CHAPTER 5

CONCLUSION, LIMITATION AND RECOMMENDATION

5. 1. Chapter Overview

This chapter is the last part of this dissertation. It concludes the results of this study based on the three research questions posed previously in Chapter 1. Then it is followed by the limitation of the study. Finally, some recommendations are withdrawn from the research results.

5.2. Conclusion of the Study

This study was conducted based on three research purposes. The first purpose of this research was to describe the implementation of Technology Enhanced Language Learning (TELL) in the context of English as Foreign Language (EFL) classroom with minimum resources. The teaching and learning process with technology integration was analyzed using substitution, augmentation, modification and redefinition (SAMR) which was proposed by Puentedura (2006). The second purpose of this research was to investigate the challenges found as well as the solutions during the teaching and learning process using technology integration in the similar context. Finally, the third purpose of this research is to study students' perceptions and experiences in learning English using technology within similar context. The answers to the three research questions have been elaborated in Chapter 4.

By using qualitative research design, the teaching and learning process with technology integration in the context of EFL classroom with minimum resources was analyzed descriptively using SAMR framework. This framework was used to analyze to what extent the English teacher implemented technology integration in the EFL class. Using convenient sampling technique, one English teacher and one class of XI grade students, which consisted of 36 (thirty six) students, in one vocational school in Bandung were involved in this study. For 14

meetings, the teaching learning process was observed in the form of classroom participatory observation.

The results of the study indicate that during the teaching and learning process, the English teacher had utilized two types of technology: non web-based as well as web-based technology. For non web-based technology, the teacher had utilized laptop, speaker, LCD projector and students' mobile phones when teaching English. While for web-based technology, the teacher had utilized several types of digital applications, such as: learning management system (LMS) applications (for example: Google Classroom), language learning applications (for example: LyricsGaps, QR Code, and Speechnotes), game-based applications (such as: Kahoot and Akinator), poster & video-maker applications (such as: Canva and Kinemaster) and certain English language learning websites.

After observing and analyzing the teaching learning process for 14 meetings, it was found out that about 79% (11 meetings) of technology integration activities were classified into augmentation level, which means that technology was substituted for certain traditional teaching tools, but with significant enhancements to students' experiences. Then 7% (1 meeting) of technology integration activities were classified into modification level, which means that technology integration requires a significant redesign of a task. And 14% (2 meetings) of technology integration activities were classified into redefinition level, which means technology allows for new tasks that were previously inconceivable with traditional teaching tools.

At substitution level, technology tools are substituted for traditional tools without any functional changes (Puentedura, 2006). Based on the result of participatory observation, no technology integration activity was classified into substitution level. At augmentation level, technology is exchanged and the function of the technological tools positively changes in some way. In other words, the technology is substituted for certain traditional teaching tools, but with significant enhancements to students' experiences. The examples of technology

tools in augmentation level, which the English teacher used in the class, were the use of QR code in teaching factual report text, the use of LyricsGaps application in teaching listening, the use of Canva in teaching captions, the use of Speechnotes application in teaching pronunciation, the use of Whatsapp in teaching speaking, the use of Padlet application for teaching personal letter and the use of Kahoot! for formative assessment.

At modification level, technology integration requires a significant redesign of a task. This level is a step over the line between the roles of technology to enhance language learning to the roles of technology to transform learning. For example in this case, the English teacher used Google Classroom as (GC) the learning management system (LMS). Via GC, teacher shared the teaching materials, posted the assignment, collected students' tasks, gave feedback and graded students' works.

Finally at redefinition level, technology is used to create new tasks. This level represents the pinnacle of how technology can transform students' experiences. Within this level, technology allows for new tasks that were previously inconceivable. In this case for example, the English teacher used Kinemaster and Instagram for digital storytelling project in teaching about personal recount text.

The second result of this study revealed the challenges which were found during the implementation of TELL in the context of an EFL classroom with minimum resources. Based on the data gained from classroom participatory observation and retrospective interview with the English teacher, the challenges could be categorized into two groups, they were: internal and external challenges.

The internal challenge in technology integration was teacher's self-motivation. The teacher admitted that sometimes she was less motivated to learn new technology. The solution for this challenge was that she usually joined Teacher Development Program (TPD), such as: seminars, workshops, and school visit programs abroad about the use technology in language teaching.

From the external challenge, the problems usually occurred in the aspects of accessibility, support and training. Accessibility refers to the availability of certain facilities which can support effective technology integration. For example, there was no language laboratory in the school but there was one computer laboratory available which should be shared with other hundreds of students and teachers. The solution for this challenge was by using traditional classroom and students' personal mobile phones. Support refers to any support system (either physical or non-physical) which can support effective implementation of technology integration in EFL classroom, for example: limited coverage of internet connection. The solution for this challenge was to ask students to use their own internet quota. The other example of challenge in relation to support was the unavailability of power supply and some important classroom technology equipments, such as: broken projectors and screens. Since there was no solution, back to book (paper-based) was the only way out. The other example of challenge related to school support system in technology integration was unsupported students' gadgets. The teacher usually asked their students to work in pairs and shared the mobile phones together, as the solution for this challenge.

The next example of challenge which the English teacher found when implementing technology in EFL classroom was less support from her colleagues and headmaster. She frequently was asked to focus on teaching materials to prepare students for exams. 'Walking alone' was the only solution for this challenge. She just continued using technology in her EFL classes only when she thought she needed to use it. The last external challenge in implementing technology in language teaching was training. Lack of knowledge in using technology would lead to many technical problems in the class, therefore the school had conducted several trainings and workshops on using technology in the classroom.

The last result of this research was related to students' perceptions and experiences about the use of technology in language learning. The data of this research question was gained from distributing questionnaire to all students

involved in this research. The questionnaire revealed that students positively perceived the use of technology in their EFL class. They perceived positively that an EFL classroom should be equipped with technology and the teacher should use it for language learning. Additionally, they believed that learning language skills and language components would be will be more effective by using technology. Moreover, students also positively perceived the use of different types of applications in language learning. They appreciated the use of Google Classroom (GC) as learning management system (LMS) in the class because it is user-friendly and flexible. They were also able to get faster feedback from the teacher via GC. They also claimed that GC is low cost since they did not need to print the assignments when they wanted to submit them via GC.

For language learning applications, such as LyricsGaps, Speechtonotes and QR Code and Canva, they also perceived the use of them positively, since they are easy to use and motivating. Most of the students felt that they were more engaged in the learning process by using technology since it is fun. The use of social media applications was also positively perceived by students since they were quite familiar with the applications and it made them easy to submit assignments. Lastly, majority of students positively perceived the use of video maker applications such as Kinemaster since they are user-friendly and free of charge. They could create and edit their videos easily like a pro via their mobile phones and the tasks became more interesting.

By using SAMR framework, the teacher had shown successful strategies of technology integration to support language learning pedagogy. In the language skill lessons, the teacher implemented genre-based approach (GBA) with its four stages **(building knowledge of the field, modelling of text, joint construction of the text and independent construction of text). While in the grammar lesson, deductive teaching was used by overtly explaining the grammar concept and then followed by specific examples to reinforce students' knowledge.**

The teacher had integrated technology tools in one or more stages of the instructions: 1) gaining student attention, 2) informing learning objectives, 3) activating prior knowledge 4) presenting learning materials, 5) providing learning guidance, 6) eliciting student performances, 7) providing feedback, 8) assessing students' performance, and 9) enhancing retention and transfer. For example: integrating Canva for practicing caption writing, integrating interactive websites for presenting and practicing grammar games about conditional sentences, integrating QR codes for practicing reading comprehension about factual report text, integrating Kinemaster and Instagram for assessing student digital storytelling about personal recount text, integrating Whatsapp voice notes for assessing students speaking skill about giving suggestion and offers, integrating Padlet for practicing and assessing students writing skill about personal letter, and integrating LyricsGaps for practicing students listening skill of song, and integrating Kahoot for formative assessment.

Since education technology tool is not one size fits all, the teacher had shown sufficient consideration in choosing it. In term of pedagogy, the chosen technology tools were relevant with the learning objectives stated in the curriculum. In terms of engagement, the technology tools were personalized and able to promote collaboration among students, Finally, in term of support, the chosen technology tools were easy to use. They were also free and low bandwith.

5.3. Limitation of the Study

Despite the findings revealed from this research, this study has some limitations. Firstly, the choice of participants in this research was based on convenient sampling technique. Therefore, to some extent, the criteria of the selected teacher might not represent the criteria of English teachers in vocational schools in general. In this research, the English teacher was deliberately chosen because of her passion in technology integration in language teaching. Since she had joined many Teacher Development Program (TPD) workshops, her understandings and knowledge about TELL was also adequate. Thus, it would

have been beneficial if there were more than one teacher involved in this study, so they could represent different criteria of English teachers in the level of vocational schools. Secondly, the length of classroom observation was limited. All in all, there were 14 meetings of teaching learning processes observed and one session of teacher retrospective interview. Therefore, it would have been beneficial if the classroom observation was taken more than 14 meetings so the data gained can be richer. The teacher could also explore more different types of technology in her EFL class.

5.4. Implications of the Study

The findings of this study contributed to the results of several previous studies about technology integration in EFL classes (Hauck et al, 1999; Ahmadi, 2018; Kranthi, 2017; Yesilel, 2016; Rahman, 2015; Ersoy & Ersoy, 2013; Suhardiana, 2019; Oh and Nussli, 2014; Ruggiero & Mong, 2015; Tikam, 2016; Ammade et al, 2016; Solano et al, 2017, Taj et al, 2017). The other important thing related to the findings of this study was that it contributed to a more in-depth understanding about the practice of technology integration in the level of secondary schools in Indonesia, especially in vocational schools. Currently, the online learning is the only way of learning for many students. Due to the Covid-19 crisis, the whole process of teaching and learning has transformed into a virtual channel of teaching and learning, including in Indonesia. Teachers must be able to set the lesson objectives and the learning outcomes which the teacher expects learners to achieve at the end of the session. The teacher must take an active role in facilitating the learning activities, sharing additional resources, probing for critical thinking, requesting and offering applicable examples. The teacher must also consider diverse students' conditions in using technology, which offers the teacher to choose low technology integration to high technology integration activities. Pedagogy must be used as the principle and technology as the accelerator for online learning activities.

5.5. Recommendation for Further Studies

This study described the result of analysis on the practice of technology integration in EFL classroom using SAMR framework. It also explored the challenges found during the implementation, and it also investigated students' perceptions and experiences during the teaching and learning process with technology integration. Further research which utilizes other different frameworks, for example Teacher Technological Pedagogical and Content Knowledge (TPACK) framework, Triple E (Extend, Enhance, Engage) framework, ADDIE (Analysis, Design, Develop, Implement and Evaluate) framework, TIM (Technology Integration Matrix) framework, and RAT (Replacement, Amplification and Transformation) framework will enrich how technology integration implemented in secondary schools in Indonesia. Further research could also investigate how technology impact students' achievement and proficiency in English. Specifically, further research could also elaborate in what way technology promotes students' achievement in English. Finally, further research can also investigate how technology can promote students' learning autonomy.

5.6. Concluding Remarks

This chapter elaborates the conclusion of the research results, followed by implications and limitation of the study. Recommendations for future research were also presented in this chapter.