# MI THEORY IN EFL CLASSROOM ON NATURALISTIC INTELLIGENCE IN INDONESIA

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**Abstract**

This study aimed at investigating the implementation of Multiple Intelligences (MI) in EFL classroom for naturalistic intelligence. It was a qualitative descriptive research, conducted in Muhammadiyah Islamic Elementary School of Kartasura. The respondents of this study were the principal, 4 English teachers, and 31 students. Data were obtained through semi structured interview, observation, and questionnaires and analyzed qualitatively following the steps of data reduction, data display, and verification. The results revealed that students' placement was relied on the types of intelligence. The materials were taught based on students' learning styles through outdoor lessons, games and drawing pictures of nature and living things. Also, 90% of them performed positive response during the learning activities. As a conclusion, integrating MI in EFL encouraged students to actively follow the classroom instructions.

**Keywords**: EFL classroom, Multiple Intelligence, naturalistic intelligence

## INTRODUCTION

Teaching English as foreign language is more complex than teaching a native language to children. Beside there are four skills that must be achieved, it is not often used in daily communication. So, it should be taught continuously. In doing so, teachers also play important roles in the classroom practices. They accommodate students' interest and attract their attention during classroom activities. They are expected to design an friendly atmosphere and enjoyable activities in which students will be interested (Ahmad et al. 2014). An enjoyable learning can also be identified by the students' motivation and participation. Researches have been conducted regarding with creating an enjoyable learning in EFL classroom. It is possible to employ music and songs to promote students' engagement and personal attitudes (Nadera 2015). They will easily take a part of the learning activities. Hence, all strategies that teachers apply are attempted to foster the quality of education.

Intelligence is one of considerable factors to determine the language learning success (Maftoon & Sarem 2012). Teachers are concerned about what strategies they will apply to benefit their students. It is not merely applying a single method of teaching by treating all students the same way. Their interest, potential, behaviour, attitudes may vary. Multiple Intelligences theory views from different perspective that every child has their own characters. They have different learning styles, readiness, and cognitive levels, and learning motivation in nature (Demir, Kilinc & Dogan 2012). It implies that everyone has at least eight intelligence and they all reflect their way of learning and their understanding (Gardner 1985). The eight intelligences include bodily-kinesthetic, intrapersonal, interpersonal, logical-mathematical, linguistic, musical, spatial, and naturalist intelligences. They represent the ability that every human has and every ability could be enhanced through learning process with help and instruction (Gardner 1985). The followings are the characteristics of the eight intelligences:

- Linguistic intelligence: has ability to learn and use language to accomplish certain goals; has sensitivity to oral and written language (Gardner 1985); thinks in words; loves reading, writing, telling stories, and playing word games (Armstrong 2003).
- Logical-mathematical intelligence: has capabilities in analyzing problems, carrying out mathematical operations, and investigating issues scientifically; has ability to deal with logic and numbers (Gardner 1985); thinks by reasoning; has interests in experimenting, questioning, figuring out logical puzzles, calculating (Armstrong 2003).

- Visual-spatial intelligence: has ability to see and assess images; has ability ti do activities with their spatial judgement; visualizes with mind's eyes (Gardner 1985); thinks through images and pictures; and takes interests in drawing, doodling, designing, and visualizing (Armstrong 2003).
- Bodily-kinesthetic intelligence: has ability to use physical motions and movements to express emotion and ideas (Gardner 1985); thinks through somatic sensation; and takes interests in running, building, dancing, jumping, touching, and gesturing (Armstrong 2003).
- Musical intelligence: has ability to make connection between sounds, rhythms, tones, and music; has ability to appreciate, distinguish, and perform musical forms (Gardner 1985); thinks through melodies; and takes interest s in singing, humming, tapping feet and hands, and also listening (Armstrong 2003).
- Interpersonal intelligence: has ability to communicate with other people effectively in social and cultural settings; perceives peoples' feelings, emotions, and mood (Gardner 1985); and takes interests in leading, organizing, and relating (Armstrong 2003).
- Intrapersonal intelligence: has positive self-concept; has self-reflective capacity and self-knowledge (Gardner 1985); thinks in relation to their needs and goals; and takes interests in dreaming and planning (Armstrong 2003).
- Naturalistic intelligence: has ability to understand and interact with nature and natural surrounding (Gardner 1985); thinks through nature and natural forms; and takes interests in playing with pets, gardening, and investigating nature (Armstrong 2003).

Attempts to implement Multiple Intelligences Theory in the classroom have been taken into account. MI based homework can enrich students' attitudes and change the classroom into an enjoyable environment (Hanh & Tien 2017). Motivation and level of individual differences are very crucial in the classroom implications and effect to students English learning (Fayazi-Nasab & Ghafournia 2016; Madkour & Mohamed 2016). Regarding with students' motivation and interest, both play important roles on their achievement. Students with high motivation and interest have strong possibility of reaching higher achievement (Li & Pan 2009). Learning styles have correlation with emotional intelligence (Leasa et al. 2017) and conductive environment and

learning strategies are required to adjust the students' development. Learning preferences are influenced by students' characteristics. Hence, teachers or educational institution are supposed to assess the students' intelligences in order to highlight their potential of a particular field (Emmiyati et al. 2014).

Studies also have been conducted related to the application of Multiple Intelligences in the classroom including in Indonesia, for instance (Derakhshan & Faribi 2015; Emmiyati et al. 2014; Leasa et al. 2017). These studies investigate the students' intelligence profiles, emotional intelligence correlated with learning styles. Nowadays, Multiple Intelligences Theory has been a phenomenon in education including in English Language Teaching. Some schools have integrated this theory in their curriculum. In the classroom, teachers can promote students' awareness of different levels of language skills including phonological, lexical, syntactical, semantic, and pragmatic levels by integrating Multiple Intelligences Theory in the learning process. For instance, integrating musical and linguistic intelligences could be applied as multiple intelligence activities using short stories and poetry to promote phonological awareness. Different intelligences have different activities to be applied. Linguistic and social competences can be promoted by carrying out cooperative tasks for students with interpersonal and intrapersonal intelligences (Madkour & Mohamed 2016). Using multiple intelligences, studying grammar, listening, speaking, reading, and writing can be done as integrated components (Madkour & Mohamed 2016).

One of the intelligence proposed by Gardner is naturalistic. Students with this type of intelligence have ability to identify natural phenomena (Gardner 1985). In the classroom practices, naturalistic activities can be carried out through some tasks dealing with nature, including in English subject. Teacher can elaborate the materials into activities which are correlated with characters of naturalistic intelligence. Through the activities, students can learn and achieve the language skills as well. It is an interesting issue where students not only know their surroundings but they also learn through their environment.

However, there are limited studies which conduct an investigation to give a clear description of learning activities integrated with Multiple Intelligences Theory for naturalistic intelligence. This research provides a deep information about the implementation of Multiple Intelligences in English as Foreign Language classroom practices in Muhammadiyah Islamic Elementary School of Kartasura, Indonesia. It has implemented Multiple

Intelligences Theory in all the subjects including English subject for about ten years by this year. Therefore, this research was conducted to answer the question: How is Multiple Intelligences theory implemented in EFL classroom for naturalistic intelligence?

The purpose of this research is to investigate the implementation of Multiple Intelligence Theory in EFL classroom for naturalistic intelligence. Furthermore, other researchers or educators could take many benefits as sources of their practices.

## RESEARCH METHOD

### Design

This research employed qualitative descriptive design. It was conducted in English classroom in Muhammadiyah Islamic Elementary School of Kartasura, Indonesia in the academic year of 2017/2018. It has implemented the theory of Multiple Intelligence in the curriculum for about ten years. The results were discussed in qualitative ways.

### Technique of Data collection

Data were collected through observation, semi-structured interview, and questionnaires.

### Respondents

The principal, 4 English teachers, and 31 students were assigned as the respondents.

### Instruments

This research investigated the implementation of Multiple Intelligences Theory. Interview guidelines, observation guidelines, and questionnaires were used in collecting the data. The questions on the interview were asking about classroom practices, students' intelligence survey, and teachers' intelligence. The questionnaires provided the same questions and were distributed to the principal and English teachers. In addition, observation guidelines were also employed to gather the data regarding the teaching strategies.

Data of students' motivation was also gathered. Questionnaires were distributed to the students, related to their interests and feelings about joining the English class. An observation guideline was also used to observe their response and interactions with teacher.

### Data analysis

The data were analyzed qualitatively. Actually there were three steps in analyzing the data, including data reduction, data display, and verification (Miles & Huberman 1994). However, data reduction was skipped since all the data were valuable to support the discussion (Miles & Huberman 1992).

## RESULT AND DISCUSSION

This research was discussing about the implementation of Multiple Intelligence Theory in the learning process for naturalistic intelligence. The result and discussion were divided into three parts covering students' profiles, teaching strategies, and students' response on the learning process.

### Students' profiles

The result of the interview with the principal revealed that the selected students were placed based on their type of intelligence. There were three placement classes considered from the correlation of the eight intelligences. They were naturalistic, kinesthetic, and linguistic class. Before they began the school year, students conducted a kind of assessment. It employed Multiple Intelligence Research (MIR) proposed by (Chatib 2012), an expert of Multiple Intelligence Practices. It was not a kind of test but it finally revealed the students' interests, learning style and type of intelligences. It was administered by the teachers. They assessed the students according to the guidelines and using the MIR instruments. The assessment was conducted through interview and observation. Later, all of the intelligences of the students were revealed. They were placed into those three parallel classes. At the third grade, there were 31 students possessing naturalistic intelligence. They actually possessed all of the intelligences but the strongest one was naturalistic. The other intelligences possessed were moderate or even weak. The intelligence was taken into account to decide the learning strategies because this type had its own characteristics in learning. They loved everything about nature, prefer to learn with nature and through their environmental setting. Their types of intelligence had possibility to change in a period of time. It depended on their surrounding which influenced the change. Therefore, every three years students took an intelligence survey to see the change. If it changed significantly, the student would be placed in the different class.

The result questionnaire spread to the students revealed profiles of students' interests. The detail information was presented in the below table.

Table 1. Students' interests

| No | Statements | Answers | |
|---|---|---|---|
| | | Yes | No |
| 1 | I love to learn through nature. | 31 | 0 |
| 2 | I love to learn animals and plants. | 31 | 0 |
| 3 | I love to climb trees. | 18 | 13 |
| 4 | I love to take care of animals. | 28 | 3 |
| 5 | I love to take care of plants | 31 | 0 |
| 6 | I love to read about nature | 31 | 0 |
| 7 | I love to watch movie channels about animals and plants. | 31 | 0 |
| 8 | I like to tell anyone about my pet. | 29 | 2 |
| 9 | I love to see a picture of nature. | 31 | 0 |
| 10 | I prefer to learn outside the classroom. | 27 | 4 |
| 11 | I love to tell anyone about nature. | 31 | 0 |
| 12 | I like to do games about nature. | 31 | 0 |
| 13 | I love to care about environment. | 31 | 0 |

The statements provided in the questionnaire were formulated from the characteristics of naturalistic intelligence. Based on the Table 1, almost all students took their interests in activities related to nature and environment such as reading about nature, playing with nature, watching movie about living things, and seeing pictures of nature.

**Teaching strategies**

The result of observation and interview with the principal and English teachers revealed that every classes had their own characters depending on the type students' intelligence. The teachers implemented Multiple Intelligence in the learning process. Some activities stated in Table 1 were applied in the classroom. English was taught through nature and environmental settings. Teacher asked the students to do outdoor activities to know physical movements, go to the yard to take notes about physical activities and plants, or enrich their vocabulary by drawing the plants and animals. Teacher also brought plants or pictures about nature and living things in the classroom to deliver materials. The result of observation also revealed that students often added some drawings on their works such as flowers, butterflies, the sun, rainbow, cloud, and trees. It showed us that their characters and style also appeared through their activities. In reading, they also paid more attention to the texts which told about nature. Not only reading, other language skills were covered in the classroom activities. Parts of speech, for instance nouns, verbs, adjectives, adverbs, pronouns, and prepositions, were taught through videos, pictures, and games with terms of nature and living things.

Teacher also played important roles in the implementation of Multiple Intelligence. They should integrate the theory in the learning process. It is obvious for them to know the characteristics and students' learning style. However, they sometimes got some problem where the teacher(s) had different intelligence from the students. It sometimes effected the students' learning style as well. It ocurred in this class where teachers found some students different. They resambled another linguistic intelligence. They were possibly influenced by teachers' perofiles that perfomed linguistic styles in for long period of time. Though they had different type of intelligence, they should apply the strategies based on students' personal traits.

**Students' response on the learning process**

The results of the questionnaire revealed that 28 students got motivated and showed positive response during the learning process. It was indicated from their enthusiasm and interest during the learning process. They looked curious and really motivated to finish their work as soon as possible. While 3 others were not highly motivated to join the class. They were not eager to get their works done. The data was presented in the following figure.
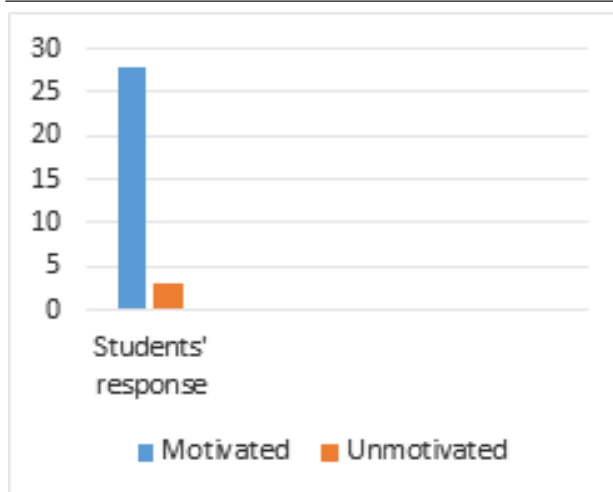
Figure 1. Students' response

Most of the students enthusiastically joined the classroom activities because they got interested in the approach. Teacher used the strategies and methods in delivering materials which were considered to be appropriate with their personal traits.

## CONCLUSION AND SUGGESTION

This research was attempted to find out the implementation of Multiple Intelligence in the English learning process. Principal, 4 English teachers, and 31 students were assigned as the respondents. The results revealed that students were assessed to get the profiles of multiple intelligences. This research was focused on the naturalistic intelligence. Students with this intelligence thought through nature and environmental setting, love activities and things about nature and living things. According to the characteristics, the teachers applied strategies, methods, and correlated the materials with nature for instance outdoor lessons, games about nature, and using pictures of nature as media. All of these activities were conducted to improve the language skills and competence. Since the classroom activities were depended on the students' personal traits, they felt comfortable and looked enthusiastic during the learning process.

The results showed how Multiple Intelligences Theory were integrated in the learning process. It was possible to make the classroom more enjoyable especially in naturalistic class. 90% of the students actively follow the classroom instructions. It indicated that they performed positive response to the learning process. Further research was needed to prove the effectiveness of using the strategies and methods on English academic achievement in all of language skills. Further research was also needed to find out internal and external factors which could possibly change individual's type of intelligence.

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