challenges faced during the implementation of online learning, and the solutions and suggestions to overcome the challenges found; and recording the participants' answers for each question. Once the interview finished, the researcher made an appointment again with the participants to schedule an observation session. The observation was done by joining the participants' online classes while the teaching and learning process was running. This was conducted to discover directly the situation of the teaching and learning process by using video conferencing applications and to observe the challenges faced by the teachers during the teaching and learning process. The researcher made the checklist, wrote a note of the situation revealed, and compared it with the data obtained from the interview session.

The data analysis was conducted in three steps. The first step was making the transcript from the recording of the interview session and eliminating the unrelated and unimportant data. The second step was elaborating the data in the form of recording transcripts into narrative text. The last step was validating the final data by using the triangulation technique. In this study, the researcher used method triangulation, which used more than one method to collect the data.

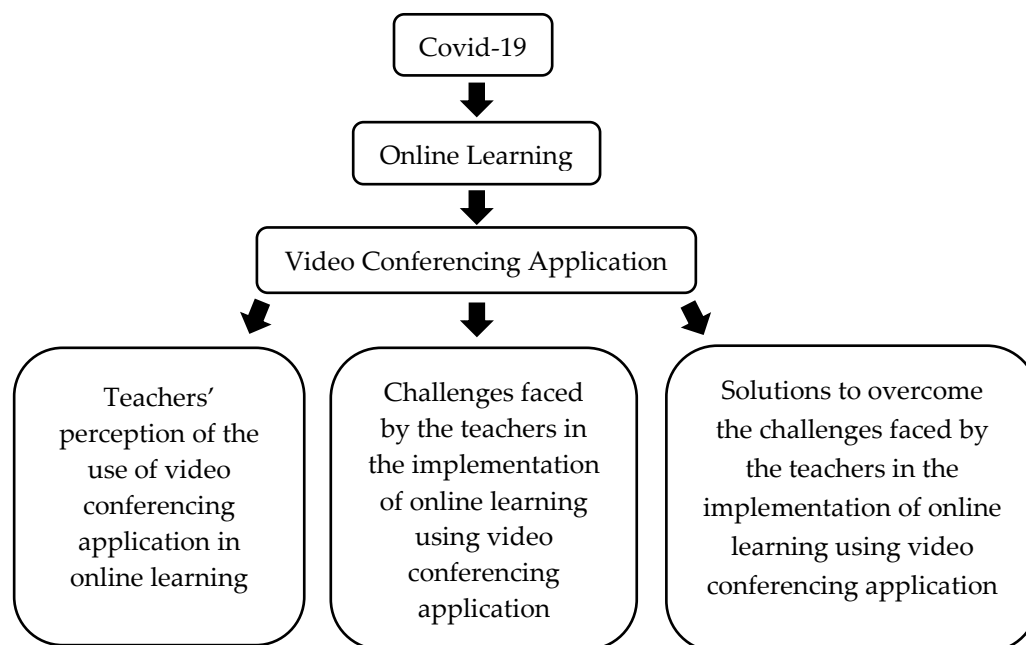


Figure 1. Research framework

### 3. FINDINGS AND DISCUSSION

The finding and discussion were presented to answer the research questions. The research questions were related to the teachers' perception of online learning using video conferencing applications, the challenges faced during online learning using video conferencing applications, and the solutions to solve the challenges faced. The result of the interview session would be presented into three topics and several sub-topics and would be divided based on the perception of teachers of elementary students, teachers of junior high students, and teachers of senior high students.

#### 3.1 Teachers' Perception of the Use of video conferencing Applications in online learning

For schools and all other educational management to continuously improve and modify the online learning system, it is crucial to understand how teachers perceive online learning and what difficulties they may face. Furthermore, teachers' perceptions can be analyzed from several aspects, namely;

#### 3.2 Teachers' competence in using and operating video conferencing applications

Based on the interview with the teachers of elementary students, the teachers of junior high students, and the teachers of senior high students, the researcher got that all of the teachers said that they were competent in using and operating video conferencing applications, in this case, is Zoom Meeting application.

Elementary Teacher 1 (ET1), *"I can master all the features in that application so easily. I don't find it difficult at all"*.

Elementary Teacher 2 (ET2), *"I am good enough with that because before teaching and learning moved into an online system, I had learned the features of some video conference applications"*.

Junior High Teacher 1 (JHT1), *"Well, I think I'm competent enough in using and operating video conference application during my online class and I know all of the features"*.

Junior High Teacher 2 (JHT2), *"I can say that I am competent in using video conferencing applications and I am mastering all the features in the video-conferencing application. I can use it by using a computer, laptop, or mobile phone"*.

Senior High Teacher 1 (SHT1), *"Well, I can operate the computer, the laptop, and mobile phone, while using the video-conferencing application. I can master all the features in a video conferencing application"*.

Senior High Teacher 2 (SHT2), *"I have a good ability in using video-conferencing applications. It is a simple application that is easy to be used. I have learned also all the features in Zoom that can support my teaching and learning process"*.

Based on the result of the interview above, it can be concluded that all of the teachers had good competence in using and operating video-conferencing applications. All of them used Zoom Meeting Application. They could make video conferencing applications by using their phone or laptop, and they could master all the features of video conferencing applications such as whiteboard, screen sharing, quizzes, etc. Because online learning has been implemented throughout many regions for several years, most teachers were considered competent to use digital equipment, especially in teaching-learning activities, when they already owned their electronic devices (Husain, Idi, & Basri, 2021). In this digital era, teachers should master the technology to avoid being perplexed by the online learning program, so the teaching and learning process would be more accessible to teachers and students (Windianti et al., 2019). Moreover, it is important to analyze the teachers' perception of their competencies in operating technology because analyzing teachers' perception of mobile technology can help promote more meaningful usage of the technology in the educational environment (Domingo & Garganté, 2016). Competence in using digital media is necessary to support the implementation of online learning. The teachers are expected to have that competence to avoid the confusion of carrying out online learning.

### ***3.3 The interaction between teachers and students during online learning using video conferencing application***

Based on the interview with the teachers of elementary students and the teachers of senior high students, the researcher found that the teachers interacted well with their students during online learning using the video-conferencing application. It was because they could talk to each other face-to-face, just like in a traditional classroom. With video conferencing, teachers may connect with their pupils as they would in a traditional classroom, encouraging the students to actively talk during the teaching and learning process (Nashir & Laili, 2021). Therefore, there were two ways of communication between teachers and students and between students and students.

ET1, *"mostly, the students are active in asking me and answering my questions and they all turn their cameras on."*

ET2, *"students were active in communication whether between students and students or students and teachers. We can talk to each other in discussing the material just like in offline class because we can see our faces each other on camera"*

SHT1, *"we mostly have the two ways of communication during the teaching and learning process. So, it's not only me who always speaks in class, but the students are also actively speaking"*

SHT2, *"the students are active in having interaction with me during online learning like they will ask me some questions if they don't understand about something or they will answer my questions. Our communication is just running so well because we can just right away talk directly face to face"*

On the contrary, it was found that the teachers of junior high students got some difficulties in building interaction with their students.

JHT1, *"it's quite challenging in building the interactions between me and the students because sometimes they don't want to turn the camera on. And also, if I ask them some questions, it's quite long for them to answer me."*

JHT2, *"it's a little bit hard for me to build an interaction with them because when I explain the material, the students just turn off their camera and mute their audio, so most of the time I just have one-way communication without any feedback from the students."*

It can be concluded that the teachers of junior high students were hard to build interaction with their students during online learning because the students always turned their cameras off and muted themselves. The students' lack of interaction and camera-off behaviour during the video conferencing led to teachers frequently having trouble engaging students in communication (Massner, 2022). Therefore, it was hard for the teachers to get feedback from the students in the teaching and learning process.

### **3.4 Teachers' motivation during online learning using video conferencing application**

Based on the interview with the teachers of elementary students, the teachers of junior high students, and the teachers of senior high students, the researcher got that all of the teachers believed that they had high motivation during online learning using the video-conferencing application.

ET1, *"I am feeling so motivated when I teach my students, and also, I feel happy every time I am teaching because most of the students are excited too to learn"*

ET2, *"I am motivated enough in teaching through the online system since it gives me the flexibility of working time and place."*

JHT1, *"I always feel like in high motivation even though I know there will be a struggle. I always come on time, show my excitement in teaching, and I always turn the camera on during the class."*

JHT2, *"my motivation is high when the students understand the material. So, every day I must find the way and the strategy to make the teaching and learning process keep fun and easy to understand by the students."*

SHT1, *"most of my students are excited to learn English, so that motivates me to teach them even though now the teaching and learning process is just online. I'm also excited to have new kinds of learning by using the videoconference application."*

SHT2, *"I think I have had high motivation since the first time I used a video conferencing application for teaching until now. I feel so motivated because teaching online by using a video conferencing application allows me to teach from anywhere. It's more flexible."*

It can be concluded that all the teachers had high motivation in teaching during online learning because their students were excited about learning and when the students could understand the materials taught. The motivation of both students and teachers is influenced by one another, so encouraging student learning may be inferred as a desired motivation for the teachers (Arslan, 2021). Therefore, when teaching online, teachers must be highly motivated since the intricacy of the curriculum necessitates immediate problem-solving in virtual classrooms (Rasmitadila et al., 2020).

Besides that, having new experiences, such as the chance to utilize Zoom Meeting application and the use of technology in education, were motivating factors for the teachers in online learning. Also, the teachers are motivated by the fact that online education overcomes geographic limitations since it allows them to teach from home (Arslan, 2021).

### **3.5 Teachers' motivation during online learning using video conferencing application**

Based on the interview conducted, it was found that one teacher of elementary and two teachers of junior high students felt that their students felt motivated only at the beginning of the implementation of online learning. After that, they started to lose their motivation.

*ET1, "at the beginning of our online class, at the time, they were really in high motivation. But now some of them sometimes come late and sometimes turn their camera off when I explain the material by opening the share screen."*

*JHT1, "In the first six months, they were excited. But when it comes to around the 6th month, they come late. Some of them joined the class 15 minutes after I started the class. Then most of the time, they turn their cameras off."*

*JHT2, "for the earlier, they are excited because it's the new thing for them. However, day by day, it seems like they don't feel motivated enough because they start to always turn off their camera."*

From the quotes above, it can be seen that the students started to show a lack of motivation by coming late, turning their cameras off during the teaching and learning process, and being quiet and not active in class discussions. In the early stages of studying from home, there was an increase in motivation since the students felt pleased, free, and like they were experiencing something new. However, one year after applying to study from home, the student's motivation decreased, and they started acting more passive due to the repeated and unexpected internet connection disturbance (Natalya & Halim, 2021).

On the other side, one teacher of elementary students and two teachers of senior high students thought that their students had high motivation during online learning.

*ET2, "students' motivation in the online classroom is good. They even come earlier to the video conference. Video conference is not only available for studying but also for playing games by using sharing features. So, it makes the students happy and feels so motivated to attend the class."*

*SH1, "Mostly, the students are excited and look motivated because they always participate in class discussion."*

*SH2, "my students still have good motivation during online learning, especially when the material that I teach is easy to understand. I think it is also because online learning using a video conferencing application is more flexible, and the students can study from anywhere."*

For elementary students, their motivation was high because they could play games using the features of the video-conferencing application. Course pleasure in the form of excitement they got from lessons, such as game-based material, may serve as a motivational stimulus for students (Meşe et al., 2021). Furthermore, the senior high students got the motivation to learn online through the flexibility of online learning, in which they could attend class and learn from anywhere. The student's academic motivation increased because they had novel learning opportunities by not having to go to campus to join the class (Natalya & Halim, 2021). Thus, it can be concluded that students' motivation may be

increased because of the fun activities during online learning and because of the flexibility to learn offered by online learning.

### 3.6 The advantages of using a video conferencing application

Based on the interview with all the teachers, the researcher obtained several advantages of video conferencing applications during online learning. The first one was that the video conferencing application provided the features of sharing the screen, files, and virtual whiteboard.

ET1, *"one of the advantages is the features of sharing screen. We can share our screen with the students if we want to show them pictures, videos, or something on the internet."*

JHT1, *"The feature of sharing a virtual whiteboard really helps me a lot."*

SHT2, *"video conferencing application provides some features that can support my teaching and learning process, like screen sharing, quiz, whiteboard, and so on."*

The teachers could set up video conferencing as an event where teachers' screens and files could be shared live, along with discussions with many students attending at once. Therefore, various interactions such as chats, real-time audio, application sharing, whiteboards, webcasting, video teleconferencing, and others are common features of synchronous e-learning settings that need further consideration for usage (Nonthamand, 2020).

The second advantage was that the video conferencing application gave the teachers and students flexibility to study from anywhere, so they do not have to go to school to have a teaching and learning process.

SHT1, *"it is flexible because I don't have to go to school to start the class. It's also flexible for the students. Even though they are out of town, they still can have a teaching and learning process."*

SHT2, *"it is so flexible. I mean, even though my students or even I cannot go to class, it's ok, because we can study from wherever it is."*

Online learning could give benefits including greater time efficiency, flexibility, energy savings, and an absence of physical space, so it allowed the teachers and the students to teach from home, reducing travel and commuting times and eliminating the need to rush to get to college. Therefore, by reducing the barriers of time, location, and expense, video conferencing applications may increase the effectiveness of the teaching and learning process (Nambiar, 2020; Nashir & Laili, 2021). It means that the effectiveness of video conferencing applications can motivate teachers and students to have a teaching and learning process still even though they are not in the same place.

The third advantage was that the video conferencing application allowed the teachers to have a teaching and learning process in real-time face-to-face with the students.

ET2, *"By having video conferencing application, I think the situation is more conducive, at least same with offline class because we can directly talk and see our face each other."*

JHT2, *"Having online learning, especially using video conferencing application, is good because it is almost the same as having a usual offline class where my students and I can still meet to have teaching and learning process even though we are not in the same place."*

SHT2, *"The students can be easy to understand what I explain during online learning because they can see my face while I am teaching, and we can talk directly in real-time."*

Despite the distance, teachers and students could communicate in real-time, helped by video conferencing like usual learning in class, so, which helped learners comprehend and master the subject taught (Marhami et al., 2020). Furthermore, face-to-face interaction in real-time allows the teaching and learning process using a video conferencing application to be similar to the usual traditional classroom (Al-Samarraie, 2019). It can be concluded that video conferencing allows teachers and students to have a teaching and learning process like in a real classroom, although they are separated by distance.

### ***3.7 The challenges faced by the teachers in the implementation of online learning using video conferencing application***

Besides the advantages of online learning using the video conferencing application presented before, the teachers also faced some challenges. The first challenge which was experienced by all the teachers was related to an unstable internet connection.

ET1, *"The obstacle that I've found when I have an online class is the internet connection. It totally ruins our communication and the teaching and learning activity."*

JHT1, *"Sometimes the internet connection is unstable. So sometimes our communication will be bad because of the bad connection. And, of course, it will impact the teaching and learning process too."*

SHT1, *"Sometimes the internet connection in my place or in my students' place is unstable, and it will disturb the teaching and learning process."*

The quality of the internet connection, technical issues, and device incompatibility might occasionally limit the use of video conferencing applications (Al-Samarraie, 2019). Therefore, communication issues resulted because of the internet's constrained capacity which prevented audio and video communications from being sent and received (Yu, 2018). To sum up, the problem related to poor internet connection can be the main issue in online learning using video conferencing applications because the communication between teachers and students during the teaching and learning process depends on the quality of the internet connection.

The second challenge was related to a lack of interaction with the students because the students always turned their cameras off and muted their audio.

JHT1, *"The big obstacle is because sometimes it's hard for me to build the interaction with my students. It's because sometimes students turn off their camera and also mute their audio, so I cannot see them, I cannot hear them."*

JHT2, *"The students will turn their camera off and mute themselves, so it will be hard for me to make communication with them and to control them"*

Teachers frequently struggled to get students to communicate because of the lack of interaction and camera-off behaviours from students during video conferencing (Massner, 2022). Therefore, teachers may ask students random questions in the middle of a course to identify which students have exactly joined the online class (Nashir & Laili, 2021). The problem of communication in video conferencing applications is caused because the students tend to turn their cameras off, so it is necessary for the teachers to find strategies to boost the students' participation during the learning process.

The third challenge was related to learning facilities to support the students in online learning using video-conferencing applications. This was specifically experienced by the teachers of elementary students. Some of the students did not have the devices to run the video-conferencing application.

ET1, *“the students also have lack of facilities, like they don’t have an appropriate device to do online learning.”*

Students could not afford mobile data daily and had to share phones with their siblings or parents since they did not have laptops or phones (R. P. Rahayu & Wirza, 2020). However, the successful performance of all instructional activities in implementing online learning, access to data packages, Internet networks, and ownership of mobile devices or laptops was a must for teachers and students (Rasmitadila et al., 2020). Therefore, the teachers must find solutions to make sure that all the students have supporting facilities during online learning

### **3.8 Solutions to solve the challenges faced by the teachers**

The insights and recommendations educators provide about integrating video conferencing applications in online education are crucial for enhancing its efficacy in subsequent iterations. Following the encounter with certain challenges in the execution of online education through video conferencing applications, several resolutions and recommendations were identified from the educators' standpoint. In order to address the challenges associated with limited internet connectivity, the educators discovered the necessity of equipping themselves with reliable internet service providers and Wi-Fi capabilities. In addition, the instructors employed an alternative application as a contingency measure in the event that video conferencing was not feasible. The resolution to the deteriorating connection was to reschedule the event to an alternative time or day.

ET1, *“Related to the internet connection, I have two providers for internet, Telkomsel and XL. So, sometimes if XL is not good, I change to Telkomsel, if Telkomsel is not good, I change to XL, if both are not good, I change to Wi-Fi.”*

JHT1, *“If the connection gets bad, I send the material through WhatsApp and send some tasks to students in a certain time while waiting for the network to be stable.”*

SHT2, *“If the internet connection is unstable, I will reschedule my class to another time or day based on the agreement with the students.”*

To make online learning run well, the institution should provide additional funds for a good internet connection and prepare or electronic infrastructures and facilities (Husain et al., 2021). Moreover, to support video conferencing, teachers should provide other forms of communication or tools, such as social media platforms that students are already familiar with and frequently use in case the main system or program had a problem (Nonthamand, 2020). The teachers could also communicate with both the parents and the students to find another schedule to set up another meeting through a video conferencing application if the internet connection was still bad because, through online platforms, teachers could easily provide additional courses or course segments to their students since it was flexible to study anywhere and anytime (Hiranrithikorn, 2019). It means that to cope with the problem related to a poor internet connection, it is suggested that the schools provide good internet connection, and it is suggested that the teachers scheduled another course when the teaching and learning process did not run well.

To maintain students' motivation and build their interaction during online learning, the teachers prepared themselves with various kinds of fun activities, educative games, or quizzes every meeting and started the class with ice-breaking or interesting conversations with the students.

ET1, *“to keep up the students' mood, motivation, and concentration during online learning, I always update myself with new fun activities or games.”*

JHT1, *"I always try my best to find fun activities for them during teaching and learning process, or I always start the class with ice breaking or casual interesting conversation with the students, so their motivation will be increased."*

It needs creativity from the teacher to make the teaching and learning process enjoyable for the students in order to keep their passion for online learning and prevent becoming a psychological burden (R. P. Rahayu & Wirza, 2020). That is why a teacher needs to consider of creative methods to engage the students, so they are ready and feel motivated to learn (Rasmitadila et al., 2020). Moreover, the students would usually actively speak and participate during the class discussions when the teachers started the class with a casual, interesting conversation or with ice breaking. Therefore, teachers should foster a relaxed yet serious learning environment and enhance their presence by having eye contact, smiles, casual talk, and humor (Massner, 2022; Nashir & Laili, 2021). It can be said that the students' motivation depends on how the teachers create a creative and fun learning atmosphere during the teaching and learning process by online.

To solve the challenge related to the lack of students' facilities to support online learning, the teachers also developed good communication with the parents in order to provide the students with the necessary facilities for online learning.

ET1, *"I always communicate with the parents that the students need supporting device for their learning process, so the parents will do their best to lend them the device or even to buy the new one"*

The implementation of online learning requires collaboration between teachers and parents since parents typically own supporting equipment like mobile phones or computers (Rasmitadila et al., 2020). Moreover, involving parents in controlling their children's learning activities was obviously needed because if teachers were only teaching, students could engage in other activities like playing games, talking with friends, and using social media without having to focus on the materials taught by teachers (Nashir & Laili, 2021). Therefore, it can be said that cooperation among the teachers, the parents, and the students is necessary to overcome the challenges that may happen during online learning using video-conferencing applications.

#### 4. CONCLUSION

The educators held diverse perspectives regarding the use of video-conferencing applications for online learning among elementary, junior high, and senior high students. All educators had favourable attitudes towards their proficiency in utilising video conferencing applications, their level of enthusiasm, and the benefits afforded by such technological tools. Nevertheless, it is worth noting that a portion of the educators had favourable attitudes towards their students' engagement and motivation levels during their interactions. Moreover, the teachers encountered many difficulties during the process of implementing online learning using video conferencing software. These hurdles included concerns related to internet connectivity, limited opportunities for contact between professors and students, as well as inadequate resources available to students to facilitate effective online learning. Consequently, educators proposed several strategies to address the aforementioned issues. These included offering alternative internet connectivity options, incorporating engaging activities and educational games into the instructional process, and establishing effective lines of communication with students' parents. Thus, it is suggested that the next researcher to conduct research related to students' perception of the use of video conferencing applications in online learning, so there will be another point of view that can be analyzed to make better the future use of online learning.

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