

CHAPTER IV

FINDINGS AND DISCUSSION

A. Findings

In this chapter the researcher will explain the result used the data collection technique used by researchers were interview. Interview techniques are carried out online using the WA application by contacting personally. Data was collected by interviewing 11 students from the English education department class 2018 as many as 11 students. Interviews started from January 18, 2022-18 February 2022. The data will be presented in a qualitative descriptive form according to the method used by the researcher. With the interview results as follows:

1. The Types Of Application The Pre-Service Teachers In Using ICT In Online Learning
 - a. Zoom Meeting

This application is used to display power points during the learning process. This makes it easier for teachers because they don't have to spend time writing on the blackboard. So that teachers can pay attention to students when power points are distributed to students.

b. Google Meet

One of the functions of this application is the same as the zoom meeting, which is to display power points.

c. WA Grub

Used to share information with students. In addition, another function is to send material or practice questions that cannot be sent or when the initial application used is problematic. In other words, WA grub is used as a second application. The WA application was chosen because it consumes less quota and access is also easier.

d. Youtube

Providing training materials and assignments.

e. E-Learning Madrasa/E-learning school

This application is used to check student attendance lists and distribute core materials.

f. Google Classroom

This application is used for uploading material, discussing and collecting assignments.

g. Canva

Canva is used to create power points because the appearance of power points in the Canva application is more attractive.

h. Quizizz

This application is used by several pre-service teachers. This application serves to assist students in remembering the material and for quizzes.

i. Google Form

This application will use if the main application has problems.

2. The Challenges And Barriers In Using ICT In Online Learning

From the interviews that the researchers did, the researchers got the results of the interviews following the table:

a. Challenges In Using ICT In Online Learning

Table 4.1:

Information of interview result

Teachers	Types of Challenges	Statements
Pre-service teacher 1	Class management	Most of these challenges also come from students, there was chaos in the grub chat because some wanted the zoom application, some

		wanted Google meeting.
Pre-service teacher 2	Preparing creative teaching materials	Self-ability to make creative materials to attract students' attention.
Pre-service teacher 3	Time management	The lack of time I have for video editing because it is divided with other activities.
Pre-service teacher 4	-	Not really, because we only give assignments.
Pre-service teacher 5	-	I already understand the application I'm using.
Pre-service teacher 6	-	I get used to using those applications previously.
Pre-service teacher 7	-	all applications have been mastered well.
Pre-service teacher 8	How to explain the material to the student	How do I behave when I explain or provide

		material in the form of videos to students.
Pre-service teacher 9	-	I did not find any significant problems while teaching.
Pre-service teacher 10	-	No.
Pre-service teacher 11	Mastery of application usage.	when I use my cellphone and it's very difficult to share the screen and I'm confused at that time.

The finding of the research shows that during the learning process, some pre-service teachers use more than one application. From the use of the application, not all pre-service teachers experience challenges during the teaching and learning process.

Researchers will write down the overall challenges in general from the results of interviews with participants.

1) Class management

From the results of interviews that researchers have conducted, researchers conclude that some pre-service

teachers still cannot fully control online classes. When learning has started, there are still students who are chaotic in the grub chat to agree on what application to use during class. As said by pre-service teacher 1, "*...this challenge also came from students, there was chaos in the grub chat because there were those who wanted the zoom application, there were those who wanted to google meeting until there were also students who suggested various applications. for us to meet face to face on screen a lot yesterday.*"

2) Preparing creative teaching materials

According to some pre-service teachers, preparing materials to be delivered to students is also a challenge for them during the online learning process. Because, if they do not really prepare the teaching materials carefully, it will have an impact on the process of giving the material itself. As stated by pre-service teacher 2, "*the ability to make creative materials to attract students' attention and not be boring like making videos or ppt.*"

3) How to explain the material to the students

Even though they have implemented PPL 1, it is still a challenge when delivering material to students during PPL 2. Moreover, PPL 2 is carried out online. Teachers

and students cannot meet face to face, so it is difficult for them to know how far they understand the material being conveyed. As said by pre-service teacher 8, *"If the challenge is how do I behave when explaining or giving material in the form of videos to students so that the material is conveyed to students. Because sometimes we give explanations like this, even though they are caught like that. Because it was proven several times that some of the exercises did not understand. It can be seen from their answers that they are still wrong, they are not careful enough to read the practice questions."*

4) Time management

Time management is one of the important things that must be mastered by a teacher. Must be able to divide the time during online learning. Starting from preparing teaching materials, taking videos, editing videos and so on. If you can't manage the time, it will have an impact on the online learning process itself. As experienced by pre-service teacher 3, *"...the lack of time I have for video editing is because it is divided with other activities."*

5) Mastery of application usage

The increasingly sophisticated era requires educators to be able to keep up with the times. One of them is the

teacher must also be able to operate online learning support applications in order to minimize unwanted things. However, sometimes small unexpected things suddenly happen. This was experienced by pre-service teacher 11, *“The challenge is, when I use my cellphone and it is very difficult to share the screen and I am confused at that time while the lesson is in progress, that's the only challenge that occurs. If the rest there is no challenge because it has been used every day.”*

b. Barriers In Using ICT In Online Learning

From the interviews that the researchers did, the researchers got the results of the interviews following the table:

Table 4.2:

Information of interview result

Teachers	Types of Barriers	Statements
Pre-service teacher 1	Insufficient smartphone capacity	At least when you want to play a video from YouTube because it might be a bit heavy.

Pre-service teacher 2	Unstable network	Signal
Pre-service teacher 3	Unstable network	Unstable network makes the process of uploading videos slow.
Pre-service teacher 4	-	No
Pre-service teacher 5	Unstable network	The bad student network.
Pre-service teacher 6	Unstable network	The internet connection that was sometimes unstable.
Pre-service teacher 7	Unstable network	Many students who are less active in using the quizizz application because of network problems so that the quiz is a bit late.
Pre-service teacher 8	Unstable network and economic issue.	Only the students have network problems or even the students' cellphones are shared with their parents.

Pre-service teacher 9	Unstable network	Internet connection issue.
Pre-service teacher 10	Unstable network and insufficient smartphone capacity	Network and cellphone overheating.
Pre-service teacher 11	Unstable network	The problem is the signal.

The researcher will write down the overall barriers in general from the results of interviews with participants.

1) Insufficient smartphone capacity

Smartphone is one of the important things that are needed during online learning. Both for the teacher and the students themselves. Smartphone that have a large storage capacity, will certainly make it very easy for users to use them. On the other hand, if the phone's memory capacity is small, it will also have an impact on its users. As experienced by pre-service teacher 1, “...when you want to play a video from youtube because it might be a bit heavy, youtube plus the google meet or zoom application becomes a bit heavy, so

when you open a video from youtube, the screen is immediately displayed to google meet, the sound doesn't appear, then what's shown on youtube is the same as the one on google meet it's a little lag/loading, what's displayed on google meet or zoom is slower than the speed it should be on youtube." This is also felt by pre-service teacher 10, "... an overheating cellphone."

2) Unstable network

The most common obstacle experienced by pre-service teachers is an unstable network. This of course will affect the online learning process. An unstable network is experienced not only by teachers but also by their students. As experienced by pre-service teacher 7, *"if there is one obstacle, there are still many students who are less active in using the quizizz application because of network problems so that the quiz is a bit late."* A bad network also affects uploading videos as teaching materials. This was experienced by pre-service teacher 3, *"Yes, sometimes the unstable network makes the video upload process slow."*

3) Using cellphone together

To facilitate the learning process, the cellphone used should also be a special cellphone for students studying. It is intended that students can focus during the delivery of

material by their teacher. However, there are still students who do not have their own cellphones so they have to take turns with their parents. Like the obstacles experienced by pre-service teacher 8, "*...even the student's cellphone is shared with his parents.*"

3. The Alternative Solution

a. How To Overcome Challenges

From the results of interviews that researchers have conducted, researchers will conclude which solutions are used when pre-service teachers experience or face challenges.

1) Make decisions as wisely as possible

This solution is used if any of the students have their own arguments. So the decision the teacher can take is to make a deal with them. This is intended to prevent protracted debate and not to cause social jealousy.

2) Learn to improve teaching skills

When you feel that your ability to teach is still lacking, you can overcome this by continuing to learn. Moreover, now teachers are also required to be able to convey the material as well as possible during the online learning process. This is so that students remain eager to learn even though they do not learn directly in school.

3) Learn to manage time well

In addition to learning to improve teaching skills, another important thing that a quasi-teacher must do is manage time well. Because if the teacher is able to complete his tasks according to the schedule, it can minimize unwanted things. For example, teachers can maximally take videos and edit learning videos. And can upload it long before the learning starts.

b. How to overcome barriers

From the results of interviews that researchers have conducted, researchers will conclude the solutions to be used when pre-service teachers experience or face barriers.

1) Communicating with the pamong teacher

If there are barriers related to students, then the solution is to ask the tutor teacher to help overcome the problem. As was done by pre-service teacher 1, *"The first way I overcome this barrier is if the student is late for my entry, contact me via chat or ask for help from the tutor teacher (the original subject teacher) usually he always helps to remind students to enter class to be absent..."*

2) Prepare plan B

Preparing plan B in case plan A doesn't go smoothly is the right thing. Every teacher should have a plan B because it really helps the teacher so that if something doesn't go

according to plan, the teacher can immediately take action.

As pre-service teacher 9 did, *“As I use wifi as my internet provider, I can switch it to the cellular internet connection for the faster and more stable connection.”* This is also done

by pre-service teacher 17, *“to overcome this barrier because some children are constrained by the ulun network, they give more free time to work until the student network is stable.”*

This was also done by pre-service teacher 6, *“For the internet connection, I needed to switch to another data or I conducted the class using WhatsApp since it only needs a little amount of data....”*

3) Prepare teaching materials in advance

Preparing things related to the learning and teaching process including preparing teaching materials is a solution to minimize the obstacles experienced. Also so that the pre-service teacher can really be ready to convey it to students.

As was done by pre-service teacher 3, *“Prepare it long before it is used so that it is not too tight with the time when it is taught / when it is used to teach.”*

4) Improve skills

Continuing to learn to improve skills is one way to make teachers more confident when delivering material to students. Because if the teacher masters the material to be

conveyed, is able to control the class and dominate the class, then the teacher will be able to overcome the obstacles encountered during the learning process. This was done by pre-service teacher 11, *“Personally, I'm back to studying. I give students assignments, because every time I use Google Meet, I always use recording, so I record. After that they have to see that, have to conclude, studied again. Usually I upload it to youtube.”*

B. Discussion

Based on the problems that researchers have identified using the interview technique above, the researchers will discuss all of these problems in a study entitled, Challenges And Barriers On The Use Of ICT In Online Learning. Here's the discussion:

1. The Types Of Application The Pre-Service Teachers In Using ICT In Online Learning
 - a. Zoom Meeting

This application is used to display power points during the learning process. This makes it easier for teachers because they don't have to spend time writing on the blackboard. So that teachers can pay attention to students when power points are distributed to students.

That is accordance with theory zoom can be categorized as an online learning media which can be interpreted as a type of teaching and learning that allows teaching materials to be delivered to students using the Internet media (Monica & Fitriawati, 2020).

b. Google Meet

One of the functions of this application is the same as the zoom meeting, which is to display power points. This is accordance with Google Meet presents a myriad of features to maximize users in conducting online meetings Allows users to share screens for document, spreadsheet, or presentation needs (Arifin, 2020).

c. WA Grub

Used to share information with students. In addition, another function is to send material or practice questions that cannot be sent or when the initial application used is problematic. Because the one of advantages from WA application is can send files, pictures or photos (Pos, 2018).

d. Youtube

YouTube media has become part of the progress of information technology today, especially in the academic world. The development of science and technology increasingly encourages renewal efforts in the use of technological results in the learning process. Teachers are required to be able to use the tools that can be

provided and in accordance with the progress of the times (Mulya, Maryanti, Wulandary, & Irawan, 2020).

So, the teacher usually used the YouTube applications to provide training materials and assignments.

e. E-Learning Madrasah/E-learning school

Madrasah e-learning too provide a menu for teachers to share teaching materials that will delivered to students. Teacher can create as many classes as you want guided by the teacher, be it the teacher subject, class teacher or teacher counseling guidance. Teachers can even create an online class that provides accessible electronic books students anytime and anywhere they are (Hikmah, 2020).

But the teacher in this research used to check student attendance lists and distribute core materials.

f. Google Classroom

This application is used for uploading material, discussing and collecting assignments. This is the accordance with theory the purpose of google classroom is to help teachers manage the creation and collection of student assignments basically leveraging the framework of Google Docs, Drive and other Apps (Iftakhar, 2016).

g. Canva

Canva is used to create power points because the appearance of power points in the Canva application is more attractive. This is the accordance with theory one of advantages using canva application make it easy for someone to make the desired or needed design, such as; creation of posters, certificates, infographics, video templates, presentations, and more provided in the Canva app (Monoarfa & Haling, 2021).

h. Quizizz

Quizizz is an online learning media that can be used to make learning more fun. Through Quizizz, users can create or use question templates that have been provided as assessment material. This application can be used by kindergarten students to college students (Murniaseh, 2021).

In this research the pre-service teacher used the application to assist students in remembering the material and for quizzes.

i. Google Form

The one of advantages using google forms is easy to use and easy to share (Sreliciouz, 2021):. So, the pre-service teacher in my research used this application if the main application has problems.

2. Challenges And Barriers In Using ICT In Online Learning

a. Challenges in using ICT in online learning

1) Management Class

The first challenge experienced by pre-service teachers in online learning is the management class. Teachers who cannot manage their classes during the learning process will certainly have an impact on the learning process. In fact, one of the successes in teaching language classes is that the teacher can manage the class well. This is in accordance with the theory put forward by Brown that In a succession of practicalities for the language classroom is to grapple with what we call classroom management, which encompasses an abundance of factors ranging from how you physically arrange the classroom, to teaching styles. By understanding what some of the variables are in classroom management, you can take some important steps to sharpening your skills as a language teacher (Brown, 2000).

And the ability to be able to manage a class is a basic ability that must be possessed by a teacher. According to Harmer said that classroom management the ability to control and inspire a class is one of the fundamental skills of teaching (Badriah, 2014).

2) Prepare creative teaching materials

Preparing materials for online learning is different from preparing materials for offline learning. According to

Nugroho & Mutiaraningrum said that the second challenge is designing materials for online learning that is different from traditional classrooms. It consumes a lot of time to prepare materials for online learning. This is certainly a challenge for pre-service teachers (Nugroho, Ilmiani, & Rekha, EFL Teachers' Challenges and Insights of Online Teaching amidst Global Pandemic, 2020).

The EFL teacher showed an awareness of designing an interactive, simple, and appropriate material to improve students' abilities. Nevertheless, the teachers tend to give their students assignments that have to be submitted in a particular deadline. Soon, it becomes another great challenge, to check students' tasks daily, give score and feedback is hard for the teachers (Nugroho, Ilmiani, & Rekha, EFL Teachers' Challenges and Insights of Online Teaching amidst Global Pandemic, 2020).

3) How to present material to students

Presenting material to students is also one of the skills that pre-service teachers must possess. If the teacher does not understand or does not master the material to be conveyed, then this becomes a challenge for the teacher himself. Lack of understanding the nature of language teaching, this problems means not enough qualified and professional English teachers

provided in the institution, and nowadays teachers do not know to put heavy burden through heavy workloads with crowded classroom (Badriah, TEACHERS' CHALLENGES IN CLASSROOM MANAGEMENT IN TEACHING ENGLISH AT MAS MAHDALIYAH JAMBI, 2019).

4) Time Management

If a teacher has the ability to manage his time well, then he will be able to complete one task and another on time. However, even though they have made a schedule of activities, sometimes teachers can also not be on time to complete them. This is caused by one thing or another. So this is also a challenge for pre-service teachers.

From result of research by Al-Munawarah found two challenges faced by the teachers and one of the challenge is time allocation. Lack of time as a challenge in using ICT and admitted that she spent more time to check the program before using it. In addition, the material that teachers get through the internet, especially text, and the language level of the text must be modified. It also takes time to modify the text they get (Al-Munawwarah, TEACHERS' PERCEPTIONS ON THE USE OF ICT IN INDONESIAN EFL LEARNING CONTEXT, 2014).

5) Mastery of application usage

In online learning, teachers are required to be able to master the applications used during learning so that the learning process runs smoothly without obstacles. However, not all teachers can master the application that is used. Especially if there is a problem with the application. This becomes a challenge for pre-service teachers.

As the theory put forward by Nugroh, Ilmiani & Rekha that in the context of technology, the e-learning platform has become one of the crucial accelerators. However, this crucial accelerator is not ready yet in the university where this study was conducted. The absence of a representative e-learning platform impedes teaching and learning activities. Additionally, the instructors slightly have adequate knowledge and skills of technology integration to design online teaching since they performed traditional classroom interaction before the global pandemic (Nugroho, Ilmiani, & Rekha, EFL Teachers' Challenges and Insights of Online Teaching amidst Global Pandemic, 2020).

b. Barriers in using ICT in online learning

1) Insufficient smartphone capacity

The smartphone capacity owned by the teacher used to teach during online learning must be large. Because this has an impact on the fluency to teach students. However, not all

teachers have smartphones with large storage space so this becomes an obstacle for the teachers themselves. In fact, having a large memory capacity is one of the important things. According to Wiranti said that, smartphone in our educational system is crucial. With all of those advantages a smartphone may offer, learning process can always be facilitated regardless the situation, distance and time. In particular of today's pandemic condition, the use of smartphone is not only beneficial for the students but for the teachers as well (Wiranti, 2021).

2) Unstable network

The most common barrier experienced by pre-service teachers is the unstable network. This is in accordance with the theory put forward by Pale that dreadful internet connection is the most issue which are faced by both the students and the lecturers in the process of teaching and learning English during the pandemic (Pale, 2021).

Several factors can cause the network to become unstable. One of the factors is that not all regions in Indonesia have an adequate internet network.

In some remote areas in Indonesia, a stable internet network is still difficult to obtain. This causes some students to be unable to participate in online learning activities properly. This was very evident when the lecturer explained the material

using the video conference app or uploaded video file (Purnama, 2021).

3) Economic issue

The economic issue is also a barrier that is felt not only by students, but also by teachers who teach. One of the pre-service teachers experienced this. Students who take classes must exchange smartphones with their parents. So that this becomes an barrier in the online learning process.

The emergence of barrier associated with technical issues. Not all parents have cell phones/laptops, and Internet signals are poor, especially in the suburbs (Rasmitadila, et al., 2020).

3. The Alternative Solution

a. How To Overcome Challenges

From the results of interviews that researchers have conducted, researchers will conclude which solutions are used when pre-service teachers experience or face challenges accordance with the theory.

1) Make decisions as wisely as possible

Decision making is a skill that can affect students for life. Decision-making skills can be used effectively when there is a sense of awareness (Badade, 2021).

This solution is used if any of the students have their own arguments. So the decision the teacher can take is to make a deal with them. This is intended to prevent protracted debate and not to cause social jealousy.

2) Learn to improve teaching skills

When you feel that your ability to teach is still lacking, you can overcome this by continuing to learn. Moreover, now teachers are also required to be able to convey the material as well as possible during the online learning process. This is so that students remain eager to learn even though they do not learn directly in school.

Teaching skills are pedagogical competences of a teacher. Pedagogic competence is the way teachers teach and regulate the learning system in the classroom by establishing good interactions with students (Sugihartini, Sindu, & Dewi, 2015).

3) Learn to manage time well

In addition to learning to improve teaching skills, another important thing that a quasi-teacher must do is manage time well. Because if the teacher is able to complete his tasks according to the schedule, it can minimize unwanted things. For

example, teachers can maximally take videos and edit learning videos. And can upload it long before the learning starts.

Time management is particularly important for secondary and postSecondary school students who have to do exhaustive and severe workloads assigned from schools, getting from employment and from other several activities. All those students having better time management skills, gain higher GPAs. In case of such students, time management is primarily based on preset principles, ideas, practices, experiences, abilities and tools. The time handling activities for the management of school operations includes supervision of instruction and staff related issues (Khan, Farooqi, Khalil, & Faisal, 2016).

b. How to overcome barriers

From the results of interviews that researchers have conducted, researchers will conclude the solutions to be used when pre-service teachers experience or face barriers.

1) Communicating with the pamong teacher

If there are barriers related to students, then the solution is to ask the tutor teacher to help overcome the problem.

The pamong teacher is a teacher in junior high / senior high school who is assigned to guide prospective teacher students during PPL. The civil servant teacher provides guidance on techniques or methods that are relevant to the teaching and learning process that will be faced in managing and mastering the class (Afrilianti, Ulfah, & Achmadi, 2011).

2) Prepare plan B

Any time we try something new, and especially when adopting new technology, we will have moments where things don't go as planned (Alvarez, 2020).

Preparing plan B in case plan A doesn't go smoothly is the right thing. Every teacher should have a plan B because it really helps the teacher so that if something doesn't go according to plan, the teacher can immediately take action. For example if the internet connection is not good, the teacher can ask to students for take a material in the school.

3) Prepare teaching materials in advance

Preparing things related to the learning and teaching process including preparing teaching materials is a solution to minimize the obstacles experienced. Also so that the pre-service teacher can really be ready to convey it to students.

Good teachers are almost in a continuous state of preparation and planning. They are always thinking about the next lesson. The impact of preparation and planning is tremendous on student learning (Meador, 2019).

4) Improve skills

Continuing to learn to improve skills is one way to make teachers more confident when delivering material to students. Because if the teacher masters the material to be conveyed, is able to control the class and dominate the class, then the teacher will be able to overcome the obstacles encountered during the learning process.

The quality of teaching is determined by the teachers' ability in teaching. A person's ability to teach skillfully must be trained, for example, through video simulations of teaching skills based on the theory of appropriate teaching skills (Sugihartini, Sindu, & Dewi, 2015).

