

CHAPTER II

REVIEW OF RELATED LITERATURE

2.1 Relevance Theory

2.1.1 Theory of Multiple Intelligence

Howard Gardner, a professor at Harvard University's School of Education, published the book *Frames of Mind: The Theory of Multiple Intelligences*. In this book, Gardner (1983) criticizes the definition of intelligence as a single, general capacity manifested in certain linguistic and logical abilities that can be measured in a number (the Intelligent Quotient, or IQ) a definition that has dominated American education. Until that time, IQ test was thought to be psychology's biggest success because intelligence seemed to be something quantifiable. However, now it is believed that this type of tests cannot measure or quantify all intelligences. Gardner developed a theory with Multiple Intelligences because he felt that the current psychometric tests only examined the Linguistic, Logical, and some aspects of spatial intelligence, whereas the other facets of intelligent behavior such as athleticism, musical talent, and social awareness were not included (Neisser, et al 1996). Gardner (1983) views intelligence multifaceted. His model is based on findings from both cognitive science (the study of the mind) and neuroscience (the study of the brain). His approach is called "Theory of Multiple Intelligences". This theory suggests that intelligence is the ability to solve problems and difficulties in a particular domain. This is an inborn attribute

of the individual and the general faculty of intelligence does not change much with age or with training or experience (Gardner, 1983).

Multiple intelligences is a set of aptitudes, skill in which each of human being posses various types of learning style. Prasetyo and Andriani in Wahyuni (2017: 10) said that multiple intelligences are tools to receive new information as an elective learning style, working style and self innate power. The type of people's intelligence does not only indicate their capacity, but it also points out how they choose their own learning style and empower their strength as well as minimize the weaknesses.

2.1.2 Teaching Based on Multiple Intelligence

In many cases, they are strategies that have been used for decades by good teachers. In other cases, the theory of multiple intelligences offers teachers an opportunity to develop innovative teaching strategies that are relatively new to the educational scene. MI theory suggests that no one set of teaching strategies will work best for all students at all times. All children have different proclivities in the eight intelligences, so any particular strategy is likely to be highly successful with one group of students and less successful with other groups. For example, teachers who use the Rhythms, Songs, Raps, and Chants strategy as a pedagogical tool will probably find that musically inclined students respond while nonmusical students remain unmoved. Similarly, the use of pictures and images in teaching will reach students who are more spatially oriented but perhaps have a different effect on those who are more physically or verbally inclined. (Armstrong, 2009:73-78)

1. Teaching Strategies for Linguistic Intelligence

Activities	Treatment
Storytelling	When using storytelling in the classroom, you weave essential concepts, ideas, and instructional goals into a story that you tell directly to students. Although storytelling is usually thought of as a means of conveying knowledge in the humanities, it can be applied in mathematics and science as well. For example, to teach the idea of multiplication, you can tell students the story of brothers and sisters who have magical powers: whatever they touch multiplies (e.g., for the first child, it doubles; for the second, it triples; and so on). To convey the notion of centrifugal force, you can take students on a mythical journey to a land where everything spins around very rapidly from the center out ward. Prepare for storytelling by listing the essential elements you'd like to include in the story. Then use your imagination to create a special land, a group of colorful characters, or a whimsical plot to carry the message home. It may help to visualize the story at first and then practice telling it to a spouse or to a mirror. Stories needn't be especially original or fabulous for children to benefit from them. Students are often impressed simply by a teacher's willingness to be creative and speak from the heart about a subject.
Brainstorming	The brainstorming can be about anything: words for a class poem, ideas for developing a group project, thoughts about material in a lesson being taught, suggestions for a class picnic, and so forth. The general rules for brainstorming are: participants share whatever comes to mind that is relevant, no put-downs or criticisms of any idea are allowed, and every idea counts. You can place ideas at random on the board or screen or use a special system such as an outline, a mind-map, or a Venn diagram for organizing them. After everyone has had a chance to share, look for patterns or groupings in the ideas, invite students to reflect on the ideas, or use the ideas in a specific project (such as in a group poem). This strategy allows all students who have an idea to receive special acknowledgment for their original thoughts.
Tape Recording	Students can use tape recorders to "talk out loud" about a problem they are attempting to solve or a project they are planning to do. In this way, they reflect upon their own problem solving processes or cognitive skills. They

	can also use tape recorders to prepare for writing, helping to loosen the soil, so to speak, of their topic. Students who are not good writers may also want to record their thought son tape as an alternative mode of expression. Some students may use the tape recorder to send “oral letters” to other students in the class, to share personal experiences, and to get feedback about how they are coming across to others in the classroom.
Journal Writing	The domain can be broad and open ended (“Write about anything you’re thinking about or feeling during the class day”) or quite specific (“Use this journal to keep a simulated record of your life as a farmer during the 1800s as part of our history course”). Journals can be kept in math (“Write down your strategy for solving this problem”), science (“Keep a record of the experiments you do, hypotheses you’re testing, and new ideas that emerge from your work”), literature (“Keep an ongoing record of your responses to the books you’re reading”), or other subjects. They can be kept entirely private, shared only between teacher and student, or regularly read to the class. They can also incorporate multiple intelligences by allowing drawings, sketches, photos, dialogues and other nonverbal data. (Note that this strategy also draws heavily upon intrapersonal intelligence in so far as students work individually and use the Journal to reflect upon their lives.)
Publishing	Publishing takes many forms. Students can submit their writing to a class or school newspaper, a city newspaper, a children’s magazine, or some other publishing source that accepts student work. Students’ writing can also be published using desktop publishing software such as Microsoft Publisher, Print Shop, or Print Explosion and then bound in book form and made available in a special section of the class or school library.

2. Teaching Strategies for Logical-Mathematical Intelligence

Activities	Treatments
Calculation and Quantifications	In line with school reform efforts, teachers are being encouraged to discover opportunities to talk about numbers both inside and outside the math and science arena. In subjects such as history and geography, you may focus regularly on important statistics: lives lost in

	wars, populations of countries, and so forth. But how do you accomplish the same aim in literature? You shouldn't force connections that simply aren't there. It's surprising, however, how many novels, short stories, and other literary works make reference to numbers. In a novel by Virginia Woolf, <i>To the Lighthouse</i>, there is a mention of 50 pounds to fix a green house roof. How does that figure translate into U.S. dollars? In a short story by Doris Lessing, "Through the Tunnel," a boy must count to see how long he can stay underwater and then compare that to the amount of time it takes experienced divers to swim through a submerged tunnel. Each of these passages provides the basis for mathematical thinking. Of course, you shouldn't feel compelled to make word problems out of great works of art—that would be stifling to say the least. It is a good idea, however, to keep alert for interesting numbers and intriguing math problems wherever they may be found. By tuning into the numbers in the midst of nonmathematical subjects, you can better engage highly logical students, and other students can learn to see that math belongs not just in math class but in life.
Classification and Categorization	The logical mind can be stimulated anytime information is put into some kind of rational framework, whether the data be linguistic, logical-mathematical, spatial, or any other kind. For example, in a unit on the effects of climate on culture, students might brainstorm a random list of geographic locations and then classify them by type of climate (e.g., desert, mountain, plains, or tropical).
Socratic Questioning	In Socratic questioning, the teacher serves as a questioner of students' points of view. The Greek sage Socrates is the model for this type of instruction. Instead of talking <i>at</i> students, the teacher participates in dialogues <i>with</i> them, aiming to uncover the rightness or wrongness of their beliefs. Students share their hypotheses about how the world works, and the teacher guides the "testing" of these hypotheses for clarity, precision, accuracy, logical coherence, or relevance through artful questioning.
Heuristics	Examples of heuristic principles include finding analogies to the problem you wish to solve, separating the various parts of the problem, proposing a possible solution to the problem and then working backward, and finding a problem related to yours and then solving it.

3. Teaching Strategies for Spatial Intelligence

Activities	Treatments
Visualization	An application of this strategy involves having students create their own “inner blackboard” (or movie or video screen) in their mind’s eye. They can then place on this mental blackboard any material they need to remember: spelling words, math formulas, history facts, or other data. When asked to recall a specific body of information, students then need only call up their mental blackboard and “see” the data inscribed on it
Color Cues	Use a variety of colors of chalk, markers, and transparencies when writing in front of the class. Provide students with colored pencils and pens and colored paper on which to write assignments. Students can learn to use different colored markers to “color code” material they are studying (e.g., mark all the key points in red, all the supporting data in green, all the unclear passages in orange). Use color to emphasize patterns, rules, or classifications during instruction (e.g., coloring all <i>th</i> ’s red in a phonics lesson, using different colors to write about distinct historical stages in Greek history). Finally, students can use their favorite colors as a stress reducer when coping with difficult problems (e.g., “If you run into a word, problem, or idea you don’t understand, imagine your favorite color filling your head; this can help you find the right answer or clarify things for yourself”)
Picture Metaphors	The educational value of using metaphors lies in establishing connections between what a student already knows and what is being presented. Think of the key point or main concept you want students to learn. Then, link that idea to a visual image. Construct the complete metaphor yourself (e.g., “How is the development of the colonies during early American history like the growth of an amoeba?”) or have students develop their own (e.g., “If the major organs in the body were animals, which ones would they be?”).
Idea Sketching	This strategy can be used to evaluate a student’s understanding of an idea, to emphasize a concept, or to give students ample opportunity to explore an idea in greater depth. Here are some examples of subjects or concepts you might have students choose to illustrate: the Great Depression, gravity, probability (in math), fractions, democracy, pathos (in a literary work), ecosystem, and continental drift. Following up the

	drawing activity with a discussion of the relationship between the drawings and the subject matter is important.
Graphic Symbols	Requires you to practice drawing at least some part of your lessons—for instance, by creating graphic symbols that depict the concepts to be learned.

4. Teaching Strategies for Bodily-Kinesthetic Intelligence

Activities	Treatments
Body Answer	Ask students to respond to instruction by using their bodies as a medium of expression. The simplest and most over used example of this strategy is asking students to raise their hands to indicate understanding.
Classroom Theater	Classroom Theater can be as informal as a one-minute improvisation of a reading passage during class or as formal as a one-hour play at the end of the semester that sums up students' understanding of a broad learning theme. It can be done without any materials, or it may involve substantial use of props. Students may themselves act in plays and skits, or they may produce puppet shows or dramatizations in miniature (e.g., showing how a battle was fought by putting miniature soldiers on a plywood battle field and moving them around to show troop movements). To help older students who may initially feel reluctant to engage in dramatic activities, try some warm-up exercises
Kinesthetic Concepts	Concepts strategy involves introducing students to concepts through physical illustrations or asking students to pantomime specific concepts or terms from the lesson. This strategy requires students to translate information from linguistic or logical symbol systems into purely bodily-kinesthetic expression. The range of subjects is endless.
Hands-on Thinking	Many educators have already provided such opportunities by incorporating manipulative (e.g., Cuisenaire rods) into math instruction and involving students in experiments or lab work in science. In thematic projects, too, students can use hands-on thinking—for instance, in constructing adobe huts for a unit on Native American traditions or in building dioramas of the rain forest for an ecology theme. You can extend this general strategy into many other curricular areas as well. At a rote level, students can study spelling words or new vocabulary words by

	forming them in clay or with pipe cleaners. At a higher cognitive level, students can express complex concepts by creating clay or wood sculptures, collages, or other assemblages.
Body Maps	The human body provides a convenient pedagogical tool when transformed into a reference point or “map” for specific knowledge domains. One of the most common examples of this approach is the use of fingers in counting and calculating

5. Teaching Strategies for Musical Intelligence

Activities	Treatments
Rhythms, Songs, Raps, and Chants	Take the essence of whatever you are teaching and put it into a rhythmic format that can be either sung, rapped, or chanted. At a rote level, this can mean spelling words to the rhythm of a metronome or singing the times tables to the tune of a popular song. You can also identify the main point you want to emphasize in a lecture, the main idea of a story, or the central theme of a concept and then place it in a rhythmic format.
Discographies	Supplement your bibliographies for the curriculum with lists of recorded musical selections—tapes, compact discs, MP3 files, and other audio formats—that illustrate, embody, or amplify the content you want to convey.
Super memory Music	Students should be in a relaxed state (putting heads on desks or lying on the floor) while the teacher rhythmically gives the information to be learned (e.g., spelling or vocabulary words, history facts, science terms) against the musical background
Musical Concepts	Convey musically the idea of a circle, begin humming at a certain tone, drop the tone gradually (indicating the gradual slope of the circle) to a low note, and then gradually move up toward the original tone.
Mood Music	Locate recorded music that creates an appropriate mood or emotional atmosphere for a particular lesson or unit. Such music can even include sound effects (nonverbal sounds are processed through the musical intellect), nature sounds, or classical or contemporary pieces that facilitate specific emotional states. For example, just before students are about to read a story that takes place near the sea, play a recording of sea sounds (waves crashing up against the shore, sea gulls crying, etc.) or <i>La Mer</i> (The Sea) by Claude Debussy.

6. Teaching Strategies for Interpersonal Intelligence

Activities	Treatments
Peer Sharing	Sharing is perhaps the easiest of the MI strategies to implement. All you need to do is say to students, "Turn to a person near you and share _____. "The blank space can be filled with virtually any topic. You might want students to process material just covered in class ("Share a question you have about what I just presented").
People Sculptures	For a unit on inventions, students can create people sculptures of different inventions, complete with moving parts. In algebra class, students can create people sculptures of different equations, each person representing either a number or a function in the equation. Similarly, in language arts, students can build people sculptures to represent spelling words (each person holding up a letter), sentences (each student representing a word), or whole paragraphs (each person taking responsibility for a complete sentence). Assign a student to help "direct" the activity, or let the components of the sculpture organize themselves.
Cooperative Groups	The use of small groups working toward common instructional goals is the core component of the cooperative learning model. Such groups generally work most effectively when they have three to eight members. Students in cooperative groups can tackle a learning assignment in a variety of ways
Board Games	Board games are a fun way for students to learn in the context of an informal social setting. On one level, students are chatting, discussing rules, throwing dice, and laughing.
Simulations	A simulation involves a group of people coming together to create an "as-if" environment. This temporary setting becomes the context for getting into more immediate contact with the material to be learned. For example, students studying a historical period might actually dress up in costumes of that era, turn the classroom into a place that might have existed then, and begin acting <i>as if</i> they were living in that time.

7. Teaching Strategies for Intrapersonal Intelligence

Activities	Treatments
One-Minute Reflection Periods	A one-minute reflection period can occur anytime during the school day, but it may be particularly useful after the presentation of information that is especially challenging or central to the curriculum. During this one-minute period (which can be extended or shortened to accommodate differing attention spans), there is to be no talking and students are to simply think about what has been presented in any way they'd like. Silence is usually the best environment for reflection, but you occasionally might try using background "thinking" music as an option.
Personal Connections	The big question that accompanies strongly intrapersonal students through their school career is: "What does all this have to do with my life?" Most students have probably asked this question in one way or another during their time in school. It's up to teachers to help answer this question by continually making connections between what is being taught and the personal lives of their students. This strategy, then, asks you to weave students' personal associations, feelings, and experiences into your instruction. You may do so through questions ("How many of you have ever. . .?"), statements ("You may wonder what this has to do with your lives. Well, if you ever plan on . . ."), or requests ("I'd like you to think back in your life to a time when . . .").
Choice Time	Giving students choices is as much a fundamental principle of good teaching as it is a specific intrapersonal teaching strategy. Essentially, choice time consists of building in opportunities for students to make decisions about their learning experiences. Making choices is like lifting weights
Feeling-Toned Moments	This strategy suggests that educators are responsible for creating moments in teaching where students laugh, feel angry, express strong opinions, get excited about a topic, or feel a wide range of other emotions. You can help create feeling-toned moments in a number of ways: first, by modeling those emotions yourself as you teach; second, by making it safe for students to have feelings in the classroom (giving permission, discouraging criticism, and acknowledging feelings when they occur); and finally, by providing experiences (such as movies, books, and controversial ideas) that evoke

	feeling-toned reactions.
Goal-Setting Sessions	The goal-setting sessions may last only a few minutes, or they may involve in-depth planning over several months' time. The goals themselves can relate to academic outcomes ("What grades are you setting for yourself this term?"), wider learning outcomes ("What do you want to know how to do by the time you graduate?"), or life goals ("What kind of occupation do you see yourself involved with after you leave school?"). Try to allow time every day for students to set goals for themselves. You may also want to show students different ways of representing those goals (through words, pictures, etc.) and methods for charting their progress along the way (through graphs, charts, journals, and time lines).

8. Teaching Strategies for Naturalist Intelligence

Activities	Treatments
Nature Walks	Nature walks make a superb preparation forgetting your class ready to do creative writing, drawing, or other activities
Windows onto Learning	As with nature walks, looking out a window can be used to set a scene for literature or history or for scientific observation. Other subjects can take what's beyond the window as a starting point, a place to briefly stop during a lesson, or a final stopping point.
Plants as Props	Many teachers have adorned their windowsills or shelves with house plants simply to create a positive ambiance for learning.
Pet-in-the-Classroom	First of all, having a pet in the classroom automatically creates for many naturalistically inclined students a "safe place" where they can go to have a relationship to the natural world and to feel a sense of caring for nature's beings (some of these kids maybe our future veterinarians!). Second, many specific instructional uses can come from having a pet in the classroom. The scientific skill of observation can be developed by having kids keep notes on a pet's behavior.
Eco-study	This strategy essentially means that whatever we are teaching, whether it is history, science, math, literature, geography, social studies, art, music, or any other subject, we should keep in mind its relevance to the ecology of the earth. In essence, what I'm suggesting here is that "ecology" shouldn't just be a unit, course, or

	topic isolated from the rest of the curriculum but that it be integrated into every part of the school day.
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2.1.3 Categories of Multiple Intelligence

In the 'Multiple Intelligences in the Classroom' book points out that there are eight types of Multiple Intelligences. And based on the web of multiple intelligences institute "All the intelligences differ not only neurologically, but in the symbol systems that they apply, the tools they call on, the core or sub abilities included, and how they are utilized in the real world." The eight intelligences are elaborated below: (Thomas Armstrong, 2000:6-8)

1. Linguistic Intelligence

The capacity to use words effectively, whether or in writing. This intelligence includes the ability to manipulate the syntax or structure of language, the phonology or sounds of language, the semantics or meanings of language, and the pragmatic dimensions or practical uses of language.

This intelligence involves all forms of working with language, including reading the newspaper, a novel, or the label some various products we buy; writing essays, poetry, reports, or letters; formal speaking before an audience and informal conversation with a friend; and listening to someone's words and understanding both what they are saying and what they are intending to communicate.

2. Logical Mathematical Intelligence

The capacity to use numbers and to reason well. This intelligence includes sensitivity to logical patterns and relationships, statements and

propositions, functions, and other related abstractions. It includes categorization, classification, inference, generalization, calculation, and hypothesis testing.

This intelligence deals with numbers and logic, and is the kind that scientists, accountants and computer programmers often use in their profession. This intelligence also includes the ability to reason, sequence, think in terms of cause-and-effect, create hypotheses, look for conceptual regularities or numerical patterns, and enjoy a generally rational outlook on life.

3. Visual-Spatial Intelligence

The ability to perceive the visual-spatial world accurately and to perform transformations upon those perceptions. This intelligence involves sensitivity to color, line, shape, form, space, and the relationships that exist between these elements.

This intelligence involves thinking in pictures and images. People who have high degree in this intelligence will enjoy doing art work, can read maps, charts and diagrams, and do jigsaw puzzles well. Graphic artists, cartographers, draftspersons, architects, painters, and sculptors often use this intelligence.

4. Kinesthetic Intelligence

Expertise in using one's whole body to express ideas and feelings and facility in using one's hands to produce or transform things. This

intelligence includes specific physical skills such as coordination, balance, strength, flexibility, and speed.

This intelligence involves the ability to use one's whole body or parts of one's body to solve problems or create something. Dancers, actors, professional athletes, surgeons, and engineers use this intelligence.

5. Musical Intelligence

The capacity to perceive, discriminate, transform, and express musical forms. This intelligence includes sensitivity to the rhythm, pitch or melody, and timbre or tone color of a musical piece.

This intelligence related to musical skill such as composing, performing, and appreciating music. People who remember melodies or are well aware of pitch and rhythm show musical intelligence. They like to listen to music and recognize surrounding sounds. Singers, songwriters, rock musicians, dancers, composers, and music teachers possess this intelligence.

6. Intrapersonal Intelligence

The ability to perceive and make distinctions in the moods, intentions, motivations, and feelings of other people. This can include sensitivity to facial expressions, voice, and gestures.

This intelligence related to emotion and selfness. A person with high degree intrapersonal intelligence can easily access her own feelings, discriminate between many different kinds of inner emotional states, and use her self-understanding to enrich and guide her life.

7. Interpersonal Intelligence

Self-knowledge and the ability to act adaptively on the basis of that knowledge. This intelligence includes having an accurate picture of oneself; awareness of inner moods, intentions, motivations, temperaments, and desires; and the capacity for self-discipline, self-understanding, and self-esteem.

This intelligence related to the other person and connection, which includes the ability to understand other people's motivations, intentions, and desires, and to work well with others. People who use this intelligence are salespeople, teachers, actors, and religious and political leaders.

8. Naturalistic Intelligence

Expertise in the recognition and classification of the numerous species—the flora and fauna—of an individual's environment. This also includes sensitivity to other natural phenomena and, in the case of those growing up in an urban environment, the capacity to discriminate among inanimate objects such as cars, sneakers, and CD covers.

There are eight ways of students learning based on multiple intelligences.

Table 2.1. Eight Ways of students learning based on multiple intelligences

Children who are highly...	Think...	Love...	Need...
Linguistic	In words	Reading, writing, telling stories, playing word games	Book, tapes, writing tools, paper, diaries, dialogue, discussion, debate, stories
Logical-mathematical	By reasoning	Experimenting, questioning, figuring out logical puzzles,	Material to experiment with, science materials, trips to planetariums and science

		calculating	museum
Spatial	In images and pictures	Designing, drawing, visualizing, doodling	Art, logo, videos, movies, slides, imagination games, mazes, puzzle, illustrated books, trip to art museum
Bodily-Kinesthetic	Thorough somatic sensation	Dancing, running, jumping, building, touching, gesturing	Role-play, drama, movement, building things, sport and physical games, tactile experiences, hands-on learning
Musical	Via rhythms and melodies	Singing, whistling, humming, tapping, feet and hands, listening	Sing-along time, trips to concerts, playing music at home and school, musical instrument
Interpersonal	By bouncing ideas off other people	Leading, organizing, relating, manipulating, mediating, partying	Friends, group games, social gatherings, community events, clubs, mentors/apprenticeships
Intrapersonal	In relation to their needs, feelings, and goals	setting goals, meditating, dreaming, planning, reflecting	secret places, time alone, self-paced projects, choices
Naturalist	Through nature and natural forms	playing with pets, gardening, investigating nature, raising animals, caring for planet earth	access to nature, opportunities for interacting with animals, tools for investigating nature (e.g., magnifying glasses, binoculars)

The table above shows the way students' think, their love, and their need while acquire in many thing activities in the learning process in the school. Moreover, people have eight different types of intelligences. Some people are good at some things and other people are good at others. And, not all people are good at all things.

2.1.4 Multiple Intelligence Based Activities

The best learners and the best teachers are when the teachers can improve, alter, and accommodate the curriculum with students' tendencies. But in general, the scope of national curriculum needs to be followed by educators. Hand books often are only as a guide curriculum and teacher's reference. However, teacher has opportunity to take a decision their best ways to gain aim and target of learning. So, by the Howard Gardner's concept of multiple intelligences, teacher could make lesson plans and create some activities allow all students to use their strong intelligences while learning. (Thomas R.Hoer, 2007: 52)

Therefore, as Thomas Armstrong states that a teacher in a multiple intelligences classroom is very different with a teacher in a traditional linguistic/logical-mathematical classroom. In the traditional classroom, the teacher teaches while standing in the front of the class, s/he writes on the whiteboard, giving questions about the assigned reading or handouts to the students, and waits while they finish their written work. It is usual thing and very bored. (Armstrong, 2000:56)

In the MI classroom, the teacher keeps her educational objective purposefully in mind. They continually change her method of presentation differently. Many types of multiple intelligences are often combined in creative ways. The atmosphere of teaching-learning process is very interesting because of effort and creativity of the teacher in conducting the class on the move. It is need good preparation to make all better without passing chance in keeping the students' tendency. In MI classroom, students are conducted as have to interact

with each other in different ways (e.g., in pairs, small groups, or large groups), to engage in self-reflection, and learn through living things).

Harmer (2007) proposed that there are some difficulties and the potential ways of dealing with the circumstances. The difficulties and solutions also emerge during implementing multiple intelligence based activity. These difficulties and solutions are presented at the table below:

Table 2.2 Difficulties and Solution of Implementing Multiple Intelligences

Problem/Difficulties	Solutions
Students are all at different levels	Different material, ignore the problem, give different task, or use peer help
Class is very big	Use pair work and group work, chorus reaction, group leaders, or think about vision and acoustics
Students keep using their own language	Talk about issues, encourage them to use English appropriately, only respond to English used, keep reminding them, or create English environment.
Students don't do homework	Parents' help, make an agreement, make homework fun and productive.
Students are uncooperative	Deal with the behavior not the students, be even-handed, use any means of communications, and make language learning contract.
Students don't want to talk	Use pair work, act out and read aloud, role play, record or allow them to speak in a controlled way
Students don't understand the audio track	Preview interview question, use jigsaw listening, one task only, play the first segment only, play listening in chunks, use audio script, vocabulary prediction and have students listen all the time.
Some students finish before everybody else	To keep the early finishing students happy, use spare activity (little worksheet, puzzles, reading, etc), give extra work and exercise.

2.1.5 Multiple Intelligence In Speaking Skill

Research in cognitive psychology indicates that students are motivated to learn when they are involved in the learning process and when instructional approaches allow them to be reflexive about their learning (Armstrong,

2000;Reiff, 1992). The framework of MI theory encourages teachers to involve and motivate students. Armstrong (2000) explains that, "MI theory essentially encompasses what good teachers have always done in their teaching reaching beyond the text and the blackboard to awaken students' minds".

In communication theory (such as language development and rhetorical theory) would appeal to verbal-linguistic and logical-mathematical thinkers who understand the concepts and see the overview of communication. Interpersonal thinkers can also appreciate the interconnections of communication and public speaking, and should be encouraged to view public speaking as a teaching format or as a connection with other people, since they typically interact comfortably with others. Visual-spatial thinkers can see the purpose and results of communication through visual reinforcement (such as videotapes of exemplary public speeches) and through the actual event of public speaking as it happens in the classroom setting. Bodily-kinesthetic learners can appreciate the importance of the nonverbal facets of public speaking; they should be encouraged to be expressive with their hands and to walk while speaking to stimulate their thinking ability. Musical intelligences should focus on pitch and inflection and other uses of the voice to convey messages—they should be taught that public speaking is not in the words alone. Intrapersonal intelligences should be encouraged to think of public speaking as a "goal" that will have personal benefits (Schaller and Callison, 1998:96).

The optimization of multiple intelligences in speaking classes can be achieved through creative and innovative learning activities. Learning materials

can be combined in a single theme presented by taking into account student characteristics such as interests, talents, and intelligence, so that every student has the opportunity to succeed according to his or her strengths. Competence will be achieved by developing students intelligences, and empowering their potentials to grow by facilitating them with Multiple Intelligences-based activities. Appropriate learning activities will help them achieve the competence and capitalise their potentials into useful intelligence. Furthermore, the Multiple Intelligences activities also promote learner-centeredness in a language classroom and emphasize students' strengths and needs that will eventually benefit them (Adityas, 2016:75).

2.1.6 Definition of Speaking

Speaking is a skill which deserves attention every bit as much as literary skills, in both first and second language. To most people, mastering the speaking skill is the single most important aspect of learning a second or foreign language, and success is measured in terms of the ability to carry out a conversation in the language (Oxford Dictionary, 1995:403).

Brown (2001: 267) cites that when someone can speak a language it means that he can carry on a conversation reasonably competently. In addition, he states that the benchmark of successful acquisition of language is almost always the demonstration of an ability to accomplish pragmatic goals through an interactive discourse with other language speakers.

Richards and Renandya (2002: 204) state that effective oral communication requires the ability to use the language appropriately in social interactions that

involves not only verbal communication but also paralinguistic elements of speech such as pitch, stress, and intonation. Moreover, nonlinguistic elements such as gestures, body language, and expressions are needed in conveying messages directly without any accompanying speech. Brown (2007: 237) states that social contact in interactive language functions is a key importance and in which it is not what you say that counts but how you say it what you convey with body language, gestures, eye contact, physical distance and other nonverbal messages.

Speaking is so much a part of daily life that people take it for granted. The average person produces tens of thousands of words a day, although some peoples, like auctioneers or politicians-may produce even more than that. So natural and integral is speaking that people forget how they once struggled to achieve this ability-until, that is, they have to learn how to do it all over again in a foreign language (Thornburry, 2005:1).

2.1.7 The Components of Speaking

Speaking is significant to an individual's living processes and experiences as are the ability of seeing and walking. Speaking is also the most natural way to communicate. Without speaking, people must remain in almost total isolation from any kind of society. For most people, the ability to speak a language is the same with knowing a language since the speech is the most basic means of human communication. Speaking is not just making sound. Birds, animals, babies make sound and though it may be communication of sorts, it is not speaking. Speaking is also one of the language arts that are most frequently used by people all over

the world. The art of speaking is very complex. It requires the simultaneous use of the number of abilities which often develop at different rates. Generally, there are at least four components of speaking skill concerned with comprehension, grammar, vocabulary, pronunciation, and fluency (Syakur, 1987).

1. Comprehension

Comprehensibility focused on the students' understanding of the conversation. comprehensibility measures how much interpretations is required to understand students' responses. In other words, it means that if a person can answer or express well and correctly, it shows that she or he comprehends well .

2. Grammar

It is needed for students to arrange a correct sentence in conversation. It is in line with explanation suggested by Heaton (1978:5) that student's ability to manipulate structure and to distinguish appropriate grammatical form in appropriate aones. The utility of grammar is also to learn the correct way to gain expertise in a language in a language in oral and written form.

3. Vocabulary

One cannot communicate effectively or express their ideas both oral and written form if they do not have sufficient vocabulary. So, vocabulary means that appropriate diction which is used in communication

4. Pronunciation

Pronunciation was the way for students' to produce clearer language when they speak. It deals with the phonological process that refers to the component of

a grammar made up of the elements and principles that determine how sounds vary and pattern in a language. According to O'Connor (1967:24), in producing the sounds, there are two terms that have to be focused on, they are consonant and vowel. O'Connor stated that there are several kinds of consonants in English as follow:

- 1) Friction Consonants : / f, v, θ, ð, s, z, ʃ, ʒ /
- 2) Stop Consonants : /p, b/, /t, d/, /k, g/, /tʃ, dʒ/
- 3) Nasal Consonants : /m, n, ŋ/ 4. Lateral Consonants : / l /
- 4) Gliding Consonants : / j, w, r /

Besides, the term vowels can be defined as the sounds made by voiced air passing through different mouth-shapes. The differences in the shape of the mouth are caused by different positions of the tongue and of the lips. According to O'Connor (1967:79), there are kinds of vowels, they are:

- 1) Simple vowels : / i, I, e, /, e, æ, ^/, / I:, I, e, æ, ^/, / ^, a:, ʊ, /, ʊ, ɜ:, u, u:/, ɜ:, α:/, /ə/,
- 2) Diphthongs : /əu, aɪ/, /eI, ai, əI/, /Iə, eə, uə/ 3. Vowel Sequences : the most common sequences are formed by adding to a diphthong, especially to / aI / and / au.

2.1.8 The Characteristics of Successful Speaking Skill

Again, sometimes spoken language is easy to perform, but in some cases it is difficult (Brown, 2001:270). This statement is supported by Munjayanah (2004:16) that when people want to speak fluently, sometime they get difficulties

to do it. In order that they can carry out the successful speaking, they have to fulfil some characteristics of successful speaking activity such as:

- 1) Learners talk a lot. As much as possible of the period of time allocated to the activity is in fact occupied by learners talk. This may be obvious, but often most time is taken up with teacher talk or pauses.
- 2) Participant is even. Classroom discussion is not dominated by a minority of talk active participants. All get a chance to speak and contribution are fairly evenly distributed.
- 3) Motivation is high. Learners are eager to speak because they are interested in the topic and have something new to say about it, or they want to contribute to achieve a task objective.
- 4) Language is of an acceptable level. Learners express themselves in utterances that are relevant, easy comprehensible to each other and of acceptable level of language accuracy.

2.2 Relevance Studies

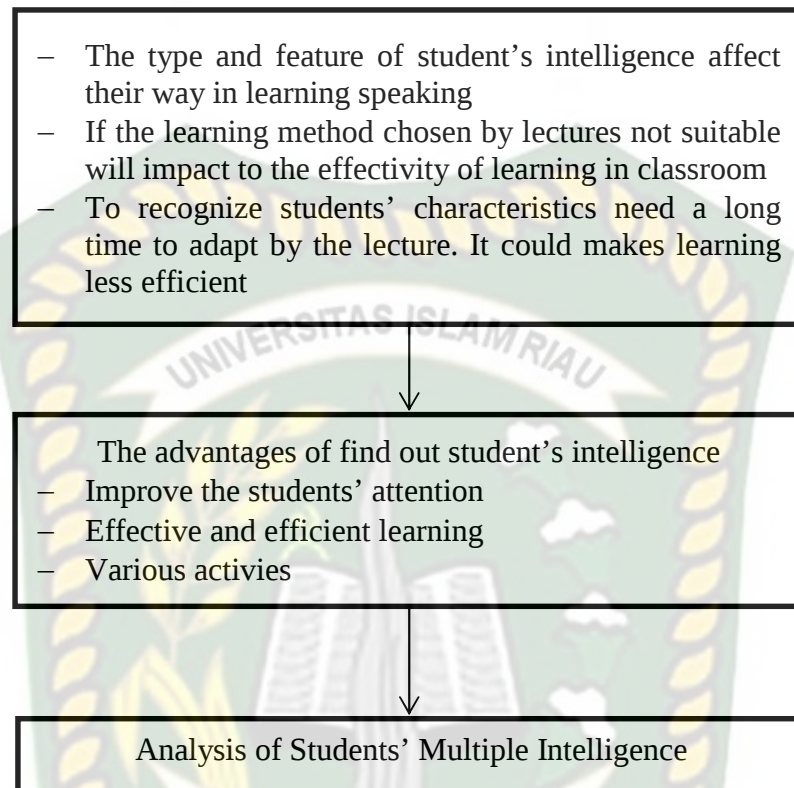
There are several relevant researchers which have relevancy with multiple intelligence activities:

First, Hamurlu (2007). This study's aim was to analyze the effects of the instruction based on Multiple Intelligences Theory on the students' achievements in English classes, and the students' attitudes towards the English classes. The result of the study, it has been realized that the instruction based on multiple intelligences theory has increased the students' achievement in English classes and has made positive effects on the students' attitudes towards English.

Second, Bulut (2003) aimed to identify the advantages of applying Multiple Intelligence Theory in teaching English as a foreign language to children. The participants of the study are 71 students at fifth grade. As a result of this study, it has been ascertained that specific grammatical structures should be presented via different activities and exercises designed in accordance with various intelligences of the students. Multiple Intelligence Theory seems to be helpful in English lessons.

Third, the research was done by Izmir (2009) entitled “The Effect of Using Activities Based on Multiple Intelligence Theory on 11th Grade Students’ Learning and Retention of English Vocabulary”. The finding showed that after the teaching period, Post- test was applied and then analyzed. After two weeks, Post- test was applied again to see the long-term retention. As a result teaching vocabulary through activities based on Multiple Intelligence Theory was proved to be valuable in students’ learning and retention of English vocabulary.

2.3 Conceptual Framework



The study is aim to find out the factors of multiple intelligence in speaking skill at the first semester of English language education students. Since English speaking class still becomes something which worries students. Some students are not interest to speak English. There are student actually has a good english but still feel shy to speak English. Besides, there are student has a good willing to speaking and dominate in classroom. Then, lecturers had experienced challenges in finding suitable learning methods in handling different intelligence. If the chosen learning method is not suitable, the speaking class will tend to be ineffective. There are students who seem less motivated and cannot even catch learning well, so learning does not go according to plan. And the last, to recognize students' characteristics need a long time to adapt, in order to recognize the

personality and intelligence of students. This long time certainly makes learning less efficient to achieve learning goals.

So, knowing of multiple intelligence student in speaking class will help two ways, both student and lecture side. From the students side, it will impact to the attention of student in learning since the leacture know the best way to teach the difference of multiple intelligence. It will less makes boredom in students' side. In addition, from teacher side it will help teacher to make class active and efective in achive learning goals.

2.4 Assumption

The researcher assumes that each student has a difference in his Multiple Intelligence, so investigating various Multiple Intelligences in students may find more than one intelligence, where dominant intelligence will be used as a benchmark as a solution for developing learning methods that are suitable for these students.