CHAPTER II

LITERATURE REVIEW

This chapter contains some fundamental theories as well as prior research related with this study. The fundamental theories include the nature of TPACK, the importance of TPACK, curriculum 2013, syllabus and lesson plan, teachers' belief, teaching speaking,

A. The Nature of TPACK

The idea of TPACK is not totally novelty. It is heavily based on Shulman's idea of two basics knowledge; pedagogy and content knowledge. These two types of knowledge domains should be synchronized by the teachers in their teaching so that teaching as well as learning taking place in class become meaningful processes either for the teachers or the students. Teachers are therefore expected not only to know the substance of the topic being taught, but also to give careful thought to how they will present the knowledge to their students.

By the rapid development of technology in almost any area, the calls for teachers to increasingly integrate the use of technology into classroom practices are inevitable. In the 21st century learning environments, the knowledge of technology becomes as important as those of content and pedagogy. Twenty-first century teachers are required to possess not only the knowledge of subject matter and what is good for learning but also the knowledge of technology that will complement their classroom practices and, hence, the learning processes of their 21st century students. This is the point

where the element of technological knowledge is added and conceptualized by Mishra and Koehler (2006). In this new framework, Shulman's concept of pedagogy and content knowledge (PCK) is broadened to incorporate technical knowledge and is renamed technological pedagogical content knowledge (TPCK). In its subsequent evolution, TPCK transforms into TPACK. As Thompson and Mishra (in Roeblyer and Doering, 2010:50) suggest, the addition of the letter "A" will better represent the interconnection of the three domains of knowledge (T, P, and C), and the TPACK framework will better describe the "Total PACKage" of teacher knowledge.

Technological Pedagogical Content Knowledge (TPACK) is a sort of contextual knowledge regarding the affordances of technology for teaching a particular subject matter in a particular situation (Mishra & Koehler, 2006). Moreover, according to McGraw-Hill (2019), Technological Pedagogy Content Knowledge (TPACK) is a theory that was designed to describe the set of knowledge that instructors need to educate their students, to teach successfully, and to utilize technology. TPACK is a teacher knowledge construct on the integration of technology into instruction. It addresses the complex, varied, and situational character of teacher knowledge as it strives to determine the form of knowledge needed by teachers for technology integration in their teaching.

Technological Pedagogical Content Knowledge (TPACK; Koehler & Mishra, 2008; Mishra & Koehler, 2006) is perhaps the most prevalent model of teacher knowledge about the educational application of digital technology

(Chai, Koh, & Tsai, 2013; Hew, Lan, Tang, Jia, & Lo, 2019; Voogt, Fisser, Pareja Roblin, Tondeur, & van Braak, 2013). According to this paradigm, which is an extension of the Pedagogical Content Knowledge framework introduced by Shulman (1986, 1987), in order to successfully educate using technology, teachers must integrate several knowledge dimensions. These comprise pedagogical knowledge (PK), content knowledge (CK), and technology knowledge (TK) as the three fundamental components (TK). In addition, three first-level hybrid components, pedagogical content knowledge (PCK), technical pedagogical knowledge (TPK), and technological content knowledge (TCK), are generated at their intersections (TCK). TPCK is the most sophisticated sort of knowledge. It depends on the innovative integration and alignment of all previously listed knowledge fields. The seven subdomains are briefly described in Table 2.1 and shown in Figure 2.1.

Table 2.1. *Definitions and Examples of TPACK Dimensions*

Subdomain	Definition	Example
TK	Knowledge related to the use of technology	Knowledge about how to use electronic tools like laptop, LCD projectors, Blogs, Google Class, etc.
PK	Knowledge about students' learning, instructional methods, and learning assessment	Knowledge about how to use teaching strategies, like problem based learning, inquiry based instruction
CK	Knowledge of the selected topic that will be taught or learnt	Knowledge about science, mathematics, history, or language subject
PCK	The ability of teacher to choose appropriate teaching strategy to teach a subject effectively	Using problem based learning to make students have a deeper understanding about of

		concepts
TPK	Knowledge of how different technologies may be incorporated into the classroom and understanding that the use of technology may change the method of instruction	Using video conference to support communicative teaching
TCK	The ability of teacher to select appropriate technology of particular topic in order to make better students' understanding of subject matter	Using power point to represent content of specific topics
TPACK	Knowledge that is required the teachers for integrating technologies in their teaching in any content area	Knowledge about using discussion forum to extend students' understanding about social issues

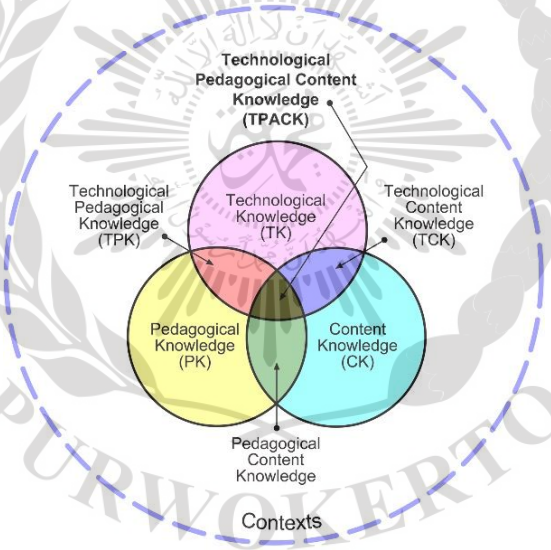

Fig. 2.1. *The TPACK framework (Reproduced by permission of the publisher, © 2012 by tpack.org).*

B. The Importance of TPACK in Teaching

Mishra et al (2010) states in 21st-century teaching, teachers need to master TPACK which includes knowledge, skills and technology in order to transform teachers more effectively during learning. The framework of the

TPACK was developed to have four different main components. These aspects used as evaluation criteria for a teacher's TPACK (Niess, 2005, 2012):

1. A comprehensive understanding of the reasons for incorporating technology into subject matter instruction. This necessitates the teachers have a basic knowledge of what it means to teach a topic using digital tools.
2. Knowledge of students' subject matter understandings, reasoning, and learning using technology. It implies that teachers must have a complete comprehension of students' thinking and learning processes when using digital technology into their subject-specific instruction.
3. Knowledge of curriculum and instructional resources that integrate technology into the study and teaching of subject matter. This necessitates that teachers have a comprehensive grasp of the curriculum, the instructional resources, and the affordances and limits that digital technology will provide for their curricular goals.
4. Knowledge of instructional techniques and representations for teaching and learning content areas using technology. This necessitates that teachers understand how to establish a reciprocal link between their teaching approaches and the digital technology that best represents a certain subject.

The five tiers of TPACK development were influenced by Rogers' (1995) innovation-decision process model's five phases. According to Niess, Suharwoto, Lee, and Saddri (2006), each level is defined as follows:

1. Recognizing (Knowledge): Teachers at this level are able to utilize a certain digital technology and evaluate its suitability for a specific subject area.
2. Accepting (Persuasion): Teachers at this level are receptive to the incorporation of digital technology into their instruction, although they may not fully comprehend the potential use of technology in the classroom.
3. Adapting (Decision): After gaining experience, teachers at this level are capable of determining whether to incorporate a certain digital technology in their instruction for a given subject issue.
4. Exploring (Implementation): At this stage, teachers begin to actively incorporate digital technology into their subject-specific teaching techniques.
5. Advancing (Confirmation): Teachers at this level are able to evaluate the efficacy of incorporating a certain digital technology into their instruction for a specific subject matter.

These levels of TPACK may give researchers and educators with instructions for developing successful strategies and analysing, enhancing, and evaluating the technology integration process. These levels of TPACK also demonstrate how vital it is for English instructors and other teachers to interact and participate throughout the period of integrating technology, since teachers must possess all three domains of knowledge. Power Point, a component of Microsoft Office, enables teachers to create professional-looking presentations

in the classroom, according to Segundo and Salazar (2011). According to research conducted by Ozaslan and Maden (2013), Power Point Presentations make the material more engaging, hence attracting students' attention.

C. Curriculum 2013

In general, the term "curriculum" refers to a sequence of courses designed to help students attain certain academic or vocational objectives. Frequently, a curriculum consists of a list of general learning goals, courses, and materials. Some curricula are more akin to lesson plans, offering thorough material on how to teach a course, replete with discussion, questions, and activities for students. Curriculum is a plan designed to aid the teaching and learning process under the supervision and direction of a school, college, or university and its faculty (Komaria O: 1998). Then, Muslich (1994) defines curriculum as a collection of plans and systems about the topics and materials to be taught as well as the techniques employed to carry out teaching and learning activities in the classroom. Similar to Muslich's definition, our government has defined curriculum as a collection of plans and systems concerning the aims/objectives, topics and materials and techniques used to carry out the teaching and learning process in order to attain certain education goals (The Act No. 20/2003, National).

Curriculum is a result of educational policy that must be modified periodically. This is due to a number of variables, including the alterations in societal requirements, the new understanding of the teaching and learning process, political concerns, and the growth of industry and technology (Yulia:

2016). The requirements of students/learners and stakeholders change annually. The primary objective of this modification is to enhance the teaching-learning process and learning design at schools.

At the time the researcher gained the data, Indonesia uses curriculum 2013 which replaces the old curriculum - School Based Curriculum or KTSP (Kurikulum Tingkat Satuan Pendidikan). According to the Education Sector Analytical and Capacity Development Partnership (ACDP), the school-based curriculum development (KTSP) 2006 does not currently satisfy the demands, thus the ministry of education created curriculum 2013 as the most recent. According to Government Regulation of Ministry of Education and Culture number 58, 2014, the objective of the 2013 Curriculum is to prepare Indonesians to live as individuals and citizens who are faithful, productive, innovative, effective, and able to contribute to the social life, nation, country, and the global civilization. The 2013 curriculum is a value-based curriculum where character development is emphasized. According to Mulyasa (2013:7), curriculum implementation in 2013 is autonomous. It indicates that students are able to improve and use their knowledge, as well as evaluate the importance of good character and morals, in order to demonstrate positive attitudes and behaviors in their everyday lives. Core Competences (Kompetensi Inti/ KI) describes the values. Four competences are included in this list (KI 1 to KI 4). KI 1 pertains to spiritual elements, KI 2 to social (behavioral) aspects, KI 3 to knowledge aspects, and KI 4 to skills aspects. Basic Competences, which are abbreviated as KD, are the sources used to construct competencies

for indicators. In the 2013 curriculum, teaching and learning activities are scientifically based. Observing, questioning, acquiring knowledge, associating, and communicating are the five phases included in this methodology. Consequently, the instructional technique interacts with inquiry-based learning, project-based learning, discovery learning, problem-based learning, and task-based learning.

Curriculum 2013 is used in elementary and secondary education. In the context of education in Indonesia, basic education comprises of primary or elementary school known as Sekolah Dasar (SD) and junior high school known as Sekolah Menengah Pertama (SMP). Secondary Education is comprised of Senior High School, also known as Sekolah Menengah Atas (SMA), and Vocational High School, also known as Sekolah Menengah Kejuruan (SMK). Currently, the 2013 Curriculum is also being utilized to build Early Childhood Education (PAUD) and Higher Education (university, D3 and D4) curricula.

D. Syllabus and Lesson Plan

Syllabus and lesson plan are famous terms used in educational field. Though having similar mission, which is to enlighten the future life of students, those terms are quite different in characteristics and use. According to Richards and Schmidt (2010), a syllabus is a description of a course's content and the sequence in which it will be delivered. The Ministry of Education and Culture has produced a curriculum for the implementation of the 2013 curriculum that includes core and fundamental skills, guidelines for learning materials, learning activities, assessment, time allocation, and learning sources.

In addition to the curriculum, lesson plans play a significant part in learning activities. Lesson plan is a collection of activities to achieve the objectives of learning. A well thought and careful design of lesson plan can help teachers stay on track and ensure the effectiveness of learning process (Mulyasa, 2009: 154). Planning helps because it allows teachers to think about what they are going to do with their students at class. A plan helps teachers remember what they wanted to accomplish in the teaching activities, particularly if they get sidetracked or suddenly forget.

The emergence of 2013 curriculum brings new atmosphere to the teaching and learning process in classroom. Students, as learning subjects, are expected to be more creative, innovative, active, productive and affective. Teachers, as facilitator, should be more creative in integrating students' character building into learning materials, and utilizing recent media in delivering materials and assessing students' achievement.

In order to achieve those expectations, teacher needs to prepare him/herself before entering classroom by designing a lesson plan. Although planning a lesson is administrative, but it is a must. This statement is supported by Regulation of Minister of Education and Culture No. 103 of 2014 Article 3 Paragraph 1 which implies that every teacher in the educational unit is obliged to prepare lesson plans completely and systematically so that learning will be interactive, inspiring, fun, challenging, active and provide enough space for innovation, creativity, and independence in accordance with learners' talents, interests, and physical and psychological development. Teachers, in 2013

curriculum, were only demanded to design their own lesson plans based on some principles suggested by the government. The syllabus and learning materials which were designed and developed by the teachers in the previous curriculums (2004 and 2006 curriculums), had been provided by the government. This was to help teachers in administrative tasks and foster them to focus more on the teaching and learning process in classrooms.

The lesson plan should correspond with seven fundamental concepts (Saputra, 2019). First, Knowledge should include a basic comprehension of language patterns, word groupings, functions, topics, themes, and culture, among other things. The teacher must also comprehend how the language works. Second, taking individual differences into account necessitates that teachers design active learning strategies that are suited for each student. Third, the capacity to develop and provide multiple varieties of an activity in response to changing circumstances. Fourth, coherence and cohesion link each aspect of the lesson plan to create an integrated activity (Regulation No. 65/2013 of the Ministry of Education). Fifth, flexibility enables classroom activities to be conducted successfully and efficiently by responding to and improving the circumstances. Sixth, pupils should be motivated to learn via effective delivery of feedback. Seventh, ICT should be included into their teaching process, with technology serving as a means to enhance instructional activities.

According to Harris and Hofer (2009), the lesson preparation process may be broken down into five fundamental instructional considerations. These decisions are primarily concerned with (1) determining the learning goals, (2)

selecting the most appropriate methods and strategies that can be used to enhance students' learning experience, (3) selecting and sequencing the activities that students will engage in during the learning, (4) determining how students can be assessed based on the learning goals and their achievement, and (5) choosing the tools and resources that will be used to help students learn. There are various components directing instructors in the creation of lesson plans for the 2013 curriculum. The following components are based on National Educational Regulation Number 103 issued by the Minister of Education in 2014:

1. Core Competencies

   Core Competence is a description of a student's core knowledge, attitude, and abilities that must be attained in every class and or semester in a certain topic or competencies that must be had by a student in a particular subject.

2. Basic Competence

   Basic Competence is a collection of competencies that must be learned by students for a certain topic as a foundation for determining an indicator of competence.

3. Indicator of standard competence achievement

   Indicator of standard competence achievement is behaviour or performance that can be measured and observed to demonstrate the achievement of standard competence, and it can be measured and observed via assessment execution covering cognitive (knowledge), psycho motoric (skill), and affective (emotional) domains (attitude).

4. Objective

The objective is the process and outcome of learning that learners are expected to attain depending on their fundamental competency. In this respect, at the conclusion of the course, students are able to accomplish the objectives that rely on fundamental competency.

5. Material

Material consists of relevant theory, facts, principles, and processes expressed in point format according on the aim stated, the characteristics of the pupils, and the time allotted. This implies that resources must be relevant to what students will learn in the learning environment and must be based on the aim, student characteristics, and time allotted.

6. Instructional activity

The teaching process consists of three phases: First, there is pre-teaching. It is designed to motivate students and engage their interest in learning participation. Second, while teaching. The methodical observation, questioning, investigating, associating, and communicating parts of the process of teaching and learning to attain basic competency

7. Assessment

Instruments based on the indication of standard competence achievement are used to assess the research results of students. It may be deduced that evaluation must be conducted using rubrics in order to evaluate students' performance in relation to predetermined markers.

8. Resources

Resources is selected based on main competence and basic competence, objective, material and scientific approach. In addition, resource is a tool and media used such as textbook, projector, computer, and internet. The using of these tools is to conduct teaching-learning activity runs well and effectively as well as to attract students' interest in learning.

E. Teachers' Belief

1. Definition of Belief

A belief is a proposition that held both consciously and unconsciously, is evaluative and accepted as true by the individual, filled with strong commitment and serves as a guide and thought (Borg: 2001 as cited in Lita: 2019). Then, in 2003 he uses the term teacher cognition instead of using teachers' beliefs to refer to the unobservable cognitive dimension of teaching that is what teachers know, think, believe, and do. Furthermore, during the research time from 2006 to 2015 Borg has tried to complete the definition and the framework of teachers' cognition. It becomes a proposition that held either consciously or unconsciously, influenced by the experiences, training, and contextual factor of classroom practice which is value in that it is accepted as true by the individual and imbued with emotive commitment, and it serves as a guide and thought.

Belief is described as a person's unique knowledge, which is built from their experiences gained through their culture and education and acts as implicit theories to direct their thoughts and behaviors (Pajares, 1992 as

cited in Hasta, 2016). People build their beliefs based on their life experiences, which then serve as their unconscious knowledge and compass for action. We can infer from Pajares' assertion that teachers' beliefs are the essential things they learned through experience and that they have an influence on people's actions and thoughts on some specific items, in this example, teaching behavior. According to some experts, since beliefs are ingrained in an individual's own understandings, they tend to be static and resistant to change (Phelan & McLaughlin, 1995; Richardson, 1996 as cited in Hasta, 2016).

Beliefs are assessments and judgments we have of ourselves, other people, and the world at large. They are individual viewpoints supported by observation or reason (Khader, 2012 as cited in Abbas, 2017). According to one definition, beliefs are a collection of concepts that people develop as a result of their experiences and the way their ideas overlap as they learn (Ford, 1994; Khader, 2012 as cited in Abbas, 2017). Beliefs are reflections on all subjects, including those we don't know enough about but are confident enough to tackle (Barcelos, 2003; Khader, 2012 as cited in Abbas, 2017). According to Haney, Lumpe, and Czerniak (1996) and Khader (2012) as mentioned in Abbas 2017, beliefs are defined as the teachers' justifications and perspectives on instruction.

2. Teachers' Belief in Language Teaching

Richards and Lockhart (1996) as cited in Hasta 2016 claimed that the knowledge and the thinking that the teacher brought through years provide

their basic in making decision in their teaching behaviour. From Richard and Lockhart statement, teachers' fundamental thinking gives them impact in their teaching behaviour and their classroom action. Teachers have a wide range of information, and they comprehend the world by constructing a complex system of individualized and specialized knowledge (Clark & Peterson, 1986 as cited in Abbas, 2016). Many teachers' professional insights are rightfully regarded as beliefs. As teachers gain more professional experience, this information also grows and develops, creating a highly individualized belief system that restricts their comprehension, judgment, and behavior (Kagan, 1992 as cited in Abbas, 2016). Beliefs develop gradually over time. Beliefs have both subjective and objective components, and they serve as the rationale for teachers' decisions and actions in the classroom (Richards & Lockhart, 1994 as cited in Abbas, 2016).

Borg (1997) as cited in Lita (2019) provides teachers' beliefs model that illustrates the relationship between the sources of teachers' beliefs, their own beliefs, and classroom practices. Teacher cognition influenced by some factors such as schooling, professional coursework, contextual factors, and classroom practice including teaching practice. See figure 2.2 below:

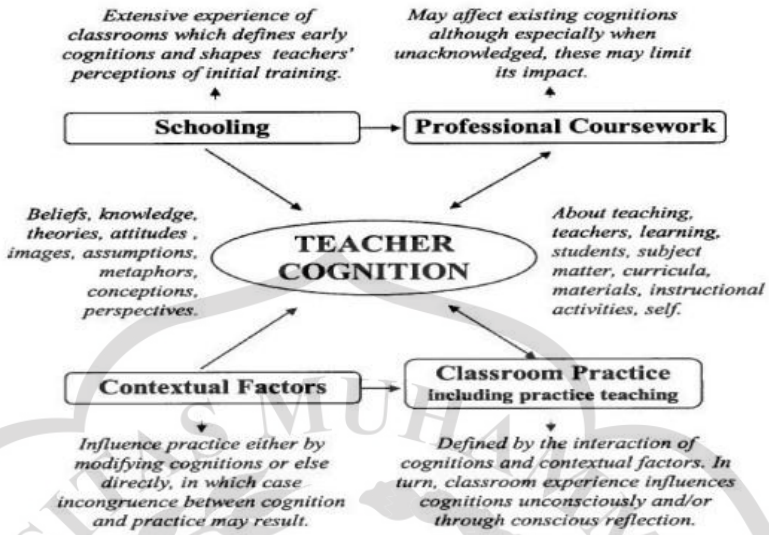

Figure. 2.2. Teacher cognition, schooling, professional education, and classroom practice (Borg, 1997 as cited in Lita, 2019)

Firstly, the schooling element refers to teachers' previous learning experiences with a teacher or even with their parents before they commence their undergraduate studies at university. This element is one of the important issues that affect teachers' belief. Secondly, professional coursework refers to all formal teacher's training they had gone through before their professional carrier as a teacher. Thirdly, defined contextual factors deals with institutional support where the teacher work. Finally, Classroom practice refers to the teachers' experience of classroom practice related to their beliefs about themselves as teachers, their students, the subject matter they teach, and the circumstances surrounding their practice. However, this relationship between teachers' beliefs and practices heavily influenced by contextual factors, and thus, this element placed within the

contextual factors in the framework. Classroom practice also be understood concerning a teacher's experience with teaching. In 2006, Borg as cited in Lita, 2019 made some modification in the framework where the labels of schooling and professional coursework factors were changed to experience and training as seen in the following figure 2.3:

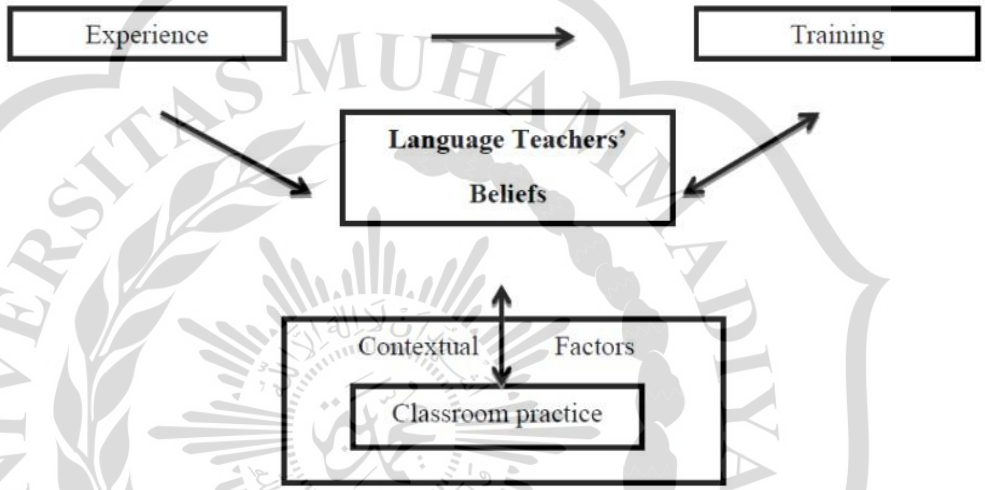

Fig. 2.3. *The Modified Framework of Language Teacher Cognition (Borg, 2006 as cited in Lita, 2019)*

Here, experience refers to teachers' personal and professional previous experience with digital technology. Training, in turn, includes any formal technology-related training teachers completed during their pre-service training and in-service professional development.

F. Teaching Speaking

1. The Nature of Speaking

In general, speaking is a means of communication, and its purposes are to communicate what is it one's mind to others. Speaking, in other words, can be formulated as to give response directly to persuade others to

do something, to clarify unclear thing, and to express an opinion, feeling, etc (Eulis, 2016). According to Nigel Hardwood (2010), speaking is a unique form of communication which is the basis of all human. It means that speaking is the activity of speech and it is an integral part of the whole personalities which reflects the speaker's insight. Furthermore, Thornbury (2005) defines speaking as interactive and requires the ability to cooperate in the management of speaking turns. Kayi (2006) added that speaking is the productive skill in the oral mode. It, like the other skills, is more complicated than it seems at first and involves more than just pronouncing words.

From some definitions above it can be concluded that speaking skill is always related to communication. Speaking skill itself can be stated as the skill to use the language accurately to express meanings in order to transfer or to get knowledge and information from other people in the whole life situation

2. The Types of Speaking

Brown (2004: 271) describes six categories of speaking skill area. Those six categories are as follows:

a. Imitative

This category includes the ability to practice an intonation and focusing on some particular elements of language form. That is just imitating a word, phrase or sentence. The important thing here is focusing on pronunciation. The teacher uses drilling in the teaching learning process.

The reason is by using drilling, students get opportunity to listen and to orally repeat some words.

b. Intensive

This is the students' speaking performance that is practicing some phonological and grammatical aspects of language. It usually places students doing the task in pairs (group work), for example, reading aloud that includes reading paragraph, reading dialogue with partner in turn, reading information from chart, etc.

c. Responsive

Responsive performance includes interaction and test comprehension but at the somewhat limited level of very short conversation, standard greeting and small talk, simple request and comments. This is a kind of short replies to teacher or student-initiated questions or comments, giving instructions and directions. Those replies are usually sufficient and meaningful.

d. Transactional (dialogue)

It is carried out for the purpose of conveying or exchanging specific information. For example here is conversation which is done in pair work. e. Interpersonal (dialogue) It is carried out more for the purpose of maintaining social relationships than for the transmission of facts and information. The forms of interpersonal speaking performance are interview, role play, discussions, conversations and games.

e. Extensive (monologue)

Teacher gives students extended monologues in the form of oral reports, summaries, and storytelling and short speeches. Based on the theory above, it can be concluded that there are some points that should be considered in assessing speaking. The students need to know at least the pronunciation, vocabularies, and language functions that they are going to use. When the students have been ready and prepared for the activity, they can use the language appropriately.

3. Micro and Macro Skills of Speaking

Brown (2004:142) distinguishes between micro-skills and macro-skills of speaking. The micro-skills refer to producing the smaller chunks of language such as phonemes, morphemes, words, collocations, and phrasal words. The macro skills imply the speakers focus on the larger elements: fluency, discourse, function, style, cohesion, nonverbal communication, and strategic options. The micro-skills and macro-skills of speaking, according to Brown (2004: 142-143)

a. Micro-skills

1) Produce difference among English phonemes and allophonic variants.
2) Produce chunks of language of different lengths.
3) Produce English stress patterns, words in stressed and unstressed positions, rhythmic structure, and intonation contours.
4) Produce reduced forms of words and phrases.

5) Use an adequate number of lexical units (words) to accomplish pragmatic purposes.
6) Produce fluent speech at different rates of delivery.
7) Monitor one's own oral production and use various strategic devices pauses, fillers, self-corrections, backtracking- to enhance the clarity of the message.
8) Use grammatical word classes (nouns, verbs, etc.), systems (e.g. tense, agreement, and pluralization), word order, patterns, rules, and elliptical forms.
9) Produce speech in natural constituents: in appropriate phrases, pause groups, breathe groups, and sentence constituents.
10) Express a particular meaning in different grammatical forms.
11) Use cohesive devices in spoken discourse.

b. Macro-skills

1) Appropriately accomplish communicative functions according to situations, participants and goals.
2) Use appropriate styles, registers, implicature, redundancies, pragmatic conventions, conversation rules, floor-keeping and yielding, interrupting, and other sociolinguistic features in face-to face conversations.
3) Convey links and connections between events and communicative such as relations as focal and peripheral ideas, events and feelings,

new information and given information, generalization and exemplification.

4) Convey facial features, kinesics, body language, and other nonverbal cues along with verbal language.
5) Develop and use a battery of speaking strategies, such as emphasizing key words, rephrasing, providing a context for interpreting the meaning of words, appealing for help, and accurately assessing how well your interlocutor is understanding you.

4. Problems with The Teaching of Speaking

Teaching is basically the process of giving information to students. Doing teaching activity means that teacher is transferring knowledge, message, or skill to the student, and at that moment also occur interactive process between teacher and students. Many experts have differently defined the word teaching. According to Douglas Brown (2000), teaching as showing or helping someone to learn is guiding and facilitating learning enables the learner to learn how to do something, giving instruction, guiding of the study of something, providing with knowledge causing to know or understand. Feiman-Nemser and Buchmann (in Ball and Forzani, 2009) define teaching as the work of helping people learn "worthwhile things," which, as they pointed out, adds an explicitly moral dimension. Furthermore, Cohen (in Ball and Forzani, 2009) stated that teaching defined as helping others learn to do particular things, is an everyday activity in which many people engage regularly.

Teaching speaking is a process where a teacher helps the students to provide and to facilitate them to obtain the learning goal which is the needs to improve their performance in speaking skill (Mualiyah: 2017). The teacher might encourage the students' desire in learning speaking skill during the teaching and learning process to help them obtain their goal. It is in line with Nunan in Kayi (2006:1) who defines teaching speaking as the teacher teach the listener to: (1) produce the English speech sound and sound pattern, (2) use word and sentence, stress intonation pattern and the rhythm of the second language, (3) select appropriate words and sentences according to the proper social. In addition, there are some principles of teaching speaking skills as the following:

a. Encourage students to speak right from the first day. If not, as early as possible and not to wait till she teaches them a stock of words, phrases or sentences.
b. Tolerate the students if some of them simply repeat what they say.
c. If a student gives one word answer to any question, bear it for the time being.
d. Let the learners speak actively with whatever English knowledge they have.
e. Propose structures/phrases/words and let the learners use it in different situation and drill as much as possible.
f. Encourage back-chaining or tail-forwarding technique to make long sentences by combining more than ten sentences.

g. Organize role play and pair-work as much as possible and supervise the learners to correct the active ones and activate the passive ones.

h. Be well prepared in advance in terms of lesson planning, activities and tasks.

i. Let the learners commit errors and mistakes at the primary stage. Interruption and correction hinder fluency and discourage the learner.

(Nunan in Kayi: 2016)

Penny Ur (2009) explain that there are some problems in getting learners to talk in the classroom, they are:

a. Inhibition

Unlike reading writing and listening activities, speaking requires some degrees of real-time exposure to an audience. Learners are often inhibited about trying to say things in a foreign language in the classroom: worried about making about mistakes, fearful of criticism or losing face, or simply hy of the attention that their speech attracts.

b. Nothing to say

Even if they are inhibited, teacher often hear learners complain that they cannot think of anything to say: they have no motive to express themselves beyond the guilty feeling that they should be speaking.

c. Low or uneven participation

Only one participate can talk at time if he or she heard and in large group this means that each one will have only very little talking time. This

problem is compounded by the tendency of some learners to dominate, while others speak very little or not at all.

d. Mother- tongue use

In classes where all, or number of learners share the same mother tongue, they may tend to use it: because it easier, it is felt unnatural to speak to one another is a foreign language, and because they feel less exposed if they are speaking their mother tongue. If there are talking in small groups it can be quite difficult to get some classes-particular the less disciplined or motivated ones to keep to the target language.

In teaching speaking there many problems that is encountered by English teacher, they are: inhibition, nothing to say, or uneven participation, and mother tongue

4. The Use of Technology in Teaching Speaking

There are many researches about how speaking is taught to students especially using the English language. Various researches have been conducted to find out which approaches and strategies are the best and more effective in developing communicative competence. Utilizing technology in teaching methods is a fundamental practice in teaching EFL, where it is available and accessible. Suggestions to incorporate the use of technology in teaching speaking have been stated. The use of CMC (computer-mediated communication) in teaching pronunciation and conversation is put forward to improve students' oral skills (Hong, 2006).

With the technology used in teaching language skills, McDougald (2009) also revealed that ICT is definitely a complement to conventional teaching, especially when developing reading, writing and listening skills in English. The use of technology in teaching speaking is one of the changes in how languages are taught in school which focuses on the use of language communication rather than just passing the examination (Thao, 2003). Besides, Bahadorfar and Omidvar (2014) also stated that technological tools like the internet, podcasts, video conferencing, videos, and speech recognition software are considered the best tools for teaching speaking skills. Similarly, the internet, podcasts, video conferencing, videos and speech recognition software, TELL, blogging is considered to be some of the best tools for teaching speaking skills (Parveen, 2016). Using these technologies has become the mode of communication of instructors and students for the present day which implies that technology is needed to get into the modernized world. Technology has become an additional tool for teaching in enhancing their students' speaking competence.

The utilization of technology in teaching speaking has become an essential practice particularly in teaching English as a foreign language (Hong, 2006). It brings a number of positive results on the part of the learners. Goh (2016) stated that technology in teaching speaking develops language fluency, accuracy and complexity. As well, Akkara, Anumula and Mallampalli (2020) stated that using technology in teaching speaking improves students' speaking fluency and coherence, lexical resource, grammatical range and accuracy and pronunciation. More so, technology in teaching speaking improves students'

speaking skills and employing such has a positive impact on learners speaking skills, fluency, and pronunciation. It also overcomes students' speaking difficulty (Hamad, Metwally & Alfaruque, 2019).

5. Previous Research

In conducting the research, the references are required in order to complete and improve the ideas. There have been several researches dealing with the theme of this research. Some of them are used as a guide and helpful reference into this research. *First,* research conducted by Hamzah Hassan Alhababi (2017) entitled Technological Pedagogical Content Knowledge (TPACK) Effectiveness on English Teachers and Students in Saudi Arabia. The aim of this research was to integrate technology into technology-rich, English language learning classrooms in Saudi Arabia. Technological, pedagogical, and content knowledge (TPACK) framework was used to design activities of technology integration for teachers' and students' achievement and effectiveness. Mix method of qualitative and quantitative was used to collect data. The participants were 56 male teachers who taught English language courses in public Saudi Arabian schools. Participants were gender specific because the school system in Saudi Arabia separates males and females. Observation, survey (pre and post survey), and interview were used to collect data. Pre and post surveys were administered digitally to the participants. The researcher conducted observations and, an in-depth, recorded interview with each teacher (n = 2). Also, an in-depth recorded interview was conducted with (n = 2) students for data analysis to provide depth to the student perspective

collected. The results showed that TPACK framework is an effective tool for both teachers and students to enhance teaching and learning if it is well implemented and used. Teachers in this study showed interest for a better future of education with technology being well integrated and used in the curriculum.

Another research was conducted by Ozlem Karakaya (2017) to investigate the relationship between preservice teachers' self-reported TPACK and their performance in implementing technologies. The research also attempted to explore how preservice teachers integrate digital technologies into their lesson plans. Survey and lesson plans were used to collect data to address the research questions. A TPACK Survey (Schmidt et al., 2009) was administered as post-test design to learn students' self-report of TPACK, and a lesson plan demonstrating their application of TPACK knowledge as a course requirement was collected. A TPACK-Based Technology Integration Assessment Rubric (Harris et al., 2010) was used to assess preservice teachers' lesson plans. The total population in this research was 148 students. However, the survey data and lesson plans were collected from 40 students. The findings of this study have pointed out that self-reported assessment of preservice teachers' technology knowledge is higher than their actual ability to integrate technology with content and pedagogy into lesson plans. Improving preservice teachers' technological knowledge should not only be restricted to educational technology courses. In fact, teacher education programs should redesign various methods courses (like literacy, science, social studies, math) to help

preservice teachers design lesson plans not only with content and pedagogical knowledge but also with technological knowledge.

In different study conducted by Rowena V. Sosas (2021) about technology in teaching speaking and its effects to students learning English in the Bachelor of Secondary Education program of the University of Southern Mindanao Kidapawan City Campus, Philippines. This study aimed to explore the use of technology in teaching speaking and how technology have enhanced their speaking competence. Three sets of Focus Group Discussions (FGD) which consist of seven students of junior, sophomore, and senior students in each set were involved in this study. The interview was administered during FGD. Results revealed that students are taught to speak in English using the technologies of today such as video conferencing, email correspondence, social media interaction and real-time actual emceeing and onstage speaking performances where students are engaged in real academic and professional situations. Moreover, findings revealed that these technologies in teaching speaking build rapport, increase fluency and accuracy, ease anxiety and apprehension, and build confidence among students. Apparently, the researcher found that the technology used in teaching speaking can be aligned with the communicative way of teaching which allows students to convey themselves in a skilful and competent way of communication.

Mahdum (2015) conducted a study about the TPACK of English Teachers in Pekanbaru, Riau, Indonesia. This study was aimed at examining how in-service teachers developed and applied TPACK throughout their

teaching. Seventy-four in-service teachers were selected as the participants through simple random sampling. Questionnaire consisted of 45 items measured in-service English teachers' self-assessment of the 7 TPACK sub-domains. The results revealed the TPACK of English teachers in Pekanbaru was in the good category. It implied they had been able to integrate information and communication technology, content, and appropriate approaches in English language learning. Mean scores on technology-related sub-domains were lower than non- technology sub domains. Yet, it was still in the good category, which might indicate the teachers had not been really familiar with technology knowledge. Therefore, it is recommended that teachers continuously develop their TPACK, especially in technology-related sub domains in order to achieve better language teaching and learning.

A study conducted by Yatun, dkk (2021) entitled Teachers' TPACK Practice of English Blended Learning Course in the Midst of Covid 19 Pandemic. This study aimed to examine teachers' knowledge of TPACK used in English blended learning course. A descriptive qualitative method was employed to analyse phenomenon in the teaching learning process. The observation focused on the three components of TPACK in practice included technological tool, content material, and learning activity. Two English teachers who taught second and forth semester in one of institutions in Surabaya were observed four times. the finding showed that teachers promoted 22 and 24 of the 33 TPACK criteria in practice, which represented the TPACK knowledge. This means teachers have achieved more than 50 % of criteria

which representing the TPACK knowledge in practice. In conclusion, the TPACK knowledge help teachers conducted an effective teaching with technology as teachers were able to apply the framework of TPACK in practice during the blended learning activity.

The studies above have revealed some important points that TPACK affects teaching decision making in implementing particular strategies in their teaching. Those studies have researched teachers from different contexts with different findings. However, the ways the researchers approached their research have been strengthening the framework of this study which is investigating teachers' TPACK especially in teaching speaking in Vocational High Schools. This study will contribute to rich information about TPACK in Indonesian context.