#### **CHAPTER 5**

#### **CONCLUSION AND SUGGESTION**

This chapter presents the concluding remarks and recommendations derived from the findings and discussions in the previous chapters. It summarizes the key insights regarding pre-service English teachers' perceptions, benefits, and challenges in implementing technological knowledge during English microteaching.

#### 5.1 Conclusion

This study has thoroughly examined pre-service English teachers' perceptions regarding the implementation of technological knowledge in their English microteaching practice. By focusing on three essential aspect such as perceptions, benefits, and challenges of implementing technological knowledge, this research provides valuable insights for teacher education programs and EFL instructors. The study employed Maba's (2017) theoretical framework on perception, which defines perception as an individual's opinion formed through sensory experience, alongside Koehler and Mishra's (2009) concept of technological knowledge, which encompasses understanding, operating, and adapting to various technologies. Through qualitative research methods including thematic analysis of interviews and document analysis of lesson plans, this study has revealed significant findings that contribute to our understanding of technology integration in EFL teaching contexts.

# 5.1.1 Pre-service Teachers' Perceptions of Technological Knowledge Implementation

Based on the findings and discussion, it can be concluded that pre-service English teachers have developed a comprehensive understanding of technological knowledge in teaching contexts. They consistently perceive technological knowledge as an essential component of effective teaching that requires continuous learning and adaptation to new tools and trends. The pre-service teachers view technology primarily as a valuable support system that enhances their teaching effectiveness through improved material presentation, student engagement, and assessment. Their awareness of technological trends, demonstrated through active efforts to stay updated via social media platforms and peer learning, indicates a proactive approach to developing technological knowledge. Their lesson plans further confirm these perceptions through the integration of various digital tools like YouTube, TikTok, Quizlet, and Padlet for different learning activities, reflecting their view of technology as a versatile teaching resource. However, the findings also suggest that while pre-service teachers recognize the importance of technological knowledge, they sometimes still treat it as an add-on rather than a fully integrated component of their teaching approach within the broader TPACK framework.

# 5.1.2 Benefits of Technological Knowledge Implementation

The study reveals several significant benefits that pre-service English teachers obtain from implementing technological knowledge in English microteaching. The most prominent benefit is the enhancement of student engagement and learning experiences through technology-mediated activities such

as interactive games, multimedia presentations, and social media integration. Another substantial benefit is the improvement in teaching efficiency and lesson delivery, with digital tools supporting various aspects of instruction from material preparation to assessment and feedback. Technology also facilitates both collaborative and independent learning by providing platforms for group work, peer feedback, and self-paced learning. The pre-service teachers' lesson plans demonstrate how digital worksheets, audio files, and interactive applications promote interaction and group work while simultaneously enabling students to review materials at their own pace. These benefits align with the literature on technology integration in education, highlighting how technological knowledge can transform teaching and learning experiences when properly implemented. The findings further suggest that pre-service teachers who effectively implement technological knowledge can create more dynamic, efficient, and student-centered learning environments.

## 5.1.3 Challenges in Technological Knowledge Implementation

Despite the recognized benefits, pre-service English teachers face several significant challenges when implementing technological knowledge in English microteaching. Technical difficulties with hardware and software, including connectivity issues and platform errors, often disrupt lesson flow and require quick problem-solving skills. The substantial time and effort required to learn and adapt to new technologies presents another challenge, as pre-service teachers must balance technology integration with other teaching responsibilities. The lack of formal training and institutional support for technology integration forces many

pre-service teachers to rely on self-directed learning and peer support, which may be insufficient for developing comprehensive technological knowledge. Classroom management issues related to technology use, such as student distraction and maintaining focus during technology-enhanced activities, also pose significant challenges for pre-service teachers. These challenges highlight the need for more structured support and training in pre-service teacher education programs to prepare future teachers for effective technology integration. The findings suggest that addressing these challenges requires a multi-faceted approach involving improved teacher education curricula, institutional support, and the development of practical strategies for efficient technology integration.

## 5.2 Suggestion

From the conclusions of this study, it is clear that pre-service English teachers need more support to improve their technological knowledge in teaching. The findings show both challenges and opportunities in using technology in the classroom. Because of this, some suggestions are needed to help different groups who play an important role in teacher education. In the following part, suggestions are given for pre-service English teachers, teacher educators, educational institutions, and future researchers. These suggestions are expected to guide and support better use of technology in English teaching.

#### **5.2.1 Suggestions for Pre-service English Teachers**

Pre-service English teachers should develop an integrated understanding of technological knowledge within the TPACK framework by considering how technology interacts with pedagogical and content knowledge in lesson planning. They should build personal learning networks through social media and peer collaborations to stay updated with educational technology trends. Creating a repository of effective technological tools categorized by teaching purposes would provide practical resources for future teaching. Developing basic troubleshooting skills can minimize disruptions during technology-enhanced lessons. Pre-service teachers should also practice efficient time management for technology integration to ensure technology enhances rather than complicates their teaching.

# 5.2.2 Suggestions for Teacher Educators

Teacher educators should design courses that emphasize the integration of technological knowledge with pedagogical and content knowledge rather than treating technology separately. They should include real-world technology implementation scenarios in microteaching sessions for practical experience. Teacher educators should model effective technology use in their own teaching as concrete examples for pre-service teachers. A mentoring system with technology-proficient instructors would provide personalized support for technology integration. Assessment rubrics should specifically evaluate the quality and effectiveness of technology integration in lesson plans and microteaching.

## 5.2.3 Suggestions for Educational Institutions

Educational institutions should invest in reliable technological infrastructure to minimize technical difficulties during teaching. They should establish formal training programs focused specifically on educational technology applications. Creating technology resource centers would support hands-on learning with various technological tools. Partnerships with technology companies

could provide access to the latest educational tools. Regular assessment of preservice teachers' technological knowledge would help identify gaps and design appropriate interventions.

## **5.2.4 Suggestions for Future Research**

Future research should investigate how pre-service teachers' technological knowledge develops from their initial education through early career years. Studies exploring the relationship between technological knowledge and teaching effectiveness would provide insights into the impact on learning outcomes. Research on cultural and contextual factors would contribute to understanding technology integration in diverse educational settings. Studies on the sustainability of technology integration practices in professional settings would be valuable. Research on developing resilience in facing technical challenges would address an important aspect of technological knowledge often overlooked.