

## MULTIPLE INTELLIGENCES PROFILE OF EFL STUDENTS AT SMP MUHAMMADIYAH 15 SURABAYA

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### ABSTRACT

*This research analyzes the multiple intelligences in English Foreign Language (EFL), especially in 8A grade students. It identifies the multiple intelligences profile based on the frequency of multiple intelligence (MI) types, students' high and low scores. This research uses a descriptive quantitative design. The subject of this research was 8A grade students in SMP Muhammadiyah 15 Surabaya. The research instruments were the Multiple Intelligences questionnaire, IQ results, and documentation of English mid-test scores in the second semester. From analysis and discussion, it was found that this class's IQ score average is 86, and the most dominant intelligence type is musical. For five highest score students, there were four types of intelligence that they had. They were interpersonal, naturalist, logical-mathematical, and musical. Meanwhile, five low English achievers had four types of multiple intelligence: musical, interpersonal, naturalist, and visual-spatial. In conclusion, the class has diversity in multiple intelligence. Multiple Intelligence types cannot refer to a certain group, in this case, groups based on their English score, because some MI types can be found in the high and low English achiever groups.*

**Keywords:** *Intelligence Quotient (IQ), Multiple Intelligences, EFL Students*

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### 1. Introduction

Some studies by (Montero et al., 2014) (Thi et al., 2019) found that some factors influence achieving the English language, such as affective factors, social factors, and cognitive factors. Affective factors consist of attitude, self-esteem, motivation, and others. Social factors comprise cultural background and economic status. Meanwhile, cognitive factors contain language aptitude, learning style, and intelligence.

This research focuses on one element of cognitive factors, namely intelligence. Thi (2019, p. 4) states intelligence is the ability that minister thinking and reasoning. If a man can respond and solve life problems and challenges, so this person reaches a high level of intelligence. Intelligence itself can be in various forms, like IQ, EQ, and Multiple Intelligences. EQ and MI proposed after many facts found that IQ is not the only standard to measure someone's intelligence in living.

IQ test was created by Alfred Binet in early 1900. It consists of Stanford-Binet, the Weschsler range of test (WISC), and the British Ability Scales (Fox, 2005, p. 184). It only measures linguistic and logical-mathematical intelligence. Many people believe that the students who have high IQ; they get a high score in learning. However Brown (2000, p. 100) has a different view from what people believe so far. He considers that it just fits in formal context i.e. taking a standard test, so students push the limit of their learning memory to pass the exam He sees the relationship between intelligence and second language learning success is in terms of learning storage. Being able to memorize all things being studied is the key. He then gives an example of immigrants who have to "take" immersion once they arrived in their new neighborhood. No matter what the degrees of their IQ are, these immigrants pass the target language since they apply it daily life

After 80 years IQ test had been invented, Howard Gardner discovered a new theory of human intelligence, called Multiple Intelligences. It measures more specific ability which not only measured

linguistic and logical-mathematical intelligence. There are eight types of intelligences based on the Gardner theory. Linguistic, logical-mathematical, interpersonal, intrapersonal, bodily-kinesthetic, visual-spatial, musical, and naturalist. Based on Gardner's Theory, every human being may possess more than two different intelligences and their intelligences may develop to be better and best (Armstrong, 2009, pp. 6–12).

MI theory can be adapted by a teacher for teaching. To introduce MI theory to the class, Armstrong (2009, p. 48) suggests the idea of making career day or field trip to some companies. The purpose of holding these kinds of activities is to let them know that career or occupation needs different types of intelligences. The other activity is the teacher can do what Derakhashan (2015, p. 69) did, identifying student's multiple intelligences profiles. After knowing the students' MI profile then the teacher can create various teaching methods based on this data.

Relating to what has been explained in the previous paragraphs, it is interesting to analyze the following problems:

1. What is the dominant type of intelligence of eighth-grade students in English class at SMP Muhammadiyah 15 Surabaya?
2. What are the profiles of multiple intelligences and IQ of five high-score achievers in English class?
3. What are the profiles of multiple intelligences and IQ of five low-score achievers in English class?

## 2. Method of Research

It runs a descriptive quantitative method to analyze MI profile along with the IQ score and student's English achievement as a foreign language in SMP Muhammadiyah 15 Surabaya. The subject of the research was eight grade students in class A of the second semester in the academic year 2016-2017 at SMP Muhammadiyah 15 Surabaya. It took only one class which divided two groups which consist of five high-score highest and five low-score in English class. This research conducted on March 6<sup>th</sup> until Mei 30<sup>th</sup> 2017. The instruments of the research were Multiple Intelligences questionnaire, IQ result, and documentation of English mid-test scores in the second semesters.

The steps of the technique of the data collection were:

- a. Gathering the mid-test score data in English class
- b. Collecting the IQ result which held by Cahya Panca Grahita in the year 2015 before the researcher gives the Multiple Intelligences questionnaire.
- c. Giving Multiple Intelligence questionnaire which consists of 56 items to 33 participants in VIII A to find out the student's Multiple Intelligences Profile which adapted from some references, they are from Armstrong (2009, pp. 35–38), The Rogers Indicator of Multiple Intelligences (RIMI) Test, and Mary Ann Christison published in the MEXTESOL) by using Likert scales. According to Dornye (2003, p. 37) Likert scales contain some statement which related to special target then the respondents should mark the response option from 'agree' to 'disagree' and each response option has scored. For example, 'agree' has score 4, and 'disagree' has score 1. This research uses five responses option that consists of 'constantly'=5, 'often'=4, 'often enough'=3, 'sometimes'=2, and 'seldom'=1. To avoid misunderstanding the meaning of the questionnaire, the researcher translates it into Indonesian language. There are blueprints of the questionnaire.

**Table 1 Blueprint of Multiple Intelligences Questionnaire**

No	The Content of The Questionnaires	Questionnaire Number
1	Linguistics Intelligence	1,2,3,4,5,6,7
2	Naturalist Intelligence	8, 16,24,32,40,48,56
3	Musical Intelligence	9,10,18,26,34,42,50
4	Logical-Mathematical Intelligence	11,17,19,27,35,43,51
5	Visual-Spatial Intelligence	12,20,25,28,36,44,52
6	Bodily-Kinesthetic Intelligence	13,21,29,33,37,45,53

No	The Content of The Questionnaires	Questionnaire Number
7	Intrapersonal Intelligence	14,22,30,38,41,46,54
8	Interpersonal Intelligence	15,23,31,39,47,49,55

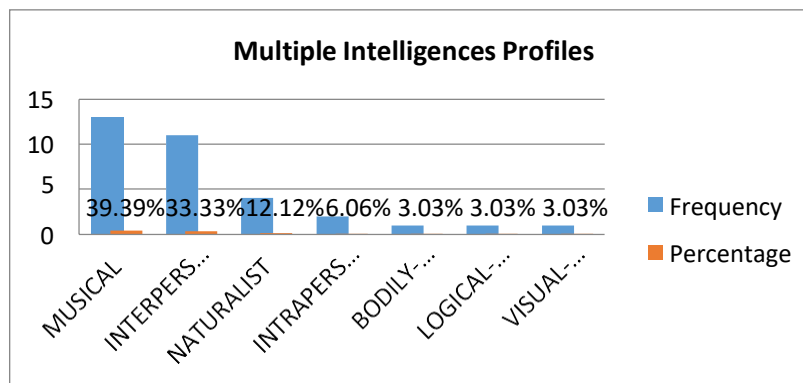
The steps of techniques in the data analysis were:

1. Classifying Multiple Intelligences based Multiple Intelligences questionnaire by using Gardner's theory.
2. Finding out the dominant type of intelligence
3. Analyzing five high-score achievers and their intelligences
4. Analyzing five low-score achievers and their intelligences
5. Making a conclusion and suggestion

### 3. Result

In this part, there are some findings that are connected with research questions. They are presented in figures and tables then described in paragraphs.

Figure 1. The multiple intelligences profile of eight grade students.



Based on the result above, the most dominant intelligence at second grade is musical intelligence with 39.39%, the second one is interpersonal intelligence with 33.33%, the third one is naturalist intelligence with 12.12%, the fourth one is intrapersonal intelligence with 6.06%, the fifth is bodily-kinesthetic with 3.03%, logical-mathematical intelligence with 3.03%, and the last one is visual-spatial intelligence with 3.03%.

Table 2. Multiple Intelligences Profile of High-Score Achievers in English Class

Student	Score	Type of Intelligences	IQ
Student 1	83	Interpersonal	91
Student 2	82	Naturalist	84
Student 3	80	Interpersonal	79
Student 4	80	Logical-mathematical	91
Student 5	78	Musical	85

Consecutively, the scores of English mid-test from five students are 83, 82, 80, 80, and 78. Based on the table above, the type of intelligences of students' high scores in English class are interpersonal (two students), naturalist, logical-mathematical, and the last is musical. Besides, the most dominant

type of intelligences of the five highest achievers is interpersonal.

Table 3 Multiple Intelligences Profile of Low-Score Achievers in English Class

Student	Score	Type of Intelligences	IQ
Student 1	20	Musical	83
Student 2	24	Interpersonal	88
Student 3	25	Naturalist	-
Student 4	26	Naturalist	81
Student 5	34	Visual-Spatial	84

In sequence, the scores of English mid-test from five students are 20, 24, 25, 26, and 34. Additionally, the types of their intelligences are musical, interpersonal, naturalist, naturalist, and visual-spatial. Based on the table above, the type of intelligences of students' low scores in English class are naturalist (two students), musical, interpersonal, and the last is visual-spatial. Furthermore, the predominant type of intelligences from this group is naturalist.

#### 4. Discussion

The students' IQ test scores were from Cahya Panca Grahita. They were tested in year 2015, these became as reference of analyzing the research findings. The levels of IQ based on Cahya Panca Grahita, are  $>170$  = "Genius",  $140-169$  = "Very Superior",  $120-139$  = "Superior",  $110-119$  = "Smart",  $90-109$  = "Normal",  $80-89$  = "Slow Learner",  $70-79$  = "Difficulty to Thinking",  $<70$  = "Very Low",  $<60$  = "Less Normal",  $<50$  = "Mental Retardation".

The levels of IQ of five high score students from first to the fifth student are 91 is normal, 84 is slow learner, 79 is the difficulty of thinking, 91 is normal, and 85 is slow learner. The levels of IQ of five low-score students from first to fifth student contain 83 is slow learner, 88 is slow learner, 81 is slow learner, and 84 is slow learner.

From these data, it can be said that the students who acquired high score in English test mostly have low IQ. Moreover, this class could be categorized as slow learner. These can be used as evidence that intelligence is not the main factor that affects in English learning. It is supported by Putri (2015) who researched with entitled the correlation between IQ and student achievement in learning English. Based on her research, there is no correlation between IQ score and student achievement in English class.

After knowing the students' IQ and their English scores in grade 8A, then this research continued to categorize the students' MI profile by using Gardner's Theory. Based on the multiple intelligences questionnaire result from 33 students in SMP Muhammadiyah 15 Surabaya, there are seven out of eight types of intelligences. They are logical-mathematical, visual-spatial, musical, bodily-kinesthetic, interpersonal, intrapersonal, and naturalist. The most dominant intelligence is musical intelligence. Even the dominant intelligence is musical, it still can be the way to improve their English language as Morgan and Forseca (2004, p. 126) explain that musical intelligence affects learning English language because it can make the student feel enjoy in learning English. Younas et al (2015, p. 5) add some insight to all types of MI have a contribution in developing language skill. They give an example from interpersonal intelligence. According to them, interpersonal intelligence can facilitate the student to improve their learning in the classroom. The characteristics of interpersonal intelligence are good communication in the group, and also develop their English ability by making communication with native speakers.

#### 5. Conclusion and Suggestion

Finding out Multiple Intelligence profiles of EFL students in grade 8 took a long process. Once the result got, it determined that this class was heterogeneous, seven amongst eight types of Multiple Intelligences found. Even though the average IQ level was 86, they still tried their best to perform in

English Class. These data would become a challenge for English teachers to teach effectively by using MI profiles in making lesson plan.

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