CHAPTER IV
FINDINGS AND DISCUSSION

The research findings and their discussion were presented in this chapter. Researcher represented the results of data analysis from participant online reflection and semi-structured interview to reveal the challenges that students encounter during preparing DC content. Moreover, the results of the study were further explored in the discussion section by the researcher and were linked with relevant previous research findings.
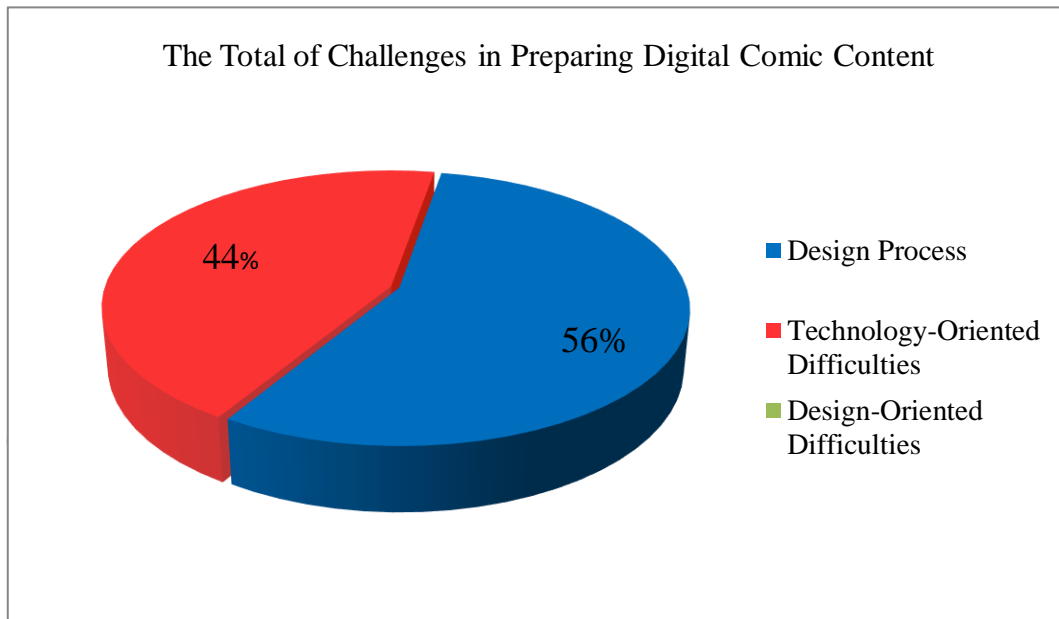
4.1 Findings

Based on the outcomes of data analysis from participant online reflection and semi-structured interview, one central theme, which is challenges in preparing DC content with three sub-themes emerged to reveal the research findings, namely: (1) technology-oriented difficulties, (2) design process, and (3) design-oriented difficulties by Akcanca (2021). The details will be presented as follow :

4.1.2 The Digital Comic Challenges

This section explains the research findings and shows the totality of each challenge experienced by EFL learners in preparing digital comic content. Challenges in preparing digital comic content in this context are the challenges students experience in preparing digital learning media which is still a new thing for EFL learners. Challenges in preparing digital comic content in this inquiry can be in the form of design difficulties, and challenges using digital tools to design, and create attractive digital learning media. Participants share their observations

about the challenges in preparing digital comic content like what they found during the foreign language teaching media class. The source of the findings comes from online reflections that the inquirer has transcended and united. The finding will be presented in the graphic below:

The Total of Challenges in Preparing Digital Comic Content

44%

56%

■ Design Process

■ Technology-Oriented Difficulties

■ Design-Oriented Difficulties

Figure 4.1 Result of the Challenges in Preparing Digital Comic Content

Figure 4.1 above shows that 56% of the challenges in preparing digital comic content are at the design process stage because in this stage participants do many things which form them many challenges that must be while designing a digital comic. Another 44% of this result shows that technology-oriented difficulty is also a challenge in preparing digital comic content for EFL learners because when participants are oriented toward the use of technology, especially in the use of various digital tools that are still recent to EFL learners, in order that participants have difficulty making digital comics. Design-oriented difficulties get 0% in challenges in preparing digital comics because design-oriented difficulties it discusses how EFL learners overcome the problems they get when designing

digital comics. Therefore, it is concluded that most of the challenges that EFL learners face in preparing digital comic content are at the design process stage based online reflection.

4.1.2.1 Technology-Oriented Difficulties

The technological challenges in this context refer to the difficulties participants encounter when creating digital comics due to their limitations on digital tools for content creation. For instance, learners may face obstacles when utilizing specific applications for designing digital comics or struggle with incorporating comic characters into platforms like Canva.

In terms of technology-oriented difficulties which are part of the challenges that students encounter during preparing DC content, the results of this study found that the learners first challenge is digital-program oriented. This phenomenon was expressed by participants reflection. The problem raised is related to one of the challenges in creating DC which is technology-oriented difficulties.

The first problem that raises in this phenomenon is the lack of good network. P1 stated that:

> *"The network overlap, this problem makes it difficult for me to compile my digital comic content. Even my DC assignments take too long because my Canva loads more than it does. I had wanted to give up on making it, due to frustration due to the network not supporting it. Since I use Canva, it needs a really good network for all the features to operate smoothly and victorious. However, when I work in DC, my network is very slow. Finally, all my drafts are loading. Luckily Canva has an auto-save feature so my drafts are saved properly. Due to this problem, in the drafting stage of the DC design, it took two days to complete it. To pass this challenge, I went to my friend's house which has a good wifi network."* (P1)

Another problem that appears is the lack of knowledge in using digital tools. This problem was expressed by P2 and P3:

> *"As well as thinking about how to incorporate digital elements such as animation, sound, and other interactive features. In addition, when I create digital comics I also have to figure out how to use the right tools and software to create comics, as well as understand the technical aspects of digital comics such as file types, resolutions, and color palettes."* (P2)

> *"The challenge that I faced when I first started making digital comics was learning new features in making digital comics because this was a new project for me so it took quite a long time just to learn about these features, such as using Canva, Bitmoji, and Voice Notes applications. etc."* (P3)

Moreover, the third problem that was stated by P3 and P5 is there are many digital tools that need to be applied. Therefore, the participant felt overwhelmed by using too many tools as she needs to go back and forth to other applications.

> *"The challenge that I faced when I first started making digital comics was learning new features in making digital comics, so it took quite a long time just to learn these features, such as using Canva, Bitmoji, voice note applications, etc."* (P3)

> *"Adjustments to the use of additional platforms in digital comics. As making digital comics requires using features from other platforms (e.g. Vacaroo for audio enhancements; YouTube for video enhancements), this requires me not only to get used to using digital comic design applications but also other applications. With so many applications needed to complete the creation of digital comics, I feel that creating digital comics becomes more complicated and takes longer because creators have to visit different platforms back and forth."* (P5)

Another problem that was expressed by P2 and P3 is the digital tools were inconvenient to access:

"Digital comics are often stored in a variety of different file formats, and it can be difficult for me to organize and access them in an efficient and easy-to-use way. In addition, most digital comic content is stored on premium sites, making it difficult to share or transfer content across multiple platforms. Additionally, digital comic content often includes large amounts of multimedia, such as audio and video, which can pose challenges to storage and accessibility".* (P2)

"Then I edited it into the application and then included it in a digital comic. Among the processes of making digital comics, this process is the most time-consuming". (P3)

The online reflection revealed that EFL learners have many problems in using technology to design a digital comic. Several problems such as lack of understanding of the technology used, the use of too many digital tools, problems accessing digital tools in online platform, and network problems. This explains that the use of technology is not an easy thing for EFL learners with the constraints they encounter in designing a digital comic.
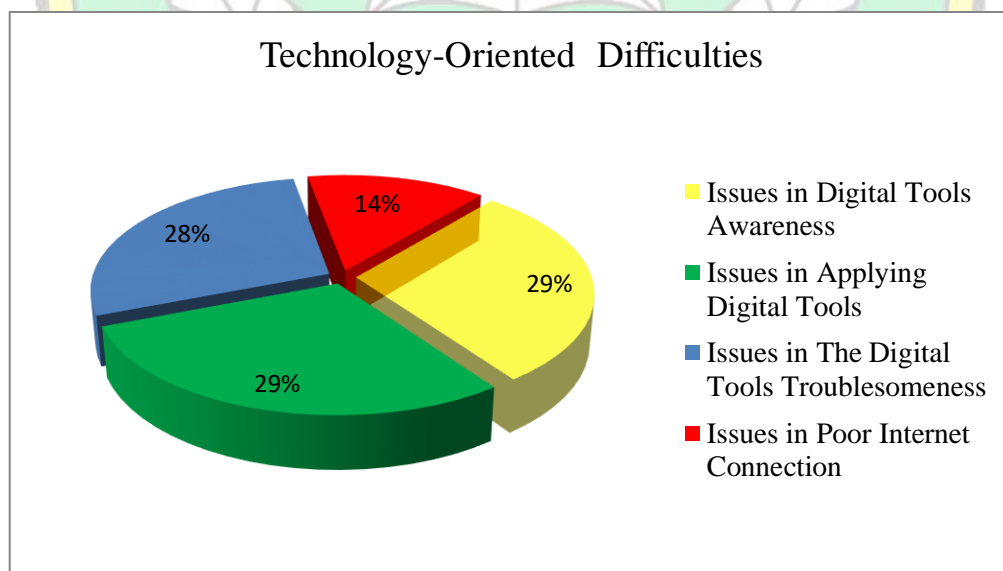
Figure 4.2 Result of the Technology-Oriented Difficulties

Figure 4.2 above shows that a shortage of understanding of digital technologies and several digital devices that must be utilized get a higher

percentage, with a trend of 29%. Followed by 28% the troublesome in accessing the digital tools, then 14% issues in poor internet connection. Lack of knowledge of digital tools is also a challenge for participants because some of the digital tools used in preparing digital comics are still new for participants to use and the lots of digital tools that need to be applied are challenges that often arise in reflection because participants find it difficult to use many digital tools simultaneously in preparing digital comics. This inconvenient to access about the limitations of using digital tools due to the many digital tools that can help in preparing digital comics but have to be a premium member of these digital tools, then a lack of a good network is a challenge because in preparing digital comics, the digital tools used are online-based therefore lack of good network is one of the challenges in preparing digital comics.

4.1.2.2 Design Process

This section describes the research findings and points out one of the challenges in preparing DC content: the design process. The design process in this context is that in designing a digital comic there are many challenging processes, such as determining characters that suit the comic concept, design process in this context also talk about the process of selecting backgrounds, templates, animations, and many more aspects that are right for digital comic content. Participants share their design process challenges in preparing DC content in online reflection and semi-structured interviews.

Below are some of the participants' statements in their online reflections on what challenges EFL learners during the digital comic design process, all taken directly from their comments. There were quite a few obstacles at this stage of the

6

design process because at this stage the participants had already made or decided which digital comic they wanted. As participant P1, P3 and P5 shared their problem in determining the topic they would choose in their digital comic:

"I was confused before about what topic should I use in making this project. There are many topics available. It took 2 days for me to choose a topic, this because I read 3 books first. Apart from that, because the two topics that I wanted had already been picked up by other friends." (P1)

"The obstacle that I experienced when making digital comics was in selecting material and adjusting features to the material. First, I find it difficult to choose suitable material to use in my digital comic. Because I'm still a layman, I try to find materials that are light and easy to make. But to make it easy for readers/students to understand is also quite difficult. What's more, I have to make the material interesting with various features. It took a lot of time to design the material and customize it with interesting features." (P3)

"For the obstacles to selecting digital comic topics, I overcame this by reading and reviewing the themes that need to be taught to students in schools through the available textbooks. After that, I tried to see teaching references on the internet related to this material. Thus, I can estimate which material can be presented more efficiently through digital comics." (P5)

Not only in determining what topics will be presented in a digital comic, but participants also said in the online reflection that determining what concept will be presented in a digital comic is a challenge that is experienced in the design process. The participants of this inquiry P1, P4 and P5 reported:

"When choosing a Comic template, I was faced with various choices. Everything is very good and beautiful. But, again, I can only choose one." (P1)

"How do I determine the digital comic concept so that it can become an interesting learning medium, such as determining the character,

design, color selection, and also good instructions that the dc user can understand later." (P4)

"Regarding digital comic design, <u>I find it difficult to choose an interesting background</u>. This is because, during the digital comic creation process, we were directed to use a background image which is a template and cannot be changed. This is quite practical and easy, but unfortunately, it makes the comic look a bit monotonous. Then because of the habit of using background templates that are available on the internet, I also had difficulties when trying to make my version of the background by using images that I like." (P5)

Another problem experienced by the participants in designing a digital comic is the problem of recording voice and making storyboards. All of these statements were also found in online reflection. P1, P2, P3 and P4 unveiled that:

"<u>When I have to record my voice as a reference in explaining the material</u>. <u>Because it requires a lot of preparation such as the text to be read, a quiet place, and voice training</u> so that it is interesting and not flat. What's more, the material that I am talking about must be as short, concise, and clear as possible because an explanation that is too long will bore the listener. Because of that, I tried many times to just record it." (P3)

"<u>I had a hard time recording my voice</u> for a digital comic <u>because made the right voice for the DC character and made sure the voice matched with the contextual context of the digital comic that I had</u>. I also had difficulty adjusting the timing of the sound with the movement of the images and dialogue in digital comics." (P2)

"In compiling the storyboard, <u>I found it a challenge to recreate it because, during the feedback session, it turned out that the lecturer told me to change the topic I chose. This causes materials, ppt, and others that I have to re-create again.</u>" (P1)

"In designing my digital comic, <u>one of the main challenges I experienced when compiling a storyboard for a digital comic was ensuring that the story I wrote could be properly translated through pictures and dialogue.</u> I also had to ensure that each image had the right composition and strong visual associations to create a clear and engaging storyline. Another challenge that I experienced in designing storyboards was, of course, there had to be consistency between the storyboard and the lesson plan that was made.
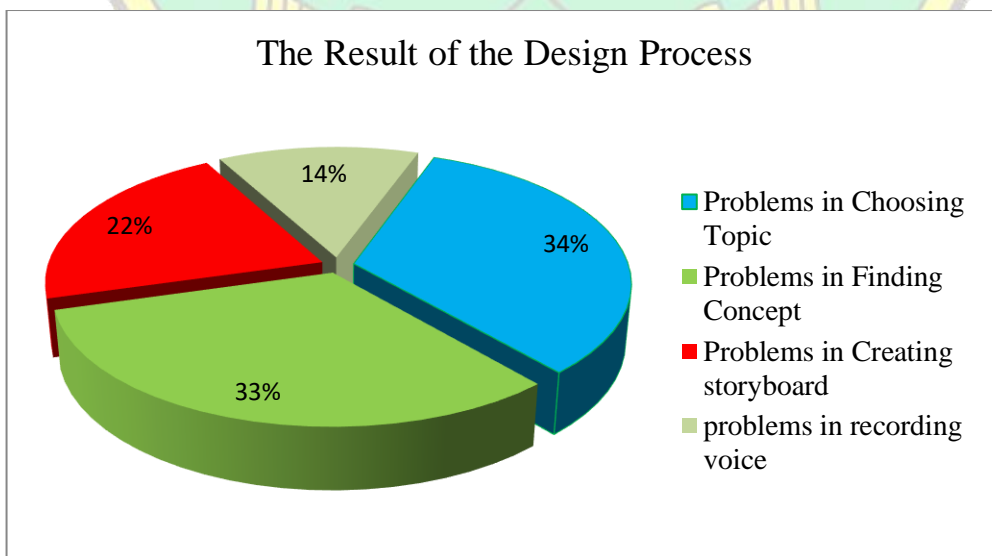
Therefore, I had difficulty connecting and equating the storyboard with the lesson plan that I had previously designed." (P2)

"When making storyboards. At first, I was confused about making it because the plot only used instructions. (P4)

These extracts show that making digital comics is not an easy thing, participants need to learn many things, especially in the field of technology, such as design features. But not only learn features to design, but participants must also have a creative brain and good taste in terms of visuals because in digital comics talk about visuals such as characters, concepts or themes, and colors. This is to make people interested in the digital comics that participants create, so that they are comfortable with learning.

Making good instructions in a digital comic must also be given more attention because this is useful for making digital comics better to use and in this case voice recording can be useful as instructions in digital comics. In terms of storyboards, also be arranged properly because can be a reference for compiling storylines in digital comics.

The Result of the Design Process

- Problems in Choosing Topic — 34%
- Problems in Finding Concept — 33%
- Problems in Creating storyboard — 22%
- problems in recording voice — 14%

Figure 4.3 Result of the Design Process

Figure 4.3 above shows that problems in to choosing the topic receive a higher percentage, with a trend of 34%. Problems in finding the concept is on 33%, followed by problems in creating storyboard 22%, then 14% problems in recording voice. Confusion to determine the topic is the most frequent challenge experienced by participants because the topic has an important role to make digital interesting to watch and learn about, determining the topic also means determining everything in digital comics such as learning materials and assessment materials. Selecting the concept discusses the visualization that will be applied to digital comics, about how to create a digital comic with an attractive color and background in order for digital comic becomes comfortable to use. Making a storyboard is a challenge for participants because the storyboard discusses the storyline in a digital comic which is also useful as a lesson plan so it becomes a challenge in preparing digital comics because it also discusses aims, activities, and assessments. Recording voice is a challenge in digital comics because there are lots of devices that must be prepared such as text, quiet places, and voice training. Making the accurate voice with digital comics that are made is also a challenge in recording voice.

4.1.2.3 Design-Oriented Difficulties

This section describes research solutions and shows how to overcome the challenge of preparing DC content: the design-oriented difficulties. Design-oriented difficulties in this context mainly talk about how to overcome the obstacles encountered when making a digital comic. Participants shared their design-oriented difficulties in preparing DC content.

While making a digital comic, there are bound to be many challenges or problems, and it doesn't mean that the problem will be avoided, but that it will be studied so that it can become a problem solution when making a digital comic. In this case, each participant P1, P2, P3, P4 and P5 shared how they overcame the problems they encountered when making a digital comic:

> "The way I handle it is to _always prepare a second or third draft if my first draft is rejected (again)._" (P1)

> "The way I overcome the obstacles I encounter during the process of making digital comics is _time management_. Time management is an important part of creating digital comics. I need to plan and set aside specific time to create comics. This will help me stay focused and organized, and prevent me from getting overwhelmed." (P2)

> "I overcome the problems that I face by _trying again and again until I succeed_. For example, in the voice note problem that I experienced, even though there were many obstacles and failures in making it, I didn't give up and kept trying until I was satisfied with the results. Finally, through the assistance of the course lecturer. There is no doubt, all accurate information must come from the lecturers themselves who always provide information regarding their courses and open consultations on assigned assignments." (P3)

> "_By asking lots of questions to lecturers or friends_, and also seeing lots of tutorials on making digital comics on YouTube." (P4)

> "Then for the third obstacle which is the use of the digital comic platform, _I choose to finish all the things I have to do on one platform_, then move on to another platform. So, I chose to place all my avatars according to the plan, and then move on to other platforms to record sound, etc. I think this is effective in reducing processing time." (P5)

These excerpts showed that making a digital comic requires a lot of effort and good time management because in making digital comic many things can happen such as a bad network, too many applications being used, and a lack of understanding of the use of technology. But that doesn't mean there aren't solutions to every problem you get when creating a digital comic.
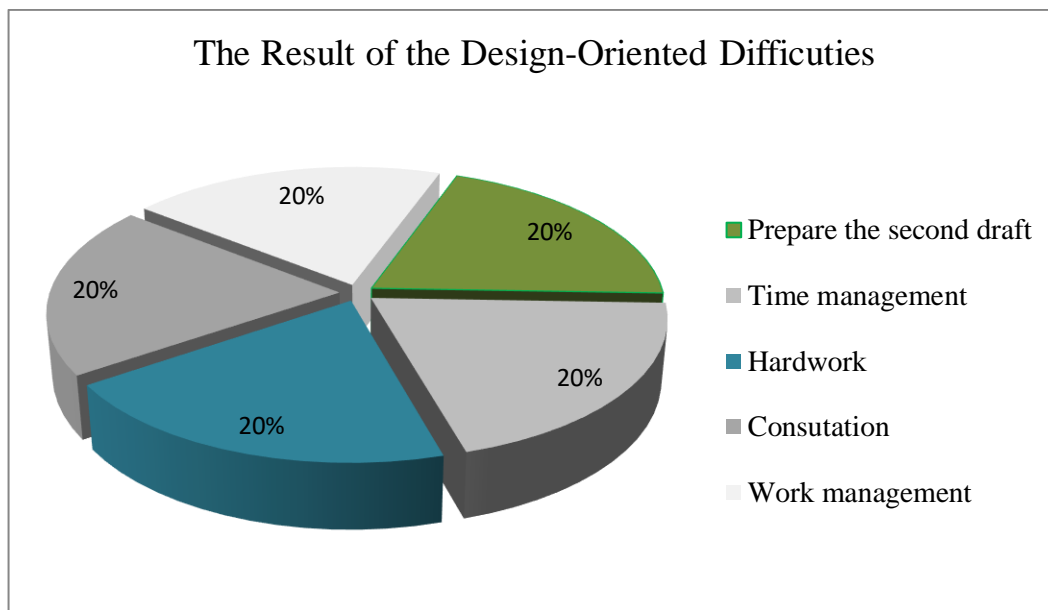
Figure 4.4 Result of the Design-Oriented Difficulties

Figure 4.4 above shows that how to overcome the difficulties when preparing digital comic content is prepare the second draft, time management, hardwork, consultation, and work management. This five result of design-oriented difficulties receive a same percentage, with a trend 20%.

4.2 Discussion

This section presents a dealer's discussion with research findings on exploring the challenges of EFL learners in preparing digital comic content. The findings reveal that EFL learners apply two types of challenges, namely technology-oriented difficulties and design processes. Other findings also reveal how EFL learners overcome the challenges they get. Through an outline of the themes that emerge in the research findings, this EFL learner challenge plan can be substantiated.

Working on projects using digital comics presents a number of difficulties for EFL students, many of which are technological in nature. It can be difficult for

EFL learners to use new technologies or platforms that are foreign to them, which makes it tough for them to take full advantage of Canva's capabilities. As a result, in order to get in-depth information and improve their abilities in generating digital comics, EFL learners must delve into the available programs or tools.

The EFL learner responses to questions in online reflection emphasize how critical it is for EFL students to become technologically literate. EFL students must grow accustomed to using digital tools and sites like Canva since technology develops quickly (Forutanian, 2021). These difficulties in using Canva to create digital content act as a motivator for EFL students to become tech-savvy. This training is essential because future EFL teachers will need to develop unique and cutting-edge teaching materials to improve the learning process (Allen & Berggren, 2016).

The difficulties EFL students had utilizing Canva to create digital content highlight how important it is to include technology into EFL training. To help students develop the critical digital literacy skills they need, EFL teachers should give them opportunities to interact with digital tools and platforms (Benitt, Schmidt, & Legutke, 2019). Based on Le Thi (2020), using technology into EFL classroom encourages creativity, critical thinking, and teamwork while preparing students for the rapidly evolving technological environment of education.

The experiences of aspiring teachers when creating instructional comics for the first time in a digital setting were examined in Akcanca's (2021) research. The results of this study are consistent with the difficulties encountered by EFL students working on digital comic projects. The study brought attention to the learning curve and early challenges involved in using digital tools and platforms

to create instructional comics. Prospective instructors battled with the unfamiliarity of the digital world much like EFL students did, highlighting the difficulties both groups encountered.

Additionally, Giovannini (2019) said that these difficulties highlight the necessity of addressing technological integration in teacher preparation programs. Future EFL educators must have the skills and knowledge required to successfully use digital tools and platforms for teaching. The production of digital material and the integration of technology into EFL education should be the emphasis of modules or courses in teacher preparation programs, according to Ranieri et al. (2018).

Research by Carstens et al. (2021) supports the notion that incorporating technology in the EFL classroom positively impacts student engagement and learning. Technology offers opportunities for interactive and multimedia-based activities, which can enhance students' motivation and interest in language learning (Gorbanyova, 2016). Digital comic creation, for example, provides a platform for students to express their creativity, engage with visual content, and practice language skills in a meaningful and enjoyable manner. By integrating technology into EFL instruction, educators can create a more dynamic and student-centered learning environment.

According to participant P1's replies, employing technology in EFL situations is a big barrier because of network problems. P1 stated that network instability caused performance issues with the program, which made editing operations time-consuming, especially in online settings. This problem serves as a

reminder of how crucial solid and dependable internet access is for enabling effective and hassle-free technology use. To promote smooth technological integration and reduce disruptions to learning activities, educators and institutions should solve network infrastructure issues.

Harris (2016, p. 27) makes the case that, despite the challenges EFL students may have while making digital comics, the creation of high-quality instructional material should be given priority. Despite the difficulties, teachers must make an effort to give EFL students well-designed, interesting learning resources that support their academic objectives. This necessitates striking a delicate balance between resolving technology issues and making sure that useful and effective digital material is created. The usage of technology may be optimized by educators and a supportive environment can be created that is ideal for teaching EFL.

Several elements that were discovered through online reflections and replies from participants P1, P2, P3, and P5 are responsible for the lengthy nature of the design process. These participants claimed that choosing the comic's subject and figuring out how to successfully adapt it into the digital format takes serious thought. This suggests that students should exercise critical thought when choosing content and should do their research to make sure their choices are in line with both educational goals and language acquisition results. Herlina and Linda's findings from 2021, which found that EFL learners considered the design process for digital comic projects to be time-consuming and challenging, corroborated these claims. Because creating a digital comic requires a variety of components, it is hard and time-consuming.

EFL students brought up a number of factors that make the design process difficult. These components include selecting acceptable templates, generating storyboards, developing the premise or plot, and recording the right sound effects. To guarantee the successful integration of multimedia components and the delivery of the intended message, each of these processes demands careful preparation, imagination, and attention to detail. As a result, the design process takes into account not just verbal factors but also visual and audio ones.

The difficulties EFL students had when creating digital comic projects highlight the need of thoughtful consideration and planning. Given the time and effort needed to effectively complete the design process, learners must exercise critical thought and make wise selections. In order to help students succeed, educators and researchers should emphasize the value of careful planning, efficient resource utilization, and innovative thinking throughout the design process (Bonnardel & Didier, 2016). The complexity of digital comic design can be more successfully navigated by learners when scaffolding and instructional tools are provided (Azman, Zaibon, & Shiratuddin, 2014).

The idea that aspiring instructors struggle to come up with creative ideas for digital comic projects is supported by Akcanca (2021). EFL students sometimes find it difficult to stray from predetermined topics or ideas, which inhibits their originality and creativity. The creation of interesting and cutting-edge instructional materials may be hampered by this problem. The rigid adherence to predetermined topics restricts learners' freedom to explore a variety of topics and include their own distinctive viewpoints, potentially restricting the efficacy of digital comics in language acquisition.

According to Arroio (2011), instructional comics are an effective teaching method that uses both text and pictures to impart knowledge. Learning is made more engaging and entertaining by the integration of visual elements with specified themes in educational comics. However, combining visual components with the teaching material and making appropriate use of them might be difficult for EFL students. This necessitates careful thought about how images might improve understanding and support language learning goals.

When making instructional comics, Gülersoy and Türkal (2020) underline the value of learning new things and taking into account aspects unique to teaching. The topic content and pedagogical concepts must be thoroughly understood by EFL students working on digital comic projects. They must think about how to convey the information effectively, link it with language learning goals, and make sure the comic style encourages engagement and understanding. This task emphasizes the necessity for EFL students to get a thorough grasp of both the topic matter and the instructional strategies necessary to produce successful educational comics.

Based on the data from P1, P4, and P5, EFL students have trouble choosing appropriate topics or templates for their digital comics. It may be challenging for learners to select an appealing solution due to the variety of accessible templates. This challenge emphasizes how crucial it is to offer learners direction and assistance throughout the choosing process in order to make sure that the selected idea or template is in line with the desired learning objectives and effectively engages the target audience.

Based on Pratt (2009), the illustrations in digital comic have a big impact on how readers perceive spatial connections within the framework of the story. The location of the tale and the connections between the characters and things are made clearer to readers through the use of visual components such as pictures and drawings. For their digital comics to successfully transmit spatial relationships and improve reader understanding, EFL students must pay close attention to the visual components..

In addition, Sentürk (2020) focuses on the significance of keeping harmony between the written and visual elements while creating instructional comics. Sömen and Akcanca (2020) stated that comics' visual components are crucial for capturing readers' attention, ensuring the comic's survival, and bringing the tale to life. Sömen (2020) emphasizes the necessity of developing a harmonic interaction between the words and the images in order to maintain the story's continuity and coherence. EFL students should aim for a succinct presentation of the subject matter, achieving the correct balance between imagery and words, in order to successfully convey the desired message to readers.

P3's experience brings to light the difficulties EFL students have while preparing for voice recordings. To achieve correctness and fluency, texts must be carefully chosen and rehearsed. To reduce background noise and distractions, it's also crucial to choose a calm location for recording. Additionally, voice training is required to enhance intonation and pronunciation, ensuring that the message is effectively communicated. These difficulties highlight how crucial it is to give EFL students direction and assistance in voice recording preparation in order to improve the caliber of their digital educational comics.

The findings of this investigation are supported by Akcanca's (2021) research, which also highlights the challenges that aspiring teachers encounter, particularly when they are first developing instructional materials, including digital media. The study underlines that undergraduate students are more likely to come across technology-focused alternative teaching resources than conventional teaching materials, such as digital instructional comics. This implies the necessity of giving EFL students—future teachers—the knowledge and technological proficiency they need to properly integrate digital media into their teaching methods.

Learners of English as a foreign language (EFL) can gain from specialized direction and training to solve the difficulties in voice recording preparation for digital instructional comics. Teachers and instructional designers should offer tools and advice to help students choose relevant texts, locate appropriate recording spaces, and hone their voice abilities. Language learning curriculum can include voice training activities and practice sessions to help students improve their intonation, pronunciation, and fluency. A further way to better prepare future educators for the digital age is to incorporate technology-oriented teaching resources, including digital instructional comics, into EFL teacher training programs.