#### **CHAPTER I**

### **INTRODUCTION**

# A. Background of Study

Nowadays, the development of technology can improve performance and enable various activities to be carried out quickly, precisely, and accurately, thereby increasing productivity. The advancement of technology has been described in the holy book of the Qur'an al-Anbiya verse 80-81:

وَعَلَّمْنَهُ صَنَعْةَ لَبُوْسٍ لَكُمْ لِتُحْصِنَكُمْ مِّنْ بَأْسِكُمْ فَهَلْ اَنْتُمْ شَكِرُوْنَ وَعَلَّمْنَهُ الرَّيْحَ عَاصِفَةً تَجْرِيْ بِاَمْرِهَ اللَّي الْأَرْضِ الَّتِيْ برَكْنَا فِيْهَ أَ وَكُنَّا وَلِسُلَيْمُنَ الرِّيْحَ عَاصِفَةً تَجْرِيْ بِاَمْرِهَ اللَّي الْأَرْضِ الَّتِيْ برَكْنَا فِيْهَ أَ وَكُنَّا بِكُلِّ شَيْءٍ عَلِمِيْنَ بِكُلِّ شَيْءٍ عَلِمِيْنَ

This verse explains that it is so extraordinary science which is a gift from God Almighty. Allah was the first to create the technology. The results of His work spread to the next generation. Therefore, it is obligatory for us to study and develop it, because the development of the times will not occur if the human who has been gifted with reason does not want to develop the existing knowledge.

Advances in technology have changed the patterns and socio-cultural structures in various aspects of human life, including in the field of the

education system. As a result of the integration in the education of technological developments, it was influenced the way teachers conduct teaching and learning in the classroom (Chai, Ling Koh, & Tsai, 2013). An example of integrating technology in learning is blended learning, the idea by the North American Council for Online Learning (NACOL). In this model, learning is not focused on face-to-face activities in the classroom, but also uses web-based technology (online learning) to support learning activities. Blended learning has finally become an effective learning model, especially during this pandemic covid-19 era. However, the use of technology for classroom purposes still remains a problem. It is believed that even though the use of technology help to improve student learning, teachers often find difficulties in integrating them effectively.

The education journal entitled Technological Pedagogical Content Knowledge: A framework for Teacher Knowledge (Mishra & Koehler, 2006), has been a reference by many researchers to develop learning models. The term which became known as Technological Pedagogical and Content Knowledge (TPACK) is a framework for designing a learning model by combining three main aspects, technology, pedagogy, and content. It is not enough that technological improvements alone contribute to education. In that case, a framework guiding teacher knowledge to integrate technology into the lesson is needed. The framework should consider technological, content, and

pedagogical knowledge as well as integration between them so that technology can be integrated in a meaningful way. Mishra and Koehler developed a model of Technological Pedagogical Content Knowledge (TPACK) by including the expression of technology in the pedagogical content knowledge (Mishra & Koehler, 2006). It was adapted from the Pedagogical Content Knowledge model by Sulman (1986).

Technological pedagogical and content knowledge (TPACK) is the perfect combination of the three-domain of knowledge (content, pedagogical, and technology) that aims to develop basic knowledge when a teacher learns lesson materials and understands how technology can increase learning opportunities and experience for the student and know the correct pedagogical to increase the content of the learning. n English teacher who understands the pedagogies and concepts by using technology to teach lesson materials by having the right TPACK will be able to engage and motivate students to explore the content of English learning to a greater degree. The technological pedagogical and content knowledge (tpack) suggests that it is an important condition to create effective and innovative classroom teaching by using technology. (Abbitt, 2011)

There is a lot of research has been done on 'the readiness', but mostly they discussed teachers, not a pre-service teacher, as in a journal entitled Measuring Teachers' Readiness to Use Technology: Pedagogical and Content

Knowledge (TPACK) pilot study (Misieng, Ramanair, & Rethinsamy, 2018). This study is aimed at designing an appropriate instrument that can indicate English language teachers' level of TPACK to measure their readiness to use technology in teaching the English language in the tertiary level classroom to enhance student learning. While, there was a study that discussed pre-service teachers, but looked at how it applied to the class. A journal entitled Tracing Technological Pedagogical and Content Knowledge (TPACK) on Practical EFL Teachers in Writing (Surayya & Asrobi, 2020). The study examines how the integration between technology, pedagogy, and content knowledge in the writing context as part of the TPACK framework for practical EFL teachers. Therefore, the purpose of this study is to investigate pre-service teachers if they were ready or not before applying TPACK to the class.

In early observations of English education students of Antasari State Islamic University Banjarmasin, the researcher asked for some regarding the technological pedagogical content knowledge (tpack), the result of the interview was that all the students interviewed had the knowledge of technology, having pedagogical knowledge and content knowledge, researchers did not ask in-depth how big and spacious they knew about the three components. Then, the researcher asked whether they knew of the integration of technology onto a learning project such as the technological pedagogical content knowledge (tpack) only a few of them knew, but did not

fully understand it yet and most of them had never heard what the technological pedagogical and content knowledge (tpack) was. Based on these early observations and the explanations, researchers were attracted to a study entitled The Readiness of Pre-service English Teachers in Implementation TPACK (Technological Pedagogical and Content Knowledge) in classroom.

# **B.** Research Questions

This study attempts to answer what is the level of Technological Pedagogical and Content Knowledge (TPACK) readiness of pre-service English teachers of Antasari State Islamic University Banjarmasin?

# C. Objectives of Study

According to the research question, the objectives of this research is to describe the level of Technological Pedagogical and Content Knowledge (TPACK) readiness of pre-service English teachers of Antasari State Islamic University Banjarmasin.

### **D.** Significance of Study

This section mentions the theoretical and practical implications or the contribution of the study:

- 1. This study is hopeful to be as material to the researcher for processing knowledge and skills in the future as an English teacher.
- This study is hopeful to be useful to conduct educational research, especially related to TPACK (Technological Pedagogical and Content Knowledge).

### E. Definition of Key Terms

#### 1. The Readiness

The readiness is an initial condition of a person who will face something that makes him/her ready to respond to him/herself in achieving certain goals. In this case, how the readiness of pre-service English teachers implementing TPACK in the classroom.

#### 2. Pre-service teacher

Pre-service teachers are college students of education study programs who practice teaching before taking any particular job. In this study, the pre-service teachers are Englis education department year 2016.

### 3. Technological Pedagogical and Content Knowledge (TPACK)

TPACK (Technological Pedagogical and Content Knowledge) is a dynamic framework for defining teachers' knowledge. The TPACK framework describes the kinds of knowledge required by teachers for the successful integration of technology in teaching.