CHAPTER II

LITERATURE REVIEW

In this chapter the researcher elaborates systematic analysis of references related to title of the research. This chapter includes the related literature, related studies and theoretical framework about the research.

2.1. Literature Review

2.1.1. EFL pre-service teacher

The term ‘EFL pre-service teacher’ refers to those who are in one sphere such as training or education before taking any particular field of job (ÜLGÜ & ER, 2016). In addition, there are two main views for EFL pre-service teacher to be effective language teacher. Those are teachers with language and methodological knowledge, and teachers with personality (Barzaq, 2007) in line with Barzaq’s statement, Demiroz & Yesilyurt (2015) based on their study argued to be an effective foreign language teacher they should teach communicatively, indirectly correct student’s oral errors and have a good understanding of the target language.

Likewise in terms of requirements, EFL pre-service teachers have many duties to fulfill as prospective teachers. One of them is they should have enough pedagogy skills such as in designing and implementing curriculum, applying technologies, and mastering the target language with its culture (Barzaq, 2007). To become a proficient teacher, EFL pre-service teacher need to improve the

ability in terms of choosing content as teaching materials, knowing how to deliver materials and have a good teaching and managerial strategies (Sheridan, 2011). Hence, Shulman (1986) defined teacher knowledge can be classified into content knowledge, pedagogical content knowledge, curricular knowledge and general pedagogical knowledge. In addition, there are six types of significant knowledge for language teachers according to Roberts (1998) as cited in Bonavidi (2013):

a. *Content knowledge:* this type includes target language including system, types, and language analysis as can be found in English skill courses.
b. *Pedagogic content knowledge:* this type helps the teacher in determining the target language that students need. In this case the EFL pre-service teacher first understands the basis in learning the language.
c. *General pedagogic knowledge:* this type includes good classroom management, so the effectiveness of the learning class can be achieved. This includes classroom management, the use of teaching media, classroom activities and so forth.
d. *Curricular knowledge:* this type is inclined towards the use of syllabus, examination requirements, and teaching materials. Thus, the EFL pre-service teacher is expected to know the standard achievement of both local and national curriculum.
e. *Contextual knowledge:* this type includes pre-service language teacher's understanding of the surrounding social environment such as student learning environment, school environment and EFL pre-service teacher relationship with school parties.

f. *Process knowledge:* pre-service language teacher's skills and attitudes must always evolve over time. In the other word, EFL pre-service teacher must have skill for development.

Bonavidi asserts the EFL pre-service teacher needs to know the whole types of knowledge above and adapt it into the real situation. He emphasizes the way of teaching done by EFL pre-service teachers are therefore related to their needs in the real classroom. The knowledge they posses are essential to their teaching and student's way of learning. Accordingly, there are some points need by EFL pre-service teachers beside pedagogy that they are must be well qualified in language skills, culture and literature, language and linguistics and psychology (Barzaq, 2007). In addition, in the area where English become foreign language it gives special issue and important element for TEFL program. It required EFL pre-service teacher such as those who have good language proficiency and can communicate effectively (Barzaq, 2017).

Despite of those conditions, in the real situation EFL pre-service teacher found some challenges and weaknesses when associated with teaching practicum. Farrel (2012) classifies several challenges that are often faced by EFL pre-service teachers are lesson planning, lesson delivery, classroom management, and identity development. The same thing was stated by Kalebić (2006), what is often faced by EFL pre-service teachers related to the difficulty of determining the right teaching strategy, lesson plan, and time and classroom management. It happens based on the different situations and class conditions they find in the real life. Hence, this can be overcome in two ways: first, by preparing everything needed

by a teacher or teacher candidates at the preparation stage such as at the Second Language Teacher SLT stage by including reflection activities and assignments to certain subjects (Farrel, 2012). Second, as stated by Farrel (2009) in Farrel (2012) by holding trainings aimed at teachers in the first year in order to prepare themselves in minimizing the challenges to be faced.

Teaching practicum is a complex activity where beside EFL pre-service teacher play an important role in it, other stakeholders such as teacher trainers and school-based mentors (Kalebić, 2006) are also involved. Apart from that, EFL pre-service teacher's quality is important in terms of teacher preparation (Bonavidi, 2013). Bonavidi (2013) also defined it is not only for preparing the EFL pre-service teacher to be professional teachers who teach in the school but also more to have good teaching ability for EFL pre-service teachers through the language teacher education program. For instance it can be achieved by enriching oneself with various sources of information that can be obtained from the internet, book, and others (Mudra, 2018).

2.1.2. The Technological Pedagogical Content Knowledge (TPACK)

The framework of Pedagogical Content Knowledge (PCK) first emerged in 1986 by Lee S. Shulman which aims to teach a particular subject with contents related to the right strategy for students (J. Koehler, Mishra, Kereluik, Shin, & Grahama, 2014). In other words, the concept of PCK focuses on two broad views subject-specific or content knowledge (the 'what' of teaching) and pedagogical knowledge (the 'how of teaching), and propose teachers to integrate those knowledge together (Yıldırım, 2018). The concept offered by Shulman occurred

as an approach to synchronize teachers' knowledge and how they apply their knowledge into teaching (Koehler & Punya, 2009) and to criticize the separation of content and pedagogical knowledge which used in teacher education program. Also, it is an adaptation from technological knowledge which has become an issue since early years (Ekrem & Recep, 2014). Along with the rapid of time, the development in the field of technology in education is growing and cannot be avoided therefore; the issue needs to be resolved (Mishra & Koehler, 2006). Thus, in 2006, Mishra and Koehler added 'technology' as the new major knowledge in PCK. Therefore, Technological Pedagogical Content Knowledge (TPACK) becomes the extended framework of Shulman (1986) (J. Koehler, Mishra, Kereluik, Shin, & Grahama, 2014). This framework exists as one of the solutions from the problem of technology integration within classroom.

Technological Pedagogical Content Knowledge (TPACK) is one model of framework that integrates the three components in it including content, pedagogy and technology (Mishra & Koehler, 2006). Koehler, *et al.* (2014) defined TPACK as the knowledge for a better technology integration needed by a teacher. Hence, TPACK is a concept that mix and match technology in teaching that aims to provide ease in problem solving, development of methods to facilitate the information retrieval system, as well as an understanding of the difficult concept (Ekrem & Recep, 2014). TPACK is a very effective and comprehensive framework to help teachers to integrate technology in teaching (Öz, 2015). Mishra and Koehler (2006) argued that TPACK framework differ from other knowledge of technology or disciplinary where they classified TPACK as:

> the basis of good teaching with technology and requires an understanding of the representation of concepts using technologies; pedagogical techniques that use technologies in constructive ways to teach content; knowledge of what makes concepts difficult or easy to learn and how technology can help redress some of the problems that students face; knowledge of students' prior knowledge and theories of epistemology; and knowledge of how technologies can be used to build on existing knowledge and to develop new epistemologies or strengthen old ones. (Mishra & Koehler, 2006, p. 1029).

Thus, TPACK framework is a concept that reflects content, pedagogy, and technology simultaneously and helps teacher or EFL pre-service teacher to integrate technology. In other words, TPACK not only limited to the teachers' knowledge of the tools or features of technology and the benefits or its weaknesses but also more to the way of teachers or EFL pre-service teachers in integrating components of these technologies. There are numerous definitions of TPACK according to experts. These definitions may be not exactly similar but it reveals TPACK framework as the effective concept in integrating technology into classroom practices.

As mentioned above the TPACK framework consists of three main elements of knowledge and four intersections of knowledge including TPACK as shown in figure 2.1. Each element has a relationship with the other knowledge. Therefore, it needs to be reviewed in advance how those elements form TPACK framework as proposed by Mishra and Koehler.

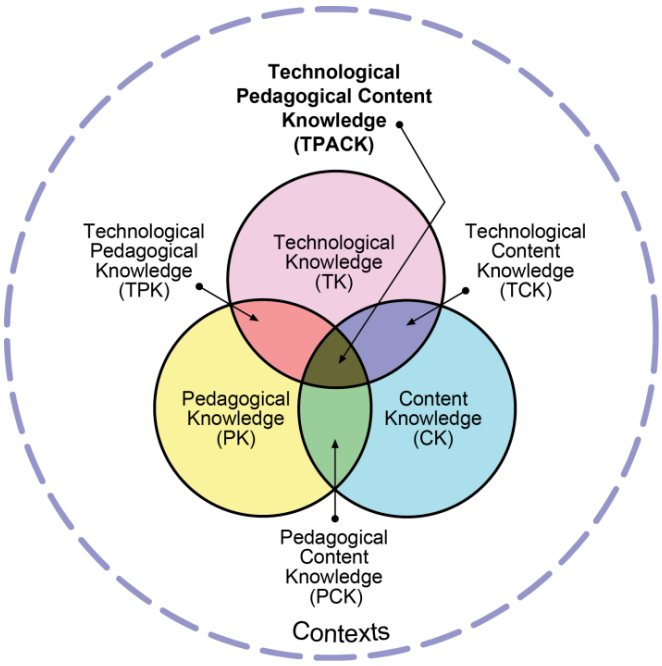

Figure 2.1 The Technological Pedagogical Content Knowledge (TPACK) Framework *(taken from http://www.tpack.org/)*

It leads us to understand some features which form TPACK framework including Content Knowledge (CK), Pedagogical Knowledge (PK), Pedagogical Content Knowledge (PCK), Technology Knowledge (TK), Technological Content Knowledge (TCK), and Technological Pedagogical Knowledge (TPK).

a. Content Knowledge (CK)

Content knowledge (CK) refers to the knowledge of teacher on specific subject to teach (Mishra & Koehler, 2006). According to Shulman (1986) as cited in Koehler and Mishra (2009) the content involves the knowledge of ideas, theories, concepts, facts as well as knowledge of the approaches on how to relate those ideas to existing evidence. Thus, teacher or pre-service teacher should clearly understand the subject matter they are going to teach in order to

avoid some misrepresent or incorrect information from the students (Mishra & Koehler, 2006).

b. Pedagogical Knowledge (PK)

Pedagogical knowledge (PK) is the knowledge of teachers about the process, methods or practice of teaching (Mishra & Koehler, 2006). The knowledge includes the way of teacher on how to plan and deliver materials, manage classroom environments, and evaluate students' work (Mishra & Koehler, 2006; Koehler & Mishra, 2009). Therefore, this knowledge requires teacher with enough cognitive and social understanding as well as knowledge to integrate theories into practice within classroom (Koehler & Punya, 2009).

c. Pedagogical Content Knowledge (PCK)

Pedagogical Content Knowledge (PCK) means knowledge as the integration of pedagogy and content into curriculum. According to Mishra & Koehler (2006) this knowledge includes some elements of contents which through this approach the teacher or EFL pre-service teacher can know what approaches to use that are suitable with the content to be taught. The chosen strategy should also include aspects of problem solving faced by students and students' prior knowledge (Mishra & Koehler, 2006). Similarly, according to Ekrem and Recep (2014) in order to obtain effective teaching appropriate knowledge is needed to achieve it. Thus, PCK might help teacher or EFL pre-service teacher to realize it.

d. Technology Knowledge (TK)

Technology Knowledge (TK) refers to the knowledge about technology including traditional or standard and new technology and its integration into teaching practice (Mishra & Koehler, 2006; Koehler, Mishra, Kereluik, Shin, and Graham, 2014). Mishra and Koehler (2006) classified standard technology including the use of books, chalk and blackboard, while advanced or new technology including internet and digital video. Mishra and Koehler also defined that TK is not just limited to the use of both models of the technology as mentioned above but also to some operation of software for example a word processor, spreadsheets, e-mail, and browsers. However, in reality technology always changing and developing. Therefore, the technology must be adapted with the time (Mishra & Koehler, 2006). In all, teachers are required to have this knowledge in order to adapt with an advanced technology and combine it with the content or task.

e. Technological Content Knowledge (TCK)

Technological Content Knowledge (TCK) is knowledge on combining subject matter and its integration through technology (Koehler, Mishra, & Yahya, 2007). In other words, it is necessary to apply technology in learning to create the new nature from learning itself such as the use of Geometer's Skecthpad to learn Geometry (Mishra & Koehler, 2006).

f. Technological Pedagogical Knowledge (TPK)

Technological Pedagogical Knowledge (TPK) refers to knowledge of technology integration which involves its components of tools, features as well as strategies into teaching. It aimed to provide teaching with chances through

the use of technology itself and off course with suitable pedagogical strategies (Mishra & Koehler, 2006; Koehler, Mishra and Yahya, 2007). Thus, teacher or pre-service foreign language teachers suppose to have this knowledge to be used within classroom.

In addition, to facilitate in understanding the example of each sub component of TPACK framework will be presented in the following table 2.1 adapted from Chai, Koh, and Tsai (2013):

Table 2.1 TPACK Components and Examples

TPACK Component	Example
TK	Knowledge about how to use Web 2.0 tools (e.g., Wiki, Blogs, Facebook)
PK	Knowledge about how to use problem-based learning (PBL) in teaching
CK	Knowledge about Science or Mathematics subjects
PCK	Knowledge of using analogies to teach electricity
TPK	The notion of Webquest, KBC, using ICT as cognitive tools, computer-supported collaborative learning
TCK	Knowledge about online dictionary, SPSS, subject specific ICT tools e.g. Geometer's Sketchpad, topic specific simulation
TPACK	Knowledge about how to use Wiki as an communication tool to enhance collaborative learning in social science

The process on how TPACK formed cannot be separated from the above components. Those components are interconnected to each other to form a more effective concept of teaching for teacher or EFL pre-service teacher. At first, content knowledge (CK) is considered to be the only knowledge required

by the teachers but then knowledge of pedagogy (PK) is also become the focus of teacher education. Thus, that knowledge appears separately (Mishra & Koehler, 2006). Furthermore, in 1986 Shulman introduces his new framework known as Pedagogical Content Knowledge (PCK). Mishra and Koehler (2006) defined PCK as the integration of knowledge (pedagogy and content) which involves an understanding about topics and how a problems are organized by considering students' abilities. Hence, this concept is aimed to combine both pedagogy and content knowledge together to achieve more effective and comprehensive teaching practice. Specifically, this knowledge involves several concepts and techniques used by teacher or EFL pre-service teacher to understand those concepts or techniques more easy to be applied in classroom (Mishra & Koehler, 2006; Koehler, Mishra and Yahya, 2007).

According to Mishra and Koehler (2006) with the changing of time, the use of technology in the field of education cannot be separated from teaching and learning process. Therefore, the special skill related to this knowledge is needed. Seeing this condition, the term 'technology' becomes one of the parts required by the teacher of EFL pre-service teacher as known as Technology Knowledge (TK). Moreover the consideration on the relationship among these three components then becomes a concern considering technology serves as a tool used in learning such as the use of computers in the classroom. Technology becomes the media in delivering content (Mishra & Koehler, 2006; Koehler & Mishra, 2009). Thus, these three components of knowledge

are interconnected as known as Technological Pedagogical Content Knowledge (TPACK).

In the context of TPACK framework usage, like Indonesia where English is a foreign language, English is not used as a language of daily communication. This language has become an international language therefore it encourages students to learn English effectively (Liu, Liu, Yu, Li, & Wen, 2014). Liu, *et al.* (2014) also argued this situation encourages the use of technology in learning English in the context of EFL certainly very necessary. Technology help student in learning English through many sources encountered through technology as well as on the internet. Hence, according to Bygate (2001) as cited in Liu, *et al.* (2014) the use of TPACK framework in the EFL class certainly encourages teachers to be able to use technology well because the use of a good TPACK can affect communicative language teaching. Likewise, teacher of EFL plays an important role in implementing effective technology to improve students' learning (Köse, 2016). In reality it is not easy; the teacher is faced with several difficulties. Liu classified those challenges into four aspects: integration of technology into teachers' present knowledge system, the relationship between new and old knowledge, teachers' willingness to accept new technology, and teachers' weaker position in using new technology.

Indeed teachers or community efforts are needed (Liu, Liu, Yu, Li, & Wen, 2014). One way to integrate TPACK framework into EFL context is by including activities related to communicative competence in the classroom

(Bugueño, 2013). They are expected to have positive thinking about technology in education and creative thinking to generate new thoughts and experiences (Rahman & Harun, 2016). Accordingly, Köse (2016) stated it also necessary to equip teachers of EFL with the skills needed to integrate technology in the classroom with good preparation. As a result, the EFL pre-service teacher would obtain the potential from the technology they used based on its usage (Haddad & Draxler, 2002). As according to Haddad and Draxler (2002) it is generally used in five levels namely presentation, demonstration, drill and practice, interaction, and collaboration. Therefore, it is needed by the teacher education program in providing sufficient practice rather than just theory. Thus, the teacher's motivation and confidence will increase in integrating technology for effective learning if they apply those strategies nicely.

2.1.3. Microteaching in Teacher Education

Microteaching in teacher education has been rapidly used in many places in the world. Microteaching itself began to exist since 1960's in medicine at Standford University, California, United State of America (Saban & Coklar, 2013). It developed by Dwight W. Allen and his colleagues (Seidman, 1968). In another study, microteaching in education first appeared in the year of 1963 at Standford University with the aim of finding innovation in pre-service teacher training (Cooper & Allen, 1970). Hence, Sadker and Cooper (1972) argued that nowadays microteaching has been integrated in various universities, school, and colleagues.

Microteaching in teacher education can be defined as a form of teacher training which designed to be limited in various sides but systematic (Wallace, 1991). It also defined as a small scope of class which aims to provide teaching skills for teachers who are experienced or not, and the context of the class is realistic (McKnight, 1971). Similar definition stated by Cooper (1970) microteaching is a situation where teachers teach students in a small amount of time and small numbers of students. In addition, microteaching is a procedure for pre-service teacher to practice specific teaching skills and within a few spans (Choudhary, Choudhary, & Malik, 2013). Choudhary, Choudhary, and Malik (2013) defined microteaching as the specific form of activity that involved the integration of theories into practices, training and research, as well as innovation and implementation. Therefore, they defined it as a unique organization. From the definition above, it can be concluded that microteaching in education is a teaching simulation class for pre-service teachers to develop their teaching skills. Also the class was design with a limited number of pupils and limited time provided.

There are two main objectives from integrating microteaching. They are general aims and specific aims. General aims can be classified into following objectives (Cadorat, 1995):

1. To provide pre-service teacher with many chances in terms of presentation, practice and collaboration
2. To give consideration to pre-service teacher on their own performance of teaching
3. To provide pre-service teachers with enough provisions for their future

While the specific aims are:

1. To prepare pre-service teacher with basic technique that used in teaching practice
2. To provide experiment in using techniques and delivering materials
3. To increase own competencies in observing, analyzing, or evaluating self-and other teaching performances
4. To train pre-service teachers' ability in giving and receiving feedback from others
5. To give insight on classroom management on microteaching class

Both general and specific aims are to provide pre-service language teachers with good ability to be able to perform good teaching performance in real classroom. Further, the objective of microteaching is to identify the behaviors during teaching practice in colleges or universities (Spelman & John-Brooks, 1972). Thus, microteaching is a medium used as EFL pre-service teachers to practice teaching.

Cooper and Allen (1970) defined the duration of teaching in microteaching is four to twenty minutes with a total of three to ten students. While a microteaching session includes teaching and giving feedback about teacher's performance directly. In the other words, it followed by giving an assessment of the teacher's performance immediately after the practice of microteaching is done (McKnight, 1971). Likewise, in language teaching the microteaching program is done through two components, namely recording of micro-learning and the feedback which used to apply the practices that have been conducted (Ogeyik,

2009). According to Ogeyik (2009) in this case microteaching can facilitate the teaching process through a small picture that includes who, where, how, and what to teach. Besides, it also followed by feedback to evaluate self-teaching performance.

Furthermore, MacLed and McIntyre (1977) asserted there are many variations of microteaching model used this is due to obtain more effective teaching skill. As stated by Ward and Borg (1970) in Choudhary, Choudhary, and Malik (2013), at Standford Univesity where microteaching was first used, there were many microteaching models of cycles. The original cycle presented in sequences: Plan – Teach – Critique – Replan- Reteach – Recritique. Since the cycle has been much modified it gives new sequences with little change as used at Standford University: Plan – Teach – Critique – Replan – Reteach – Recritique – (change in unit) – Plan – Teach – Critique – Replan – Reteach – Recritique. Those approaches presented may be not the same but all approaches and models are to adjust the needs of pre-service teacher, realizing that there are various problems faced by pre-service teacher then they are destined to master various strategies (Long, 1994). In addition, Wallace (1991) categorized the stages of microteaching is occurred in three or four stages, as elaborated below:

1. The Briefing: in this stage the trainee receives an input about how the teaching process will be done. It can be in oral or written input.
2. 'The Teach': in this stage the trainee teaches material/micro-lesson where in general the teaching and learning process is recorded. This can happen in peer-teaching or teacher teaches the micro-lesson to the

real students. Also, in this stage the trainee practice their teaching performances based on their lesson plan they have organized.

3. The Critique: in this stage the trainee receives input on his/her teaching that has been performed previously. Also, the in this stage the trainee's video can be played for further discussion.
4. 'The Reteach': in this stage the trainee teaches for the second time by considering the feedback that has been received in the previous teaching performance. In other words, the trainee continues to do teaching practices to meet the specified criteria.

In addition, Allen and Eve (1968) stated the contribution of microteaching in education can be classified into some points: First, microteaching can improve skills and professional teaching techniques through safe and conducive teaching environment. Second, one potential that can develop through microteaching is the pre-service teachers' performances in classroom. Third, there are various instructional skill models that can be used by pre-service teacher through microteaching. Further, the role of microteaching in education serves as a simulation class for pre-service teachers to apply the theories they have acquired through the practice of teaching with their own colleagues, this aims to increase the confidence of pre-service teachers before they teach in the real class (Ismail, 2011). Thus, through microteaching pre-service language teachers can improve their skills related to teaching which appropriate with the theory into practice.

Accordingly, Coşkun (2016) argued the benefits that can be obtained through microteaching including language improvement such as pronunciation etc., teaching competency, effective classroom management, developing critical thinking, and determining weaknesses and strengths when teaching. However, on the other hand it also provides a negative impact. According to Stanley (1998) as cited in Coşkun (2016) microteaching gives unrealistic classroom environment where the situation is unreal. Also, it is disrupt the teaching process because of the assessment process, and peer-feedback is sometimes too personal (Coşkun, 2016).

In conclusion, it is necessary to improve the program so that it can give a better influence on the teaching process through microteaching as microteaching is seen as an effective teaching practice method. Through the integration between theories into practices effectively the teachers are expected to improve their professionalism by improving the teaching skill needed.

2.2. Review of Relevant Studies

There are several studies related to EFL pre-service teacher's view and understanding of technology integration during Microteaching class. A study entitled "TPACK in practice: A qualitative study on technology integrated lesson planning and implementation of Turkish pre-service teachers of English" conducted by Kurt, *et al.* (2014) aimed to investigate whether and/or how Turkish pre-service teachers of English reflected their TPACK, as developed in a design study integrating coursework and field experiences, on their lesson plans and implementation. The study employed a mixed methods approach and involved 22 PTs which chosen by random sampling to represent the sample. Hence, the study

applied survey at the beginning of the study. It also provided specific course which designed as a treatment. It held for 12 weeks with different activity for each week. The treatment has its requirement for each PTs (designed a lesson, modified it, and taught it at their practice school). The results from the lesson plan and classroom observation show that PTs reflect content, pedagogy and technology and the relationship among them. They also apply the experiences they learned from coursework into practice. In addition, the researcher suggests for teacher education program to provide PTs of technology integration that not only focus on coursework but also on fieldwork in real life.

Another study about perceptions of EFL pre-service teachers on TPACK is conducted by İşler & Yıldırım (2018). The study aimed to investigate Turkish pre-service EFL (English as Foreign Language) teachers about their level of TPACK, factors affecting their perceptions on TPACK, and beliefs on technology integration into EFL classrooms. The study uses both qualitative and quantitave approaches to gather the data. It applied TPACK-Deep Scale for assessing technological pedagogical content knowledge. In addition the researcher also used background questionnaire in the study. The results shows that pre-service of EFL teachers recognize the importance of technology integration into English language teaching, while majority of them argued that they have varying levels in using technology for their future classrooms due to the dissent school's environment. The study also presents the positive and negative factors which revealed by participants. They argued that the technology integration help learners to learn through interesting, interactive and engaging leraning, while the negative factor is

the integration of technology in the classroom can be time consuming for teachers. The study suggests teacher education program to provide pre-service language teachers with enough knowledge on how to combine content, pedagogy and technology together.

The above studies have relevancy on the present research because it aimed to investigate EFL pre-service teachers' views and understanding of TPACK in teaching. The current study mainly investigates EFL pre-service teachers' views of their understanding on technological pedagogical content knowledge during Microteaching performance as particular context where the participants are from English Language Education Department of UII. The analysis of this study focuses on the implementation of TPACK framework, approaches to develop TPACK and its theoretical and practical usage in Microteaching class.

2.3. Theoretical Framework

The main topic of this study contains Technological Pedagogical Content Knowledge (TPACK) framework and microteaching as second variable that limit the topic. Hence, the study aims to investigate EFL pre-service teachers' views and understanding of TPACK during Microteaching performance. Therefore, the focus of the analysis is on EFL pre-service teachers' views and understanding of TPACK, while Microteaching performance becomes the embedded unit of analysis in this study. The case to illustrate the problem of the study is done in Microteaching subject at English Language Department of Islamic University of Indonesia (PBI UII).

Technological Pedagogical Content Knowledge (TPACK) framework is a concept that combines knowledge: Content, pedagogy, and technology as well as to provide convenience for teachers or EFL pre-service teacher to integrate technology with more effective and comprehensive approach into the classroom. In EFL context, the integration of TPACK is very necessary seeing the current conditions where learning through technology is needed. Thus, teacher plays an important role in implementing effective technology to improve students' learning. So that sufficient readiness is needed so that they can overcome problems that may occur.

Microteaching is a teaching context with minimum number of students and time allocation which aimed at pre-service or in-service teachers to develop their own pedagogical skill. Also, it becomes a stage to prepare EFL pre-service teacher before facing the real teaching context or to improve the pedagogical skills. Through microteaching, both pre-service and in-service teachers can achieve many advantages from a simulation class as they can apply the theories into practice in more effective way of teaching likewise they can improve their confidence. Microteaching is done through direct teaching performance and feedback process. In addition, in language teaching the microteaching program is done through two components, namely recording of micro-learning and the feedback which used to apply the practices that have been conducted. Thus, microteaching can provide small picture of what to teach effectively.

In this case, the study conducted to investigate EFL pre-service teachers' views and understanding of TPACK during Microteaching performance at English Education Department of Islamic University of Indonesia, Yogyakarta.

2.4. Analytical Construct

Figure 2.2 shows the analytical construct of Technological Pedagogical Content Knowledge (TPACK) framework that the researcher will identify including EFL pre-service teachers' views and understanding about TPACK framework and its connection with microteaching in education variable.

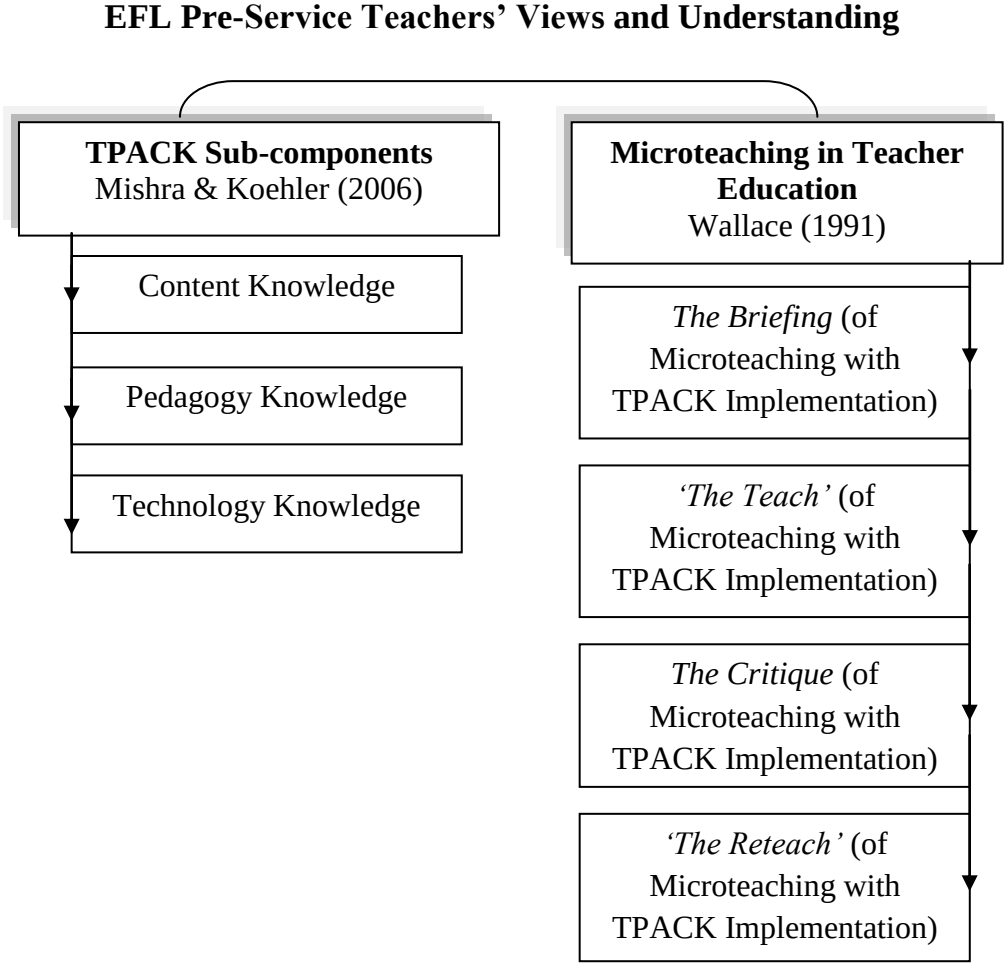

Figure 2.2 The Analytical Construct of the Research