The High School English Teacher's Experience in Actualizing Howard Gardner's Multiple Intelligence Theory in Teaching

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Abstract

This research aimed to find out the strategy used by the English teacher in actualizing multiple intelligence in teaching and the ways of the English teacher uses the strategy in actualizing multiple intelligence in teaching. This research applied the descriptive qualitative method. The data was collected from interviews using Zoom meetings and documentation of the English teacher's lesson plans. The data was taken from the teacher at Bosowa School Makassar. The result of this research showed that the English teacher at Bosowa School Makassar applied almost all of the multiple intelligence in his teaching strategies, excluding musical intelligence. These strategies are (1) linguistic intelligence; regulation to speak English, debate, and write a personal letter, (2) logical-mathematical intelligence; English riddle games, (3) spatial intelligence; caption material and hot seating game, (4) bodily-kinesthetic intelligence; treasure hunting game, (5) interpersonal intelligence; make dialog, (6) intrapersonal intelligence; daily journal, and (7) naturalist intelligence; field trip. The English teacher distinguished the way he used strategy in actualizing multiple intelligence to encourage and motivate students to enhance their skills in learning. It can be concluded that using various strategies in actualizing multiple intelligence in teaching can encourage and motivate students to enhance their skills in learning.

Keywords: Multiple intelligence, teaching strategies.

1. Introduction

The theory of multiple intelligence, introduced by Howard Gardner, is a breath of fresh air in the field of education, which is still dominated by the use of the standard Intelligence Quotient (IQ) to measure students' intelligence. Gardner claims that intelligence is no longer interpreted solely in terms of IQ, as it has been in the past. However, intelligence refers to the ability to solve problems and create something useful (Santrock, 2014). Gardner compiled a list of eight bits of intelligence such as linguistic intelligence, logical-mathematical intelligence, spatial intelligence, musical intelligence, bodily-kinesthetic intelligence, interpersonal

intelligence, intrapersonal intelligence, and naturalist intelligence (Amstrong, 2009).

The development of each student's intelligence is largely influenced by the teacher. Teachers are expected to assume that students who are intelligent and achievers are not academically intelligent because each individual is born with different types of intelligence. Aside from academic ability, students have a variety of great potential (Rofiah, 2016). Teachers, as a result, are one of the factors that aid in the development of this intelligence.

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According to Bredekamp (2011), competent teachers understand students' development and know how to create appropriate strategies for their developmental levels. Using good strategies can help students to evolve their intelligence. Santrock (2014) states effective teachers have a strong grasp of their subject matter as well as a strong foundation in classroom management. They understand how to use strategies in teaching that are supported by goal-setting, lesson planning, and classroom management.

Previous researchers employed research using case studies and literature review methods. Following that, they investigated kindergarten, elementary, and junior high school levels. Then, Islamic religion and mathematics were the subjects researched. As a result, the researchers conducted extensive research about the strategies used by the English teacher in actualizing multiple intelligence theory in The qualitative method teaching. descriptive approach were used in this research to get detailed information about the strategies used by an English teacher to actualize multiple intelligence in teaching.

2. Literature Review

2. 1. The Definition of Multiple Intelligence

Multiple intelligence is a theory of intelligence proposed by Dr. Howard Gardner, a Harvard University psychologist, in 1983. Gardner did not identify intelligence simply based on high logical-mathematical intelligence and IQ, but rather based on eight bits of intelligence. By classifying human skills into the following eight major categories of intelligence, Gardner provides a way to map the diverse diversity of human capacities. Examples of intelligence linguistic intelligence, logicalinclude mathematical intelligence, spatial intelligence, intelligence, bodily-kinesthetic intelligence, intrapersonal intelligence, and naturalist intelligence (Amstrong, 2009). The importance of Gardner's theory of multiple intelligence is to appreciate each person's uniqueness, the various ways of learning, embodying several models to assess them, and nearly limitless ways to actualize oneself in this world in a particular field that is finally recognized.

2. 2. Kinds of Multiple Intelligence

According to Fleetham (2006), multiple intelligence is a skill and talent that students have to solve various problems in learning. Gardener defines intelligence as a collection of abilities or skills that can be grown and developed.

a. Linguistic Intelligence

Linguistic intelligence according to Gardner (1999), includes the capacity to acquire new languages, be sensitive to spoken and written language, and be able to utilize language to accomplish particular objectives. Thus, linguistic intelligence is the ability to effectively use and process words, both orally and in writing. According to Rofiah (2016), people in linguistics spend their time reading, writing (poems, short stories, novels, diaries, etc), playing scrabble, filling in crossword puzzles, preferring to hear verbally (auditory), remembering the words easily, and finding language irregularities in other people's writing or words.

b. Spatial Intelligence

Siswantari and Maretha (2020) defined spatial intelligence as sensitivity to lines, colors, forms, spaces, balance, the shadows of harmony, patterns, and connections between these aspects. The capacity to see, communicate concepts spatially, accurately orient are further considerations. Rofiah (2016) argued that people with this intelligence have active imaginations, have no trouble reading maps, prefer pictures to written words, are color sensitive, enjoy photography and videography, proficient at visualizing an object from various angles, and enjoy simplifying complex ideas into images.

c. Logical-Mathematical Intelligence According to Gardner (1999), logicalmathematical intelligence entails the ability to analyze problems logically, perform mathematical operations, and investigate

issues scientifically. People with this intelligence, according to Rofiah (2016), demonstrate competence in physics and mathematics. They also have strong analytical abilities, think frequently, and are always on the lookout for answers to various questions.

d. Kinesthetic Intelligence

According to Gardner (1999), kinesthetic intelligence involves using one's entire body to create things. This intelligence is associated with movement, control, balance, coordination, and dexterity of body parts.

e. Musical Intelligence

An indication of musical intelligence is the ability to play write, and understand musical patterns (Gardner, 1999). Individuals of you who enjoy music and are talented musicians fall under the category of those with musical intelligence.

f. Interpersonal Intelligence

Gardner (1999) stated that interpersonal intelligence refers to a person's capacity to collaborate well with others and to understand the intentions, motives, and desires of others. People with this intelligence have strong social skills, can quickly connect and adapt to new environments, can position themselves, and prefer group activities (Rofiah, 2016).

g. Intrapersonal Intelligence

Gardner (1999) mentioned that intrapersonal intelligence is the ability to understand oneself and to have an effective working model of oneself that includes one's desires, fears, and capacity in regulating one's own life.

Rofiah (2016) stated that people with this intelligence understand themselves, their life goals, their goals to achieve, and their strengths and weaknesses. Furthermore, people with this intelligence will always reflect on themselves and draw lessons from various events in their lives. This is the type of intelligence that everyone should strive for.

h. Naturalist Intelligence

Gardner (1999) claimed that natural intelligence refers to the capacity to show competency in the identification and

categorization of various species of flora and fauna. Flora enthusiasts, can make a garden or collect various types of plants (Rofiah, 2016). Besides, trying to keep a specific animal will help fauna enthusiasts enhance their intelligence.

2. 3. Strategies for Actualizing Multiple Intelligence

There are several strategies for actualizing multiple intelligence according to Manichander (2016), such as:

a. Linguistic Intelligence

The strategies for actualizing multiple intelligence using linguistic intelligence are using vocabulary terms to complete crossword puzzles, participating in games like Boggle, scrabble, writing poems for a class poetry collection, and taking part in discussions.

b. Spatial Intelligence

The strategies for spatial intelligence are taking photographs for assignments and classroom newsletters, using idea mapping, mind mapping, and clustering when taking notes, studying geographic areas mentioned in class using maps, or using drawing computer software to illustrate poems.

c. Logical-Mathematical Intelligence

The strategies for logical-mathematical intelligence are playing math games, using the tenses formula to create sentences, or discussing analogy paragraph

d. Kinesthetic Intelligence

Participating in skits, role-playing, playing Simon Says and Twister-style games, and using charades to act out characters from a book, vocabulary words, animals, or other subject-area material are some of the strategies to enhance kinesthetic intelligence.

e. Musical Intelligence

Writing songs and music regarding subjectmatter issues, setting creative poetry to music and reading it to the class, and Playing music while doing the fill-in-theblanks exercise are some of the strategies to enhance musical intelligence.

f. Intrapersonal Intelligence

The strategies for actualizing multiple intelligence using intrapersonal intelligence are writing reflective papers or essays, writing a literary autobiography, writing goals for the future and planning ways to achieve them, or keeping journals or logs throughout the year.

g. Interpersonal Intelligence

The strategies for interpersonal intelligence include working in cooperative groups to develop and finish tasks, working in pairs, or speaking with experts on subject-specific subjects.

h. Naturalist Intelligence

The strategies for naturalist intelligence are observing the natural world, organizing or taking part in park/playground clean-ups, recycling drives, and beautification initiatives, or looking into animal habitats are some of the techniques.

3. Research Methodology

In this research, the researchers applied a descriptive qualitative method. This method is used to gather factual data about the strategies used by an English teacher in actualizing multiple intelligence in teaching year 11 students. The subject of this study was an English teacher from SMA Bosowa Makassar. The subject was chosen using the criterion sampling method. The purpose of this method is to find a participant who meets a predefined criterion (Mills and Gay, 2016).

This research used interviews and documentation as instruments. The interview was conducted online by using a Zoom meeting. The researchers used semi-structured interviews. This is a type of interview that is

more independent than structured interviews to find problems and also ask respondents' opinions and ideas. Then, the researchers deepened the questions one by one to extract additional information (Galletta, Consequently, answers offered full information and covered the variable. A semistructured interview with an English teacher had been carried out to collect data about the strategies used in teaching. Then, documentation covered the lesson plan, syllabus, school brochure, teaching process, and interview process. After collecting data, the result of the interview was processed quantitatively. The researchers used data analysis according to Miles and Huberman (1992). There are four stages of data analysis: data reduction, data display, conclusion drawing, and verification.

4. Findings

The findings of this research are to identify the answer to the research questions which are: (1) The strategies used by the English teacher in actualizing multiple intelligence in teaching, and (2) The ways the English teacher uses strategy in actualizing multiple intelligence in teaching. These are broadly described as follows:

4. 1. The Strategies for Actualizing Multiple Intelligence

On Tuesday, 22nd February 2022, the interview was conducted online through a Zoom meeting. Based on the result of the interview, it was found that the English teacher at Bosowa School Makassar used several strategies in actualizing Multiple Intelligence in teaching the year 11 students in the following table:

Table 1. Types and Strategies of Multiple Intelligence Applied by the English Teacher

No.	Multiple Intelligence	The Strategies
1.	Linguistic intelligence	Setting the regulation to speak English
		• Debate
		Writing a personal letter
2.	Logical-mathematical	English riddle game
	intelligence	
3.	Spatial intelligence	Caption material
		Hot seating game

4.	Bodily-kinesthetic	Treasure hunting game
	intelligence	
5.	Interpersonal intelligence	Dialog
6.	Intrapersonal intelligence	Daily journal
7.	Naturalist intelligence	• Field trip

Table 1 shows that the English teacher at Bosowa School Makassar applied almost all of the multiple intelligence in his teaching strategies, excluding musical intelligence. These strategies are (1) Linguistic intelligence; regulation to speak English, debate, and writing a personal letter, (2) Logical-mathematical intelligence; English riddle games, (3) Spatial intelligence; caption material and hot seating game, (4) Bodily-kinesthetic intelligence; treasure hunting game, (5) Interpersonal intelligence; make dialog, (6) Intrapersonal intelligence; daily journal, and (7) Naturalist intelligence; field trip.

4. 2. The Ways of The English Teacher in Actualizing Multiple Intelligence in Teaching

a. Linguistic Intelligence

There were three strategies applied by the English teacher at Bosowa School Makassar in actualizing linguistics intelligence.

- 1) Regulation to Speak English
 - In this strategy, the students communicated in English fully to enhance their spoken language and linguistic intelligence.
- 2) Debating

Here are the following ways to conduct debate:

- The teacher introduced the debate regulation and its motion to the students
- The teacher assigned the pro and contra team
- The first speaker of each team should introduce their team member
- The speaker gave a brief opinion about the given motion
- 3) Writing a Personal Letter

Here are the ways in writing a personal letter:

- The students attached the purpose to write a letter.
- The students wrote to whom they need to write the letter itself.

b. Logical-Mathematical Intelligence

The way that the English teacher used to apply linguistic intelligence was by actualizing the English riddle game. Here are the following steps:

- The teacher gave an assignment that consists of a bunch of HOTS (Higher Order Thinking Skill) questions
- The students did reasoning and practiced their logical thinking
- The students acquired the logical intelligence

c. Spatial Intelligence

The following is a further way the English teacher actualized spatial intelligence.

1) Caption Material

Here are the steps to make a caption material:

- The students designed their picture
- The students gave captions or explain the picture
- The students handed the picture on to the English teacher
- 2) Hot Seating Game

These are the ways in playing the hot seating game:

- The English teacher divided the students into several groups or several teams. For example, each team consists of five students.
- Each team had one representative student come forward to sit in a hot seating seat.
- The rest of the team members gave the clue orally to the representative student to guess the picture on the screen.

• The representative student was ready to guess the picture.

d. Bodily-Kinesthetic Intelligence Above are some 24ways to make a dialogue mentioned by the English teacher:

- The students were divided into some groups.
- One student read the map and the rest of them helped to go somewhere to find the treasure.
- The team member read the instruction carefully to hunt for the treasure.
- They went to some places to visit based on the instruction.
- The last, the team member was directed to find something which was in line with the treasure-hunting game.

e. Interpersonal Intelligence

The students were assigned by the teacher to make a dialog by following the instructions as follows:

- The team member required two students
- Every team developed their own opinions on a given topic
- Every team presented their dialogue in front of the class

f. Intrapersonal Intelligence

At Bosowa School Makassar, every student was required to make a daily journal. Here are the steps for making a daily journal:

- The students wrote down their self-daily journals by using English
- Then, the students reported it to the teacher and academic consular

g. Naturalist Intelligence

Here are some ways to conduct a field trip stated by an English teacher at Bosowa School Makassar.

- The students went to the specific area whether on local, national, or international field trips
- The students acquired knowledge and experience
- The students described any information

• The students reported the assignment to the teacher

5. Discussions

5. 1. The Strategies for Actualizing Multiple Intelligence

The researchers examined the findings concerning the problem statements in this research. On Tuesday, February 22, 2022, the interview was conducted online using a Zoom meeting. Based on the result of the interview, it was found that the English teacher at Bosowa School Makassar used several strategies in actualizing Multiple Intelligence in teaching year 11. Almost all of the multiple intelligence in his teaching strategies were applied, excluding musical intelligence. Besides, it was found that the English teacher at Bosowa School Makassar used game strategies to cover some multiple intelligence, such as (1) Logical-mathematical intelligence; English riddle games, (2) Spatial intelligence; hot seating game, and (3) Bodily-kinaesthetic intelligence; treasure hunting game.

a. Linguistic Intelligence

To enhance this intelligence, the English teacher applied three strategies, these are regulation to speak English, debate, and writing a personal letter. The first strategy is giving regulations to speak English. This strategy will help students to enhance their speaking skill or linguistics skill. The second strategy is debate. It offers an excellent chance for students to improve their speaking skills. It also assists students to improve their linguistic intelligence. Through debate, students have been allowed to speak and share their critical views on the topic. The third strategy is writing a personal letter. This strategy engages students to effectively improve their writing skill. According to Robert (2003), a letter is a written communication from one person to another on a topic of concern.

b. Logical-Mathematical Intelligence

The English teacher applied an English riddle game to enhance students' logicalmathematical intelligence. It requires a higher-

level of critical thinking skills, helps those who play to arouse their self-confidence and decreases the anxiety from acquiring the language.

c. Spatial Intelligence

There were two strategies applied to enhance the students' spatial intelligence. The first strategy is caption material. It aims to describe an image or photograph so that it will be more engaging. Caption material strategy can help students to enhance their visual-spatial intelligence and writing skill. The second strategy is the hot seating game. It provides the students with chances to communicate in English, improve vocabulary or grammar, and get to know one another (Young, 2005).

d. Bodily kinesthetic intelligence

The strategy that was applied by the English teacher in actualizing this intelligence was a treasure-hunting game. This game aims to look for and to be the first group to find the treasure by following written instructions and solving word puzzles. It also assists students to enhance their kinaesthetic intelligence by entailing one's whole body and movement control to solve problems (Gardner, 1999).

e. Interpersonal intelligence

The English teacher applied dialog as a strategy to enhance students' interpersonal intelligence. The goal of dialogue is to engage all students in an active role and thus receive practice in speaking, listening, and acting. Besides, it also promotes social relationships (interpersonal) that help students to improve their interpersonal intelligence relates to a person's ability to comprehend the intentions, motivations, and desires of others and to collaborate effectively with others (Gardner, 1999).

f. Intrapersonal Intelligence

Writing a daily journal was a strategy conducted by the English teacher at Bosowa School Makassar to improve students' interpersonal intelligence. It offers students a great chance to develop their writing skills and

a good opportunity to express their ideas and emotions.

g. Naturalist Intelligence

The strategy used for naturalist intelligence was a field trip. Doing a field trip, it directly can enhance students' naturalist intelligence. They can demonstrate expertise in the recognition and classification of numerous species of flora and fauna (Gardner, 1999).

5. 2. The Ways of The English Teacher in Actualizing Multiple Intelligence in Teaching

Based on the results of interviews, the researchers found several ways applied by an English teacher in actualizing multiple intelligence for the year 11 students.

- a. Linguistic Intelligence
- 1) Regulation to Speak English
 There are three stages in teaching speaking according to Harmer (1987):
 - Introducing a new language
 - Giving an exercise and practicing to students.
 - Noticing the students' activity in speaking.

2) Debate

According to Cahyono (2011), the debate might be done in a form as follows:

- The students are divided into two groups.
- There are pro and contra groups.
- The teacher gives each group a chance to present their thoughts.
- The teacher may write each concept on a board.
- The teacher and the students decide once the debate is over.
- 3) Writing a Personal Letter
 - The students have to attach the purpose to write a letter.
 - The students write to whom they need to write the letter itself.

b. Logical-Mathematical Intelligence Here is the procedure to play a riddle game (Sadie, 2005).

- Dividing the class into two groups, one for questions and one for answers.
- Giving the first group the questions and the second group the responses.
- The student in the other group who has the answer is expected to read that response out loud and each student in the first group is supposed to read the question he has loudly.
- Assigning the students to pairs if the question and the response line up. Unless they do, until the correct response is discovered, keep going.

c. Spatial Intelligence

There are two strategies for actualizing spatial intelligence. Here are the following ways:

1) Caption Material

Burns (2011) mentions the procedure of caption material strategy. It includes five steps:

- Each student creates their picture.
- The students write a sentence caption for their picture.
- The students write a description of a picture.

2) Hot Seating Game

Here is the step to play a hot seating game (Shabrina, 2018):

- The teacher divides the class into four teams.
- The teacher arranges a hot seat with a screen behind it in front of the class.
- Every team has a representative student to seat in the hot seat.
- One team is called up at a time and one team member takes the hot seat while the other team members look at the screen.
- The teacher displays the image on the monitor for guessing.
- Each team member gives a hint concerning the supplied image by utilizing a synonym, antonym, definition, description, etc.
- The student in the hot seat pays attention to hints from friends.

d. Bodily Kinesthetic Intelligence

The steps that need to be carried out in playing a treasure-hunting game are as follows:

- Explaining the treasure hunt idea to students
- Dividing the class into groups of 3-6 people.
- Giving a box and markers to each group.
- Defining the concept of "profession" in detail.
- Describing how teachers have placed occupations throughout the classroom.
 Ten professions were to be found by each group.
- Gather each group and tell them they must give a presentation on the hunt box.

e. Interpersonal Intelligence

Here are the dialogue procedures (Richards, C. J., et al, 1992).

- Giving a presentation of short dialogues or several mini-dialogues to the students.
- Providing the question and answer based on the topic of the dialogue and the situation in the dialogue.
- Assigning the students written homework.

f. Intrapersonal Intelligence

Ruddell (2005) explores the element of four steps, such as:

- The teacher chooses his/her motivation for journal writing and how it relates to learning objectives.
- The teacher carefully considers his/her reasons and has them prepared to convey to students.
- The teacher determines and clearly defines the procedures and processes for journal writing on a daily, weekly, and semester-long basis.
- Formulating and compiling a set of expectations for student behavior.

g. Naturalist Intelligence

The procedure of a field trip stated by Kartawidjaja (1998) is:

- Planning for the field trip well.
- Organizing the transportation carefully
- The teacher must think the field trip will be very educational and closely related to the lessons being covered in class.
- The teacher ought to go to the object location and discuss it there.
- Asking the principal and the parents of the pupils for permission.
- The students now have more than enough information to develop a whole scene or story.

6. Conclusions

Based on the findings and discussions in the previous part, the researchers concluded: First, the English teacher at Bosowa School Makassar applied mostly multiple intelligence in teaching the year 11 students, excluding musical intelligence. These are (1) linguistic intelligence; regulation to speak English, debate, and write a personal letter, (2) logicalmathematical intelligence; English riddle spatial intelligence; caption games, (3) material and hot seating game, (4) bodily kinesthetic intelligence; treasure hunting game, (5) interpersonal intelligence; make dialog, (6) intrapersonal intelligence; daily journal, and (7) naturalist intelligence; field trip. Second, the English teacher varied his ways of actualizing strategies due to some reasons. First, he realized that every student is unique and different. Second, he wanted to engage and motivate his students to evolve their skills in learning. Moreover, applying multiple intelligence in English class, assisted students developing eight intelligences, all expanding their existing language knowledge, and discovering new content.

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