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The Place of The Multiple Intelligences Theory in the Algerian EFL Textbook: An Evaluation of 1st Year Secondary School Textbook "At the Crossroads"

مكانة نظرية الذكاءات المتعددة في المنهاج المدرسي لتعليم اللغة الانجليزية بالجزائر: تقييم الكتاب الثانوي "At the Crossroads" المدرسي للسنة الاولى للتعليم Djallel Boulmaiz, University of Constantine -1-, Algérie. تاريخ التسليم: (2017/09/25)، تاريخ القبول: (2017/12/05)

Abstract:

ملخص:

This paper investigates the extent to which the multiple intelligences theory is applied in the Algerian EFL classroom. An English language textbook, "At the Crossroads", was evaluated and teachers' knowledge and application of the theory were also analyzed. The aims of this research were achieved through a survey (which investigated teachers' use of MI) and a textbook evaluation tool designed and used to analyze "At the Crossroads" in relation to the multiple intelligences theory. The findings showed that "At the Crossroads" caters basically for only two intelligences: the verbal/linguistic and the logical/mathematical. The results showed also that most Algerian teachers are not acquainted with the multiple intelligences theory and the researcher recommends, therefore, that teachers must receive more training on the application of MIT to meet learners' diverse needs.

Kev words: Multiple intelligences theory, English as a foreign language learning, textbook evaluation, teachers' perceptions.

يهدف هذا المقال الى تقصى مدى تطبيق نظرية الذكاءات المتعددة عند تعليم اللغات الاجنبية في المدرسة الجزائرية. تم تقييم الكتاب المدرسي لللغة الإنجليزية، وهو «At the Crossroads» على ضوء هذه النظرية، كما تمت دراسة معرفة وتطبيق ال(ام. آي تي) من طرف المعلمين. وقد تحققت أهداف هذا البحث من خلال استبيان (والذي ساعد في دراسة مدى تطبيق المعلمين له ام آي تي) وأداة تقييم للكتاب المدرسي (والتي استعملت لتحليل «At the Crossroads» إعتمادا على نظرية الذكاءات المتعددة). أظهرت النتائج أن At the» «Crossroads يساهم في تطوير نوعين من أنواع الذكاءات فقط: اللفظي/ اللغوى والمنطقي/ الرياضي. وأظهرت النتائج أيضا أن معظم المعلمين الجزائريين ليس لديهم اطلاع كاف على النظرية و لهذا توصيى الدراسة بوجوب تلقى المعلمين الجزائريين المزيد من التدريب على تطبيق النظرية لتلبية الاحتياجات المتتوعة للطلبة. الكلمات المفتاحية: أجندة 2063، التنمية الأفريقية،

الشباب الأفريقي، الإرهاب في أفريقيا.

1 - Introduction:

The new notion of intelligence proposed by Gardner, in his book *Frames of Mind*, has revolutionized the field of psychology. Gardner (1983) defines "intelligence as the ability to solve problems or to create fashion products that are valued within one or more cultural settings" (p. 81). This definition challenged the traditional psychological view of intelligence as a single capacity that drives logical and mathematical thought. He rather suggests that all individuals have personal intelligence profiles that consist of a combination of seven intelligence types, namely linguistic, logical, mathematical, spatial, musical, bodily-kinesthetic, interpersonal, and intrapersonal intelligences. In 1999, Gardner added the eighth intelligence type which is the naturalist intelligence.

Since 1983, when Howard Gardner published *Frames of Mind*, multiple intelligences theory (MIT) has been widely accepted and adopted by educators as a tool for understanding and effectively meeting the learning needs of their students. Christinson (1998, as cited in Botelho, 2003) claims that few theories have been embraced more enthusiastically by EFL teachers in the past few years than Gardner's theory of multiple intelligences; the theory has been applied to foreign language teaching and learning by many scholars such as Berman and Tanner.

To obtain better results, the significant shift in language teaching from a teachercentered to a learner-centered approach must be felt in our textbooks, which are considered important elements in any curriculum.

When designing textbooks, learners' needs and potentials should be taken into account. The multiple intelligences theory can perfectly serve the purpose and make a great contribution to language teaching and learning since it allows for the involvement and consideration of learners' needs, potentials, styles, and intelligences.

2. Literature Review:

2.1 Gardner's Multiple Intelligences Theory

As the co-director of Harvard's Project Zero, a research group established in 1967 and dedicated to the study of cognition, creativity, and the arts; Gardner "received an interesting assignment: to write a book about what had been established about human cognition through discoveries in the biological and behavioral sciences. Thus was born the research program that led to the theory of multiple intelligences" (Gardner, 2003, p. 3).

Although it has attracted some controversy and criticism, Gardner's theory of multiple intelligences has, indeed, revolutionized the world of psychology and changed the way in which the notion of intelligence should be looked at. First introduced in the 1983 book, *Frames of Mind*, the theory challenged the traditional view of intelligence as a unitary, biologically determined cognitive ability that could be simply measured and defined quantitatively through the IQ tests. Gardner,

instead, saw the mind "as a series of relatively separate faculties, with only loose and non-predictable relations with one another" (Gardner, 1993, p. 32).

According to MI theory, IQ tests' emphasis on the linguistic and the logical/mathematical abilities has been one of the biases of conventional ideas about intelligence. In contrast, the theory claims for other autonomous and equally important abilities or intelligences to be acknowledged. Intelligence ceased to be defined only by the concept of academic intelligence in the light of MI theory, and the concept of cultural intelligence, which includes the academic intelligence and other types of it, was introduced. Gardner (1999) defined intelligence as "a biopsychological potential to process information that can be activated in a cultural setting to solve problems or create products that are of value in a culture' (pp. 33-34). He "saw intelligent behavior as related to specific kinds of functioning in the real world" (Mason & Wilox, 2009, p. 498).

In *Frames of Mind* (1983), Gardner has originally identified seven different intelligences: verbal/linguistic, logical/mathematical, spatial/visual, bodily/kinesthetic, musical, interpersonal, and intrapersonal. An eighth intelligence, the naturalist intelligence, was added to the list in the late nineties. A brief description of the eight intelligences can be summed up as follows:

- A/ Verbal/Linguistic Intelligence (VL) :

In Gardner's words (1999), VL intelligence "involves sensitivity to spoken and written language, the ability to learn languages, and the capacity to use language to accomplish certain goals" (p. 41). Linguistically gifted people possess an advanced verbal sense of humor as they are generally capable of effectively manipulating linguistic components and structures. They often use language to make puns, analogies, tongue twisters, and jokes.

An intelligence is the product of nature, but environmental factors, it is believed within the framework of MIT, play a vital role in developing someone's abilities. "Early talkers and readers may not become linguistically gifted if their life experiences are limited" (Mckay, 2008, p. 713). The linguistic intelligence is one of the later-developing intelligences, because to be linguistically adept requires life experience.

High level of VL intelligence is demonstrated by writers, poets, public speakers, lawyers, and interpreters. William Shakespeare, Robert Frost, Virginia Woolf and Mark Twain, for instance, are typical examples.

B/Logical/Mathematical Intelligence (LM):

LM intelligence, according to Gardner (1999), "involves the capacity to analyze problems logically, carry out mathematical operations, and investigate issues scientifically" (p. 42). Those gifted in mathematical/logical intelligence tend to think rather sequentially and linearly, reason using deduction, and easily discern patterns in data. Their problem solving capacities are rapid, typically non-verbal,

unpredictable, and may seem to be invisible to the problem solver (McKay, 2008; Kincheloe & Feltman 2007).

Although this type of intelligence, along with VL intelligence, is of great importance in the academic setting, especially in conventional schools; Gardner (1999) asserts they are not necessarily superior to other intelligences. Gardner (1999) rightfully raises the issue:

Indeed, the fact that most psychologists and most other academics exhibit a reasonable amalgam of linguistic and logical intelligence made it almost inevitable that those faculties would dominate tests of intelligence. I often wonder whether a different set of faculties would have been isolated if the test developers had been business people, politicians, entertainers, or military personnel (p. 42).

Expertise in LM intelligence is typically exhibited by mathematicians, statisticians, accountants, philosophers, physicists, chemists, biochemists, engineers, and computer programmers. Blaise Pascal, Isaac Newton, Albert Einstein, Srinivasa Ramanujan, and Bill Gates are typical examples of end-state performers in the logical/ mathematical domain.

C/ Musical Intelligence (M):

M intelligence involves the ability to indentify sound patterns, create, communicate, and understand meanings made out of sound. It is characterized by auditory imagery and therefore entails skill in the performance, composition, and appreciation of musical patterns (Gardner, 1999).

According to some neuropsychological studies, "the right hemisphere of the brain seems to be associated with musical perceptions and production" (McKay, 2008, p.716). Gardner (1999) questioned psychologists', and even laypeople's, underestimation of such an intelligence saying: "In my view, musical intelligence is almost parallel structurally to linguistic intelligence, and it makes neither scientific nor logical sense to call an intelligence and the other a talent" (p. 42). For him, M intelligence is no less important than other human abilities.

Musicians, composers, band directors, disc jockeys and music critics tend to possess this mode of intelligence. Examples of people who possess an end-state expertise in musical intelligence include Wolfgang Amadeus Mozart, who had composed his first pieces at age 5, Ludwig van Beethoven, Midori Gotō, and Michael Jackson.

D/ Bodily-kinesthetic intelligence (BK):

Gardner (1999) concisely defines BK intelligence as person's ability of using "one's whole body or parts of the body (like the hand or the mouth) to solve problems or fashion products" (p. 42). From a biological perspective, the motor cortex is believed to be responsible for the control of bodily movement. "In right-handed people, motor control is located in the left hemisphere; in left-handed people, motor control is located in the right hemisphere" (McKay, 2008, p713). BK intelligence is ideally demonstrated by dancers, actors, athletes, figure skaters,

craftspersons, surgeons, bench-top scientists, mechanics, and many other technically oriented professionals.

End-state expertise of BK intelligence is illustrated by footballers such as Diego Armando Maradona, Zinedine Zidane, and Lionel Messi, dancers such as Mikhail Baryshnikov, Martha Graham; and actors such as Alfredo James Pacino, and Robert Anthony De Niro.

E/ Spatial/Visual Intelligence (SV):

SV intelligence involves the capacity of effectively recognizing and manipulating "patterns of wide space (those used, for instance, by navigators and pilots) as well as the patterns of more confined areas (such as those of importance to sculptors, surgeons, chess players, graphic artists, or architects)" (Gardner, 1999, p. 42). Spatially intelligent people often see things that other people miss and apply their spatial abilities to arts such as sculpture, invention, painting, photography, interior design, and architecture. As reported by McKay (2008), "the posterior region of the right cerebral cortex is the location in the brain where spatial processing occurs" (p. 716).

Examples of people who showed exceptional skills in the spatial/visual domain include Leonardo di ser Piero da Vinci, Pablo Picasso, Temple Grandin, Frieda Kahlo, and I.M. Pei.

F/ Interpersonal Intelligence (IR):

IR intelligence—one of Gardner's two personal intelligences—denotes "a person's capacity to understand the intentions, motivations, and desires of other people and, consequently, to work effectively with others" (Gardner, 1999, p. 3). In the interpersonal system we recognize elements such as facial expressions, gestures, other body language, and verbal cues. Studies showed that the frontal lobe is "the area of the brain involved with interpersonal intelligence. Damage to this area via injury, lobotomy, or Pick's disease results in lasting personality changes" with other cognitive abilities staying intact" (McKay, 2008, p.714).

Sharp IR intelligence is generally required of educators, businesspeople, counselors, clinicians, religious leaders, political leaders, and actors. Psychologists and talk show hosts such as Dr. Phillip C. McGraw, and Oprah Winfrey, and noted leaders, such as civil rights activist Martin Luther King, Jr., are among those individuals who demonstrate the existence of exceptional interpersonal intelligence.

G/ Intrapersonal Intelligence (IA):

IA intelligence -Gardner's second personal intelligence-"involves the capacity to understand oneself, to have an effective working model of oneself—including one's own desires, fears, and capacities—and to use such information effectively in regulating one's own life" (Gardner, 1999, p. 43). Strong IA intelligence allows the person to successfully monitor his own emotions, construct self-concept, and understand how he fits in relation to other people. According to McKay (2008), "as is the case with interpersonal intelligence, the frontal lobe is involved with

personality. Damage to the frontal lobe can alter personality but leave other cognitive functions intact" (p. 714). Strong IA intelligence is typically demonstrated by spiritual leaders, psychologists, psychotherapists, political leaders, and teachers.

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H/ Naturalistic Intelligence(N):

N intelligence is characterized by the ability to recognize and classify different species of flora and fauna in nature. It involves the person's capacity to situate himself in the natural environment (McKay, 2008; and Kincheloe & Feltman, 2007).

Examples of individuals who excel in this domain include biologists, ornithologists, and agriculturers. End-state expertise of N intelligence is illustrated by people such as Jane Goodall, John James Audobon, and E.O. Wilson.

The intelligences Gardner identified correspond to different content areas. He conducted a study where he "combed the literature from brain study, genetics, anthropology, and psychology in an effort to ascertain the optimal taxonomy of human capacities" (Gardner, 2003, p. 3). While his predecessors based their arguments on one field, analysis of data collected using psychometric instruments, he "reviewed evidence from a large and hitherto unrelated group of sources: studies of prodigies, gifted individuals, brain-damaged patients, idiots savants, normal children, normal adults, experts in different lines of work, and individuals from diverse cultures" (Gardner 1983, p. 9). Gardner admits, therefore, that the list of intelligences he proposed is far from being exhaustive. He believed that the precise number of intelligences is not known, and more importantly, human intelligences according to him cannot be identified only through statistical analyses of cognitive test results.

2.2 MI Theory and Language Teaching:

One of the main manifestations of the enormous success MI theory has achieved is the inspiration it gives to different types of projects, most notably those related to education. Immediately after the release of *Frames of Mind* in 1983, the theory started to produce astonishing effects and Gardner himself "was amazed at how many individuals said that they wanted to revise their educational practices in the light of MI theory" (Gardner, 2003, p. 6). Multiple intelligences theory was, and still is, the centre of many studies and researches in the field of education, including, of course, second and foreign language teaching.

Although MI theory was not created as curriculum or model for educational institutions, hundreds of schools in the USA and around the world are applying it in their educational practices. Some of these schools base their curricula on the principles of the theory. A famous example is the Key School in Indianapolis, Indiana, which is, according to Gardner (2003), "the first school in the world organized explicitly around MI theory" (p. 7).

Researchers are optimistic about MI theory and believe that through it teachers would rather invest in learners' wide range of abilities. MI theory according to them has the potential to revolutionize the educational field if appropriately applied. Pritchard (2009) declares: "If the ideas set out by Gardner are to be taken seriously, then there are ramifications for the ways in which teachers teach and for the types of activities in which children in school are expected to take part" (p. 35).

2.3 MI Theory and Textbook Evaluation:

According to Palmberg (2001) Michael Berman was the first to apply Gardner's MI theory to ELT in his book 'A Multiple Intelligences Road to an ELT Classroom'. The recent integration of the theory into education is, likely, the main reason behind the shortage in the empirical literature on textbook evaluation in that particular point, that is, in the light of the multiple intelligences theory. The researcher will make reference, here, to some of the experimental studies that tried to determine and analyze the intelligence profiles of EFL coursebooks in use.

In the autumn of 2000, a study made by a group of student teachers who participated in an EFL methodology course at the Department of Teacher Education at Abo Akademi University in Vaasa, Finland; was reported by Palmberg (2001). They evaluated a coursebook used at the time, "Bricks 1", in order to determine its intelligences profile. In their study, they attempted to "find out the proportional distribution of exercises that catered for each of the diverse intelligence types in that particular coursebook, and, at the same time, to identify some of the problems involved in such an analysis" (Palmberg, 2001, p. 2).

As was expected, the coursebook exercises were predominantly verbal/linguistic and interpersonal, 97% and 25% respectively, but to the researchers' surprise, a "large number of exercises aimed at intrapersonal (with 76%)" (Palmberg, 2001, p.3).

Another study was conducted elsewhere when Snider (2001, as cited in Botelho, 2003) evaluated ten first-year college German textbooks to determine the types of intelligences the activities engaged. As the study showed that the materials were presented in a limited range of activity types, of the forty-one types of activities identified, only eleven engage intelligences other than verbal/linguistic. So, he suggested to modify the activities to enhance all the intelligences in learners. He explained "how the activity was in the textbooks and offered three suggestions for each activity type to provide alternatives to enhance more intelligences other than VL" (Snider 2001, as cited in Botelho, 2003, pp. 51-52).

Following the same model, Botelho (2003) studied, as part of a master's project, six EFL textbooks used in Brazilian language institutes. The textbooks were analyzed to determine if their activities catered for learners' multiple intelligences and the intelligence profile of the textbooks was identified. The results showed that the textbooks' activities do not engage all intelligence types (the most common

intelligences were VL, SV, IR, and IA) and that the MI theory was not considered when those textbooks where designed.

3. Research Methodology:

The process of textbook evaluation is a vital component for the design and implementation of syllabi since it provides valuable information to guide our actions, methodology, materials, and all aspects of syllabus innovation.

The aim of this research, therefore, is to investigate whether "At the Crossroads" caters for the multiple intelligences theory, and to what extent its activities help to develop all of the learners' eight intelligences. This study will also try to propose extra activities catering for the intelligences not included in the original activities of the textbook, and to suggest ways to help teachers apply multiple intelligences theory in their lessons.

This study attempted to provide answers to four main research questions. The first research question is directly related to the textbook being evaluated; does it incorporate the principles of multiple intelligences theory? Which intelligences are included in it? And to what extent does it engage MI in learners?

The relevance of multiple intelligences theory to English language teaching was investigated, so the second research question is concerned with knowledge and use of multiple intelligences theory in language teaching within the Algerian context, and can be formulated as follows: Are Algerian teachers aware of multiple intelligences theory? And if that is the case, do they apply it in their teaching?

The third question is related to the criteria English language teachers use to select extra materials supplementing this textbook, and how that impacts the use of MI theory in classrooms taking into consideration learners' different styles and intelligence profiles.

The last research question worth asking: What are the media necessary for the application of multiple intelligences theory in teaching, and can we make them available in the Algerian classroom?

In this study, two main research instruments were used. First, a Textbook Evaluation Tool (TET) served to analyze the English language coursebook entitled "At the Crossroads", which is used at first year of secondary school education. The coursebook evaluation will determine to what extent the activities of the textbook help to develop the learners' eight intelligences.

As a second research instrument, a survey was directed to teachers in order to collect relevant information concerning EFL teachers and their teaching contexts. The questionnaire was sent to seventy-nine male and female teachers of public secondary schools. Sixty-one questionnaires were handed personally by the researcher and eighteen were sent through e-mail. However, only sixty-five subjects responded to the survey.

4. Results and Discussion:

Trying to answer the first research question, the researcher conducted an evaluation of the coursebook being currently used with learners at the first year of secondary education. As mentioned before, the study aimed at identifying the intelligence profile of "At the Crossroads", and to what extent each of the eight intelligences is catered for in the textbook.

The results from the textbook analysis showed the following: Only seven intelligences were catered for (in various degrees of course); the bodily/kinesthetic intelligence was totally ignored and none of the 380 activities aimed at enhancing this type of intelligence. The profile of "At the Crossroads" was predominantly the combination of two intelligences: verbal/linguistic and logical/mathematical. The verbal/linguistic and the logical/mathematical intelligences were present in 100 % and 43.15 % of the activities respectively. 25 % of the activities engaged the intrapersonal intelligence. The spatial/visual intelligence was present in 19.73 %, the interpersonal and the naturalistic intelligences were present in 13.15 %, and 8.68 % respectively, and only 1.05 % of the activities engaged the musical intelligence in learners.

It was not expected to find that the principles of MI theory would be perfectly incorporated in "At the Crossroads" but it was held, nonetheless, that at least most intelligences would be engaged in a balanced way, especially after looking at some of the designers' claims concerning the aims of the textbook. For example, though the textbook writers were aware of the numerous pedagogical purposes that can be served through the inclusion of pictures and illustrations (Riche et al, 2005), their work did not reflect enough interest in developing the learners' spatial/visual intelligence.

It was expected, for instance, that a higher number of activities would cater for the interpersonal intelligence since one of the general aims of "At the Crossroads" was to consolidate competencies such as interacting orally in English (Riche et al, 2005).

The focus of this textbook on the verbal/linguistic and the logical/mathematical intelligences can have different interpretations. First, the incorporation of these two intelligences in language courses is less demanding in terms of cost and time compared to the other intelligences. Secondly, and more importantly, the textbook designers seem to be inclined to produce, either intentionally or not, test driven materials. In the so-called test driven curricula, educational materials incorporate the parameters that would enhance psychometric characteristics of measurement devices. Materials with such features are, therefore, "directed toward the content of the test rather than toward learning what the learners should be learning" (Farhady, 2002, p. 2). Language learners, through the use of "At the Crossroads", are being taught basically how to succeed in formal and standardized tests (which focus

chiefly on the verbal/linguistic and the logical/mathematical intelligences of the test-takers).

Table 1 summarizes the number and percentage of occurrence of each intelligence in the textbook (labels were used to refer to the intelligences in the following way: VL for verbal/linguistic, LM for logical/mathematical, SV for spatial/visual, BK for bodily/kinesthetic, M for musical, IR for interpersonal, IA for intrapersonal, and N for naturalistic).

Table 1: Number and Percentage of Occurrence of Each Intelligence in "At the Crossroads"

Total Number of Activities	380							
Intelligence	VL	LM	SV	BK	M	IR	IA	N
Number of Activities	380	164	75	00	04	50	95	33
Percentage	100 %	43.15 %	19.73 %	00 %	1.05 %	13.15 %	25 %	8.68 %

The analysis of the teachers' questionnaire revealed that although most subjects, fifty-five (84.62 %), have been trained in ELT methods, approaches, and theories, only nine (13.85 %) subjects said that they learned before about MI theory. Fifty-six (86.15 %) of the subjects confirmed that they have never learned about the theory. As to how teachers learned about MI theory, seven the subjects mentioned that they learned about it in a course, and two subjects learned about it from books (one subject mentioned that he knew about MI through a book called "You Are Smarter than You Think").

Data collected in the second section showed that thirty-one (47.69 %) subjects were not sure if they apply MI theory in their lessons, twenty-two (33.85 %) said they do not use MI in teaching, and only twelve (18.46 %) subjects said that they do apply the theory in their lessons.

However, when asked to answer question 10, which consisted of a list that includes at least four activities, materials, and techniques that can enhance each of the language learners' eight intelligences, the results suggest that most teachers are applying the multiple intelligences theory even without being aware of it. The aim behind this question was to check teachers' awareness of the use of the multiple intelligences theory.

In fact, some educators are applying MI principles in their teaching even though they ignore its existence as an established theory. Maybe teachers' experience in teaching and the training they received in ELT methods (such as TPR, suggestopedia, ...etc) and theories (such as the learning styles theory) made them realize the importance of bringing variety to their classrooms to cater for learners' different needs and profiles.

What looks promising, as well, is that most participants, forty-eight (73.85 %), showed interest in learning more about the multiple intelligences theory.

Moreover, teachers were asked in question 8 to mention how often "At the Crossroads" needs to be supplemented and the data collected in that section showed that thirty-two (49.23 %) subjects supplement "sometimes" the textbook, sixteen (24.61 %) do that "often", six (9.23 %) subjects only "seldom" supplement it, and two (3.07 %) subjects see that "At the Crossroads" needs to be "always" supplemented with extra materials. Nine (13.84 %) subjects, however, said they "never" need extra materials when they teach using "At the Crossroads".

So, although most teachers do not know about the multiple intelligences theory, the research findings indicate that Algerian teachers are well prepared for the adoption of MI teaching techniques. The Ministry of Education should, therefore, capitalize on that and modify language curricula to incorporate the innovative ideas which the multiple intelligences theory has introduced.

5. Conclusion:

Indeed, in a multiple intelligences-friendly language classroom, raised motivation of both teachers and learners can be ensured. Students' progress in learning foreign languages can be immensely improved as well. The purpose of this study was to evaluate, in the light of MIT, the language textbook named "At the Crossroads", and to investigate Algerian teachers' knowledge and application of the theory.

The results showed that the intelligence profile of "At the Crossroads" was predominantly the combination of the verbal/linguistic and the logical/mathematical intelligences, and that the multiple intelligences theory was not considered when this textbook was designed. If teachers rely strictly in their lesson plans on "At the Crossroads", most types of learners will be ignored.

References:

- Botelho, M.R.L. (2003). Multiple intelligences theory in English language teaching: An analysis of current textbooks, materials, and teachers' perceptions. Ohio, College of Arts and Sciences of Ohio University.

Farhady, H. 2002. Classroom assessment: A plea for change. Retrieved January 12, 2015 from the World Wide Web: www.aua.am/academics/dep/hf../ClassroomAssessment.pdf.

Gardner, H. (1983). Frames of mind: The theory of multiple intelligences.

New York. Basic Books.

Gardner, H. (1999). Intelligence reframed: Multiple intelligences for the 21st century.New York. Basic Books.

- Gardner, H. (2003). "Multiple Intelligences after twenty Years". Retrieved July 23,2015 from the World Wide Web: http://pzweb.harvard.edu/pis/hg_mi_after_20_years.pdf.
- Gass, S.M., & Selinker, L. (2008). Second language acquisition: An introductory course.(3rd .ed.) New York. London. Routledge, Taylor and Francis Group.
- Jordan, A., Carlile, O., & Stack, A. (2008). Approaches to learning. England. Open University Press.
- Kincheloe.J.L & Feltman.T. (2007). Howard Gardner, in Kincheloe.J.L & Horn.R.A. jr (eds). The Praeger Handbook of Education and Psychology. (Vol1) [pp81-87] USA. Greenwood Publishing Group, Inc.
- McKay, R.(2008). Multiple intelligences, in Salkind. Neil. (ed), Encyclopedia of Educational Psychology. Vol2. [pp712-717] USA. SAGE Publications, Inc.
- Mason, E.J., & Wilox, K. (2009). Intelligence: An overview, in Anderman.E.M & Anderman.L.H.(eds) Psychology of classroom learning: An encyclopedia. [pp 497-505] USA. McMillan Reference.
 - Palmberg, R. 2001. Catering for multiple intelligences in EFL coursebooks. HLT
- Magazine, January (2002). Retrieved on July 8, 2015 from the World Wide Web: http://www.hltmag.co.uk/jan02/sart6.htm.
- Pritchard, A. (2009). Ways of learning: Learning theories and learning styles in the classroom. (2nd ed). London.New York. Routledge, Taylor and Francis Group.
- Richards, J.C. (2001). Curriculum development in language teaching. UK. Cambridge University Press.
- Riche, B., Arab, S.A., Bensemmane, M., Ameziane, H., & Hami, H. (2005). At the crossroads: Secondary education, year one. Algeria. The National Authority for School Publications (O.N.P.S).
- Tomlinson, B. (1998). Materials development in language teaching. UK. Cambridge University Press.