CHAPTER II

LITERATURE REVIEW

This part attemps to explain the definition of Multiple Intelligences as the theory of this research. The definitions of intelligence, Multiple Intelligences and Language Learning, critics on Multiple Intelligences, Speaking Achievement, and related studies which are taken from some books and journals also presented to support this study.

Definitions of Intelligence

To begin with the definitions of intelligence, there are many scientists who have been successfully to explain the meaning of intelligence itself. Yian (2010) argued that intelligence is the ability to solve problems or fashion products that are valued in one or more cultural settings. Gardner defined intelligence in three definitions. ''(1) Intelligence is a species characteristic. (2) Intelligence is an individual differences. (3) Intelligence is fit execution of an assignment.'' (Gardner, 2006, p. 32). Ibnian (2013) stated that Intelligence is a psychological notion which is connected with learning and educators base a lot of their professional decision on. Hence, it could be concluded that intelligence is the ability of someone that is used to solve problem that being faced.

9 Multiple Intelligences

Along the time, educational field shows that theories of intelligence that have been proposed before focuse on one or two kinds of intelligences that affected people still stand to use their intelligence partly (Yamanci, 2013). On the contrary, in 1983 Howard Gardner proposed that there were eight basic intelligences that all people possed then they were known as Multiple Intelligences (Gardner, 2006). It consists of Verbal-Linguistic Intelligence, Logical-Mathematical Intelligence, Visual-Spatial Intelligence, Bodily-Kinesthetic Intelligence, Musical-Rhythmic Intelligence, Intrapersonal Intelligence, Interpersonal Intelligence and Naturalistic Intelligence. In 1999, Gardner later added a new kind of intelligence; this was Existential Intelligence (Palmberg, 2011). As the result, there are nine basic intelligences proposed by Gardner.

Verbal-Linguistic Intelligence

Verbal-linguistic intelligence is sensitivity to spoke and to write language, the ability to learn languages, and the capacity to use language effectively. People who have this intelligence learn best through listening, reading, writing, and discussing. They read and speak effectively. They have good ability to learn other languages and to use listening, speaking, writing, and reading to communicate, to discuss, to explain and to persuade others. Writers, poets, lawyers and speakers are among person who has this intelligence (Gardner, 2006).

Logical-Mathematical Intelligence

Logical-Mathematical Intelligence is the ability to calculate, to quantify, to consider propositions and hypothesis, and to carry out complex mathematical operations including making mathematical calculation, reasoning in deductive and innductive case, making logical reason, reading diagram, table, numeric, and using number effectively (Yamanci, 2013). Scientist, accountants, computer programmers and engineers are among those that Howard Gardner saw as having high logical-mathematical intelligences. They always consider that everything is a job. They are also talking about calculate and logical attempt all of the discipline aspects (Chatib, 2012).

Visual-Spatial Intelligence

Visual-Spatial Intelligence is the capacity to think in three-dimensional ways, to perceive external and internal imagery, to recreate, to transform, or to modify images, to navigate oneself and objects through space and to produce graphic information. Sailors, pilots, sculptors, painters and architects are people who have this intelligence (Gardner, 2006).

Bodily-Kinesthetic Intelligence

Bodily-kinesthetic is the potential of using one's whole body or parts of body to solve the problems. It is the ability to use mental abilities to coordinate bodily movements (McFarlane, 2011). People who have bodily-kinaesthetic intelligence explore the environment and objects through touch and movement. They learn best by direct involvement and participation and remember most clearly what was done, rather what was said. Dancers, actors, athletes, and craft person are people who have high degree of this intelligence.

Musical-Rhythmic Intelligence

Musical Intelligence is the capacity of sensitivity to pitch, melody, rhythm and tone. People who well developed musical-rhythmic intelligence usually listen and respond with interest to a variety of sounds. They enjoy seeking out opportunities to hear music. There are many kinds of people who exhibit a high degree of this intelligence such as composer, instrumentalist, vocalist and singer (Abdallah, 2008).

Intrapersonal Intelligence

Intrapersonal intelligence is an ability to understand oneself. She/he knows what he/she is good at. Like and dislike, the feeling with, achievement, ability, weakness and strength are components that this person knows so well (Gardner, 2006). People who have this intelligence are usually curious about the big questions in life. They gain insights into the complexities of self and the condition of human. Independent learner, self-paced learners, and great thinkers and decision makers are people who have high degree of intrapersonal intelligence (Abdallah, 2008).

Interpersonal Intelligence

Interpersonal intelligence concerns with the ability to understand and to interact effectively with other or the ability of understanding and welcoming needs, aspirations, spirit and emotion of other people (Yamanci, 2013). People who have interpersonal intelligence could perceive the feelings, thoughts, motivations, behaviours, and lifestyles of other. They are very easy to understand and to communicate effectively. They enjoy adapting behaviour to different environments or groups. There are kinds of people who have high degree of this intelligence such as religious leaders, political leaders, teachers, and psychologist.

Naturalistic Intelligence

Naturalistic Intelligence is the ability to observe pattern in nature, to identify and to classify natural object and human made system. Museum is the one place to study and to get inspiration (Palmberg, 2011).

Existential Intelligence

Existential intelligence is sensitivity and capacity to tackle deep questions about human existence, such as the meaning of real life, why we die, and how we get here. This intelligence also concerns with philosophical, learning situation and study about status of mankind (Palmberg, 2011).

Multiple Intelligences and Language Learning

Since Gardner has proposed his theory Multiple Intelligences, MI has been used not only as the theory in psychology field but also MI is used in the educational field (Aliakbari & Jamalvandi, 2010). In educational field, Multiple Intelligences is used in language learning context (Farooqui, 2007). In regard to Farooqui, Yian (2010) stated that MI is very important for educators in the process of teaching and learning. It helps teachers and students to expand teaching/learning tools. MI offers teachers to examine and adopt the best teaching techniques and strategies in light of student' difference (Yian, 2010).

The way MI assists teachers and students in the process of language learning has been integrated in the context of learning style. Learning style is the way people perceived sensation and intuition, the way people made decision, and how active or reflective people are while interacting (Prashing, 2007). Learning style shows that every student has own way to learn. Student learns by enriching their strengths. Therefore, it is important for teacher to know how to teach with student' preference in order to develop student' intelligence (Solmundattotir, 2008). Teachers have to use different methods and activities to meet the needs of all students.

The Critics on Multiple Intelligences Theory

Multiple Intelligences theory has been widely used in the education field for many years (Randal, 2014). Many educators have used this theory to the many issues that are implemented in the classroom. While implementing Multiple Inteligences, there are two sides adhering MI. These are the strengths and the weaknesses of Multiple Intelligences. Multiple Intelligences has been implemented in the area of education which gives good impacts, but ''Multiple Intelligences is often done without looking at the critics' view on this theory'' (Peariso, 2008, p. 2). In this literature reviews, the researcher also tries to present the critic's view of Multiple Intelligences in the educational field.

There are some reasons why some educators criticize the Multiple Intelligences theory. The following statements present the critics' view of Multiple Intelligences theory.

Lack of Scientific Evidences. Peariso (2008) asked why this Multiple Intelligences theory is so widely accepted in the educational field, while Gardner's theory has lack of empirical support. When creating Multiple Intelligences theory, Gardner used his perception and his longitudinal research in defining the meaning each of intelligence with lack supported theory or researches (Peariso, 2008). Randall (2014) also argued that Gardner developed Multiple Intelligences theory through a meta analysis of brain study, genetics, anthropology, and psychology in an effort to ascertain the optimal taxonomy of human capacities. As such, when it was formulated there was not any significant research to support the hypothesis directly.

Instruction Time. "Another risk of MI implementation in the classroom is related to pedagogy and instruction time" (Peariso, 2008, p. 20). An activity will not afford all the kind of Multiple Intelligences. One activity at least consists of two or three elements of Multiple Intelligences which neglect the other intelligences.

No Permanent Instruments. McClellan (2008) argued that there is currently no permanent tool that is easily accessible to measure the students' Multiple Intelligences. It is proven when there are many researchers who created a tool in order to measure Multiple Intelligences. They compete to prove the reliability and validity of the tool which created.

This case is supported by the researchers who use different instruments in assessing MI. Taase (2012) used instrument which was developed by Botelho & Rozario when he tried to find Multiple Intelligences analysis of Iranian Textbooks. This evidence shows that Gardner does not create a permanent instrument in order to measure Multiple Intelligences theory.

Speaking Skill

When English is taught as foreign language or second language, speaking is an important part that must be considered by teacher (Farooqui, 2007). There are many factors grounded on the importance of speaking. Firstly, it is considered as one of the central elements of communication in EFL teaching (Aliakbari & Jamalvandi, 2010). Secondly, ''having known speaking makes students be aware of what real conversation looks like'' (Harmer, 2001, p. 344).

Speaking is considered as one of the central elements of communication in EFL teaching because among the four language skills, speaking seems the most important thing. People who know a language are referered to as 'speakers' of that language (Aliakbari & Jamalvandi, 2010). In the context of learning English as foreign or second language (ESL/EFL), in addition to gaining a basic communication skill, speaking is important key for students who accomplish various academic subjects in English (Kirkģoz, 2011). To understand a language, speaking is the most important material that should be mastered because it is used to communicate in social context (McCarthy, 1998).

Harmer (2001) argued that students who are engaged in the process of communication are aware of what real conversation looks like. Kirkġoz (2011) contended that speaking course can be conducive to promote students' speaking ability, then they have more willingness to speak English in the area of the class. In regard to Kirkġoz, Harmer (2001) argued that speaking stimulates students to feel the real life encounter (such as interview, asking for something, shopping, etc.). Brown (2007) also stated that ''speaking context is an urgent thing which learner attempts to acquire the second language within the cultural and linguistic milieu'' (p. 3).

Students' Achievement in Speaking Skill

It is important to be clear in what way the students of Listening and Speaking classes of this study are measured on their achievement in speaking skill. In measuring the speaking skill of the students, there are some important issues that must be measured by the teachers. Issues that pervade in the performance of speaking are accuracy and fluency (Brown, 2001). In speaking class, students and teacher must prioritize two clearly important speaker goals including accuracy (clear, articulate, grammatically, and phonologically correct) and fluency (flowing and natural of language) (Brown, 2001, p. 268).

Accuracy is part of speaking that emphasize the element of phonology, grammar, and discourse in the spoken output, while fluency is a part of speaking that could be achieved by allowing the stream of speech to flow (Brown, 2001). Measuring the accuracy and fluency of the speaker could be done by inviting students to do oral exercise. Oral exercise means that students are invited to speak the topic that has been chosen in front of the class or classmate (Harmer, 20013). Since those accuracy and fluency are essential things that are considered in speaking, in this study teachers of Listening and Speaking classes used fluency, accuracy, and readiness as the aspects that were used to measure students' achievement of speaking skill in oral exercise of self presentation.

Related Studies

The implementation of Multiple Intelligences in educational field has been used since MI regards that all people can improve each of intelligences with different ways (Taase, 2012). In educational field, Multiple Intelligences is used in many ways (Solmundardottir, 2008).

Multiple Intelligences is included in the method using in ESL/EFL classroom. Owolabi & Okebukola (2009) argued that Multiple Intelligences is a more effective method in facilitating student's achievement in science field. It was proven when they conducted a quantitative research in improving the reading ability of 90 science students at Junior High School through Multiple Intelligences. They attempted to explore the effects of appropriate pedagogical skills on students' efficiencies in reading skills. The results showed that using Multiple Intelligences influence student reading ability.

Chatib (2012) integrated Multiple Intelligences at SMP Himi Bandung. He used Multiple Intelligences approach as a way to create and to develop teaching material for students of senior high school. He utilized students' differences as a way to build their achievement. He adapted students' preferences in teaching and preparing the materials. As the result, some of his students had higher achievement in some subjects that he taught after he used Multiple Intelligences Approach.

Bas & Beyhan (2010) stated Multipe Intelligences had big role in the process of learning process. It was proven when they conduct investigation supported project based learning in 2009-2010 in Karatli Sehit Sahin Yilmas Elementary School, Nidge, Turkey. 50 students in two different classes in the 5th grade of this school participated in this study. The results showed that students who were trained by MI supported Project Based Learning had significance attitude and became more successful than the students who did not train by MI.

Hanafin (2014) proposed that application of Multiple Intelligences in the classroom and schools impacted students to be more interested and motivated, better recall and deeper understanding, higher attainment, improved self esteem, and made the circumstance of the classroom more fun and enjoyable. It was proven when he conducted an action research project in Irish University that investigated the application of Multiple Intelligences theory in classrooms and school. The teachers of Irish University become participants of his research. The results revealed that Multiple Intelligences was an effective way used to generate classroom practices.

Bas (2008) argued that using Multiple Intelligences with appropriate tools could increase students' speaking ability and it gave them chance to communicate even to practice target language effectively. It was proven when he took an action research in Turkey toward students of primary school. He would like to know the integration of MI. Bas used role play, and games which had been appropriated with student intelligences. As the results, some students were more willing to speak in the front of the class.