

#### جامعة الزاوية، المؤتمر الأول لكليات التربية بعنوان دور كليات التربية بين التعليم والتدريب University of Zawia, The First Conference of the Faculties of Education Entitled the Role of the Faculties of Education Between Education and Training



## The Importance of Using Multiple intelligences at Preparatory Stage in **EFL classroom.**( A Descriptive study ) Wedad Masoud Akram

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#### **ABSTRACT**

This paper aims to illuminate on one of the most important educational and psychological theories which focuses on considering the capabilities and unique characteristics of each student through a descriptive study, this study attempted to answer these questions:

- 1. What is the theory of multiple intelligences? What are its types and importance?
- 2. How is this theory applied in teaching the English language for the preparatory stage?
- 3. What are the educational activities that are suitable multiple intelligences in education?
  - Keywords: MI-activities, Multiple intelligences.

# أهمية استخدام الذكاءات المتعددة في المرحلة الإعدادية في فصول اللغة الإنجليزية كلغة أجنبية (دراسة وصفية )

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#### الملخص:

تهدف هذه الورقة إلى إلقاء الضوء على إحدى اهم النظريات التربوية والنفسية التي تهتم بمراعاة قدرات التلاميذ و الفروق الفردية بينهم من خلال دراسة وصفيه وحاولت هذه الدراسة الاجابة على هذه الاسئلة:

- 1. ماهي نظرية الذكاءات المتعددة ؟ ماهي انواعها واهميتها؟
- 2. كيف تطبق هذه النظرية في تعليم اللغة الانجليزية للمرحلة الاعدادية؟
- 3. ماهي الأنشطة التعليمية التي تناسب الذكاءات المتعددة في التعليم ؟

جامعة الزاوية 475 22-24/ يوليو /2024م

كما تتاول البحث مقدمة لتطوير نظرية الذكاء وتعريفها ومبادئها وتطبيق نظرية الذكاءات المتعددة في التدريس، بالإضافة إلى نقد النظرية.

الكلمات الافتتاحية: نظرية الذكاءات المتعددة، تدريس اللغة الانجليزية.

## Review of literature and related studies

In the past, intelligence was considered a fixed, static entity at birth which was defined operationally as the ability to answer items on IQ tests. Even since the publication of his frames of mind (1983), Dr. Howard Gardner has postulated an alternative definition of intelligence based on a radically different view of intelligent. According to him, intelligence entails the ability to solve problems or fashion products that are consequence in a particular cultural setting or community (1993,15).

There are many, not just one, different but autonomous intelligence capacities that result in many different ways of knowing, understanding and learning about our world. As Gardner (1993,12) states: "It is of the utmost importance that we recognize and nurture all of the varied of human intelligence, and all of the combinations of intelligence. Human are all so different largely because they all have different combination intelligence.

## **Definition of MI theory**

Gardner (1993) described intelligence as a bio-psychological potential that could be influenced by experience, culture and motivational factors, intelligence is more than IQ because a high IQ in the absence of productivity dose not equate to intelligence.

Multiple intelligences theory goes beyond being an intelligence theory; rather it is an education philosophy showing how students learn and how teachers should teach (Hoerr, 1997:43).

# Characteristics of multiple intelligences.

Armstrong (1994) has synthesized Gardner's theory into four key points that educators find attractive about the theory:

- 1. Each person possesses all eight intelligence, in each one the eight intelligence function together in unique ways.
- 2. Intelligence can be developed. Gardner suggests that everyone has the capacity to develop all eight intelligences to a reasonably high level of performance with appropriate encouragement, enrichment and instruction.

- 3. Intelligences work together in complex ways. No intelligence really exists by itself in life. Intelligences are always interacting with each other.
- 4. There are many different ways to be intelligence. There is no standard set of attributes that one must have in order to be considered intelligence.

## Gardner's taxonomy of multiple intelligences

Howard Gardner advocates that there are at least seven intelligence that need to be considered; then in 1999, Gardner added two more, naturalist and existentialist.

The nine intelligences are:

#### 1. Linguistic intelligence

Linguistic intelligence has to do with the capacity to use words spoken or written when communicating (Gardner, 1983). Specifically linguistic intelligence helps to display a facility with words and languages and indicates the use of syntax, structure, semantics and the meaning of language. People with linguistic intelligence tend to learn best by reading, taking notes , listening to lectures, via discussion and debate, they are also frequently skilled at explaining and speaking. Those with linguistic intelligence have high verbal memory , recall an ability to understand, manipulate syntax and structure.

## 2. Logical- mathematical intelligence

This type of intelligence has to do with inductive and deductive reasoning and mathematical concepts. Definition of the logical-mathematical intelligence lays emphasis on reasoning capabilities, abstract pattern recognition, scientific thinking and investigation, in addition to the ability to perform complex calculations. This intelligence indicates the ability to use and understand numbers and apply reasoning skills to explain relationships and abstractions.

# 3. Spatial intelligence

This type deal with the perception of visual and spatial world. People with strong visual- spatial intelligence are typically very good at visualizing and mentally manipulating objects. They also generally have a very good sense of direction and may also have also very good hand-eye coordination. They possess the capacity to transform their perception into form, color, space and relationships (Armstrong, 1994). They also have the ability to form mental images of concepts and personal experience to transform these images into personal meaning and applications.

## 4. Bodily-kinesthetic intelligence

This intelligence helps people to acquire the expertise in using the whole body to express ideas and feelings in addition to the ability of building and making things, they often learn best by physically doing something, rather than reading or hearing about it, those with strong bodily-kinesthetic intelligence seem to remember things through their body rather than through words (verbal memory) or images (visual memory). They benefit from working with others in experiential situations which allows for nonverbal implications rather than verbal communication (Gardner, 1999).

## 5. Musical intelligence

This intelligence is built around the use of rhythms, music and sounds to illustrate and communicate creative thinking. Those who have a high level of musical-rhythmic intelligence display greater sensitivity to sounds, rhythms and music. Sic ether is a strong aural component to this intelligence, those who are strongest in it may learn best via lecture and oral stimulations (Gardner, 1999).

## 6. Interpersonal intelligence

People in this category are likely to indulge in and foster successful relationship and are characterized by their sensitivity to others' moods, feelings, temperaments, motivations and their ability to cooperate in order to work as a group. They can communicate effectively and empathize easily with others when working in groups, and may be either leaders or followers (Gardner, 1993). They communicate effectively and possess the ability to persuade others; they typically learn best by working with others and often enjoy discussion and debate. They are attentive to nonverbal factors such as facial expressions, bodily gestures and voice.

## 7. Intrapersonal intelligence

Those who possess this intelligence are those who are believed to have more self-knowledge and tend to be more introspective, cognitively, consciously self-aware and prefer to work alone. There self-awareness makes them capable of understanding their own emotions, goals and motivations. They learn best when allowed to concentrate on the subject by themselves (Gardner, 1999). There is often a high level of perfectionism associated with this intelligence, and tends to be aware of their personal strengths and weakness.

# 8. Naturalistic intelligence

It concerns people who have the capacity to recognize and make distinctions between the natural and the artificial dimensions of things in the world. those with it are said to have greater sensitivity to nature and their place within it, the ability to nature and grow things, greater ease in caring for, taming, and interacting with animals. They are also good at recognizing and classifying different species. (Gardner, 1999).

## 9. Existentialist intelligence

These learners focus on the big picture and asking why the world operates the way it does (McCoog, 2007, p. 27). McCoog (2010) stated that students who display a strong existential intelligence need the freedom to ponder, conceptualize and hypothesize about the content presented in class. Activities for these types of learners may include: analyzing and thinking about questions that do not have a clear answer, pondering how variables interact and evaluating how concepts relate to one another. The existential intelligence is still in development and Gardner considers it to be "half intelligence" because it has not to be determined if there is a part of the brain that specifically corresponds with this form of intelligence (Gardner, 2006,21).

## **Criticism of MI theory**

Following the dissemination of frames of mind (1983), many criticisms of MI theory emerged primarily on four levels: educational, theoretical, cognitive and social (Fitzpatrick, 2004).

On an educational level, many feel such as Levin (1994), that Gardner's lack of clear guidance about how educators' should apply the theory shows avoidance on his part. Klein (2003) bemoans that MI assessments do not include procedures for ruling out alternative explanations for student's performances such as motivation. In this case, Klein believes that MI assessors are carrying out the most unfortunate aspects of IQ testing.

One major criticism of the theory is that Gardner is not expanding the definition of the word "intelligence"; rather he denies the existence of intelligence as traditionally understood and instead uses the word "intelligence" whenever other people have traditionally used words like "ability", this practice has been criticized by Sternberg (1983, 1991) and Scarr (1985).

Morgan, (1992) has charged that MI is simply another name for learning styles or cognitive styles. According to Waterhouse (2006), sufficient empirical evidence is necessary before a theory should be implemented into classroom. Therefore, Waterhouse concluded MI should not be implemented into classroom because there is no evidence to support the theory that several different intelligence exist.

## Gardner's response to the criticism

In response to these criticisms, Gardner further refined his theory of Multiple Intelligence between 1983- 1999. He expressed concerns about schools in appropriately applying MI theory. He was concerned that some teachers regarded MI teaching as a goal in itself whereas he proposed that MI strategies are a means to an end.

In response to Waterhouse (2006), Gardner and Moran (2006) defined the MI theory as based entirely from empirical findings from a variety of disciplines. Gardner and Moran also stated that, as new empirical evidence is found, the theory is modified.

Gardner (1995) staunchly defends the empiricism of the theory by referring to the numerous laboratory and field data that contributed to its development and the ongoing re-conceptualization of the theory based on new scientific data. In response to the criticism that MI theory is incompatible with genetic or environmental accounts of the nature intelligence, Gardner stats that his theory is most concerned with the interaction between genetics and the environment in understanding intelligence. Finally, the MI theory has expanded the definition of intelligence beyond utility produced a strong reaction from Gardner. He argues passionately that the narrow definition of intelligence as equal to scholastic performance is simply too constrictive, in his view , MI theory is about the intelligence and constrictive. In his view MI theory ia about the intellectual and cognitive aspects of the human mind.

#### MI in Education

Howard Gardner's theory of multiple intelligences has not been readily accepted within academic psychology. However, it has met with a strongly positive response from many educators. It has been embraced by a range of educational theorists and significantly applied by teachers and policymakers to the problems of schooling. A number of schools in North America have looked to structure curricula according to the intelligences to design classrooms to reflect the understandings that Howard Gardner improve. The theory can be used in pre-school or adult education.

Chen (2004) explained that the multiple intelligences theory has earned its credibility through the successful application of MI in many educational settings therefore, does not need to have further empirical testing done to support the theory.

While Gardner called his theory "multiple intelligence "many educators interpreted it as "seven ways of knowing ", "seven kinds of learning styles", "multiple paths of learning". In addition, MI advocates also translated his theory into many visual forms (charts, diagrams and drawings) and also used neurological references to connect intelligences and capacities into curriculum and assessment. (Armstrong, 2000)

Lazear (2003) grouped these intelligences into three different types "object-based" –visual/spatial, bodily/kinesthetic and logical/mathematical; 'objectless'- verbal/ linguistic, musical/rhythmic and naturalist; and "personal"-interpersonal and intrapersonal.

According to Don Comeau (2005), multiple intelligences theory provides logical and thorough explanation for how we think. It challenges the traditional notion that our intellect can only be viewed through the windows of languages and logic. It attacks the myth that those who fail to succeed in society are somehow less intelligent than those who represent the dominant culture.

Stager (2008) suggest that if MI used correctly will enhance learners' ability by incorporating these abilities into every aspect of a student education.

Armstrong (2000) has argued that IM theory has broad implication for special education. Because MI focuses on a wide spectrum of abilities, it helps place "special needs" in broader context.

# Implementing multiple intelligence activities in lesson plans

The multiple intelligence approach does not require a teacher to design a lesson in eight or nine different ways so that all students can access the material. Rather, it involves creating rich experiences in which students with different intelligence profiles can interact with the materials and ideas using the particular combinations of strengths and weakness.

Armstrong proposes the following seven-step procedure to create lesson plans or curriculum units using MI theory as an organizing framework:

- a) Focus on a special objective or topic.
- b) Ask key MI questions.
- c) Consider the possibilities.
- d) Brainstorm.
- e) Select appropriate activities.
- f) Set up a sequential plan.
- g) Implement the plan. (Dastgoshadeh and Jalilzadeh, 2011).

# **Benefits of using Multiple Intelligences theory**

Williams (2002,24) suggested that, when using Gardner's multiple entries, multiple representations and multiple connections, five effects are implied:

- 1. Thinking of students in a new light, looking and teaching to strengths instead of weakness.
- 2. The curriculum needs to be adapted to match the intelligence strengths of the students so they can connect with what they are learning.
- 3. The more ways to information is presented, the better chance a student has to understand and also make connections and representations to other material they have learned.
- 4. Information is taught using more than one method, it should also be assessed using more than one method. For example, it is unfair for students with a strong bodily-kinesthetic intelligence to always be assessed using pencil/paper, which commonly only assesses verballinguistic and logical –mathematical intelligences. Rather, other ways of assessment should be used, such as portfolios, projects and presentations.
- 5. When school implement MI, they encourage " responsible risk-taking and innovation".

Giles, Peter and Womack (2003) states that using multiple intelligences theory in the classroom has many benefits:

- a) As a teacher and learner you realize that there are many ways to be smart.
- b) All forms of intelligence are equally celebrated.
- c) By having students create work that is displayed to parents and other members of the community.
- d) A sense of increased self-worth may be seen as students build on their strengths and work towards becoming an expert in certain areas.
- e) Students may develop strong problems solving skills that they can use in real life situations.

Armstrong (2009,57) stated "The MI teacher provides hand-on experiences, whether they involve getting students up and moving about passing an artifact around to bring to life the material studied, or having students build something tangible to reveal understanding". The activities Armstrong suggested actively engage students by helping them relate learning to real life.

According to Lazear (2004), using MI in the classroom makes the lesson more interesting, which causes students to pay more attention to what is taught

and then learned. As a result, students are more engaged, they remember more and their achievement increases.

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