# CHAPTER I

# INTRODUCTION

## A. Background of Study

In today's digital era, technology has become an integral part of education, reshaping the ways teachers design, deliver, and evaluate learning experiences. The rapid growth of digital innovation in the 21st century has brought about significant changes in educational practices, requiring teachers to go beyond mastering subject matter and pedagogical strategies. Teachers are now expected to integrate technology meaningfully into their teaching, creating engaging, interactive, and student-centered learning environments. Therefore, the ability to blend content knowledge, pedagogical knowledge, and technological knowledge has become a crucial competence for educators, particularly for pre-service teachers who are preparing to enter the teaching profession. This integrated framework is known as Technological Pedagogical and Content Knowledge (TPACK).

The concept of TPACK was first introduced by Mishra and Koehler (2006) as an expansion of Shulman's (1986) Pedagogical Content Knowledge (PCK). Shulman argued that effective teachers must understand not only what they teach but also how to teach it in ways that make the content accessible to students. Building upon this foundation, Mishra and Koehler incorporated technology as a new and essential domain of teacher knowledge in response to the increasing role of digital tools in

education. TPACK emphasizes that technology should not be treated merely as an add on or supplementary aid but as an integral component that interacts dynamically with pedagogy and content. In other words, teachers need to understand how to select, adapt, and implement technology appropriately to support pedagogical goals and align with the nature of the subject matter.

In teacher education, especially for pre-service teachers, TPACK serves as a benchmark for determining their readiness to teach in complex, technology driven classrooms. Pre-service teachers are expected not only to comprehend theoretical frameworks but also to translate them into meaningful teaching practices. The teaching practicum or field experience is a critical stage in this process, allowing student teachers to bridge theory and practice. During practicum, they face real classroom challenges that require them to integrate content, pedagogy, and technology effectively. This period is not only a test of their teaching competence but also an opportunity to shape their professional identity as future educators.

However, the application of TPACK in real teaching settings is often challenging. Many pre-service teachers encounter both technical and pedagogical obstacles. Technically, they may face limited access to digital tools, unstable internet connections, or insufficient support from mentor teachers and schools. Pedagogically, they may struggle to align technology with instructional goals or to manage classroom interactions effectively when digital media are used. Psychologically, some pre-service teachers also report a lack of confidence or uncertainty in selecting appropriate digital

resources. These challenges can prevent them from fully realizing the transformative potential of technology in their teaching practice.

Research has shown that while many pre-service teachers are digitally literate, this does not automatically translate into effective technology integration. For instance, Chai, Koh, and Tsai (2013) observed that some student teachers used PowerPoint, videos, or online games simply as tools for presentation, without aligning them with pedagogical strategies or learning objectives. This reflects a gap between technological familiarity and pedagogical integration. Yulianto, Pradana, and Musthafa (2022), in their study "Investigating Pre-Service Teachers' TPACK Confidence in Teaching English with Technology," found that pre-service teachers often expressed confidence in using digital tools but still struggled to integrate them meaningfully with content and pedagogy. Such findings highlight a crucial research gap: while many studies focus on teachers' confidence, readiness, or self-efficacy, fewer have examined the lived experiences and reflections of pre-service teachers when they actually implement TPACK during their practicum.

Understanding these real-life experiences is vital because the development of TPACK is not a one-time achievement but a continuous process shaped by reflection, adaptation, and contextual understanding. Each classroom presents unique challenges that require pre-service teachers to reflect on their teaching choices, evaluate their effectiveness, and plan for improvement. Reflection thus becomes a core component of professional growth. Gibbs' Reflective Cycle (1988) and Kolb's (1984) experiential learning theory both emphasize that true learning occurs through a cycle of experience,

reflection, conceptualization, and experimentation. In teacher education, reflective practices such as writing reflective journals allow pre-service teachers to critically analyze their classroom experiences, identify challenges, and refine their strategies for future lessons.

This reflective process also plays a fundamental role in professional identity formation. According to Villegas-Reimers (2003), professional development is a lifelong journey that involves continuous reflection, collaboration, and adaptation. For pre-service teachers, facing classroom realities during practicum often triggers self-reflection on their roles, beliefs, and capabilities as educators. By engaging in reflection, they not only refine their understanding of teaching practices but also develop resilience, adaptability, and self-awareness traits essential for professional growth. In the context of TPACK, reflection helps pre-service teachers to see how technology, pedagogy, and content interact in practice, enabling them to move from simply "using technology" to teaching through technology.

Beyond its pedagogical and theoretical dimensions, the pursuit of knowledge and continuous learning also holds deep spiritual significance. Islam places great value on the acquisition of knowledge and the moral responsibility that comes with it. As stated in the Qur'an Surah Al-Mujadila, 58:11

يَرْفَعِ اللَّهُ الَّذِينَ آمَنُوا مِنكُمْ وَالَّذِينَ أُوتُوا الْعِلْمَ دَرَجَاتٍ ۚ وَاللَّهُ بِمَا تَعْمَلُونَ خَبِيرٌ

This verse underscores the noble status of knowledge in Islam and affirms that teaching and learning are sacred acts of personal and professional growth. From this

perspective, becoming a teacher is not merely a career choice but a spiritual journey a commitment to seek knowledge, to share it responsibly, and to grow continuously in both intellect and character. Hence, this research is not only grounded in educational theory but also inspired by spiritual values, viewing the development of TPACK and teacher professionalism as part of a holistic human endeavor.

Nevertheless, despite the increasing attention to TPACK in global educational discourse, studies focusing on how Indonesian pre-service English teachers experience and reflect upon TPACK remain limited. Most existing research in Indonesia employs quantitative approaches to assess TPACK competence through surveys or self-assessment scales, providing numerical insights but lacking depth in understanding how teachers actually make sense of their experiences. There is a need for qualitative studies that explore how pre-service teachers interpret, adapt, and reflect upon their TPACK implementation during teaching practice how they face challenges, make decisions, and grow as professionals through these experiences.

The narrative inquiry approach offers a powerful lens to address this gap. Narrative inquiry focuses on personal stories and lived experiences, capturing how individuals construct meaning through their professional journeys. In the context of teacher education, it allows researchers to understand not just what pre-service teachers do, but why they do it, and how these experiences shape their identities as educators. By collecting and analyzing reflective journals and interviews, this study seeks to uncover the nuanced processes through which pre-service English teachers integrate technology, pedagogy, and content in real classroom settings. It also aims to identify

the challenges they encounter and the strategies they employ to overcome them, as well as how these reflections contribute to their professional development.

Moreover, examining TPACK from a reflective and developmental perspective aligns with the broader goals of teacher education in the digital era: to produce teachers who are technologically literate, pedagogically competent, and ethically grounded. As education systems evolve, teachers are expected to be not only implementers of curriculum but also innovators, lifelong learners, and reflective practitioners who can adapt to changing contexts. Understanding how pre-service teachers internalize TPACK during practicum can thus provide valuable insights for improving teacher education programs, particularly in designing mentoring systems, coursework, and practicum structures that better support reflective and technology-integrated teaching.

In conclusion, the integration of TPACK in pre-service teacher education represents both a challenge and an opportunity. It challenges pre-service teachers to rethink their teaching practices and adapt to new modes of learning, but it also offers an opportunity for profound professional and personal growth. Through the process of reflection, experimentation, and adaptation, pre-service teachers develop not only their teaching competence but also their identity as lifelong learners and educators.

Guided by both educational theory and spiritual values, this study titled “The Role of TPACK in Supporting Professional Development of Pre-Service Teachers during Teaching Practicum” seeks to explore how pre-service English teachers at UIN Antasari understand, experience, and reflect on TPACK in their real teaching contexts.

By adopting a qualitative narrative inquiry approach, the research aims to achieve two primary objectives: (1) to describe how pre-service English teachers implement TPACK in classroom teaching during their practicum, and (2) to identify the challenges and reflective strategies they employ in the process. The findings are expected to contribute to a deeper understanding of how TPACK supports professional development and identity formation among pre-service teachers. Furthermore, the study's implications can inform teacher education institutions in designing more effective training and mentoring programs that not only enhance technological competence but also foster reflective, ethical, and spiritually aware educators capable of navigating the complexities of 21st-century teaching.

## B. Definition of Key Terms

1. TPACK (Technological Pedagogical Content Knowledge)

   TPACK is a conceptual framework that delineates the intersection of three core areas of teacher knowledge: technological knowledge (TK), pedagogical knowledge (PK), and content knowledge (CK). In this study, TPACK refers to the ability of pre-service English education students to simultaneously integrate educational technology, pedagogical strategies, and subject matter expertise during their teaching practicum. The focus is on how these future educators employ technology pedagogically to facilitate effective content delivery, moving beyond mere technical usage to meaningful instructional applications.

2. Professional Development

Professional development encompasses the continuous process of acquiring and refining the knowledge, skills, and attitudes necessary for effective practice in one's profession. In the context of education, it involves activities aimed at enhancing teachers' instructional capabilities and professional growth. Within this research, professional development pertains to the developmental journey of pre-service teachers as they cultivate teaching competencies, confidence, and readiness for the teaching profession during their practicum. This growth is achieved through real classroom experiences, reflective practices, and the application of TPACK principles learned during their academic coursework.

3. Pre-Service Teachers

Pre-service teachers are individuals enrolled in teacher education programs who have not yet attained full professional teaching status. They engage in academic studies and practical experiences designed to prepare them for the teaching profession. In this study, pre-service teachers refer specifically to students in the English education program undertaking their Praktik Pengalaman Lapangan (PPL), or teaching practicum. They are in a transitional phase, applying theoretical knowledge and pedagogical skills acquired during their studies to real-world classroom settings, thereby bridging the gap between student and professional educator.

## C. Research Questions

Based on the background above, the questions of this study that would be discussed are as follows:

1. How do pre-service English teachers describe their experiences of integrating TPACK during their teaching practicum?
2. What challenges and strategies do pre-service English teachers reflect upon when integrating TPACK during their teaching practicum?

## D. Objectives of Study

The objective of this study is to find out:

1. explore how pre-service English teachers integrate technological, pedagogical, and content knowledge (TPACK) during their teaching practicum experiences.
2. To analyze the challenges and strategies highlighted in pre-service English teachers' reflections on integrating TPACK during their teaching practicum.

## E. Significance of Study

The result of this study provides theoretical and practical the following benefits:

### 1. Theoretical Significance

This research offers meaningful contributions to academic discussions on professional development for pre-service teachers, particularly through the lens of TPACK (Technological Pedagogical Content Knowledge). By employing a narrative inquiry approach, the study captures the lived experiences of student teachers as they apply TPACK in real classroom settings. This method provides

rich, qualitative insights into how future educators interpret and implement integrated knowledge of technology, pedagogy, and content, ultimately enriching theoretical perspectives on teacher preparation in the digital age.

**2. Practical Significance**

On a practical level, the findings of this study can serve as a valuable resource for teacher education institutions, lecturers, and field experience coordinators (such as PPL program managers) in designing more effective curricula and training modules centered around TPACK. The insights drawn from student teachers' experiences during their teaching practice help inform the development of context-sensitive and relevant learning strategies. Additionally, the results may encourage host schools to enhance their technological and pedagogical support for pre-service teachers, fostering an environment that supports meaningful TPACK integration.