

Exploring Students' EFL Learning through Gardner's Multiple Intelligences Theory

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ABSTRACT

The study was conducted in 2018 at senior high school level. The aimed of this study was to observe EFL teacher technique to explore students' linguistic intelligence in learning English as foreign language inside the classroom.

There was one EFL teacher became the subject of this study which was taken by means of purposive sampling. Mix method was used as the method of this study. The data were obtained through several instruments that consisted of questionnaire, observation, and semi structure interview. The Questionnaire was given to twelve grade students or second year in order to see the EFL students' various learning style based on Garner theory. Second, observation was conducted inside the class in order to see the EFL teachers' instruction or technique for students' activities to explore their linguistic intelligence during teaching process. And semi-structure interview was used to get students' perception toward their EFL teacher's technique during leaning and teaching process.

The finding of questionnaire revealed that EFL students' various learning style such as linguistic intelligence (40.91%), logical intelligence (0%), spatial intelligence (22.73%), body-kinesthetic intelligence (9.09%), musical intelligence (4.55%), interpersonal intelligence (9.09%), intrapersonal intelligence (9.09%), and naturalist intelligence (4.55%). The result of observation EFL teacher was ineffective teaching technique within exploring students' linguistic intelligence. And the result of the interview indicated that all students were dissatisfied with EFL teacher's technique in teaching English for EFL class time.

Keywords: Multiple Intelligence, Learning Style, ESL

INTRODUCTION

When talking about intelligence, the first picture that comes to the mind is that it refers to brain, Short Term Memory and Long Term Memory (STM-LTM), IQ (intelligence quotient) test and many more. Intelligence, which is known as a key factor in learning and academic outcomes, was first considered as a single entity with which one is born and that cannot be changed. This view about intelligence can be seen, for example, in IQ (Intelligence Quotient) theory in which intelligence determines "people's ability to learn, to achieve academically and therefore to take on leading roles in

society”(Muijs & Reynolds, 2010). when Howard Gardner (1983) introduced MI Theory in his book *Frames of Mind*. Gardner proposed that each person has different capabilities and tendencies in different areas and that each individual has several types of intelligences that are intermingled in different ways (Gardner, 1983). According to MacLeod (2002), the model proposed by Gardner pluralized the concept of intelligence because it considered several different kinds of intelligence.

Gardner’s innovative proposal had strong effects on various fields including education and in particular language learning. Today, teachers are expected to provide MI-inspired instruction (Gunst, 2004; Koksal & Yel, 2007; Ozdemir, Guneyesu, & Tekkaya, 2006), which means a type of instruction that taps all intelligence types. On the contrary, what teachers bring to the teaching-learning process is an important question to be explored, and English as a Foreign Language (EFL) teachers are themselves human beings who may be more developed in some of the intelligences and less developed in others. Moreover, the fact that they are stronger in one specific intelligence may lead them to use exercises and activities that tap that specific intelligence because of their strength in that intelligence.

For a teacher to stimulate intellectual competences in her or his students, it is significant to provide activities that encompass all types of intelligence. This is alike what Carlin, Salazar, & Cortes (2013) view teacher’s lesson plan significant thing to include a variety of activities that are related to various types of intelligences. Therefore, it is important to reveal to what extent a teacher’s own preferences, for example, her or his dominant type of intelligence is interfering with the fact that they should use MI-inspired instruction. On the contrary, EFL teachers’ degree of awareness of the MI theory should also be identified. If the teacher considers these types of intelligence and arranges classroom activities and daily plans according to them, some problems about learning such as inattentiveness, unwanted behaviors, alienation of a lesson, and perception of lack of success may disappear (Yenice & Aktamis, 2010).

Concerning on the issue above, the researcher is interested to conduct the research about the EFL teacher’s technique such instruction of class students activities to explore students’ intelligence in enhancing students English proficiency.

Concerning on the issue above, the researcher is interested investigate the differences among EFL instructors of various intelligence types in terms of the types of the activities/techniques that they implement in the classes; that is, it was to be explored whether or not teachers selected the activities that they were better in. Therefore, this study aimed at discovering one of the possible causes that may prevent teachers from providing MI-inspired instruction in their language classes. What is considered here is the techniques used by teachers which are defined by Brown (2000) as any of wide exercises, activities, or tasks used in the EFL classroom. In addition, it would also engage researcher to know the EFL students’ dominant intelligence.

MULTIPLE INTELLIGENCE

Gardner's research shows that intelligence is not only a concept, it is a practice definition about how to develop and encourage human potentials. Moreover, Each persons has developed other intelligences more strongly, leading to different kinds of cleverness. With his theory of multiple intelligences, Gardner aims to emphasise that teachers must assess their student's learning process in a way that provides a correct overview of their strong and weak suits. Gardner (1983) proposes a new perspective of intelligence in his book "Frames of mind". He proposes the Multiple Intelligences (MI) theory, arguing that the intelligence is not only measured by the traditional IQ test. Gardner argues that MI differ from a traditional concept. In fact, Gardner defines intelligence as a "bio psychological" potential to process information that can be activated in a cultural setting to solve problems or create products taking into account the cultural and social facts".

Although, Garner's theory got criticism from both psychology and educator because of his intelligence definition and lack of supporting empirical research. But his theory of multiple intelligence enjoys considerable popularity with education world. Many teachers utilize multiple intelligences in their teaching philosophies and work to integrate Gardner's theory into the classroom. The eight kind of intelligences Gardner claims that each individual has:

1. ***Linguistic intelligence***

Gardner defines linguistic intelligence as "The capacity and ability to properly use the words, either orally or in writing. Also, it refers to the efficiency to handle the syntax or meaning of language". Students with verbal linguistic intelligence, use the language correctly, they like to learn new words, play with language, crosswords. They are fascinated by stories and are able to narrate events. Moreover, they have a passion for the meaning of the words, lyrics of songs. Students with verbal linguistic intelligence dominantly can tell stories for instance, to start conversations or discussions and they are well expressed both orally and in writing, also they like reading books.

2. ***Logical mathematical intelligence.***

According to Gartner, this intelligence is based on the sensitivity and capacity to discern logical or numerical issues. This intelligence is comprised of classification and categorization of logical patterns, the ability to infer explicit information, numerical and logical association and the calculation and hypothesis testing. This intelligence is surrounded by the world of objects materials. This is what enables us to develop the scientific method, reasoning, and logic. Students with logical mathematical intelligence really enjoy math, love to discover how things work, create personal strategies to solve problems, they are able to breakdown events into various stages, and enjoy the computer. Students with this type of intelligence have sharper analytical skills, and find it easier to synthesize, deduct and compare information.

3. ***Bodily-kinesthetic intelligence***

This is the ability humans have to perform physical movements such as dance, theater, aerobics, athletics, etc. and is related to both working and developing aspects such as flexibility, balance, speed, coordination, strength and perception. Furthermore, bodily-kinesthetic intelligence is the ability to use the body expressively in different ways. Students with spatial intelligence can imagine how things are built. They have a three-dimensional and creative imagination and a good understanding of the physical perspective. They love to assemble and disassemble, organize objects, interpret maps, and distribute elements in space.

4. ***Spatial intelligence***

Spatial intelligence is the capacity to recognize and use the patterns of wide space and more limited areas (Gardner, 1999). Art activities, reading maps, charts and diagrams, thinking in images and pictures are the favorites of the students who have spatial intelligence. According to Armstrong (1994) these students have highly developed senses for color, line, shape, form, space. They also have the ability to visualize ideas. Students with spatial intelligence, their imagination can get an idea of how things are created and are very good at contextualizing themselves in a limited space. They are also very aware of the space around them and are very good at recognizing images.

5. ***Musical intelligence***

Musical intelligence is the skill to do and appreciate the performances, and composition of musical patterns. It involves the capacity to recognize and compose music, understand tones, and rhythms. According to Howard Gardner (1999) musical intelligence is parallel to linguistic intelligence. Students with musical intelligence enjoy music and this gives them an advantage in reading and writing better because similar sounds and speech are present in linguistic intelligence.

These students are able to understand pitch, rhythm and timbre. They also can create music and enjoy singing songs. The structure of music and tonal sounds are familiar to them. The musical part of their brains can be motivated by clapping hands, snapping fingers, chanting words or moving rhythmically.

6. ***Interpersonal intelligence***

Interpersonal intelligence is the capacity to understand the intentions, motivations and desires of the others. It allows people to work effectively with others and for that reason cooperative learning is effective. Students with this interpersonal intelligence prefer to be with people. They are friendly and can get on well with others so they can easily take part in social activities. Cooperative and collaborative approaches are best for their learning. These learners are generally assertive, express their feelings make their ideas clear, and can empathize easily with others in the group.

7. *Intrapersonal intelligence.*

Intrapersonal intelligence is based on the capacity to reflect introspectively and is the ability to find meaning in the actions of the individual. Students with intrapersonal intelligence establish and maintain good social relationships, are usually friendly and have a good sense of humor. They often perceive the feelings, thoughts, motivations, behaviors and lifestyles of others through listening, engaging with others' problems and are interested in helping. They assume different roles within the group and are open to understanding other points of view. Additionally, they use verbal and nonverbal communication effectively.

8. *Naturalist intelligence.*

Naturalist intelligence is the ability to be respectful with the environment. According to Gardner (1999), this intelligence is associated with students who are in harmony with nature. It is the ability to distinguish, categorize and analyze elements of the environment such as urban and rural objects, animals, and plants. It is present in students who describe the reality around them and they are generally sensitive to environmental problems. This type of intelligence is embodied primarily by people who like to camp, scuba dive and participate in outdoor activities in natural settings. Many go on to become geologists, agronomists, and biologists.

RESEARCH METHOD

The objective of this research is observing various EFL teacher' technique used through proper students' dominant intelligence during learning-teaching process in the classroom. This research also conducted in the senior high school level, Madrasah Aliya Ma'arif Banyorang, South Selawesi, Bantaeng regency. There were 39 numbers of students (17 first grader and 22 second grader). this study used mix method design and the data collecting obtained from questionnaire, observation, and interview. This research used two kinds of technique of data analysis quantitative data was analyzed by SPSS and the qualitative data was analyzed using Miles and Huberman.

FINDING & DISCUSSION

1. The Variety of EFL Students' Dominant Intelligence within Learning Process

Learning style is concerned with the ways we perceive and gain knowledge, the ways we think and form ideas and values, and the ways we act when we process information. Some of the EFL students' learning style have been identified using Multiple Intelligence theory by classifying each student intelligence dominantly between first and second grader. Researcher used questionnaire by adopting Annstrong, T. (2009) book (see appendix – 4). The data result show bellow:

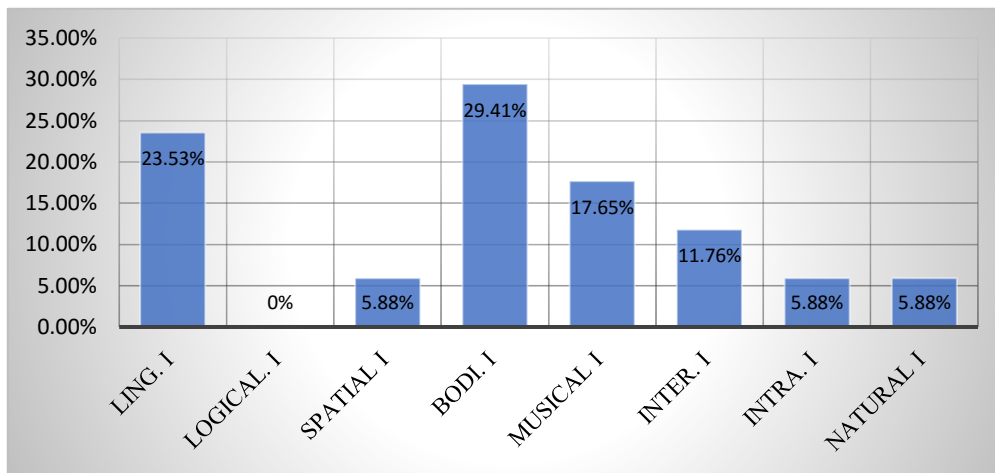


Figure 1. The 1st grade dominant intelligence

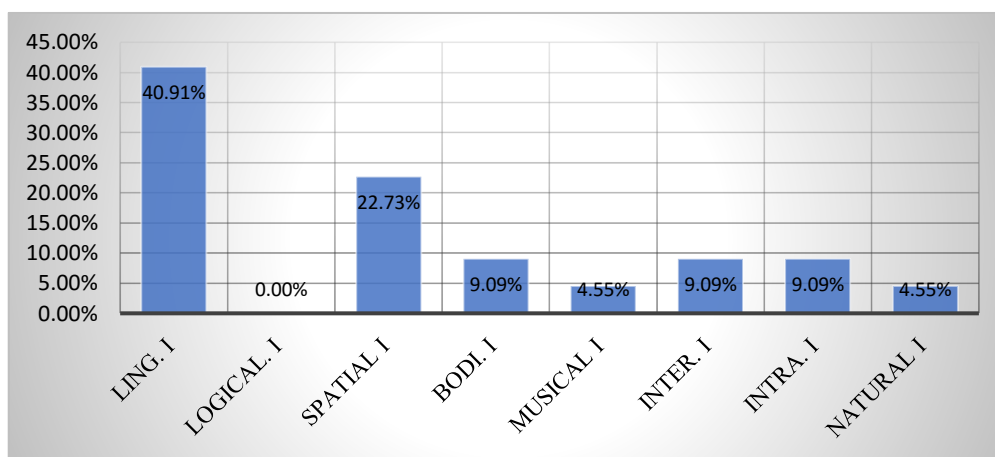


Figure 2. The 2nd grade dominant intelligence

As show the grab above that verbal-linguistic intelligence of second student grader dominantly than other intelligence. Linguistic intelligence was about 40.91% learning style in which linguistic intelligence defines as learners who are strong in linguistic-verbal intelligence are able to use words well, both when writing and speaking. These individuals are typically very good at writing stories, memorizing information, and reading. It is contrary, the first student grader body-kinesthetic intelligence dominantly 29.41% than other.

Realizing both grader different dominant intelligence, that is clearly influence students learning style. That was fundamental thing by EFL teacher could cover learners' various learning style in order to manage and transfer information in the classroom. It is important to select learning strategies that can match individual needs or appropriate students' learning style. Dunn et al. (2001) have asserted that different students need to use different instructional resources in a different sequence in accord with how each learns best. In addition, "no single measurement of style ensures that a learner's need will be met. It is perhaps more important to build an adaptable learning environment that presents the material in a variety of methods, techniques or teaching ways than try to determine each learner's personal style" (Clark, 2000).

Base on, multiple intelligence (MI) theory, although the intelligences are separated from each other but basically every human being has all the intelligences and human intelligences are not static, they can be developed. According to Smith (2002), Gardner (1995) claims that multiple intelligences rarely operate independently. They are used at the same time and tend to complement each other as individuals develop skills or solve problems. Gardner also gave illustrate that a dancer can excel in his art only if he has 1) strong musical intelligence to understand the rhythm and variations of the music, 2) interpersonal intelligence to understand how he can inspire or emotionally move his audience through his movements, as well as 3) bodily-kinesthetic intelligence to provide him with the agility and coordination to complete the movements successfully.

Referring Gardner opinion that even intelligence differ domain in brain, human intelligence rarely operate independently but complement each other as people develop skills and solve problem. Researcher has found that the interesting students' questionnaire result, there were some students who have equal number of mark amount eight intelligences. From 22 total of students actively, there were 16 or 72% students who have one intelligence higher than among of other whereas the rest of students, there were 6 or 28% students who have two or more equal number of mark each items of intelligence.

2. Teacher's Technique to accommodate EFL Students' Linguistic Intelligence

Realizing the various of students' learning style is an essential thing for teachers generally due to learning styles play a vital role in students' learning process of information such a knowledge. Even Reiff (1992) claims that styles influence how students learn, how teachers teach, and how they interact. in order that teacher is supposed to design and strategy to cover all different students' learning style. Also, according to Acaso citing from Aina Massanet Oliver's thesis (2018), teachers should raise awareness of their students' needs as it is not that obvious that what we teach is what they actually learn.

As explain in the previous chapter, the main point of this research was focus on to find out the EFL teacher kind of instructions or techniques to explore learners' linguistic intelligence fully in learning foreign language or English as foreign language (EFL) with variety learning style particularly at a formal place.

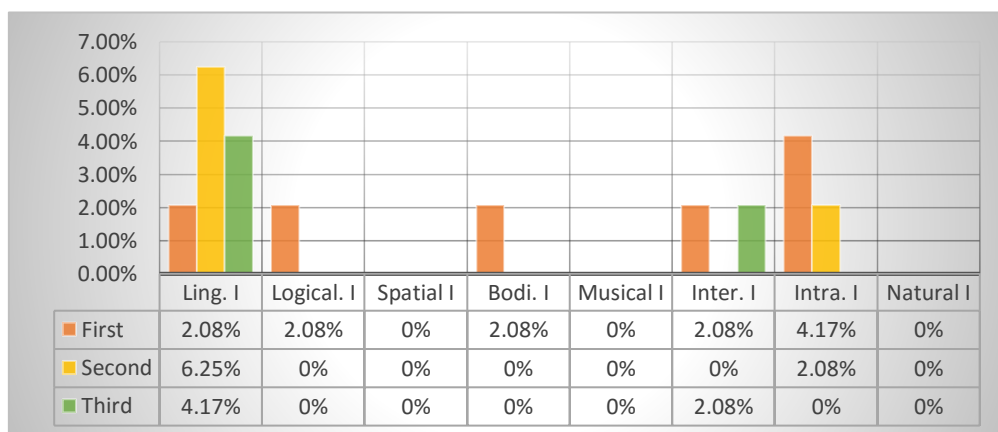


Figure 3. Type of EFL teacher technique used through MI for 3 days

The finding on figure 4.7 as unit of some observation by referring MI Check list form based activities (Appendix-2) showed that EFL teacher's technique dominantly used preferred to linguistic intelligence (teacher center explanation, vocabulary activity, and reading comprehension exercises) and students' personality (interpersonal and intrapersonal intelligence) in teaching English. It could be seen the total of percentage was 12.50% for linguistic intelligence, intrapersonal intelligence 6.25% from first to third day and students' personality with 10.41% (interpersonal intelligence and intrapersonal). Then, other intelligence such mathematic-logical 2.08 and body-kinesthetic intelligence 2.08% only used at first day. Unfortunately, another intelligence seemed not drive (visual-spatial intelligence and musical intelligence) in teaching and learning process. Although, linguistics intelligence was more dominant used in teaching process but that only dominated by teacher as center as knowledge obviously. Researcher showed observation vignette and table as classify of MI activity:

Table 1. Teacher technique to MI students' learning activity

1 st Day	Expression	Activity	Intelligence
V1 & V2	English teacher reexplained the previous lesson (Satisfaction and Dissatisfaction) and asked the students relating it.	Teacher Explanation Center and Self reflection	V-L.I and Intra. I
V3	English teacher has the students to dialog following the conversation on the hand book	Role Plays Using Dialog	Inter. I
V4	ET ask the Ss to answer the exercise below the dialog with classify the conversation the category between satisfaction and dissatisfaction.	classification & categorization and Independent Study	M-L.I and Intra. I

"Having had permitted researcher to observing EFL class, researcher joined in the class and observed teacher and students' activity for learning-teaching process. As other regular teachers do, teacher checked attendance list. After that teacher asked students some vocabularies which related the previous lesson, then teacher has students opened their handbook on page 38 (conversation section) and asked students to practice forward with their bench mate. After all students have taken turn, teacher explained next section and asked students answer the matching exercise individually which was related the conversation."

Table 2. Teacher technique to MI students' learning activity

2 nd Day			
V5	English teacher asked the definition of previous title and the meaning link the text.	Vocabulary Activity	L.I
V6	English explained the task instruction and asked the definition of synonym and its examples as well.	Teacher Center Explanation	L.I
V7	Ss start did the exercise individually that ET have.	Working Individually	Intra. I
V8	Teacher ask some vocabularies relating the transportation.	Vocabulary Activity	L.I

"The second period of observation, after teacher checked the attendance list. Teacher asked some vocabularies about pollution and then explained the next word synonym and antonym exercised. Having had explained teacher has students to answer and after students have completed the exercise, teacher reasked all students the vocabulary meaning and word match."

Table 3. Teacher technique to MI students' learning activity

3 rd Day			
V9	Teacher explained the text topic	Teacher Center	L.I
V10	Teacher asked about kind of drugs and has them to translate the text and answer reading exercise.	Reading Comprehension exercises	L.I
V11	Teacher allowed students work together with classmate.	Pair Work	Inter. I

"The third period, teacher explained the text topic that students would learn. After that teacher asked students pairing to translate into Indonesia and answer the exercise followed. Before EFL class finish, teacher asked students that who students were absent while students collected the duty."

Concerning the graph above of EFL teacher's technique and vignette (table 4.1) above have indicated that most of EFL teacher's techniques used emphasized linguistic intelligence in which teacher has tended to become as a center of knowledge due to teacher gave much explanation to students, asking students vocabulary relating the previous lesson and giving students reading exercise exercised. Furthermore, having seen students' handbook, researcher figured out some subjects (expression, structure, dialog, etc) relating students' skill like grammar, writing, and speaking often avoided. Even in the class interaction students dominant used range of time (Figure 4.8) showed 6.7% for students while EFL teacher 33% but the finding that during the observation period and students' information from interview, that EFL teacher has preferred to reading section. Seeing those characteristics of EFL teacher's techniques of teaching were identically a traditional/conventional technique or the other name direct method. Unfortunately, this type of teaching technique was thought ineffective in teaching and learning presently (digital era) and would not have explored all human intelligence potential with various students' learning style as well as that could be affected to engage in learning something. Indeed, there a lot of factors would be influenced like social, culture, technology develop and many more.

However, applying such conventional teaching technique in teaching-learning process is still widely used at any formal place nowadays especially teaching English subject in Indonesia. This type of teaching technique or method known as one of conventional or traditional method which is like teacher-centered, book-centered, and grammar-translation method, etc. Teacher center or direct method caused learners only come, sit, and listen or other word students become passive receiver. Although, researcher realized that many teachers are still teaching their students in the same manner as how they were taught and how their own teachers were taught, not much of progress in terms of the teaching perspective (Anglin & Anglin, 2008). However, using Conventional teaching methods make students uninterested in class, discouraged, bored, stop trying in accomplishing task given, and do poorly in tests (Felder & Silverman, 1988; Godleski, 1984; Oxford, 1990; Smith & Renzulli, 1984)

In this case, to solve an EFL teacher's issue within transferring equal information in order to explorer students' fully potential in particular in learning English as foreign language. As Trinh and Kolb (2011) suggested that teachers should design their teaching methods that include using various combinations of experience, reflection, and experimentation to reach all learning styles. This means introducing a wide variety of teaching elements into the classroom, such as sound, music, visuals, movement, experience, and even talking. By designing students' materials, activities base on multiple intelligence researcher to be applied in class setting will change students' condition and reach all students different learning style as well as create a fun learning so that EFL learners can be relax and pleasure gaining information. Moreover, EFL teacher can explore all students' potential within learning-teaching process especially the English subject.

Helping students learn effectively is a challenge for teachers. Teachers must realize that one type of teaching method is not sufficient (Suriati Sulaiman & Tajularipin Sulaiman, 2010). Effective teaching strategies are essential in ensuring successful teaching and learning process. Individual qualities within each teacher had been recognized as a major influence on their capacity and ability in creating opportunities for their students to learn effectively (Ball & Perry, 2009). Identifying effective teaching strategies whereby teachers are comfortable in their teaching and students learn in joyful and relaxed environment will be beneficial for education. It is vital that all learning materials should include opportunities for students to develop their strengths and strengthen their weaknesses in each particular intelligence area (Lash, 2004). Therefore, it is necessary to assess the effectiveness of our current teaching style and consider innovative ways to improve our teaching to enhance the teaching and learning effect (Delaney & Shafer, 2007).

Based on the MI approach, it was proposed that every individual have their very own unique set of intelligence profile where optimum learning occurs when content is being delivered in their dominant intelligences. According to Heikkinen, Pettigrew & Zakrajsek (1985), teachers themselves too have a preferred method in perceiving and processing information and it is logical that teachers will communicate and deliver their lesson that is most compatible with their learning style. The study conducted by Nergüz Bulut Serin et al. (2009) which examines the relationship between teaching styles and MI profile of primary school teachers in Izmir and Lefkosa also yielded similar findings where variables such as the spatial/visual, naturalistic and interpersonal intelligences play a predictive role on the teaching strategies of teachers.

Adopting multiple intelligence theory as a foundation for design lesson plan and instruction activity in EFL class helping students whose different learning style to increase motivation (Dylan, 2013; Harmer, 2007). Even the study conducted by Ahanbor and Sadighi (2014) was significant to show that teachers should consider using different techniques to develop and strengthen their students' learning styles and intelligences. For example, they can design easier tasks so that students can be more satisfied with their accomplishments. Moreover, teachers can plan and deliver a number of instructional events so that more students with varying learning styles and intelligences can benefit from the instruction they receive. According to Elena Spirovska (Spirovska, 2013), the MI can be used in different ways in the classrooms and have several benefits. In pursuance of fostering the learning process, students must be enrolled in class in a dynamic and non-conventional way so that they realize their own capacities and abilities. Moreover, if teachers are acquainted with the different learning profiles in class, they will be able to adapt, create and innovate in other types of activities that can enhance each student in their own way.

To begin with, the multiple intelligences can be used as a tool for students to “develop a better understanding and appreciation of their own strengths and learning preferences” (Spirovska, 2013) as there is no need to be an EFL teacher to understand that students are different, have different strengths and learning styles. Moreover, the use of the MI in class will raise students' awareness on the different

types of learning profiles that there are and how everyone can be good at something even if it has nothing to do with the other's learning capacities or intelligences. This is also fruitful because it helps students understand that even if everyone has their lacks or is not good in all the fields, they can help each other as a group by merging everyone's intelligences. What is more, if students are aware of their strengths and weaknesses, they will be able to work more in what they struggle with and improve those intelligences that are innate in them to exploit them.

Regarding teachers' benefits of using MI in class, Spirovska claims that once they get to know their students' profiles and their weaknesses, they will be able to do other types of lesson plans that will take into account the MI. These lesson plans will be more effective, varied and engaging than a conventional class and will not be focused on any specific intelligence but will "enable students to use the best way for them to acquire knowledge" (Spirovska, 2013). Avoiding the same types of lessons every day, innovating in the type of activities as well as adjusting or playing with different levels will be somehow new for students and will benefit them because they will learn how not to get used to the same learning strategies. Hence, Maria Acaso (2011) citing from Aina Massanet Oliver's thesis thinks that interlinking education with suspense, surprise and pleasure is the clue to fight against boredom in class and thus, will help students to gain knowledge through engaging and attractive activities.

CONCLUSION

EFL teacher in which researcher did research is used to apply traditional or conventional teaching way in process teaching-learning in class. As consequence, all learners whose various learning style do not maximize used because all students only came, sit, and listen in EFL class. Not only the teaching technique but also the topic or subject every meeting did not change so, students' other potential (listening, speaking, and writing) had not explored as much as students expected.

From All students' point of view about their current EFL teacher at Senior High School level in twelve graders is dissatisfaction for EFL Learners in which EFL teacher tend to used traditional way (like method, Approach, and technique). In this case, Teacher seems ignore other students' intelligence or learning style like Garner mention on his theory. This is one of the main students wanted that EFL teacher can change the teaching way in order to explore students' potential fully.

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Appendix 1 Questionnaire: MI Inventory

Checklist For Intelligence Strengths
Adapted from Armstrong (2009).

Name: _____

Linguistic Intelligence

- __ writes better than average for age
- __ spins tall tales or tells jokes and stories
- __ has a good memory for names, places, dates, or trivia
- __ enjoys word games
- __ enjoys reading books
- __ spells words accurately
- __ appreciates nonsense rhymes, puns, tongue twisters
- __ enjoys listening to the spoken work (stories, commentary on the radio, talking books)
- __ has good vocabulary for age
- __ communicates to others in a highly verbal way

Logical-Mathematical Intelligence

- __ asks a lot of questions about how things work
- __ enjoys working or playing with numbers
- __ enjoys math class
- __ finds math and computer games interesting (or if no exposure to computers, enjoys other math or science games)
- __ enjoys working on logic puzzles or brainteasers
- __ enjoys putting things in categories, hierarchies, or other logical patterns
- __ likes to do experiments in science class or in free play
- __ shows interest in science-related subjects
- __ does well on Piagetian-type assessments of logical thinking

Spatial Intelligence

- __ reports clear visual images
- __ reads, maps, charts, and diagrams more easily than text
- __ daydreams a lot
- __ enjoys art activities
- __ good at drawing
- __ likes to view movie, slides, or other visual presentations
- __ enjoys doing puzzles, mazes, or similar visual activities
- __ builds interesting three-dimensional constructions (e.g. LEGO buildings)
- __ gets more out of pictures than words while reading
- __ doodles on workbooks, worksheets, or other materials

Bodily-Kinesthetic Intelligence

- __ excels in one or more sports
- __ moves, twitches, taps, or fidgets while seated for a long time in one spot
- __ cleverly mimics other people's gestures or mannerisms
- __ loves to take things apart and put them back together again
- __ puts his/her hands all over something he/she's just seen
- __ enjoys running, jumping, wrestling, or similar activities
- __ shows skill in a craft (Woodworking, sewing, mechanics) or good fine-motor coordination in other ways
- __ has a dramatic way of expressing himself/herself
- __ reports different physical sensations while thinking or working
- __ enjoys working with clay or other tactile experiences (e.g., finger-painting)

Musical Intelligence

- __ tells you when music sounds off-key or disturbing in some other way
- __ remembers melodies of songs
- __ has a good singing voice

- ___ plays a musical instrument or sings in a choir or other group
- ___ has a rhythmic way of speaking and/or moving
- ___ unconsciously hums to himself/herself
- ___ taps rhythmically on the table or desk as he/she works
- ___ sensitive to environmental noises (e.g. rain on the roof)
- ___ responds favorably when a piece of music is put on
- ___ sings songs that he/she has learned outside of the classroom

Interpersonal Intelligence

- ___ enjoys socializing with peers
- ___ seems to be a natural leader
- ___ gives advice to friends who have problems
- ___ seems to be street-smart
- ___ belongs to clubs, committees, organizations, or informal peer groups
- ___ enjoys informally teaching other kids
- ___ has two or more close friends
- ___ has a good sense of empathy or concern for others
- ___ is sought out for company by others

Intrapersonal Intelligence

- ___ displays a sense of independence or a strong will
- ___ has a realistic sense of his/her abilities and weaknesses
- ___ does well when left alone to play or study
- ___ marches to the beat of a different drummer in his/her style of living and learning
- ___ has an interest or hobby that he/she doesn't talk much about
- ___ has a good sense of self-direction
- ___ prefers working alone to working with others
- ___ accurately expresses how he/she is feeling
- ___ is able to learn from his/her failures and successes in life
- ___ has good self-esteem

Naturalistic Intelligences

- ___ talks a lot about favorite pets, or preferred spots in nature, during class sharing
- ___ likes field trips in nature, to the zoo, or to a natural history museum
- ___ shows sensitivity to natural formation (e.g. while walking outside with the class, will notice mountains, clouds; or if in an urban environment, may show this ability in sensitivity to popular culture "formations" such as sneakers, or automobile styles)
- ___ likes to water and tend to the plants in the classroom
- ___ likes to hand around the gerbil cage, the aquarium, or the terrarium in class
- ___ gets excited when studying about ecology, nature, plants, or animals
- ___ speaks out in class for the rights of animals, or the preservation of planet earth
- ___ enjoys doing nature projects, such as bird watching, butterfly or insect collections, tree study, or raising animals
- ___ brings to school bugs, flowers, leaves, or other natural things to share with classmates or teachers
- ___ does well in topics at school that involves living systems (e.g. biological topics in science, environmental issues in social studies)

Checklist for Activities Evaluation

Multiple Intelligence (MI)	Activities
1. Verbal-Linguistics	Note-taking, listening to lectures/stories, reading books/response journals, reading with a partner, sustained silent reading, storytelling, debates, tape recording, teacher reading to students, translating, presenting material orally, writing a poem, myth, legend, short play, news article, creating a talk show radio program, conducting an interview, composition, literature, word games, poetry, writing, speaking, using language in games, puzzles and creative activities, group discussions, completing worksheets, giving presentations, word building games, memorizing, exercising four skills, completing worksheets, yes/no questions, asking questions, identifying various themes, round table discussion, answering comprehension questions.
2. Mathematical-Logical	Crossword, ordering, matching, categorizing and classifying, science demonstration and experiments, logic puzzles and games, story problems with numbers, logical/sequential presentation of subject matter, summarizing, analyzing grammar, solving word problems, creating categories for spelling/vocabulary, organizing information with Venn diagrams, determining cause and effect, sequencing events in a story, designing and conducting an experiment, making up syllogisms to demonstrate, making up analogies to explain, describing the patterns or symmetry, number games, critical thinking, science combinations, mental calculations, guided discovery, syllogisms, comparing, phrasal verb grids, sequencing/ordering, predicting, identifying errors, inferring, giving reasons and defending them, testing hypothesis, examining pairs to choose the correct answer (grammar/vocabulary exercises), identifying main ideas/components/attributes, describing patterns of the causally related event sequences in stories.
3. Musical	Singing, playing recorded music, playing live music (piano, guitar), jazz chants, reciting poetry, associating music to story mood/story plot, writing song lyrics, using rhythm to learn/present intonation patterns, giving presentation with appropriate musical accompaniment, explaining, sound differentiation, musical games, background music, responding emotionally to music, welcoming students with music, writing words to simple well-known melody, songs, background music to shape focus, calm down, energize and relax, record of a burst of applause.
4. Visual-spatial	Using charts and grids, clusters, videos, slide, movies, using art, graphic organizers, illustrating stories, using sentence strips, using drawings to express ideas and feelings, making maps, charts, sequencing sentences to form a coherent story, creating a slideshow, videotape or photo album, inventing a board or card game to demonstrate, illustrate, sketch and sculpt, art activities, imagination games, geometric figures, visualization, problem solving, communicating visually, enjoying creative puzzles, maps, designs, 3-D models and graphic representations, mind maps, visualizations, diagrams, TV, interpreting visual information, photographs, art work, drawing, creating visual summary, painting, flow charts, card games, visual outlines.

5. Bodily-kinesthetic	Hands-on activities, field trips, role-plays, pantomime, Total Physical Response, field experiences, creating a movement or a sequence of movements to explain, making task or puzzle cards, building or constructing, art forms, movements, drama, sports, manipulative, object coordination, dancing, crafts, miming, circle dancing, brain gym, relaxation exercises, craftwork, using computers, acting, classroom games, mingling in the classroom, simulations, find someone who... game, circulating round the classroom, tracing intonation contours with arms and fingers while saying a given utterance, outcome balls and cards.
6. Interpersonal	Pair work or peer teaching, board games, group brainstorming, group problem solving, project work, pen pals, writing group stories, playing vocabulary games, peer editing, intercultural awareness, conducting a meeting, using social skills to learn about, participating in a service project, teaching someone about, practice giving and receiving feedback on, using technology to, tutoring, cooperative learning, role playing, collective writing, information-gap activities, conducting a class survey, teamwork games/exercises, peer feedback.
7. Intrapersonal	Tasks with self evaluation component, interest centers, options for homework, personal journal keeping, dialogue journals, learning logs, choice in assignments, describing qualities you possess, setting and pursuing a goal to, describing one of your personal values about, writing a journal entry on, assessing your own work, individualized instruction, independent study, reflective practices and activities, teaching for achievement and success, introspective and meta cognitive tasks, project work, learner diaries, selfstudy, personal goal setting, discussion about what is important and of value in life, reflecting on the personal importance of what is being learned, reacting to the qualities, values, and actions of those featured in stories or poems, expressing feelings and emotions, evaluating web sites.
8. Naturalist	Creating observation notebooks of, describing changes in the local or global environment, caring for pets, wildlife, gardens, parks, using binoculars, telescopes, microscopes or magnifiers, drawing or taking pictures of natural objects, outdoor activities, natural and environmental materials and concepts, noticing relationships, making collocations, changing words in brackets into correct forms, classifying and categorizing activities, background music in the form of sounds created in the natural world.

(Berman, 1998; Campbell, et al, 1996 ; Christison, 1996)