

## ENGLISH PRESERVICE TEACHERS' PERCEPTION OF ICT: THE STUDY ON THE STUDENTS FROM RURAL AREAS

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**Abstract:** The development of technology brings a good effect on learning English. Some research supports that using technology in learning English increases students' comprehension. However, the fact in the field state that many teachers teach English using conventional methods without technology. On this basis, researchers aimed to examine the perceptions and attitudes of English preservice teachers. This research will be exciting because knowing the current perception of preservice teachers may impact their behavior with technology in the future. In conducting the study, the researchers used a descriptive qualitative method using interviews to obtain data. The criterion used is English education students who study at the higher education level in Sintang. There are 6 (six) students or preservice teachers that the researchers chose as the participants. The result of this research showed that all of the participants think that ICT is important for teaching English. Using ICT in learning can make students understand the material better, making them easier to find information from the material being taught.

**Keywords:** *English teacher; ICT; perception; preliminary teacher; Sintang.*

### INTRODUCTION

Technology is an inseparable thing in human lives. Almost all over the world have enjoyed technological advances, which are supported by their increment. The increment of technology is very fast in this century. It comes in every sector of human lives, including the educational sector. In this area, the use of technology is commonly known as ICT. ICT, or Information and Communication Technology, is a tool that can be used in the teaching and learning process. It includes tools such as computers, radio, television, projector, and the internet (Zulfiati *et al.*, 2018).

ICT is a beneficial tool for learning. It can support various learning abilities and styles, make learning more effective, make students active and engage in the learning process, make students more creative and imaginative, increase confidence, and make them creative in finding, exploring, analyzing, and presenting information (Mai, 2020). ICT can also open schools to the outside world, allowing the student to practice communicating with a wide range of people (Azmi, 2017).

Recently, there has been a development in the use of ICT in education. This development begins with the stipulation of Covid 19 as a pandemic. The use of ICT has changed the way of offline teaching. The routine of the education system, which provides offline or face-to-face learning, is replaced by online learning. The students do not intend to follow the class in a particular school room with their friends. They only need to prepare their gadgets, such as phones or computers, and an internet connection to follow the learning process everywhere.

The use of ICT affects the students' achievement in language learning, such as increasing pronunciation (Abbas & Fathira, 2020) and students' writing skills (Yundayani *et al.*, 2019). Using ICT media also increases learning motivation (Utami & Djamdjuri, 2021). Students like giving a positive attitude when ICT is used in the classroom (Azmi, 2017). Motivation is one of the factors that can determine success in learning, especially in learning a foreign language. Students will fail if they lack strong motivation to learn the language (Seven, 2020).

However, the fact in the field showed that many teachers teach English using conventional

media without technology. Conventional meant only using a book as a source in teaching. The researchers believe that it is not a mistake because books are a source of learning. Even a famous word says, "books are windows to the world". However, teachers need to combine other media to make learning more effective.

The use of learning media is also believed to hone the teacher's creativity. It is mentioned above, there are many benefits of learning media if a teacher can use it. However, many teachers still choose a book as the only source for teaching. It may be caused by the influence of their perception of ICT.

The experience becomes the nature of awakening the perception (Alptekin & Unver, 2020). It makes perception will be different for

each person. Perception belongs to the process of taking data by using a human sensory organ from the environment. However, individual interest and curiosity are other kinds of the base of perception-building perception (Alptekin & Unver, 2020).

Two kinds of familiar perception-building processes are bottom-up and top-down (Galotti, 2007). The term bottom-up process refers to the process obtained from small pieces of information. Then, that information is combined into a conclusion or perception. Meanwhile, the top-down process refers to the process obtained from expectations, theories, or concepts from experience. Several stages of the perception formation process are shown in the figure below (Walgito, 2004).

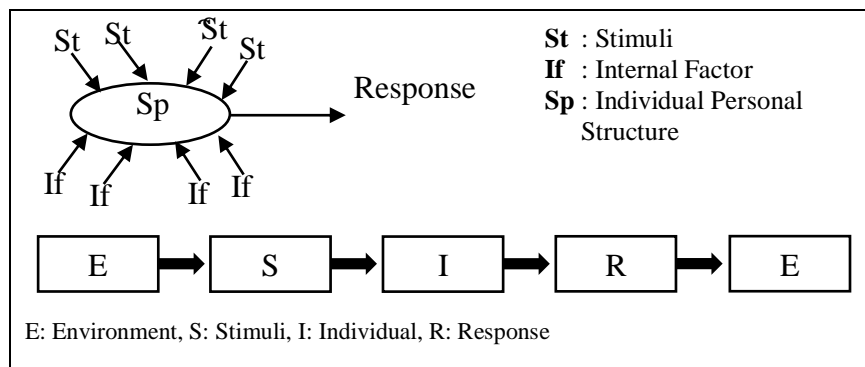


Figure 1. Perception formation process (Walgito, 2004)













Perception includes the process of receiving, organizing, and interpreting designs to influence behavior and shape attitudes (Hermawan & Tyas, 2018). The understanding of the positive impact of the use of ICT on improving student learning achievement may also give a role in making perceptions. The positive impact means, such as accommodating slow students because they can create an effective learning climate more individually, stimulate students to do exercises, and process data with the availability of animated graphics and music (Said & Hasanudin, 2019). It means the issue discussed earlier on teachers' attitudes toward ICT may be affected by their perception of ICT.

From the basis that many English teachers favor using a book as the only teaching source, the researchers are interested in analyzing teachers' perceptions of the use of ICT. However, the teachers targeted by the researchers are not people who already have a career as teachers but preservice English teachers. Thus, this research will be very interesting because knowing the current perception of preservice teachers may

impact their behavior with technology in the future.

Even there are many studies analyzing perceptions of technology, such as the research that analyses public senior high school teachers in Palembang attitude and problems on using ICT for teaching English (Aminullah *et al.*, 2019), Turkey preservice teachers' perception of ICT (Demirtaş & Mumcu, 2021), senior high school teacher of Banda Aceh perception on ICT in ELT classroom (Juliana & Muslem, 2017), and perception and motivation of senior high school teachers from Indonesian rural area to ICT (Mahdum *et al.*, 2019), this research is different from the previous research. The first difference is the place of research. This research is conducted in the city of Sintang, where no similar research has been conducted in Sintang. Sintang is a city that also becomes a district in West Kalimantan, which consists of 14 districts. In addition, Sintang is included in the lagging area. It means that using technology in underdeveloped areas is a challenge. Below are the national data facilities on the lagging area or known as 3T.

Table 1. *Facilities in 3T area (Muhammad, 2020)*

Area	Electricity		Internet		Computer/ Laptop		Smartphone	
3T		81,2%		41,5%		24,5%		57,2%
		15,1%		40,1%		18,9%		14,9%
		3,7%		18,4%		56,6%		27,9%

\* Yellow: available and usable, Red: Available but hard to use, Green: Unavailable

The second difference is the participants of the research, they are preservice English teachers that are now English learners from various rural areas. Thus, this research will be interesting to find out the perception of students who may become teachers in their areas or origin, which is rural areas.

### METHOD

This research is conducted by following a descriptive qualitative design. Descriptive research is a type of qualitative research design in which the researcher investigates events, and phenomena in the lives of individuals and asks one or a group of individuals to tell their stories, then the researcher retells the story in descriptive form (Rusandi & Rusli, 2021).

In accordance with the explanation above, the method is in line with this research's aim. It will be used to guide in analyzing the perceptions of students or preservice English teachers in the city of Sintang. The participants in this study were students in the English Education department that took the study in Sintang. There were six students or participants in this study who were in the eighth semester or who had completed PPL (field study) program. Students who have followed PPL must have carried out teaching activities in the classroom. Thus, based on their experience, the researchers are interested in making the study.

Furthermore, another criterion set by the researchers was that students came from villages that were included in the 3T or *terluar* (outermost), *tertinggal* (lagging), and *terdepan* (leading) coverage. Students who did not come from 3T were not selected to participate in this study. This choosing was following the concept of purposive sampling. Purposive sampling is a process for selecting participants in qualitative research (Abdussamad, 2021). It is a process of selecting participants by consideration (Abdussamad, 2021).

For collecting the data, researchers used interviews. A structured interview was selected as a type of interview in this study. There were some questions related to the perception of ICT and their experience in learning and teaching English using ICT. The researchers collected the data

from their experience to analyze the relation of their perception to their previous experience.

After all the data was collected, the researchers continued to analyze the data. The analysis was conducted in several steps:

Preparing and organizing the data. This step was conducted by organizing the data to make sure that the data were in a form that could be easily analyzed.

Code data into categories. This step was conducted by coding the data into a similar research category.

Construct descriptions. This step was conducted by writing a description of the data that has been categorized.

Build themes. This step was conducted after writing a description. The researchers made a theme that will be written in the research.

Report the data. It was the last step; the researchers reported and interpreted the data in the form of descriptive text.

Furthermore, the research was started on March 1<sup>st</sup>, 2022, and finished on June 28<sup>th</sup>, 2022.

### RESULT AND DISCUSSION

The data that the researcher collected revealed some themes. These were all elaborated and discussed below.

#### *Basic information about the participants*

From the interviews, the researchers knew that all students or preservice teachers came from areas with inadequate public facilities. This inadequacy mainly refers to the availability of the internet or electricity network. Internet and electricity are challenges to operate ICT because ICT is a device that requires such a connection, especially electricity.

This information needs to be known because perception is revealed from a person's contact with the environment (Alptekin & Unver, 2020). It makes the perceptions referred by the researchers in this study also come from the experience of learning English that is not only from university but also in junior and senior high school. The interview questions did not explore preservice teachers' experience since elementary school because English was a subject that must be

learned starting from junior high school. However, not all students who became preservice teachers in this study had school experience (junior and senior high school) in the village; the university level was in the city. However, some of them mentioned their experiences studying in the city, especially in high school. The data from the interviews can be seen in the tables below.

*Table 2. Experience learning by using ICT in junior and senior high school*

Participant	Origin School			Experience Using ICT
	Junior High School	Senior High School	University Level	
R1	Village	District	City	Never experienced ICT media in learning English, excluded in University Level
R2	Village	City	City	Only experience ICT in senior high school and University Level
R3	Village	City	City	Only experience ICT in senior high school and University Level
R4	City	City	City	Experience ICT on every level of education
R5	Village	District	City	Only experience ICT in senior high school and University Level
R6	District	District	City	Never experienced ICT media in learning English, excluded in University Level

*Table 3. Public facilities on junior and senior high school*

Participant	Public Facilities in the school		
	Junior High School	Senior High School	University Level
R1	No public electricity and internet connection	No public electricity and internet connection	Public electricity is connected, and the internet connection is connected smoothly
R2	Public electricity and internet connection is available	Public electricity and internet connection is connected smoothly	Public electricity is connected, and the internet connection is connected smoothly
R3	Public electricity is connected, and the internet connection is available	Public electricity and internet connection is connected smoothly	Public electricity is connected, and the internet connection is connected smoothly
R4	Public electricity and internet connection is connected smoothly	Public electricity and internet connection is connected smoothly	Public electricity is connected, and the internet connection is connected smoothly
R5	No public electricity and internet connection	Public electricity is connected, and the internet connection is connected smoothly	Public electricity is connected, and the internet connection is connected smoothly
R6	Public electricity and internet connection is connected smoothly	Public electricity and internet connection is connected smoothly	Public electricity is connected, and the internet connection is connected smoothly

The data above showed that two participants (R1 and R6) never experienced ICT in the learning process in Junior and Senior High School. Analyzed from the public facilities, the participant (R1) has a school (junior and senior high school) background from a rural area that was not covered by state electricity and internet connection. It is known that ICT media needs both connections to operate. However, electricity has become an important part of using technology. Examples of these tools are projectors

and speakers. These tools only require electricity without the internet, unlike smartphones and laptops. However, smartphones and laptops do not entirely require the internet to operate.

Data from the participants support this assumption. Participant (R4) who carries out education in the city is more experienced in ICT than others. It is because adequate facilities are found in the city than in the village.

However, another participant (R6) that has connected to a public facility also never

experienced ICT in learning when they were in junior and senior high school. The availability of technology owned by teachers and schools may be the cause. The lack of teachers' ability to operate digital devices is also a challenge that participants may experience when learning English at the junior and senior high school levels. Based on data from the Ministry of Education and Culture, teachers' ability to operate digital devices is one of the problems students face in learning (Muhammad, 2020).

Moreover, the participant also claimed that he was allowed to bring the phone but not in the classroom (junior and senior high school) when the class started. In fact, smartphones are also reliable devices for learning English.

"I was allowed to bring a smartphone, but I was not allowed to use or operate my smartphone in the class (when learning)" (Data R1)

Then, the following are some of the ICT media used by the participants when learning English from junior high school to university.

Table 4. *Experience learning by using ICT media at school and university*

No	Experience in ICT Media	Participants
1.	YouTube	R1, R2, R3, R4, R5, R6
2.	Zoom	R1, R2, R3, R4, R5, R6
3.	Google Meet	R1, R2, R3, R4, R5, R6
4.	Google Classroom	R1, R2, R3, R4, R5, R6
5.	Browser	R1, R2, R3, R4, R5, R6
6.	PowerPoint and Projector	R1, R2, R3, R4, R5, R6
7.	Online Dictionary	R1, R2, R3, R4, R5, R6
8.	MP3 player	R1, R2, R3, R4, R5, R6

The available data showed that the majority were experienced at the university level. At the junior and senior high school level, the students only experienced learning English by using MP3 players, PowerPoints, and projectors.

The media in Table 4 can be classified as online (Zoom, YouTube, Google Meet, Google Classroom, Online Dictionary, and Brower) and offline (PowerPoint, Projector, MP3 Player). The online and offline means in this discussion refers to the use of the internet.

Many researchers have shown that the ICT media have a positive role in teaching English. Such as Google Classroom, it is a media that useful for increasing students' motivation (Batubara *et al.*, 2021). The increment noted from

previous research is 76.154 mean of Post-test from 47.692 (Pre-test).

The other media is YouTube. The previous study claimed that this application decreases students' anxiety, makes students learn faster, motivates them to learn, and increases students' language comprehension (Binmahboob, 2020). In addition, YouTube brings benefit for fostering students' autonomy (Purwanti *et al.*, 2022), and affect to the students critical thinking (Cahyana, 2022).

*Participants' view on ICT for teaching English*

Several times has been mentioned that perception is the base of human behavior. Someone's perception is perceived from the cognitive contact with the environment (Alptekin & Unver, 2020). In this case, the participants' experience of learning to use ICT is one of the most important parts of knowing the perception. Following Figure 1, the perception stage starts by capturing the stimuli by the human senses. The second stage is called the physiological stage. At this stage, the stimulus received by the human senses is transmitted through the sensory nerves. The third stage is called the psychological process. It is the process of raising a person's awareness of the stimulus that is received by the receptor. Then the last stage is the result obtained from the perception process in the form of responses and behavior (Walgito, 2004).

The data revealed by researchers showed that 100% of preservice teachers agree that ICT is important in teaching English; this data is shown in figure 2.

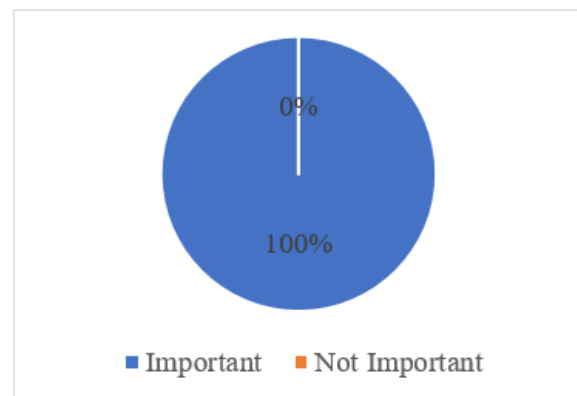


Figure 2. *Participants' decisions on ICT*

All the preservice teachers stated that ICT is essential in teaching English. Based on their teaching experience, the preservice teachers think it will benefit their students by attracting them to the class, making learning and finding information about learning material becomes

easier. This statement is proven in several data below.

"The use of ICT as a learning medium is very good for student learning activities because (the use of ICT) makes learning becomes easy." (Data R4)

"The implementation of ICT is quite good (in helping me to teach) .... (it acts) as a (tool to) support students (in learning)- it can attract the students' attention." (Data R2)

"Make students easy to... ICT is related to the internet and makes students (can) seek deeper information for learning materials." (Data R6)

*Kinds of ICT in teaching English*

The respondents used several ICT tools for teaching, such as an online dictionary, Zoom Meetings, PowerPoints, and others. The table below shows the ICT tools used by the participants in the teaching process.

**Table 5. ICT tool for teaching English**

No.	Tool	User
1	Online dictionary	R1
2	Zoom	R4, R6
3	Google meet	R6,
4	PowerPoint	R2, R4
5	WhatsApp	R2, R3, R5
6	Browser	R6

These data are in accordance with interview data.

"Using a laptop (zoom meeting) when learning from home or online – using a zoom meeting, I use PowerPoint in teaching" (Data R4)

"(ICT) is very necessary, because not all words in Indonesian language can be translated into English manually without any help (online dictionary application) – and learning is not only focused on books." (Data R1)

Different from Online Dictionary, PowerPoint, and Browser, the use of Zoom, Google Meet, and WhatsApp is rapidly increasing because of the prohibition on making face-to-face learning in the pandemic era. An example is WhatsApp, this application is used for sharing information, giving material, or teaching students by using text, video, picture, or audio (Diharjo, 2021). Moreover, Google Meet and Zoom are the other application used for teaching. These applications allow

interaction between teachers and students to carry out audiovisual learning (Diharjo, 2021).

*The challenge on using ICT in ESL classroom*

Based on a participant's experience, online learning is ineffective in increasing student understanding compared to face-to-face learning. It is based on the opinion of the supervisor (teacher) when carrying out PPL.

"...it is not effective, so at that time the teacher (mentor at school) suggested to carry out offline or face to face learning." (Data R5)

Even previous study claim that using online teaching gives benefits (Rawashdeh *et al.*, 2021), but many teachers in the field still perceive its disadvantages. Some obstacles such as technology literacy, laziness, less of teacher's guide, hard to understand material learnt, time management, lack of communication among pair, cheating, and excessive assignment (Herwiana & Laili, 2022) become the consideration on the use of online teaching. It is added by Indonesian Ministry of Education that online learning causes several problems, such as making students unable to understand the lesson, unable to ask directly to the teacher and other friends, boredom, inadequate internet network, and others (Muhammad, 2020).

On this basis, Zoom or Google Classroom and another online platform includes in ICT is reduced and emphasizes face-to-face learning. As additional information, PPL was held in August-October 2021. Learning in schools at that time was not completely done using online media. Several schools have decided to carry out face-to-face learning with consideration and application of health protocols to prevent Covid transmission. It is not strange because a previous study has also revealed that some students and teachers feel offline learning has a better impact on student understanding than online learning (Sulasmiasi *et al.*, 2021).

In addition, the habit of using conventional media is also a challenge in using ICT. One of the participants who did face-to-face learning in the class said that the offline learning he carried out always used books because it had become a habit in school. In fact, projectors are available in the teacher's room and can be used to teach the students in the classroom.

"There is a projector but it is not used because (I) already familiar with the learning process using books." (Data R3)

This habit made a preservice teacher not use ICT in the classroom. He preferred to use only book as a learning media. However, he revealed that using ICT helped him in the learning process. This habit made ICT not utilized optimally by the teacher (mentor) and preservice teacher. This issue also be caused by the teachers' perception and readiness to use technology in the classroom (Puspitarini & Hanif, 2019).

*Additional discussion – the potential of ICT and preservice attitude toward it*

Perception results of this study were obtained based on participants' experiences. This experience is then felt by participants, who then consider ICT as a good learning media to be used for teaching and learning or not. It is supported by the statement that perception has a role in human behavior (Shambodo, 2020); someone with a certain perception is earned from the contact with the environment that is made (Alptekin & Unver, 2020). It means their thinking process is revealed by some previous experiments.

The perception expressed by the participants is categorized as a top-down process. This process is defined as a process in which perceptions are obtained from expectations, theories, or concepts from experience (Galotti, 2007).

Participants stated that using ICT in learning is very beneficial for their class. Participants' experience in learning English by using ICT is the base of their perception. They think that many things can be obtained when using ICT in learning, such as making students better understand the material, making it easier for students to find information from the material being taught, and making learning process being easier. In addition, the use of ICT in learning can also make students do self-learning. In this case, students can learn the material that will be delivered before learning begins. In addition, other things that have been revealed by previous research related to the benefits obtained when using ICT are supporting various learning abilities and styles, making the learning process more effective, making students active and engage in the learning process, making students more creative and imaginative, increase confidence, and make students creative in finding, exploring, analyzing and present information, (Mai, 2020), increasing students' pronunciation (Abbas & Fathira, 2020) and writing skills (Yundayani *et al.*, 2019), and increasing motivation in the learning process (Utami & Djamdjuri, 2021).

Moreover, it can provide an activity that allows students to practice communicating with a wide range of people (Azmi, 2017).

Even if it has a good role in learning, learning using ICT is considered less effective, especially using ICT in online learning, such as using zoom. It is based on the research findings and also supported by data from the Ministry of Education and Culture that students experience difficulties in learning with the learning-from-home model (Muhammad, 2020). The connection factor and the teacher's ability to operate digital devices are one of the causes of learning not going well (Muhammad, 2020). Besides, other problems like lack of discipline because no one controls students, poor student attendance and students skipping without any reason, lack of student interest in learning, and prolonged use of cell phones for class cause headaches due to harmful rays become the challenge that can be faced (Muthuprasad *et al.*, 2021).

Besides utilizing online learning media as a means of using ICT, other digital devices that do not need to use the internet connection are the use of projectors or laptops. The internet is a challenge on using ICT (Purwanti *et al.*, 2022) for some places, especially in rural areas. There are 12,548 villages and sub-districts that still do not get a good internet connection (Jemadu & Prastya, 2021), including some areas in the Sintang regency.

In addition, 3 of 6 participants said they would use ICT in learning when they became teachers. This statement includes when teaching in a rural area that does not have internet and electricity. The media that will be used is playing a video using a laptop or MP3 using a cell phone or laptop.

"(I will keep) using ICT but it won't be a priority, I (will) use (some tools) like smartphone and laptop for listening activities and watching videos." (Data R5)

Indeed, electricity is a major requirement for using ICT in learning. Without electricity, the technology will be difficult to operate. However, innovating ICT media, such as displaying videos using laptops, can be an option for teachers to build motivation to learn and improve students' listening skills. As mentioned above, motivation is one of the factors that can determine success in learning, especially in learning a foreign language. Someone with the low motivation will fail in learning (Seven, 2020).

**CONCLUSION**

Perception becomes one of the nature of people habits. Such as using ICT, the perception that preservice teachers got from their experience influenced their need to use ICT. A good perception will lead to the thinking that ICT brings benefits to the users. It makes them will use the tool in the teaching context. This expiation refers to the finding that the researchers got. All preservice teachers from different backgrounds of rural areas gave a positive mind toward ICT. Even though, many things challenge the use of ICT in the learning process. However, they still think that ICT is important for teaching. When being a teacher, they will use ICT tool in teaching English, even in rural areas.

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