Application of Multiple Intelligences-Based Approach in TEFL: English Teaching in Morocco as a Case Study

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ABSTRACT: The current study is intended to assess the utility of Multiple Intelligence-Based Approach in improving the English performance of secondary stage learners. It adopts a two groups pre-test-post-test quasi experimental design. The experimental group consists of thirty-four learners of third year junior high school. The control group is composed of thirty-five students. Both groups are evaluated using a pre-test to determine their pre-course performance. The experimental group is taught English using a variety of activities whose goal is to stimulate every single facet of their intelligence during 17 weeks. At the end of the experiment period, a test was assigned for both groups. The groups' scores were analyzed using T-test. Accordingly, the results unveiled that the proposed MI-based approach had a positive effect on the learners' English performance. There were significant differences between the means of the pre-test and post-test of the experimental group.

KEYWORDS: Multiple Intelligences, English Performance, Multiple Intelligences-Based Approach.

1 INTRODUCTION

English teaching is increasingly becoming a vital area of study as it is used in international communication, commerce, trade, tourism, science and other fields of development. Likewise, the mastery of English does not only make people succeed in their studies but also opens a wide range of horizons for good careers.

In fact, how to teach this language effectively is a central issue that probably all educational practitioners look for. Accordingly, many approaches have been adopted and adapted, and language teaching has gained few benefits, mainly the shift from teacher-centered approach to learner-centered approach. Students are no more considered as totally similar and passive, but they are treated as diverse, coming from different backgrounds and having different potentials. Multiple intelligences-based approach is one of these learner-centered approaches that has received much attention for the recent years (Campbell, 1997) and which disputes the idea that intelligence can be measured through the same characteristics (linguistic and logical).

Gardner (1983) considers this as a narrow conceptualization of intelligence and rather defines it as "an ability to solve problems or fashion products that are valued in one or more cultures." (p. 81). He puts forward eight different intelligence capabilities: Linguistic, Spatial (Visual), Logical/Mathematical, Interpersonal, Intrapersonal, Bodily-Kinesthetic, Musical and (Naturalistic, 1999).

This has, of course, strong implications in education in general and in language teaching and learning in particular. Given this fact, if we can identify learners' real strengths and sensitize them about their intelligence profile, the act of learning will become more interesting and more enjoyable, and will by implication heighten their motivation to learning. The role of an MI teacher, then, is to continually shift his/her methods of presentation from linguistic to spatial to musical, and so on; exhibiting intelligences in creative ways. The purpose of this study, therefore, is to probe the effectiveness of multiple intelligences-based

approach and examine its implementation in teaching English as a foreign language to a group of middle school students at Moulay Ismail junior high school in Khemisset, Morocco.

The purpose of the present research is to explore the multiple intelligences and English performance of Third year middle school students. Based on such conception, this study seeks tentative answers to the following questions:

Q1. What is the multiple intelligences' profile of the students?

Q2. What is students' English performance before and after the experiment?

Q3. Is there a significant relationship between multiple intelligences-based approach and better English performance?

To achieve the proposed purposes and answer the research questions, the following research hypothesis is formulated: There is a significant relationship between multiple intelligences-based approach, and better English performance of the students.

Initially, the MI-Based Approach will be generally defined as a learner-centered approach which takes into consideration differences in learners' intelligence profiles while teaching them English language, and the fact that they approach language learning in different ways.

2 REVIEW OF LITERATURE

2.1 THE THEORY OF MULTIPLE INTELLIGENCES

In 1983, Howard Gardner, a professor in cognition and education, came up with the theory of MI as a reaction to the traditional understanding of intelligence. The theory calls for a more complete view which ratifies all parts of a person's mind. Gardner (1983) proves that people possess seven different intelligences: Linguistic intelligence, musical intelligence, logical-mathematical intelligence, spatial intelligence, bodily-kinesthetic intelligence, interpersonal intelligence, and intrapersonal intelligence. In 1999, Gardner extended this version to include one more trait of intelligence dubbed as Naturalistic intelligence.

Worth noting is that Gardner (1983) maintains that people are intelligent in several non-identical ways and it is society that nurtures and strengthens certain intelligences. This means that, possessing all intelligences to some degree doesn't mean that they are equally represented in one's mind.

2.2 MI THEORY AND FOREIGN LANGUAGE LEARNING

Gardner's MI theory has already been implemented by several foreign language educators such as Armstrong (1999, 2000), Condis, Parks & Soldwedel (2000), Haley (2001, 2004) and Berman (2005), to name but only a few. These researchers strongly argue that foreign language teaching and learning is a complex mission and only multiple intelligences-based approach can make it possible. Condis *et al*., (2000) elaborate more on this premise arguing that the traditional curriculum in language development is very simplistic and does not address the learners' multiple intelligences. So, the learner who is verbally/linguistically intelligent is more likely to do well in the language area and is considered as smart. However, the one with visual/spatial intelligence may find problems to achieve advancement in linguistic studies.

As a matter of fact, the multiple intelligence-based class activities are learner-centred. They enable learners to have a variety of approaches for the purpose to improve learning and promote their language skills (Christison & Kennedy, 1999). Poole (2000) believes that MI-based activities encourage learners to become both receivers and producers of language. In a MI classroom, learners can learn in a relaxed, anxiety-free atmosphere in which language is learnt through games, songs and task-based projects. Arnold & Fonseca (2004) suggest that language learning can be facilitated by bringing in the musical, visual/spatial, bodily/kinesthetic, interpersonal, intrapersonal, mathematical and naturalistic faculties because they form alternative perspectives towards language learning. The activities are often varied to allow learners to learn in their own ways, and automatically reduce boredom, which by implication may foster their performance in language learning. In fact, in applying the MI-theory in language teaching, three important factors are to be considered: The MI instructor, the MI environment and the MI class activities.

3 RESEARCH METHODOLOGY

3.1 RESEARCH METHOD

Adopting a two groups pre-test-post-test quasi experimental design, the study sets out to measure whether the approach implemented proves to be effective or not.

Group A: Pre-test→ MI-based approach→ post-test

Group B: Pre-test→ Traditional approach→ post-test

Therefore, after an experimental period that has lasted for a period of seventeen weeks, the means of the pre-test and post-test of both groups A and B were compared to see if there is any improvement in the scores of the experimental group and hopefully confirm the effectiveness of MI-based approach. Worth mentioning is that an MI test is used to determine the areas of students' strengths with a view to choose the type of activities which mostly suit the students' intelligence profile.

3.2   RESEARCH SAMPLE

The respondents are two classes; one class is the experimental group (A) who were taught using multiple intelligences-based approach as a method of instruction. This class includes 34 students (18 females and 16 males); the other is the control group (B) that consists of 35 students (19 males and 16 females), and have been taught via the traditional way. The latter puts the teacher in a position to follow the book step by step and gives more importance to deductive learning of grammar and vocabulary, a distinguishing feature of the Grammar Translation Method.

3.3   RESEARCH VARIABLES

The present study concerns itself with the investigation of two variables: In so far as the independent variable is concerned, it contains the following multiple intelligences: Linguistic, Logical-mathematical, Musical, Spatial, Bodily-kinaesthetic, Interpersonal, Intrapersonal and Naturalist. English performance, on the other hand, is the dependent variable. It is considered dependent as it is hypothesized to be affected positively by the MI-based approach.

3.4   RESEARCH INSTRUMENTS

PRE-TEST

Since the students are beginners and they have been learning English for less than four months, an English general proficiency test was almost impossible especially in speaking and listening proficiency. Accordingly, the pre-test was decided to measure the two groups' performance in English, namely in reading comprehension, vocabulary, grammar and some simple writing skills. The test is scored out of 20, 4 points for reading comprehension, 6 for vocabulary, 6 for grammar and 4 points for writing.

POST-TEST

At the end of the experiment, students were given another English performance test to determine any increase or decrease in students' general scores when compared with their test before the course started. Means of both groups were compared to see if there is any improvement and whether it is due to the new approach of instruction (MIBA) or probably to other uncontrolled variables. For convenience, the post-test followed the same grading score as the pre-test. It is worth noting here that as a reward for their active participation and diligence, the best participants were given certificates of excellence.

MI QUIZ

A test on multiple intelligences was administered to the experimental group before starting the experiment. It was beneficial for both students and their teacher. Students knew their areas of strength and increased their self awareness. In fact, the purpose behind an MI inventory is to connect students' life experience to the principles maintained by the multiple intelligence theory.

MOTIVATIONAL QUESTIONNAIRE

This questionnaire's purpose is to elicit the nature of feedback students of the experimental group had about the new approach. It is also a backup for the Multiple Intelligences quiz to see whether the suggested activities went hand in hand with the learners' intelligence profile. The questionnaire consists of yes/no questions, likert type scale and multiple choices statements.

4   DATA ANALYSIS

4.1   MULTIPLE NTELLIGENCE QUIZ

- Multiple Intelligences quiz helped students to know their areas of strength and increased their self-awareness; besides, the results of the MI test were exploited in choosing the classroom activities convenient with the common intelligences of the students. The most frequent intelligences are clear in the graph below:
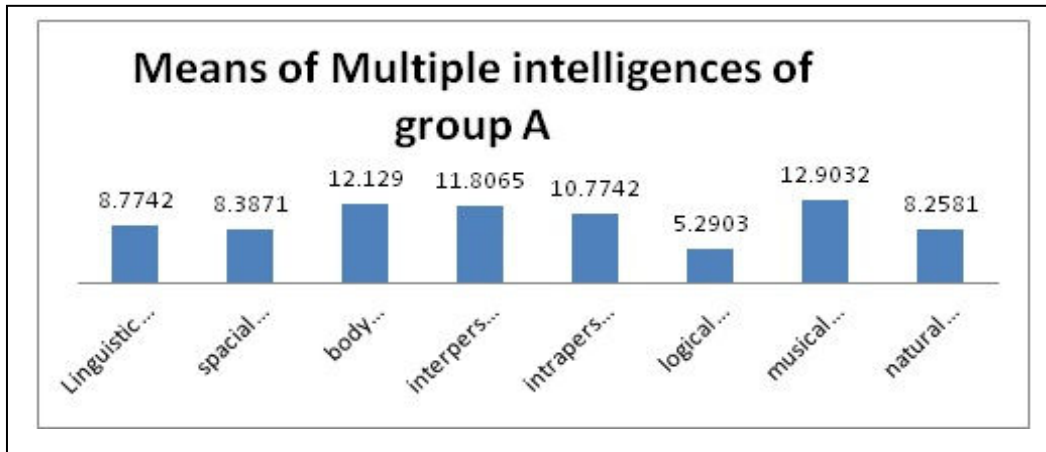

Fig. 1.   Multiple Intelligences profile

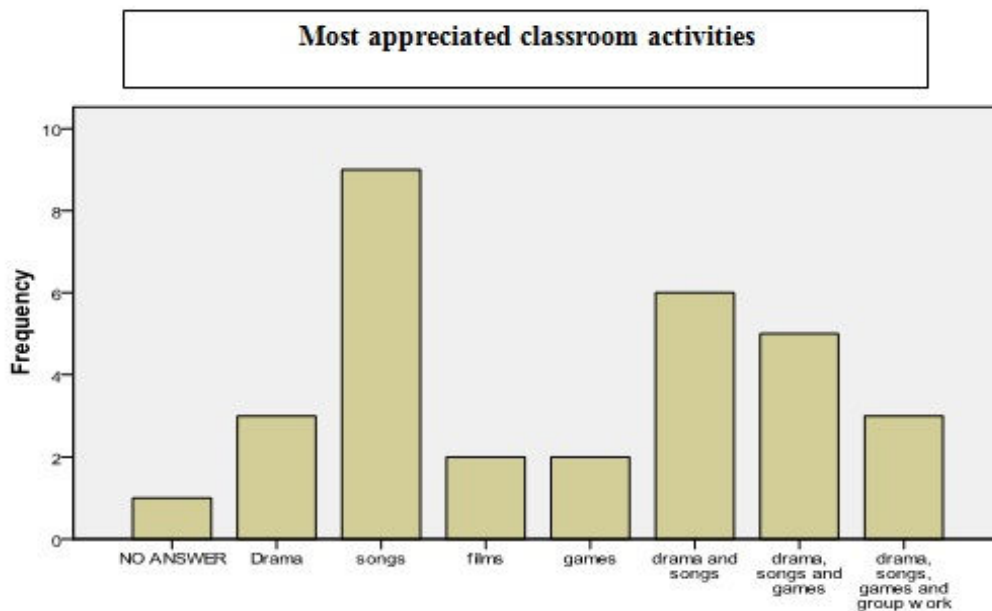- **Motivational Questionnaire**

Fig. 2.   Students' Favorite Classroom Activities

The results of the motivational questionnaire showed that the experimental group was more motivated than the control group. Their motivation was not connected to the exam or any other rewards. This may certainly be the secret behind gaining a significant improvement in their language proficiency. The MI based approach succeeded to bring the enjoyable games, songs and films to the classroom. Thanks to MI based approach, now English can be taught through entertainment which learners, especially younger ones, enjoy very much.

4.2 RESULTS OF THE PRE-TESTS AND POST-TESTS

The descriptive statistics of the pre-test and post-test of the experimental group displayed that there is a big difference between the means of the two tests' scores (pre-test M= 7,77 # post-test M= 13,81). The results showed an important improvement in language performance of the experimental group.

Table 1. Means of Group A in the Pre-test and Post-test

		Mean	N	Std. Deviation	Std. Error Mean	t	df	Sig. (2-tailed)
Pair 1	Experimental Group Pretest	7,7794	30	3,66989	,67003	-5,971	29	,000
	Experimental Group Posttest	13,8167	30	4,59851	,83957			

The results of the pre-test and post-test revealed a significant improvement in language performance of the experimental group. A difference of 5, 97 was observed between the pre-test and post-test after an experimental period which lasted for 17 weeks. This difference is highly significant at (p=, 00).

To prove that the improvement in English performance was due to the treatment (MIBA) implemented throughout the experiment and not to other variables, an independent sample t-test was used to compare the mean scores of the two groups in the post test.

Table 2. Scores of Both Groups in the Post-test

	groups	N	Mean	Std. Deviation	Std. Error Mean	Mean Difference	t	df	Sig. (2-tailed)
scores2	Experimental Group	30	13,8167	4,59851	,83957	1,56667	1,447	54	,154
	Control Group	26	12,2500	3,48497	,68346				

It is worth noting that for both groups, scores for the post-test were higher than their pre-test counter parts; however, there was little change in the part of group B compared to group A which encountered a greater improvement. Nevertheless, the experimental group appeared to outperform the control group though no significant difference was detected (p> 0,05). We conclude that Multiple Intelligences Based Approach had a positive effect on students' performance.

5 CONCLUSION AND RECOMMENDATIONS

Mixed ability classes are a truth that nobody can deny. Our classes have never been homogeneous and our learners have never come to class with the same language background, intelligence profile and motivation. Therefore, the need is for an approach which takes into consideration all these facts. Howard Gardner's theory on Multiple Intelligences has helped teachers and learners become aware of their strengths and weaknesses. However, any practitioner who would like to implement MI based approach should take into account the difference in contexts and in culture while incorporating Gardner's theory. Teachers and educators should know that intelligences are not fixed abilities but they are changeable and trainable. Worth noting is that teachers willing to apply Multiple Intelligences Based Approach can make use of projects and problem-solving techniques as they stimulate learners' creativity and cooperation and most importantly because they tap on a combination of intelligences.

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