CHAPTER 3
RESEARCH METHODOLOGY

3.1 Research Design

This study implemented a qualitative case study method. Yin (2018) acknowledges that case study endeavors to explore real-life, individual insights, and multiple cases through a detailed and in-depth collection of data from multiple sources of information. Furthermore, this method is related to the aim of the research which demands investigating EFL teacher's perception of how they implemented information and communication technology in language assessment at secondary school. This study presented a qualitative study of EFL teacher perception toward ICT-based Language assessment, which eventually can be a meaningful suggestion for language classroom assessment practices in secondary school.

3.2 Research Setting and Participants

This study took place in a state secondary school in Tasikmalaya, West Java, Indonesia. The participants of this study were three teachers recruited based on a set of criteria such as: First, the participants are experienced teachers who have been teaching English for 4 years in secondary school. This is based on (Rakib et al., 2017) which states that teachers with more than four years of service tend to have a good level of professionalism. Second, the participants utilize information and communication technology (Google Form, Quizizz, or YouTube) for language formative assessment in the classroom. Third, they are willing to become the participants of this study. The researcher asked for their willingness by filling out the consent form. There are three abbreviations indicating each participant. P1 is the abbreviation for the first participant, P2 is for the second participant and P3 is for the third participant. Table 1 illustrates the further information of the participants.

Table 3. 1 Demographic Information of the Participants

No	Participants	Irma (P1)	Sri (P2)	Sam (P3)
1	**Gender**	Female	Female	Male
2	**Age**	34	38	29
3	**Subject/Grade**	English/IX	English/VII	English/VIII
4	**Institution**	State school	State school	State school
5	**Teaching experiences**	Seven year	Nine year	Four year
6	**Utilizing ICT in assessment**	Yes	Yes	Yes

3.3 Data Collection

To acquire rich qualitative data to recognize the EFL teachers' point of view about ICT-based language assessment, one-to-one semi-structured interviews were conducted with each participant. A semi-structured interview is where the questions are pre-planned before the interview but the interviewer gives the interviewee the chance to elaborate and explain particular issues through the use of open-ended questions (Blandford, 2013). This research used some open-ended questions based on the interview developed by Luthfiyyah et al., (2021), addressed to highlight the types of ICT tools utilized in language assessment, the role of ICT in language assessment, and the benefits and challenges of conducting ICT-based language assessment in classroom. The interview was conducted with each participant based on their convenience time. The duration of the interview is around 15-20 minutes for each participant using Bahasa Indonesia. Finally, the interview sessions were fully audio-recorded, transcribed, translated into English, and sent back to the participants to get verification.

3.4 Data Analysis

The data were analyzed after the researcher interviews with the teacher using Braun and Clarke's (2006) thematic analysis. Thematic analysis is the study of patterns to uncover meaning. In other words, it's about analyzing the patterns and themes within the data set to identify the underlying meaning. Braun and Clarke (2006) argue that thematic analysis is theoretically flexible for identifying, describing, and interpreting patterns (themes) within a data set

in detail. In conducting Thematic analysis, there are six phases to follow, namely:

1. Familiarizing the data

In the first phase, after the data were transcribed and translated into English, the researcher observed the overall result of the interview. To comprehend data, the researcher repeatedly read the transcript and re-listened to the recording of the interview regarding EFL teachers' perceptions of ICT-based language assessment.

2. Generating initial codes

The second phase of the thematic analysis process is generating initial codes. Coding is aimed to reduce massive amounts of data into small units of meaning. The researcher related the data based on the research objective and pre-colored the codes to highlight the teachers' perceptions of ICT-based language assessment.

Table 3. 2 Searching Initial Codes

Interview transcription	Initial Codes
P: Memang yah membantu dalam membuat soal itu, seperti kalau untuk Quizizz referensi untuk membuat soalnya banyak bisa search,	Assist to construct questions
P: Kalau Google Form Google form paling memudahkanya itu di input soalnya, seperti pakai Add ons atau build apa itu lupa lagi Ibu namanya	Easy to add questions
P: kalau pakai Google Form itu katanya lebih memudahkan dalam pengisian soal	Easy to use
P:… jadi bedanya hanya pas praktinya aja itu bisa jadi lebih fleksibel, karena kalau pakai WhatsApp untuk tugas speaking dan listening jadi bisa di PR kan,	Flexible to use
P: lebih murah yah kalau dibandingkan dengan yang pakai kertas mah, karena kalau untuk menggandakan soal itu tidak harus print out kemudian di foto copy, jadi	Affordable cost

untuk membagikan ke siswa itu tinggal dibagikan linknya saja

P:… kalau pakai Quizizz juga lebih menyenangkan karena kan berbasis game yah kalau Quizizz itu,   Attractive assessment

P: Kalau dari siswanya itu kelihatan lebih antusias yah karena tugas yang diberikan itu bentuknya itu kita bisa buat lebih interaktif dan menarik, kayak kalau pakai Quizizz itu bisa berupa games seperti kuis interaktif   Interactive assessment

P: Kemudian kalau yang menggunakan YouTube tugasnya berkelompok jadi siswanya bisa melatih teamwork nya,   Collaborative assessment

P: …selain itu jadi lebih kreatif, jadi videonya itu diedit dulu sedemikian rupa sama mereka jadi bagus-bagus yah sebelum di upload ke YouTube itu,   Creative assessment

P: untuk penskoran di Quizizz lebih mudah yah, lebih efisien, karena sudah berbentuk angka atau nilai yah sesuai dengan kriteria nilai yang kita tentukan sebelumnya.   Auto scoring

P: Kalau untuk yang pakai YouTube karena tugasnya juga berbentuk video jadi untuk penskorannya juga bisa lebih fleksibel dilakukan dimana saja,   Flexible scoring

P: kalau di Google Form atau di Quizizz dalam pembuatan soalnya kita juga mensetting jawaban yang benarnya, nah jawaban yang benar itu nanti akan muncul setelah siswa selesai mengerjakan soalnya   Immediate feedback

P: Kalau untuk tantangannya karena Quizizz itu harus pakai internet yah jadi harus terus terhubung dengan internet selama proses ulangan atau tugas teh, sementara Wi-Fi di sekolahnya kan belum maksimal, suka gangguan juga yah jadi lemot,   Internet connection issue

P: Kemudian kekurangannya kalau pakai teknologi itu bisa ditranslate yah untuk soalnya,   Risk of cheating

The table presented below exhibits the codes alongside the associated frequencies.

Table 3. 3 Calculating Initial Codes

Initial Codes	Frequency
Assist in constructing questions	4
Easy to add the questions	3
Easy to use	3
Flexible to use	2
Affordable cost	6
Attractive assessment	2
Interactive assessment	3
Collaborative assessment	2
Creative assessment	1
Auto scoring	5
Flexible scoring	2
Immediate feedback	2
Internet connection issue	1
Risk of cheating	2

3. Searching for potential themes

    After generating initial codes, the researcher continued to examine the codes and merge them with other relevant data that shared a similar theme.

Table 3. 4 Searching for Potential Theme

Initial Codes	Potential Sub-Theme	Potential Theme
Assist in constructing questions Easy to add a questions Auto scoring Flexible scoring Immediate feedback	Sub-theme class 1 (Reduce Teachers' Workload)	Class 1 (Positive Perceptions)
Affordable cost	Sub-theme class 2	

	(Provide Low-cost Assessment)	
Attractive assessment	Sub-theme class 3	
Interactive assessment	(Facilitates Student'	
Collaborative assessment	Engagement)	
Creative assessment		
Easy to use		
Flexible use		
Internet connection issue	Sub-theme class 4	Class 2 (Negative
Risk of cheating	(Limitations)	Perceptions)

4. Reviewing the theme

    During this step, the researcher developed and modified the themes that have been identified in the previous steps. The researcher re-examined the themes that have been identified to ensure the placement of the code has been grouped into the appropriate theme.

5. Defining and naming the themes

    In this phase, the researcher identified the essence of what each theme is about. The researcher determined and gave the name of the themes based on data obtained. In this research, the researcher concludes two themes which represented teacher perception of using ICT in language assessment.

Table 3. 5 Defining and Naming the Themes

Codes	**Sub-Themes**	**Themes**
Assist in constructing questions	Reduce Teachers' Workload	Positive Perceptions
Easy to add a question		
Auto Scoring		
Flexible Scoring		
Immediate feedback		
Affordable cost	Provide Low-cost Assessment	
Easy to use		

Flexible use	Facilitates Student'	
Attractive assessment	Engagement	
Interactive assessment		
Collaborative assessment		
Creative assessment		
Internet Connection Issue	Limitations	Negative Perceptions
Risk of Cheating		

6. Producing the report

    In this final step, the researcher presented the study's result on the EFL teachers perception on ICT based language assessment.

3.5 Research Schedule

Table 3. 6 Research Schedule

Description	Oct/ 2023	Sep/ 2023	Nov/ 2023	Apr/ 2024	Jun/ 2024	July/ 2024
Research Proposal writing	▓	▓				
Research Proposal Examination			▓			
Data Collection				▓	▓	
Data Analysis				▓	▓	
Report					▓	
Thesis Result Seminar						▓
Thesis Examination						▓