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Gardner's Multiple Intelligences Theory: Implications for Teachers and Students

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ABSTRACT: *The multiple intelligence theory (MIT) was proposed by Gardner in 1983, and since then it has been a major concern for many researchers. The present study seeks to review the impact of Multiple Intelligences (MI) on Learning English as a second/Foreign Language (LESFL) and the association between multiple Intelligences and Students' Learning Improvement (SLI) and Teachers' Roles (TR). Gardner's Theory presents nine types of intelligences and assumes that they are all influential on the language four skills. In this article, the author tries to test this assumption drawing on the findings of various MI studies, especially their pedagogical implications on English language learning and teaching. The results reveal that MIT has a great impact on ES/F foreign language learning and teaching and that a firm link between MI and students' four skills' enhancement and teachers' roles in the classroom.*

KEYWORDS: Multiple Intelligence Theory (MIT), Learning English as a Second/Foreign Language (LESFL), Students' Learning Improvement (SLI), Teachers' Roles (TR).

الملخص: نظرية الذكاء المتعدد طرحت من طرف قاردنر عام 1983 و منذ ذلك الحين اصبحت الشغل الشاغل للعديد من الباحثين. فالدراسة الحالية تحاول مراجعة اثر هذه النظرية على تعلم اللغة الانجليزية كلغة ثانية/اجنبية و العلاقة بين الذكاء المتعدد والتطور التعليمي لدى الطلبة و دور الاساتذة. نظرية قاردنر تقدم تسعة انواع من الذكاء و تفترض انها جميعا تؤثر على مهارات السمع, الكلام, القراءة و الكتابة. يحاول الباحث في هذه الدراسة ان يتأكد من صحة الفرضية معتمدا على نتائج العديد من الدراسات سيما ما يتعلق بالجانب التعليمي و التدريسي للغة الانجليزية.

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النتائج بينت ان للذكاء المتعدد تأثيرا كبيرا على تعلم و تعليم اللغة الانجليزية كلغة ثانية/اجنبية, وان له علاقة وطيدة مع عملية دفع المهارات الاربعة و دور الاساتذة في القسم.

الكلمات المفتاحية: نظرية الذكاء المتعدد, تعلم اللغة الانجليزية كلغة ثانية/اجنبية, التطور التعليمي لدى الطلبة, دور الاساتذة.

1. Introduction

This study aims at investigating the Multiple Intelligences Theory components and tries to compare them with the teaching and learning benefits revealed by other researches. The ultimate objective is then to check the validity of the MIT in developing the four language skills and in helping ESL/EFL teachers to play the appropriate roles in the classroom.

Howard Gardner proposed a theory in 1983 which advocates that human beings have various intelligences. The Multiple Intelligences Theory (MIT) attempted to explain how people process, learn, and remember information in seven ways (later on the eighth and ninth intelligences were added), indicating that each individual is different from the other individuals in terms of the degree possessed in each intelligence. These intelligences are verbal-linguistic, logical-mathematical, visual/spatial, bodily-kinesthetic, musical, interpersonal, intrapersonal, naturalistic and existential. Acknowledging the students' "diverse intelligences" gives teachers the opportunity to prepare the appropriate individualized environments for learners (Maftoon and Sarem, 2012, 1234). One of the pedagogic implications of MIT, according to Gardner, is that:

> …educational methods should be created and adjusted to be more flexible for students who have different intellectual capacities, and should be redesigned and rearranged to use the multiple intelligences effectively so that those changes would benefit students, teachers and society. Multiple intelligence theory suggests that there is not just one concrete measure of intelligence and by implication a single way of teaching (ibid).

Below are Gardner's (1983) intelligences' interpretations or meanings as cited in a number of research papers.

Hasanudin and Fitrianingsih (2020) stated that "verbal-linguistic intelligence is a verbal ability that has been well developed and sensitive to the sounds, meanings, and rhythms of words (p. 118)

Arum, Kusmayadi, and Pramudya (2018) argued that "logical-mathematical intelligence is the ability of students to identify and classify objects, perform mathematical calculations, solve the problems, think logically and critically, and make conclusions" (p. 2).

According to Safranj and Zivlak (2018) "Visual/Spatial intelligence is the ability to visualise space and objects within the mind´s eye. People who prefer to use this kind of intelligence would rather draw a picture than write a paragraph. They notice colour, shapes and patterns and how light falls on the object, and comprehend mental models" (p.72).

"Bodily-Kinaesthetic intelligence is the ability to use one´s body and mimic another´s actions. People with a preference for this kind of intelligence generally have skills such as strength, balance endurance, flexibility and coordination. They use the body skilfully to express ideas and feelings to solve problems, create products or present emotion" (ibid).

Krishnan et al. (2014) stated "We define MI as *the capacity to feel, respond to and understand musical stimuli.* Although these facets share a common core and feed off one another, they can also operate independently. Therefore, the complexity of musical intelligence cannot be adequately captured as a simple, unitary construct" (p.279).

"Interpersonal intelligence is one of the intelligences in Gardner's multiple intelligences. This intelligence is related to respond information, understand information, and build social connections/interactions to others" (Dien and Wustqa, 2018).

Lunenburg and Lunenburg (2014) wrote "Intrapersonal intelligence is access to one's own feelings and the ability to discriminate among them and draw upon knowledge of one's strengths and weaknesses, desires, and intelligences" (p. 5).

"Naturalist intelligence is the ability to understand, relate to, categorize, classify, comprehend, and explain the things encountered in the world of nature" (ibid, p.6).

According to Alsaadi and Hatim (2016), existential intelligence refers to "sensitivity and capacity to tackle deep questions about human existence, such as the meaning of life, why do we die? And how did we get here?"(p. 380).

Gardner's Multiple Intelligences highlights the idea that all students are unique and diverse. Gardner calls for a broader view of how the human mind is organized and how human learning takes place, moving far from the traditional beliefs. Multiple Intelligences considers every student to be intelligent in many ways. Therefore, according to Gardner, teachers are required to reach all students and develop their multiple intelligences by diversifying their teaching methods (McClellan and Conti, 2008, p. 16). That is, "The connection between how the mind is organized and the education of students suggests a need for additional classroom teaching and testing applications. A focus on traditional linguistic and logical teaching and testing strategies must broaden to include strategies that meet the needs of diverse learners" (Phillips, 2010, p. 4).The Multiple Intelligences Theory, in its essence, is based on three major "principles: (a) individuals are not the same--individuals differences exists; (b) people do not all have the same kinds of minds; and (c) education becomes most effective if these individual differences are considered"(ibid, pp. 17-18). Gardner (1993) believes that "An intelligence is a biopsychological predisposition that can be encouraged by the natural environment; the intelligence will *not* evolve to its potential without development" (Kezar, 2011, p. 143), challenging the old view which sees that humans have only one intelligence and that only tests (IQ) can discover this intelligence. The contribution of Gardner lies in "the pluralistic view of the mind; it invites us to recognize and nurture the varied human intelligences. Some individuals finish schooling without ever having felt like an expert in any area; this can lead to low self-esteem and lifetime problems in achievement" (ibid).

2. Review of the Literature

2.1 The MIT from different perspectives

The concept of general intelligence (g) was dominant for many psychologists before the advent of Gardner's MIT in 1983 in his book "*Frames of Mind"*. This theory suggested that there are several intelligences. Gardner, at that time, argued that the choice of the term "intelligences" was on purpose and that the intelligences were equally important; i.e. there is no hierarchy of abilities (Visser, Ashton, and Vernon, 2006, p. 487). Gardner's different intelligences "…are understood as personal tools each individual possesses to make sense out of new information and to store it in such a way that it can be easily retrieved when

needed for use….In their basic form, they are present to some extent in everyone, although a person will generally be more talented in some than in others" (Arnold and Fonseca, 2004, p. 120).

Abdi and Rostami (2012) claim that Gardner's MIT is applicable to every school and family, for it caters for more room for creativity and emphasizes understanding along with the application of new knowledge and concepts in order to refresh the existing teaching methods. The MIT maintains that students will benefit more if teachers use different methodologies, trying to reach all students to advance in them high quality thinking (p. 106). Equally important, Maftoon and Sarem (2012) believe that in Gardner's (1983) MIT "…intelligence, as an individual cognitive factor, has a significant influence on the process of SLA and can account for the learners' variation in second language learning. The theory of Multiple Intelligences has caused some educators and language researchers to reassess classroom practices both in education in general and in many areas of language teaching and learning in specific" (p. 1234).

Marwaha and Nanda (2017) stress that a firm education system, adopting new techniques and methods of teaching, learning and research centers, providing room for energetic academicians, and having adequate infrastructure is now a pre-requisite for the development of any nation at all levels. That is, development rests on education, and the latter requires innovation of methods and equipment. It also requires innovation of material and curricula and reconceptualization of pedagogy by teachers. Leshkovska and Spaseva (2016) argued that because one fundamental question in education is "what to teach?" or, rather it is the question of content, Gardner believes that what is needed nowadays is a curriculum developed on deep understanding, performance, exploration and creativity; i.e. a curriculum that highlights facts about human intelligence. Namely, an "MI theory-based curriculum is student-centered, flexible (full of choices) and provide a setting for learning that is hand-on, interdisciplinary, based on real-life contexts, and set in an informal atmosphere that promotes free inquiry into novel materials and situations" (p.60). There is a call, then, for a kind of teaching where a variety of learning methods is implemented and students are offered freedom to express themselves; i.e. to act and react, using their experiences to study the designed material and activities.

2.2 The Effects of MI on Learning English

The basis for the effects of MI on learning English as a second or foreign language (ESL/EFL) could be the view that "MIT is a dynamic construct that understands intelligences as tools that are changeable and trainable… Gardner's Model of multiple intelligences is a reaction against a conservative and totally biologically driven view which would encourage students to see intelligence as fixed and which could therefore make putting out special effort to achieve academic goals seem not worthwhile" (Arnold and Fonseca, 2004, p. 122).

Kezar (2011) maintains that both elementary and secondary schools have benefited a lot from MIT. Many schools are changing from teacher and curriculum centered to individual learner centered based on the appreciation that each student is unique and diverse in terms of what s/he posseses as intelligences. Learning is encouraged not only inside but outside the classroom; i.e. in other contexts such as museums, science centers, community centers, and the workplace. In addition, for more practice and assessment purposes, students are asked to use portfolios for drawing concepts, and are invited to present topics so as to assess their different types of intelligences (p. 145). This will, of course, lead to an increase in the learners' awareness of their own learning styles. Reid (1999, p. 300) mentions that "higher interest and motivation in the learning process, increased student responsibility for their own learning, and greater classroom community. These are affective changes, and the changes have resulted in more effective learning" (Cited in Morgan and Fonseca, 2004, p. 120).

Abdi and Rostami (2012) conducted a study aiming to examine how effective was multiple intelligences- based instruction on students' creative thinking. The study compared between the results of the control group which received traditional instruction and the experimental group which received instruction based on multiple intelligences during a period of eight weeks. The findings indicated that multiple intelligences- based instruction enhanced students' creative thinking ability. That is, the strategies based on MI theory were more effective in improving students' creative thinking ability than traditional ones.

Alqatanani (2017) carried out a study which examined the effectiveness of a multiple intelligences-based program on EFL students' critical reading skills. The researcher compared between the results of the experimental group who were taught through multiple intelligences strategies and the

control group who received instruction based on the conventional teaching method. The findings revealed that there are significant differences between the two groups. Therefore, the study recommends other studies to investigate the impact multiple intelligences strategies on EFL students' achievement in other language skills.

Another experience, but still in the area of caring about individuals, Parvari, Strider, Burchell, and Ready (2017) investigated the relationship between healthcare leaders' roles and demographic variables and the multiple intelligences of nurses in the US. In terms of theory, the study relied on Gardner's MIT, and data were collected from a large population of nurses. The most crucial result of the study consisted in the existence of a significant relation between five intelligences and leadership. Therefore, more research was recommended to ensure organizational stability in hospitals, especially in terms of selecting nursing leaders.

2.3 The effects of MI on Teaching English

One important token of the distinctive features of MI classroom teacher are plainly read in Armstrong's (2009) words when stating that:

> A teacher in an MI classroom contrasts sharply with a teacher in a traditional linguistic/logical-mathematical classroom. In the traditional classroom, the teacher lectures while standing at the front of the classroom, writes on the blackboard, asks students questions about the assigned reading or handouts, and waits while students finish their written work. In the MI classroom, while keeping her educational objective firmly in mind, the teacher continually shifts her method of presentation from linguistic to spatial to musical and so on, often combining intelligences in creative ways (Armstrong, 2009, p. 56).

Morgan and Fonseca (2004) claim that in Gardner's MIT human cognitive ability is pluralistic rather than unitary and this enables learners of any subject to make greater progress if they only have the opportunity to use the necessary material. For this reason, Gardner (1991, p. 13) recommends that "teachers use a wide variety of ways to deal with the subject because "genuine understanding is most likely to emerge and be apparent to others... if people possess a number of ways of representing knowledge of a concept or skill and can move readily back and forth among these forms" (Cited in Morgan and Fonseca, 2004, p. 121). In this same line of

recommending teachers' actions in the classroom to activate the students' MI, Lunenburg and Lunenburg (2014) suggest the following:

2.3.1 Linguistic Intelligence

"Teachers can enhance their students' linguistic intelligence by having them say and see words, read books together, and by encouraging discussion. Tools include computers, word games, multimedia, books, tape recorders, and lecture" (p. 3).

2.3.2 Logical-Mathematical Intelligence

"Teachers can strengthen this intelligence by encouraging the use of computer programming languages, critical–thinking activities, linear outlining, science-fiction scenarios, logic puzzles, and through the use of logical-sequential presentation of subject matter" (ibid).

2.3.3 Spatial Intelligence

"Teachers can foster this intelligence through drawings and verbal and physical imagery. Tools include models, graphics, charts, photographs, drawings, 3-D modeling, video, videoconferencing, television, multimedia, texts with pictures/charts/graphs, microscopes, computer graphics software" (ibid).

2.3.4 Bodily-Kinesthetic Intelligence

"Teachers may encourage growth in this area of intelligence through physical activity, hands-on learning, acting out, role playing, and physical relaxation exercises. Tools include equipment and real objects" (p. 4).

2.3.5 Musical Intelligence

"Teachers can integrate activities into their lessons that encourage students' musical intelligence by turning lessons into lyrics, speaking rhythmically, and tapping out time. Tools include musical instruments, music, radio, stereo, CD-ROM, and multimedia" (ibid).

2.3.6 Interpersonal Intelligence

"Teachers can encourage the growth of interpersonal intelligence by designing lessons that include group activities, seminars, and dialogues. Tools include the telephone, audio conferencing, time and attention from the teacher, video conferencing, writing, computer conferencing, and email" (p. 5).

2.3.7 Intrapersonal Intelligence

"Teachers can encourage growth of intrapersonal intelligence by assigning reflective activities, such as journal writing and independent study. Tools include books, creative materials, diaries, privacy and time.

Examples of individuals who exhibited strong intrapersonal intelligence in their lifetimes are authors of classic autobiographies such as Mark Twain, Jean Paul Satre, and Frederick Douglas"(ibid).

2.3.8 Naturalist Intelligence

"Teachers can enhance this intelligence by having students differentiate among living things (plants, animals), demonstrate sensitivity to the natural world (clouds, rock configurations) through the study of relationships such as pattern recognition and comparison and contrast and connections to real life and science issues"(p. 6).

2.3.9 Existential Intelligence

"This would be in the domain of philosophers and religious leaders. Students favoring this intelligence tend to be the ones who must put everything into a larger framework, a global perspective, a historical context. They ask the "why?" questions. They have a tendency to be so focused on the big picture that they often lose sight of necessary details. The ninth intelligence has not yet been fully accepted by educators in the classroom (Giles, Pitre, & Womack, 2003)" (ibid).

In a study conducted by Tiara (2018, p. 339) to explore the way the primary school teacher integrated MI to the classroom, there was a major focus on the identification of multiple intelligences, their manipulation, their application, and how s/he used his/her dominant intelligences in the English language classroom. The findings led the author to recommend the following:

- English teachers are suggested to integrate multiple intelligences to the classroom by considering students' disruptive behaviors which lead to students' strongest intelligences and reflecting on what students like or dislike which are included in students' interests.
- The teachers also should not allow their dominant intelligence drive the way they teach, on the contrary, they must comply with students' needs.
- Moreover, the teachers can make use of the observed activities or exercises covering spatial intelligence, musical intelligence, intrapersonal intelligence, bodily-kinesthetic intelligence, and naturalist intelligence in their own classroom. The activities or exercises may be altered or modified in accordance with the needs.

From a different perspective, Nolen (2003) emphasizes the idea that EFL teachers should be selective in their lessons and activities so as to meet all the students' intelligences. In other words, they have to consider the EFL students' needs to help them to be successful students. On the other hand, Armstrong (2000) sees that multiple intelligences open doors for a great number of teaching strategies which could be applied in the classroom (Cited in Alqatanani, 2017, p. 311).

In a research that came out of reflecting on the multiple intelligences theory (MIT), and through observing and analyzing different English class activities, Macias (2013) detected that if the teacher is aware of the MIs of the students, s/he would easily design the materials and activities which match the students' learning process. It was then concluded that by discovering the students' major MI and, in the meantime, developing their minor MI, the teacher could plan the most appropriate lessons and the students, as a result, will be motivated to learn. The teacher's awareness of the MIs of the students gives him/her the opportunity to adjust his teaching style to the students' learning styles, and this will help to determine the level of students' achievement and prevent any kind of physical, mental or emotional problems among students (Samsudin, Haniza, Abdul-Talib, and Mhd Ibrahim, 2015, p. 54).

Dolati and Tahriri (2017) attempted to discover whether EFL teachers differ from each and one another in terms of their intelligence types based on what they implement as activities in their classes. What is more, the researchers investigated the teachers' perceptions about the MIT. In this study, classroom observation, activities records, and interviews were used to collect data. In addition, a Multiple Intelligences Checklist was employed to verify the teachers' dominant type of intelligence. One important result was that teachers of logical-mathematical type were the most influenced by this intelligence type which was clear in the activities which they implement in class, and thus it was suggested that teachers whose dominant intelligence type is logical-mathematical should not allow it to affect their teaching.

As for the components of evaluation and assessment, Armstrong (2001, p. 121) considered "observation" to be an important pre-requisite for "authentic evaluation". In the view of Gardner, teachers should observe their students while using the different competences. Learners' competences are better assessed if they are, for instance, solving problems

or making decisions naturally under the teacher's check (Cited in Martins, 2011, p. 436). The MIT urges assessment while learning, and states that the assessments should go hand in hand with the students' knowledge and performance. The major difference between the MIT assessments and traditional assessments is that they are done not only by the instructor but by other people such as the collaborative teachers and students. Contrary to this, traditional assessments are done by the instructors alone (Xie and Lin, 2009, pp. 108-109).

3. The Impact of Multiple Intelligences on Teachers' Roles

Due to the increasing demand for new teaching methods and approaches in present-day classrooms, teachers have started to implement the Multiple Intelligence (MI) approach which prompts them to conceptualize the notion of individual differences for them and their students; they are pushed to integrate the element of creativity in preparing the lectures and activities where students find room for the application of the different types of multiple intelligences (Sulaiman, Abdurahman, Rahim, 2010, p. 513).

In fact, there is a clear indication in the literature that the role of the teacher in modern times has changed, especially in providing a more convenient environment compared to the traditional classroom setting which lacks students' participation. Many scholars (Boud and Feletti, 1991; Dolmans, Wolfhagen, Schmidt and Van der Vleuten, 1994; Albanese, 2004; Ng, 2005) agree that the outcome of students' participation may be boomed or devastated by the function of the teacher in the teaching learning process. Therefore, the teacher should encourage the type of leaning in which the students are the heart of all actions in the total language teaching learning operation (Cited in Vighnarajah, Luan, and Abu Bakar, 2008, pp. 37-38). In other words, the teacher should be effective or rather aware of the his/her positions or roles. "Effective Effective teachers are those who are able to: remain calm in crises, listen actively without becoming defensive or authoritarian, avoid win-lose conflicts, respect each child as an individual, emphasize positive rather than negative expectation, explain the rationale behind rules, able to earn students' respect"(Spahiu and Spahiu, 2013, p. 95). Other important features of an effective teacher are self-reflection (the ability to change), flexibility (ability to adapt to new situations), and preparedness (readiness to intervene in issues) (ibid).

4. The Impact of Multiple Intelligences on Teachers' Feedback and Error Correction

The most crucial distinctive features of an effective teacher, according to many scholars (Gibbs, 2002; Stronge et al., 2004; Killen, 2006; Smith, 1995, and Gurney, 2007) are: persistent, flexible, innovative, influential, resourceful, creative, and reflective on what is going on in the classroom (Cited in Rubio, 2009, p. 36). In other words, effective teachers are those who focus on the students' achievement by playing the necessary roles. They should be prepared to watch all students' behaviours and to have influence on them; they should be ready to answer questions and to remedy situations, and above all they should be prudent and intelligent enough to manage time and efforts in the lectures. The teachers' intelligence is an integral part of their current role in the classroom.

Because correcting and providing corrective feedback to the learners' written work is indispensable to assist them in eliminating or, at least, lessoning the degree of their errors in writing, though there are scholars who oppose this practice, Andarab (2019) tried to employ spatial intelligence-based (SIB) metalinguistic written corrective feedback (CF) "giving metalinguistic clues such as colours and underlining to the nature of the errors" based on special intelligence characteristics as a new form of feedback and check its effectiveness on English as a foreign language (EFL) learners' development in writing. Two groups of students were used in the study: the control group received metalinguistic written CF (traditional approach) for their errors, and the experimental group received SIB metalinguistic written CF (new approach) for their errors in writing. The major Results indicated that "accuracy and style" of the writing of the experimental group excelled compared to that of the control group (whose written correction was only metalinguistic). What is more important in this study is that the integration of Gardner's special intellige and metalinguistic written corrective feedback on wring, has led to language learners' improvement in writing. Moreover, the use of a color-code scheme (relevant to layout and structure) in giving feedback on writing has increased the learners' awareness about the structure and organization of the written text.

In another study Shahrokhi, Ketabi, and Dehnoo (2013) attempted to identify the relationship between Gardner's types of intelligence and students' performances on grammar tests, focusing more on the type of

intelligence that correlates to better performance on different forms of grammar test. In this study both male and female students participated, and three different forms of grammar test together with a Multiple Intelligence (MI) questionnaire were employed to gather pertinent data. The most significant findings of the study consisted in the fact that Linguistic and Logical-Mathematical subtests would be the best predictors of students' performance on grammar respectively.

5. Conclusion

This study sought to review the impact of Multiple Intelligences (MI) on Learning English as a second/Foreign Language (LESFL) and the relationship between Gardner's nine intelligences and students' learning development and the shift or change in teachers' roles. The study targeted in particular the influence of the MIT on improving the four language skills and on the re-conceptualization of the teacher's duties or functions in the current language classroom. To this end, many studies have been presented, focusing more on the teaching and learning experiences, methods, and tips which may benefit both the teacher and students and raise their awareness of being effective partners; the studies which were checked revealed that traditional linguistic and logical teaching and testing strategies failed to meet the needs of diverse learners. Therefore, based on the MIT applications,

- Teachers should provide their learners with the necessary material (Morgan and Fonseca, 2004).
- Teachers are suggested to integrate multiple intelligences to the classroom by considering students' disruptive to discover what students like or dislike.
- The teachers also should not allow their dominant intelligence drive the way they teach.
  Teachers can make use of the observed activities or exercises covering spatial intelligence, musical intelligence, intrapersonal intelligence, bodily-kinesthetic intelligence, and naturalist intelligence in their own classroom. The activities or exercises may be altered or modified in accordance with the needs (Tiara, 2018).
- Teachers have to consider the EFL students' needs to help them to be successful students (Nolen, 2003).

- Teachers should not only discover the students' major intelligences but also develop their minor ones to be able to plan the most appropriate lessons, and thus motivate them to learn (Macias, 2013).
- Teachers whose dominant intelligence type is logical-mathematical should not allow it to affect their teaching (Dolati and Tahriri, 2017).

It can be concluded that there are various methods to teach EFL in the classroom of diverse types of learners; to address Gardner's nine intelligences. That is, learners under the umbrella of MIT are supposed to experience many situations where their needs can be met in a way or another (Arnold and Fonseca, 2004, p. 122) and , in the mean time, teachers have to consider in each of these experiences or situations the necessary material and activity (Sulaiman, Abdurahman, Rahim, 2010, p. 513). On the other hand, Andarab (2019) proved that the integration of spatial intelligence-based (SIB) metalinguistic written corrective feedback (CF) as a new method in correcting students' errors in writing is very successful in improving the students' accuracy and style. Shahrokhi, Ketabi, and Dehnoo (2013) drew the conclusion that the Linguistic and Logical-Mathematical intelligences should be enhanced to facilitate the grammar course and activities for language learners. In addition, the strategies based on MI theory were more effective in improving students' creative thinking ability (Abdi and Rostami, 2012), reading critical skills (Alqatanani, 2017), and in developing leadership (Parvari, Strider, Burchell, and Ready, 2017).

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