



Analyzing Multiple Intelligence Theory in Taiwan Elementary School: Tongmen Elementary and Tabalong Elementary School

R M Simamora

Indonesia Institute of the Art, Yogyakarta, Indonesia

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ABSTRACT

This study aimed to investigate the implementation of multiple intelligence theory in Taiwan Elementary School. The research conducted in Tongmen Elementary School and Tabalong Elementary School. According to Gardner's theory of multiple intelligences, the multiple intelligence perspective on learning, teaching, curriculum, and assessment are briefly described. In this study, the researcher chooses an observation as a research approach. Observation is appropriate for collecting data on naturally occurring behaviors in their usual contexts. The observation showed that both of the two schools has implemented and integrated the theories of MI in their learning process. The principals has completed students to be independent, how student will live in the community, school, knowing their own culture, learned directly in nature, how student control the weather, humidity, temperature, and how later when student study it further in the level.



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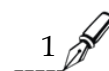
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INTRODUCTION

The multiple intelligences theory was originally proposed by psychologist Howard Gardner at Harvard University in 1983. He defined seven measures of multiple intelligences: linguistics, logical-mathematics, visual-spatial, interpersonal, intrapersonal, musical, bodily-kinesthetic and naturalist. In 1997, Gardner added an eighth intelligence, the naturalist intelligence, and two years later a ninth intelligence, existentialist intelligence (Gardner, 1999).

Gardner present evidence that human beings possess a range of capacities and potentials – multiple intelligences that, both individually and in consort, can be put to many productive use individuals can not only come to understand their multiple intelligences but also deploy them in maximally flexible and productive ways within the human roles that various societies have created. Gardner claims that everyone has all eight intelligences to some degree, but each individual has his or her own pattern of stronger and weaker intelligences. Gardner also argues that most tasks require more than one intelligence working together. For example, the conductor of a symphony obviously uses musical intelligence, but also must use interpersonal intelligence as a group leader and bodily-kinesthetic intelligence to move in a way that is informative to the orchestra. The claim of separate and independent intelligences is, of course, central to Gardner's theory.

There are many studies related to multiple intelligences and elaborating multiple intelligences with different learning approaches. Based on the previous research, Hanafin (2014) shows that teachers believe MI theory-in-use delivers direct benefits to their students' learning, motivation, and self-belief. Yavich & Rotnitsky (2020) obtained that the two dominant intelligences that were measured and influenced high achievement in the education system are not linguistic and logical, but only logical-mathematical. The findings also show that linguistic intelligence is not a dominant intelligence among students (both successful and unsuccessful). In



addition, Visser et al (2006) founded that highly diverse tests of purely cognitive abilities share strong loadings on a factor of general intelligence, and that ability involving sensory, motor, or personality influences are less strongly g-loaded. Other research, Emmiyati et al (2014) showed that there was no significant difference between male students and female students in verbal linguistic intelligence, visual-spatial intelligence, and naturalist intelligence.

Principles of Multiple Intelligences

According to Gardner & Hatch (1989) defined intelligence as *“the ability to solve problem or to create products that are valued within one or more cultural settings.”*

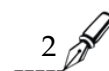
Gardner (2011) initially identified seven intelligences that all individuals possess to varying degrees, and these intelligences might be combined and used in highly personal ways. In considering additional candidate intelligences, including naturalist, spiritual, existential, and moral ones, Gardner (1999) added naturalist intelligence as an eighth intelligence. These eight intelligences can be defined and summarized as follows.

1. Verbal-linguistic intelligence relates to words and language, and is used in listening, speaking, reading, and writing.
2. Logical-mathematical intelligence deals with deductive and inductive reasoning, numbers and relationships. It involves the ability to recognize patterns, to work with geometric shapes, and to connect different pieces of information.
3. Visual-spatial intelligence includes being able to visualize an object and to create mental images. It deals with the visual arts, navigation, architecture, and certain games such as chess.
4. Bodily-kinesthetic intelligence is related to physical movement, the knowledge of the body and its functions. It includes the ability to use the body to express emotions, to play a game, and to interpret and invoke effective body language.
5. Musical intelligence includes the ability to recognize tonal patterns, pitch, rhythm, and timbre. It includes the sensitivity to environmental sounds, the human voice and musical instruments.
6. Interpersonal intelligence is used in person-to-person relationships. It includes the ability to communicate with others, to have empathy for their feelings and beliefs, to work with and relate to others, and to understand their moods, temperaments, motivations, and intentions.
7. Intrapersonal intelligence is based on the knowledge on the self, one's strengths, weaknesses, hopes, and desires. It includes metacognition, emotional responses, self-reflection and an awareness of metaphysical concepts.
8. Naturalist intelligence consists of observing patterns in nature, identifying and classifying objects, and understanding natural and human made systems.

Besides that, Phillips (2010) argued that a focus on traditional linguistic and logical teaching and testing strategies must broaden to include strategies that meet the needs of diverse learners.

Multiple Intelligences in the Schools

Integrating multiple intelligences into education represents a key component to student success regardless of the presentation method. An instructor who gears course material to address the needs of multiple intelligences will encourage academic success and promote a quality learning experience. An online learner must realize the significant role learning styles play in the educational process and would benefit from understanding individual strengths and weaknesses (Riha & Robles-Piña, 2009). Also, Shearer (2004) argued that the adoption of an MI perspective can have a profound effect on teaching, curriculum design, and school organization. To create and maintain an MI-inspired school requires ongoing and meaningful professional development of the faculty. New teachers need to be brought on board from the start and the skills of all teachers (and administrators) need to be continually expanded so that student can deal with real problems in ways that are theoretically consistent.



The theory of multiple intelligences (MI) brings a pragmatic approach to how we define intelligence and allows us to use our students' strengths to help them learn. Students who read and write well are still smart, but student are joined by other students who have different talents. Through MI, schools and classrooms become settings in which a variety of skills and abilities can be used to learn and solve problems. Being smart is no longer determined by a score on a test; being smart is determined by how well students learn in a variety of ways (Hoerr, 2004).

Many schools have implemented and integrated the theories of MI in their teaching learning process in schools. For examples, The New City School believed that the personal intelligences are the most important; at the Key School, however, all intelligences are valued equally. Latitude in implementation respects the professionalism of teachers and trusts their judgment to know how best to meet their students' needs. Besides that, he said that MI theory helped this school to recognize that all of us have different intelligence profiles; not only do we learn differently, we teach differently too. Teaching teams became more than people working together and supplying emotional support; using MI meant that teams began to draw upon the expertise and interests of each member in planning curriculum and instruction (Hoerr, 2004).

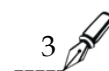
Other schools also used MI theory to develop their schools. Campbell and Campbell (1999), Russell elementary school, Lexington, Kentucky success used instruction with MI: student-driven curriculum, arts integrated into daily lessons in all classrooms, MI exploratory classes offered. Schools used assessment with MI: written classroom tests, projects, performances, and teacher observations, on state tests, scores doubled between 1992-1996 without one student at the "novice" level. And, Exposition (EXPO) for Excellence Elementary Magnet School, St Paul, Minnesota also success used instruction with MI: students learn content through MI in "family groups" that stay together for three years, students select three MI "theaters" or electives per year based on their interests. Schools used assessment with MI: classroom assessments include multimedia work samples, on Metropolitan Achievement Tests, students at school three or more years score at 75th percentile.

The researcher think that how to apply this MI theory to teaching and learning are challenging. We talked about how to recognizing MI would change what happens in classroom, how students' assessment would also have to change, and the impact this would have on communication with our students' parents. We should enthusiastic but see embracing MI as a more complex effort than we originally thought.

In addition, there are studies did in another schools. Suprpto et al (2017) points out that one of their studied said that give an example how MI theory has been implemented. School in Taiwan: Binmao Elementary School and Binmao Junior High School in Taitung County which implemented MI theory in their school, teachers success to decide on which topics, concepts, or ideas are of greatest importance and then present them in a variety ways in school. The principals have equip students to be independent, how student will live in the community, and how later when student study it further in level. In US, implementation of MI gives a positive impact to students achievement. The important things is the relationship between teacher beliefs, students and MI theory since not only MI offers guidance for improving learning but also both teacher and student realize that MI pluralizes the concept of intelligence and of being academically challenged.

MI Teaching

Wilson (2018) argued that transforming the classroom to a fun, positive, and challenging learning experience can be a daunting task. However, such a formidable process can be rewarding as well. Therefore, Arulselvi (2018) suggested that Multiple Intelligence Theory can be applied by educators, and language educators specifically, in the classroom. Tamilselvi & Geetha (2015) shows the importance of integrating MI activities in the lesson plans which aid students' learning, providing them with the optimum learning environment through their preferred learning medium and help them to achieve their fullest potential in their respective talented areas. Using



multiple intelligences to teaching allows teachers to teach for greater and enhanced understanding on important topics and themes for students and Arulselvi (2018), identifying students' abilities, teachers are able to organize a variety of contents that offer learners ways to engage in active learning that matches or enhances their Multiple Intelligences. Therefore, Macías, (2013) suggested that when applying both MI and interest centers, the teacher was able to organize a variety of contexts, activities and materials that offered students several learning opportunities

Gardner (1999) proposes three increasingly focused approaches to teaching for understanding: (1) entry points, (2) analogies, and (3) approaching the core. And, Armstrong (2009), presented 40 teaching strategies, five for each of the eight intelligences. The strategies are designed to be general enough and can apply them at any grade level, yet specific enough so that little guesswork is required to implement them. He encouraged to find additional strategies or to develop your own unique adaptations of existing strategies:

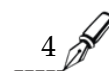
- 1) Teaching Strategies for Linguistic Intelligence; storytelling, brainstorming, tape recording, journal writing, and publishing.
- 2) Teaching Strategies for Logical-Mathematical Intelligence; calculations and quantifications, classifications and categorizations, socratic questioning, heuristics, and science thinking.
- 3) Teaching Strategies for Spatial Intelligence; visualization, color cues, picture metaphors, idea sketching, and graphic symbols.
- 4) Teaching Strategies for Bodily-Kinesthetic Intelligence; body answers, theater classroom, kinesthetic concepts, hands-on thinking, and body maps.
- 5) Teaching Strategies for Musical Intelligence; rhythms, songs, raps, and chants, discographies, super-memory music, musical concepts, and mood music.
- 6) Teaching Strategies for Interpersonal Intelligence; peer sharing, people sculpture, cooperative groups, board games, and simulations.
- 7) Teaching Strategies for Intrapersonal Intelligence; one-minute reflection periods, personal connections, choice time, feeling-toned moments, and goal-setting sessions.
- 8) Teaching Strategies for Naturalist Intelligence; nature walks, windows onto learning, plants as props, pet-in-the-classroom, and eco-study.

MI Assessment

Gardner (2006) argued that used assessment to test students, he said standardized tests for teachers, supervisors, soldiers, and police officers; we use adaptation of these instruments to assess capacities not only in standard areas of the curriculum but also in civics and arts; and we can draw on short-answer measures for assessing personality, degrees of authoritarianism, and compatibility for dating. The schools need summative assessments of finished products, assessments that show what students know and can do, as well as cumulative assessments, assessments that show how a problem was solved and the points of progress along the learning route. Each of these kinds of assessment provides insights into student thinking and also provides the student with information about personal achievement. And as the various intelligences are woven into instruction, student should be included in assessment (Hoerr, 2004).

Hoerr adding that educators decry parents who focus on grades and standardized test scores, yet we often share only these measures of student progress. We need to recognize that there are many different assessment audiences and that not only what we assess, but also why and how we assess vary with the audience: for students, for students' parents, for educators, for the larger community, for the larger educational institution (the school or district's board of education, state board, and department of education).

Arulselvi (2018) argued that there are many MI assessment tools available online or in print for use in the classroom. These tests can provide a fascinating snapshot for teachers to identify their students' innate abilities. Identifying students' abilities, teachers are able to organize a



variety of contents that offer learners ways to engage in active learning that matches or enhances their Multiple Intelligences.

Besides of that, McKenzie (2005) offered additional insights into the relationship between human intelligence, technology, and effective instruction. He suggested there are two how to measure student mastery, namely, formative and summative methods of assessment, which must take place when addressing multiple intelligences through technology. Formative assessments are snapshots in time that allow teachers and students to check on progress in the process of learning. Formative assessments are ongoing and provide information that allows the teacher to modify instruction to increase opportunities for student success.

In addition, Setiawan & Mardapi (2020) argues that assessment of MI-based curriculum that developed meets the criteria of valid, reliable, and meets the suitability of empirical data models. The first criteria are the MI-based creative curriculum assessment model developed to meet valid, reliable, and conformity criteria of an empirical data model. Second, the implementation of the assessment model had fulfilled the requirements worthy of using three criteria aspects. Aspect 1, the results of the assessment using creative instruments based on multiple intelligences on children get "very good" results: aspect 2, the readiness of the teacher in learning included in the "good" category. Aspect 3, teacher performance appraisal shows the "very good" category, and aspect 4, the benefits of the products developed are in the "very good" category.

Summative assessment, on the other hand, is a measure of a student's success at the completion of a lesson or unit. Teachers require students to take skills and concepts and apply them to higher levels of thinking. For this reason, traditional paper and pencil assessments have used essays, word problems, and lengthy objective sections to measure the degree to which students have truly mastered material. Traditionally, summative assessments have been very final in the way student have been implemented.

RESEARCH METHOD

This study used a qualitative research approach. The researcher hopes to present an insider's perspective into the events that will occur in the study as data are collected and analyzed. Ary et al (2010) stated that qualitative research, in contrast, focuses on understanding social phenomena from the perspective of the human participants in natural settings. It does not begin hypothesis, but it may in hypothesis as the study unfolds. This study, I obtained from two in Taiwan: Tongmen Elementary School and Tabalong Elementary School. The purpose of study to observe the implementation of multiple intelligences by both of schools.

Three most common qualitative methods are observation, interview, collecting and examining. In this study, I choosed observation as this research method. Observation is appropriate for collecting data on naturally occurring behaviors in their usual contexts. Yin (2011) state that observing can be an invaluable way of collecting data because what you see with your own eyes and perceive with your own senses is not filtered by what others might have (self-) reported to you or what the author of some document might have seen.

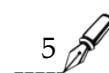
During these observations, the researcher also had note-taking to collecting data. It was used to find out the implementation of Multiple Intelligence Theory in two schools based on the eight intelligences. An analysis from observation was conducted through several stages as follow: 1) Taking picture of activities (Figure 1), 2) Watching the video-taped many times, 3) Transcribing recording from video and recorder, 4) Analyzing and classifying the data into categories related to eight intelligence activities.

RESULTS AND DISCUSSION

Description of Schools

a) Tongmen Elementary School

This school has been established since a hundred years ago. Tongmen elementary school want the students can learn fun. The purpose of teaching who can connect, identify and take care of



the mountain. So, this school trying to think and find what the students like. This school separate students becomes to two parts. The first is Tongmen Mountain and the second one is Tongmen Humanity. The first, taking the students to going to the mountain, to learn how to hunt, to learn how to survive. Second, teaching the students about their history and local industry. This school surround by mountains. If student go to the mountain, there are a lot of animals. Most of the animals are dangers. So, the teachers teach the students how to be safe, what the names and their habits. The teachers teach them how to use archery. The students also can teach the peoples how to use it. The teacher realized that is not enough to teach students using by textbook. That's why the teacher always inviting students go to the outside. Most of the students is Aboriginal peoples therefore the teacher teach them where are student come from. Student can show their personality and take care of the mountain. The teachers also invite the students to the mountain to recognize the nature closer or environment. Make camping around of the mountain. Student can challenge the students to take care of themselves. Hunt pig and teach them how to cooking in outside.

Second, Tongmen Humanity. Let students to know who student are. The first class is about *I am Truku*. Truku is the name of their tribe. So, student ask the teacher who is the senior assessor in their village. He is following up their knowledge about Aboriginal culture. Ask him to teach the students about home story and traditional artist of their history. The second class, let them to the village and drawing the picture on the wall. Student also teach students to recognize traditional knife. Traditional knife is the famous industry in their village. And student have already more than one hundred years. So, student also renew the creativity factory.

This school has principal classes. Student invite all of students to the space building. Student also cooperate with the peoples in their village. Student environment provide a lot of source and student can keep learning. Student want the students learn in the summer vacation. Because student own experiences, the students always forget all of think that their learning in the school. The teachers want the students go to school but no just sitting in the classroom. Let them go to the outside to learn something is meaningful.

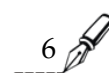
b) Tabalong Elementary School

Tabalong is historical school. This history has remained a hundred fifty years. Tabalong is means "white craft" because this school has a lot of craft. Interestingly, this school separated in two groups, namely, Regional Class and Pottery Class.

This school focused on sport, art and music. Most of the student are good playing baseball. Student got the best competition of playing baseball and the best teacher can made pottery. This school also got the best Aboriginal dance. Ninety six persen of the students are Amis tribe. The government also encouraged this school to learn language. So, the begin to bring community resources to the school and teach them Amish language and stories. In summer student have harvest celebrate of Amis tribe. This school taught students to know their own culture. Like I mention before, this school also focus on art and music instruments like drama, flute, piano and so on. The school wanted the students can play what kind of music student want. This school hopefully the students can get one skill or one instrument. If student can get opportunity, student can bring with them.

1.

Tongmen Elementary School



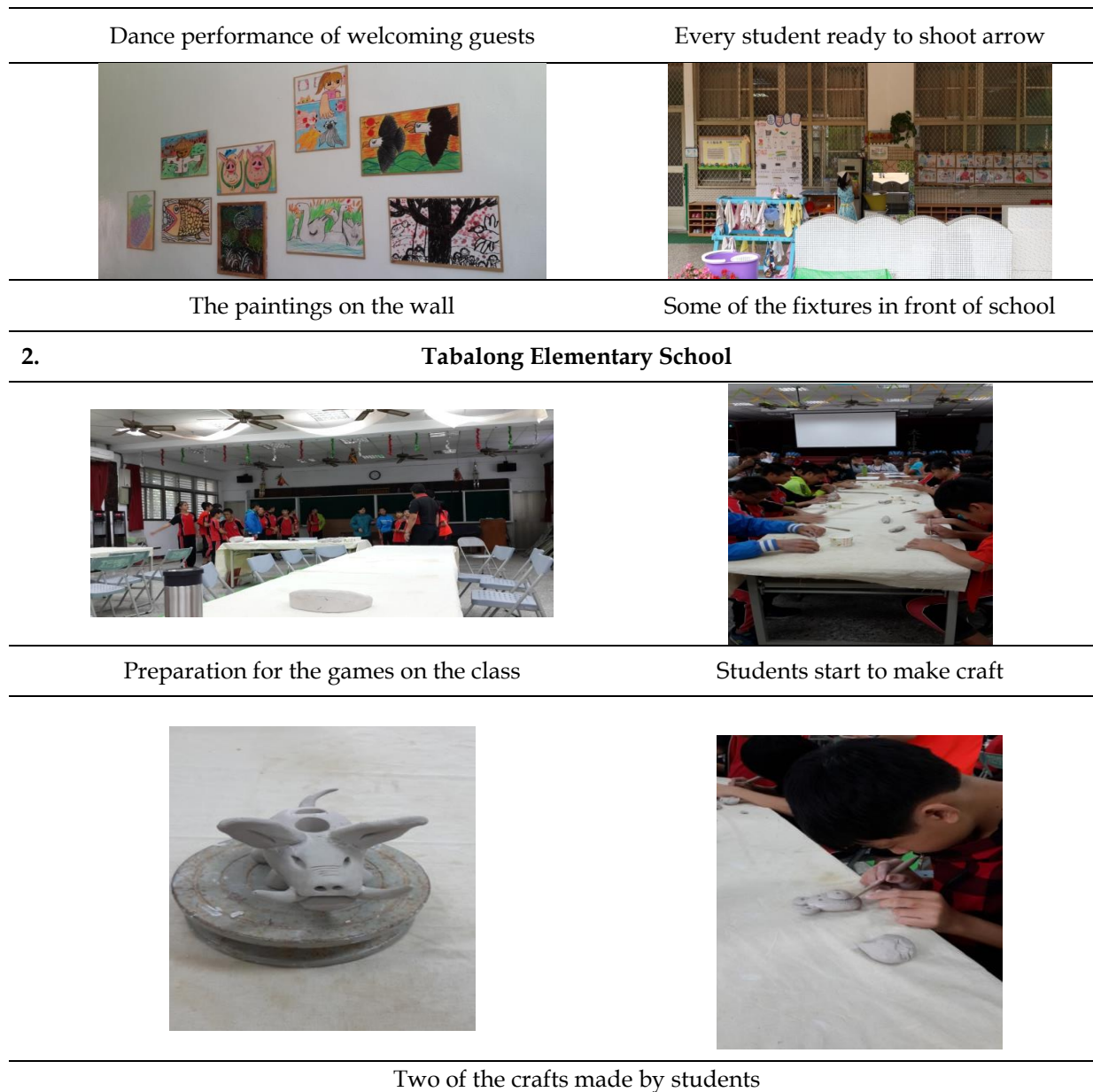


Figure 1. The activities of student in Tongmen Elementary School and Tabalong Elementary School

Table 1. Multiple intelligence perspective in Tongmen Elementary School

No.	The implementation of MI on learning process	MI Perspective							
		L	M	BK	LM	VS	Inter	Intra	N
1.	The school teach students about reading, writing, speaking and listening.	This activity encouraging the student abilities in speaking is one form of implementation on linguistic intelligence.	-	-	-	-	This activity as a form of teacher attention to students who experience learning difficulties in speaking.	Students will be aware of themselves, the shortcomings and know their strengths, especially in speaking skills.	-

No.	The implementation of MI on learning process	MI Perspective							
		L	M	BK	LM	VS	Inter	Intra	N
2.	The school teach the students about their history and local industry.	-	-	Teacher take on the role therefore student stand in front of the class to demonstrate the knowledge and skills.	-	-	The activities as a form of closeness and the way of communication between the community and school.	Students whose parents are standing in front of the class will feel proud and confident. In their minds will grow a new spirit and tremendous pride to themselves and their parents.	-
3.	The teacher teaching students how to hunt pig and how to cook in outside	-	-	Teacher take on the role therefore student stand in front of the class to demonstrate the knowledge and skills. The teachers teach them how to use archery. The students also can teach the peoples how to use it.	-	Students can recognize the animals in the mountain. There are a lot of animals. Most of the animals are dangers. So, the student want students to memorize the names and their habits.	The activities as a form of closeness and the way of communication between the community and school.	Students whose parents are standing in front of the class will feel proud and confident. In their minds will grow a new spirit and tremendous pride to themselves and their parents.	Students can recognize many animals in the mountain.
4.	The principal leading the student to know who student are.	The promotion uses aboriginal language by using some slogans.	The students also use some instrument either by mouth or by musical instrument.	The students go out as a form of physical learning.	-	The students will be familiar with the space, street, and alley so train their space intelligence.	Here students will practice to interact with others, either friend, teacher, and community.	Through this activity then the student will also grow self-esteem, self-confidence to dare to appear.	Students also learn at the same time directly with nature, how student control the weather, humidity, and temperature.
5.	The teacher teaching students about home story and traditional artist of their history.	This activity encouraging the student abilities in communication with each other.	This activity is accompanied by traditional art from the Aboriginal tribe.	Student performance requires body work and manuver as part of a bodily-kinesthetic.	-	-	Student can interact with the community in the village. Student can social relationship, able to know and use a variety of ways when do interaction.	Through this activity then the student will also grow self-esteem, self-confidence to dare to appear.	-

No.	The implementation of MI on learning process	MI Perspective							
		L	M	BK	LM	VS	Inter	Intra	N
6.	The teacher inviting students to know their village and drawing the picture on the wall.	This activity encouraging the student abilities in communicati on with each other.	-	Student performance requires body work and maneuver as part of a bodily-kinesthetic.	-	Students have a good level of internal fantasies (internal imagery). So, it tends to imaginative and creative.	Student can interact with community in the village.	Through this activity then the student will also grow self-esteem, self-concept, and self-confidence to dare to appear.	Students have a great interest in the environment, including animals.
7.	Observation the nature	-	-	Student illustrate how aboriginal people carry out something to the mountain	Student will learn life science, tree age, stem diameter, flowers, leaves, cambium, pollination , and the various dimension s of the tree	-	-	Students will have self-awareness that the universe was created by God and we should be grateful.	Students enjoy the objects and stories relating to natural phenomen a such as the occurrence of clouds and rain, the origin of the animal, plant growth, and the astronomy . Students have a great interest in the natural surroundi ngs. The students really enjoyed the walk in the outside, like gardening or closely with the park and keep animals.
8.	Outdoor activity in order to close students with local culture.	The story of tribes making learn to be prose, literacy, essays, and stories of the past	Students are familiar with traditional music	Student performance requires body work and maneuver as part of a bodily-	-	Because of activities outside the classroom students will be trained about sensitivity of space	Students to practice interacting with each other and complement in the task	Students also practice independence and confidence	Since the outdoor activity so many students learn about the nature around
9.	Every student showing their respect with other.	-	-	-	-	-	Students be able to feel the feelings, thoughts, behavior and expectations of others,	Students have a sense of feeling in a situation that is taking place, understand themselves, and being able to	-

No.	The implementation of MI on learning process	MI Perspective							
		L	M	BK	LM	VS	Inter	Intra	N
							and be able to cooperate with others.	control themselves in conflict situations.	

Table 2. Multiple intelligence perspective in Tabalong Elementary School

No.	The implementation of MI on learning process	MI Perspective							
		L	M	BK	LM	VS	Inter	Intra	N
1.	The school conducting sport, art craft and music course collaborating with expert.	-	Students have a musical intelligence easily recognize and remember tunes. Students with a sense of rhythm, beats, melody or timbre of a musical composition. For example : playing piano	Students use the power of their hands and feet muscles to produce work through activities carve or weld. For example: baseball and dance	-	In art crafts, creative students use their spatial intelligence to form an artistic artwork. For example: make handcraft.	-	Students will be aware of themselves develop the skills of their imagination in designing a work of art	-
2.	The school teach Amish students to know their own language and stories.	The promotion uses aboriginal language by using some slogans	This activity is accompanied by traditional art from the Aboriginal tribe.	Student performance requires body work and manuver as part of a bodily-kinesthetic.	-	-	Here students will interact with others, either friend, teacher, and community	Through this activity student will also grow self-esteem, self-confidence to dare to appear.	-
3.	The school have harvest celebrate of Amish tribe	-	Students have a prominent musical intelligence and easily recognize and remember the tones. Students are also easy to	Students can move and touch. Student have no control on their body movement, balance, agility, and grace of movement. Student explore the world with his muscles.	-	-	Here demonstrating the role of interpersonal intelligence and is required. Situation related to a failure of interaction between students and their parents. Students can	The awareness to accept themselves (self-concept), others environment (contextual efficacy) are part of intrapersonal intelligence in this case. The student can show an independent attitude and a	-

No.	The implementation of MI on learning process	MI Perspective							
		L	M	BK	LM	VS	Inter	Intra	N
			follow the rhythm of the music.				cooperate with team on the stage.	strong, confidence is very well.	
4.	The teacher created students become two groups. The teacher provided game I, game II, and clay in the classroom.	-	-	Students can show their performance. Student can control their body movement, balance, agility and elegance in the classroom.	-	Students are very prominent in art subjects. Students can understand the variety of information through images and shaping the clay into a souvenir.	Students can indicate social relationships, knowing and using a variety of ways when interacting with other.	Students are able to think focused and directed at achieving goals.	-
5.	Triggering potential sports: baseball, and dance.	-	-	This activity familiarizes students with healthy living through training and producing strong athletes.	Students also learn to calculate the points as in the game of basketball and softball, how many points to throw two digits, three digits, and so on. It also studied the logic of how a strategy to defeat an opponent in a match.	This activity also trains students insight into the space-related field or stadium, for example: the size of the field, running track length, etc.	-	The school plan is to create student become national athlete so improve their confidence when participate in some tournaments, competition, events, and contests.	-

Description:

- L : Linguistic
- M : Musical
- BK : Bodily-Kinesthetic
- LM : Logical-Mathematical
- VS : Visual-Spatial
- Inter : Interpersonal
- Intra : Intrapersonal
- N : Naturalist

Table 3. The unique of two schools

A Snapshot of Two MI Elementary Schools		
School Name	Unique MI Features	MI Perspective
Tongmen Elementary School	<ol style="list-style-type: none"> 1) Students enjoy the objects and stories relating to natural phenomena such as the occurrence of clouds and rain, the origin of the animal, plant growth, and the astronomy. 2) Students have a great interest in the natural surroundings. The students really enjoyed the walking in the outside, like gardening or closely with the park and keep animals. 3) For visual-spatial, Gardner & Hatch (1989) argues that the capacities to perceive the visual-spatial world accurately and to perform transformations on one's initial perceptions. 	Naturalist and Visual-Spatial
Tabalong Elementary School	<ol style="list-style-type: none"> 1) All students are intelligence in art crafts/artistic artwork. For example: make handcraft. 2) All students are intelligence in sport, and music course collaborating with expert. 3) For bodily-kinesthetic, Gardner & Hatch (1989) argues that abilities to control one's body movements and to handle objects skillfully. 4) For musical, Gardner & Hatch (1989) argues that abilities to produce and appreciate rhythm, pitch, and timbre; appreciation of the forms of musical expressiveness. 	Visual-Spatial, Bodily-Kinesthetic and Musical

The Implementation of Multiple Intelligence Theory in Classroom

Eisner (2004) founded that the implications of Gardner's view for education pertain to the cultivation of the various ways in which humans reflect intelligently and the implicit recommendation that individual proclivities, interests, and intelligences be cultivated. Such an approach to schooling would yield differences among the outcomes for children whose intelligences differed. It is this orientation to the aims of education that conflicts dramatically with a standards-driven approach to school improvement.

Martini-Jamaris (2014) conducted research on children aged 4-6 years in three stages of testing. The third stage was done by implementing mix method research and revealed that the children's multiple intelligences were improved. The improvement of the children's multiple intelligences assessed accurately. To decide the level of multiple intelligences improvement of the children, therefore, the assessment instruments equipped by measured standard used.

Based on the previous research, McClellan & Conti (2008) argues that the most preferred Multiple Intelligences are ones that allow the learner to be actively and emotionally involved in the learning; these are Bodily-Kinesthetic and Musical. In Tabalong Elementary School showed that all students are intelligence in art crafts/artistic artwork. For example: make handcraft and all students are intelligence in sport, and music course collaborating with expert. For bodily-kinesthetic, according to Gardner & Hatch (1989) argues that abilities to control one's body movements and to handle objects skillfully. For musical, Gardner & Hatch (1989) argues that abilities to produce and appreciate rhythm, pitch, and timbre; appreciation of the forms of musical expressiveness.

Author's Perspective

During the observation in both school, the researcher saw the schools keep try to teach students in classroom or outside based on MI Theory. Personally, the researcher believed about MI Theory. If we use interpretive paradigm then MI theory gives me opportunity to understand about the profile of human being in term of their ability in eight-abilities: linguistic, musical, logical-mathematics, spatial, interpersonal, intrapersonal, bodily-kinesthetic, and naturalistic.

The researcher strongly suggesting all of educator to use MI theory as a teaching strategy in the classroom. Teaching with a cognizance of MI can improve student achievement because students have different dominant learning styles and different learning engagements reach students on different cognitive levels. Designing learning engagements with MI in mind serves to reach the range of learners in the class as well as deepen student understanding.

The researcher thinking that learning about levels of multiple intelligences and how to use MI theory as a teaching strategy can help students as well as teachers to better understand each other in ways more than before. Like we tend to hold everything in, and not want to share our true thoughts because maybe we thinking that others may see us differently than who we really are, therefore, we need to know who we are, and what we are capable of being or becoming as well as knowing and understanding others, their feeling, and what student are capable of.

As a researcher, always open to ideas of how might better understand and diversify my teaching to reach my students on the classroom. This idea of multiple intelligences recognizes that students vary in way student are able to understand concepts simply validates the importance of finding many ways to present and allowing students many ways to show their understanding. The researcher also believe that every student has his or her way of process information in terms of how student learn and how student retain the knowledge. Majority of students learn and understand a particular concepts through traditional lecture. Students learn best when teacher adopts various instruction techniques. Some students learn best when student can reflect the things student have learned. Student learn by listening, brainstorming and sharing ideas with others. On the other hand, some students learn best through conceptual learning and logical thinking. Some students need to be actively involved in their own learning by practicing hands-on problem solving.

The implementation of MI theory in the classroom requires extra teacher guidance. Teachers, therefore, should think of all intelligences as equally important. This is in great contrast to traditional education systems which typically place a strong emphasis on the development and use of verbal and mathematical intelligences. Thus, the Theory of Multiple Intelligences implies that educators should recognize and teach to a broader range of talents and skills. I guess, the educators should make a structure the presentation of material in a style which engages most or all of the intelligences. This kind of presentation not only excites students about learning, but it also allows a teacher to reinforce the same material in a variety of ways. By activating a wide assortment of intelligences, teaching in this manner can facilitate a deeper understanding of the subject material.

In addition, sometimes we think that in order to implement a variety of teaching methods that developed lately required a sophisticated equipment to support the learning process. When in fact it is not. In the application of Multiple Intelligences in the teaching process can be done in several ways, including by using music to develop Musical Intelligence, study groups to develop Interpersonal Intelligence, art activities to develop the Visual-Spatial Intelligence, role play to develop Bodily-Kinesthetic Intelligence, field trip (field trips) to develop nature Intelligence, using multimedia, self-reflection for developing certain personal Intra Intelligence, and others. Out of long habit patterns of teaching is teaching that only emphasizes the lecture method is very difficult, because people tend not to get out of your comfort zone.

CONCLUSION

The role of multiple intelligences is to know that every student has way of process information in terms of how student learn and how student retain the knowledge. Majority of students learn and understand a particular concepts through traditional teach. Students learn best when teacher adopts various instruction techniques. Some students learn best when student can reflect the things student have learned. The student learn by listening, reading, writing, dancing, brainstorming, nature walk and sharing ideas with others. On the other hand, some students learn best through conceptual learning and logical thinking. Khoiriyah & Suprpto (2021) argues



that critical thinking is reflective thinking in making decisions and problems analyzing situations, discussing problems, and thinking. Some students need to be actively involved in their own learning by practicing hands-on problem solving.

Pasaribu & Suprpto (2020) argues that every child has their own experience, an expectation in future or their motivation and students have limited time to learn, and they have to focus on their learning. Every students has strengths and challenges in abilities. No two people are the same. As a result, it is not fair to assume every student will learn best with the same instructional strategy. Each student has unique multiple intelligences and the different ways to learn. In other words, not every student learns best from a single teaching approach. As a teacher, I must constantly be aware of the learning styles of my students in order to incorporate instructional strategies that will enhance their learning potential.

Both of schools, Tongmen Elementary School and Tabalong Elementary School have implemented and integrated the theories of MI in their teaching learning process. Student apply MI theory based on school background and culture. The principals has completed students to be independent, how student will live in the community, school, knowing their own culture, learned directly in nature, how student control the weather, humidity, temperature, and how later when student study it further in the level. In my opinion, a lot of things that can be imitated and adapted to the development of schools in Indonesia. In addition, it takes careful planning curriculum in applying MI in the classroom and outside the classroom, as was done by both schools.

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Author (s):

* Roy Martin Simamora (Corresponding Author)

Department of Performing Art Education, Faculty of Performing Art,
Indonesia Institute of the Art, Yogyakarta, Indonesia

Jl. Parangtritis No. KM. 6,5, Glondong, Panggungharjo, Kec. Sewon, Bantul, Daerah Istimewa Yogyakarta, 55188

Email: simamoramartin@gmail.com, roy.simamora@isi.ac.id

