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COMBINING THE COMPETENCY-BASED APPROACH AND

THE MULTIPLE INTELLIGENCES THEORY FOR

BETTER ACHIEVEMENTS: The Case of First Year

LMD Students at the English Department- University of Oum El

Bouaghi

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Dedication

To the memory of my mother. May your soul rest in peace!

Acknowledgments

'In the name of Allah, Most gracious, Most merciful

Praise be to Allah, the Cherisher and Sustainer of the Worlds'

I owe my deepest gratitude to my supervisor, Professor BELOUAHEM Riad. Without his patience, constant support and encouragement, valuable insights, and wise guidance this study would have hardly been completed. Thank you for being my role model and inspiration.

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Abstract

A tough challenge the Algerian higher education system is confronted with concerns student underachievement. The factors that students' success or failure can be attributed to are manifold and teaching methodology may actually top the list. The aim of this study is to investigate whether learners' performance on a specific topical knowledge speaking test will be enhanced if we implement an instructional design that incorporates the principles of the Competency-Based Approach and the Multiple Intelligences Theory. The study attempts to investigate as well teachers' knowledge and application of the Competency-Based Approach and the Multiple Intelligences Theory in addition to examining learners' and teachers' perceptions of the importance of the speaking skill and some of the main factors and problems that influence its acquisition. In order to achieve the research objectives, we resorted to a number of instruments, namely a quasi-experimental design, a students' questionnaire, and a teachers' questionnaire. The quasi-experiment was conducted on three randomly chosen groups of first year students at the level of the English department- Larbi Ben M'hidi University. It helped in testing the research hypotheses: that experimental group A (with whom the Competency-Based Approach is implemented) will outperform the control group in the specific topical knowledge speaking test and that experimental group B (with whom the Competency-Based Approach is implemented in combination with the Multiple Intelligences Theory) will outperform both the control group and experimental group A in the specific topical knowledge speaking test. The teachers' questionnaire shed light on teachers' familiarity with and use of the Competency-Based Approach and the Multiple Intelligences Theory, and both surveys explored students and instructors' attitudes towards the speaking skill and the factors they think influence its development. Research findings reveal that the speaking skill is highly valued by both students and teachers. The quasi-experimental design findings demonstrate that combining the Competency-Based Approach and the Multiple Intelligences Theory yields better results in improving students' speaking skill; our research hypotheses were confirmed. Results of the teachers' questionnaire, however, indicate that teachers' knowledge about the Competency-Based Approach and the Multiple Intelligences Theory is limited. In the light of the findings the researcher came to, a number of suggestions are put forward to help teachers and educational institutions implement effectively the Competency-Based Approach and the Multiple Intelligences Theory.

List of Abbreviations

ANOVA: Analysis of Variance

CBA: Competency-Based Approach

CBE: Competency-Based Education

CBLT: Competency-Based Language Teaching

CBT: Competency-Based Teaching

CEFR: Common European Framework of Reference for Languages

EFL: English as a Foreign Language

ESL: English as a Second Language

MI: Multiple Intelligences

MIT: Multiple Intelligences Theory

OECD: Organization for Economic Cooperation and Development

SPSS: Statistical Package for the Social Sciences

SLL: Second Language Learning

MEC: Ministerio de Educación y Ciencia

UG: Universal Grammar

USA: United States of America

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General Introduction

1. Statement of the Problem

Underachievement, lack of active engagement, and students' deteriorating level have been a topic of debate for many years. Reasons cannot be reduced to one or two factors, but teaching style is definitely at play here. During my few years' experience as a teacher at the department of English- Larbi Ben M'hidi university, and through the number of informal discussions I held with colleagues and even students, I sensed that many fingers were pointed at traditional, teacher-centered methods. Adoption of conventional methods is believed to be one of the leading sources for student level decline.

Students need to be prepared for a world that is not just looking for individuals who possess disciplinary knowledge, but rather for ones who own the competence of effectively utilizing such knowledge in practical, real-life situations. The target of the teaching process should go beyond transmitting abstract information to include qualifying our students to be better information processors, critical thinkers, and problem solvers. Conventional teaching, however, is often associated with several negative corollaries such as shallow information processing, poor concentration, inertia, negative affect, and consequently low grades. Traditional methodology is typically teacher-dominated. It seldom considers individual differences (intelligence profiles and learning pace for example), it makes the teaching of complex, abstract material more difficult, and it allows no room for addressing or developing students' critical thinking, problem solving, and decision making skills. Learners play no active role; they are mere receptacles to be filled by knowledge imparted by the teacher.

2. Aims of the Study

The key to improving our learners' achievements may be in the hands of the students themselves. The solution may lie in adopting a teaching approach that caters more for learners' different profiles, an approach that makes students' needs its starting point, and one that encourages autonomy by giving students more control over the learning process. Hence, the primary purpose of this study is to investigate whether the students' speaking skill will be boosted if we implement a learner-centered instructional design. This instructional design will draw on the principles of the Competency Based Approach (CBA) and the Multiple Intelligences Theory (MIT). It should be noted that the language skill our study will primarily target is the speaking skill. Our choice is justified by the fact that speaking is a very important skill that is rarely addressed and assessed within conventional systems.

Abandoning traditional methods for more modern approaches and methods requires teachers to be knowledgeable about such learner-centered approaches and theories as CBA and MIT. Success of such a move actually depends on the provision of proper training which is an essential prerequisite for effective implementation of a teaching methodology. So, this study aims also at probing teachers' knowledge about CBA and MIT as well as investigating the extent to which CBA and MIT are applied in their classrooms.

Since we have special interest in tracing learners' development of the speaking skill within a specific academic subject-matter course (a linguistics' course), this study aims as well at investigating a number of issues related to speaking as a skill. The research will examine how highly students and teachers value mastery and development of oral communication skills. Students and teachers' attitudes and perceptions of the main factors and problems that influence the acquisition of the speaking skill will also be explored and analyzed.

3. Research Questions and Hypotheses

3.1 Research Questions

This study will be guided by the following research questions:

1- Compared to traditional teaching methods, would an instructional design incorporating the principles of CBA and MIT yield better results in our students?

2- How important is the speaking skill for our students? And was it catered for sufficiently in the previous phases of their educational path?

3- How important is the speaking skill for our students from the perspective of teachers? And is it catered for sufficiently in their classes?

4- How do students perceive the factors that may influence their speaking performance and development of oral communication skills?

5- How do teachers perceive the factors that may influence their students' speaking performance and development of oral communication skills?

6- Are teachers in the department of English-at Larbi Ben M'hidi university- knowledgeable about CBA?

7- How often do they apply it, i.e. CBA, in their teaching?

8- How effective do they think CBA is in improving the teaching/learning process?

9- Are teachers in our department knowledgeable about MIT?

10- How often are multiple intelligence-based (MI-based) techniques implemented by teachers in our department?

11- How effective do they think MIT is in improving the teaching/learning process?

12- To what extent is it easy or difficult to implement MIT in our language classes?

3.2 Hypotheses

This study seeks to test three hypotheses: a null hypothesis and two alternative hypotheses. The research hypotheses are formulated as follows:

H₁: Experimental group *A* (with whom the Competency-Based Approach is implemented) will outperform the control group in the specific topical knowledge speaking test.

H2: Experimental group B (with whom the Competency-Based Approach is implemented in combination with the Multiple Intelligences Theory) will outperform both the control group and experimental group A in the specific topical knowledge speaking test.

And the null hypothesis is formulated as:

Ho: 'Change in the teaching style will have no effect on students' development of speaking performance on a specific topical knowledge test'.

4. Research Design

It is important to define the research methods adopted and the overall strategy chosen to address the research problem. Research methods can be defined as the set of instruments the researcher makes use of conducting his study, that is, the tools and techniques of data collection and analysis. In Cohen, Manion, and Morrison's (2005) words: "By methods, we mean that range of approaches used in educational research to gather data which are to be used as a basis for inference and interpretation, for explanation and prediction" (p. 44).

Choice of the method is, principally, guided by the nature of the topic being investigated. Different research methods, such as quasi-experiments, surveys, case studies, and action research; reflect different purposes. The aim of the research imposes the use of a specific method given that each approach provides answers to different questions.

To serve main purpose of this study, which is to look for the possible effect the independent variable (teaching style) might have on the dependent variable (development of the

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speaking skill within a specific academic subject-matter course), we opted for a quasiexperimental design. But to gain more insight into the phenomenon under study the researcher will resort to additional research instruments, that is, the teachers' and the students' questionnaires.

The quasi-experimental design is implemented in the department of English at Larbi Ben M'hidi university. From a total population of three hundred and twenty nine (329) first year students (distributed over eight groups), a sample of three intact groups is chosen randomly to take part in the study: a control group and two experimental groups, *A* and *B*. It should be noted though that members of the groups were assigned by the administration. The quasi-experiment is conducted over three phases: pretesting, treatment, and post-testing. The pre-test takes place during the second week of September, 2015, the treatment period extends over the whole academic year 2015/2016, and the post-test is administered during the first week of May, 2016.

The other research instruments used in this study are two questionnaires directed to students and teachers. The students' questionnaire is addressed to a sample that is comprised of ninety six (96) first year LMD students at the department of English and it aims at elucidating learners' opinions about the importance of the speaking skill as well as the problems that hinder their development of oral communication skills. The teachers' questionnaire, on the other hand, elicits instructors' attitudes and perceptions of a number of issues related to the teaching and development of the speaking skill. It also fulfills the aim of investigating teachers' knowledge and application of CBA and MIT. From a population of forty eight (48) EFL teachers, at the English department- Larbi Ben M'hidi university, the questionnaire is administered to thirty (30) teachers.

5. Structure of the Study

This thesis is comprised of seven chapters. The first three chapters review literature related to the topic while the four remaining chapters constitute the practical part of the study. Chapter one opens with a discussion of the main factors that led to the emergence of the competency movement and then proceeds to a description of the major developmental phases Competency Based Education (CBE) went through. This chapter introduces CBE, presents its salient features, and discusses the main techniques CBA employs.

Chapter two casts light on the main aspects of Gardner's theory of Multiple Intelligences. This chapter starts by presenting the diverse perspectives intelligence is looked at from. The intricacy of the concept of intelligence makes it necessary to start with a discussion of how it has been differently defined by scholars and theorists. After that, it embarks on a detailed description of MIT: the intelligences hitherto identified by Gardner and the criteria that may qualify a certain ability as an intelligence. The chapter closes with an exploration of the educational implications of MIT.

Chapter three deals with a number of issues related to the teaching and learning of the speaking skill. It defines what speaking is and endeavors to provide a comprehensive description of its main aspects and constructs. It also discusses the difficulties that make the teaching and acquisition of speaking a challenging task. It offers some suggested techniques that may aid students develop that important skill. Next, the chapter raises teachers' awareness of some important measures and issues instructors should take account of when assessing learners' speaking performance.

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Chapter four examines students' perceptions of the importance of the speaking skill. It explores and analyzes the way participants in this study were taught speaking in the previous stages and investigates as well, from students' standpoint, the major hindrances that obstruct proper development of oral communication skills.

Chapter five analyzes the teachers' questionnaire data. It primarily investigates teachers' knowledge and application of CBA and MIT in their language classes. In addition to that, it measures teachers' valuation of the speaking skill and its importance for EFL learners.

Chapter six offers a detailed description of the procedures the researcher made use of and the main phases he went through implementing the quasi-experimental design. The quasiexperiment is used to test the causal relationship between two variables: teaching style (the independent variable) and learners' performance on a specific topical knowledge speaking test (the dependent variable). Additionally, the chapter presents the results obtained and the statistical measures employed in data analysis and interpretation.

The thesis concludes with chapter seven which sums up the results of the study and its main implications. It also proposes, based on the research findings, a number of suggestions and recommendations for an effective application of CBA and MIT.

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CHAPTER ONE: Competency Based Education

Introduction

Limiting language teaching to the study of language structure is no longer a satisfaction. In order to adapt to the rapid changes of the modern era, current teaching approaches, such as CBA, tend to target different goals. The aim is rather to enable learners to use the language effectively in a range of pragmatic and communication oriented situations and more importantly to gear students to the settings in which they would be required to use this language. To explain why CBA is claimed to be the ideal route to fulfill such practical goals, this chapter will present and discuss the main characteristics of this teaching approach. The first section will be devoted to reviewing the main philosophical foundations and theoretical bases that justify the emergence of the competency movement. Definition of CBE and explanation of its basic components will be preceded by a detailed historical account which will trace the origins of CBA and present, in a chronological order, the successive phases it went through in its development. After that, we will move to discuss concepts and techniques CBE emphasizes, that is teaching for behavioral objectives and implementing project works to improve learners' competencies. The chapter finally closes with an exploration of the advantages offered by CBE at the psychological and affective levels.

1.1 Learning Theories, Educational Philosophies, and Language Nature Theories

In describing teaching approaches and methods one needs to make reference to the "general principles and theories concerning how languages are learned, how knowledge of language is represented and organized in memory, or how language itself is structured". (Richards & Rodgers, 2001, p. 14). For that reason, it was deemed necessary to review literature

related to educational philosophies, language nature and learning theories before embarking on a detailed description of CBE and its main characteristics.

1.1.1 Educational Philosophies

A- Idealism

Idealism, one of the oldest systematic philosophies in Western culture, espouses the refined wisdom of men and women. The ultimate nature of reality, according to the idealist, rests on consciousness and mental entities rather than material, physical objects. The main aims of an idealist philosophy of education are the development of the mind and the improvement of students' character by implanting long lasting values. Idealism is a teacher-centered philosophy; students are passive recipients and teachers are assigned the responsibility of embodying models of behavior that are exemplary (Hager, 2014; Bullough, 2002; McLaren & De Lissovoy, 2002).

B- Realism

Realism is a philosophical theory that holds a rather materialist thesis. In contrast to idealist theories, the major concern of which are abstract concepts and logical constructions, realism posits that the material world exists independent of mind with truth lying in simple correspondences of observation. The realist school endorses the teaching of factual information and favors physical-world related subjects like math, physics, and science. Teachers are assigned the duty of imparting knowledge of this reality to students whose job is, at best, the passive participation in the study of things (Hossler, 2002; Caine, 2002; Williams, 2014).

C- Essentialism

Essentialism is an educational philosophy that bases the curriculum on teaching and learning those things that are essential to success in life. Essentialists offered, according to Null (2002), three basic educational principles:

- First, they recognized the right of an immature student to the guidance of a welleducated, caring, and cultured teacher.
- Second, they proposed that an effective democracy demanded a democratic culture in which teachers impart the ideals of community to each succeeding generation of children.
- Third, they called for a specific program of studies that required thoroughness, accuracy, persistence, and good workmanship on the part of pupils (p. 164).

Essentialism is a teacher-centered philosophy that is mainly concerned with the teaching of the great truths of human existence and the conservation of culture (Tozer, 2014; Conrad, 2002; Ellis, 2004).

D- Experimentalism

Experimentalism is an educational philosophy that dominated the early part of the twentieth century. Education at its best, from an experimentalist perspective, "is based on the continuous reconstruction of experiences emanating from student interest and active investigation" (Ellis, 2004, p. 30). A central tenet of experimentalism is the creation of school experience that accurately reflects 'real life'. Experimentalism called, therefore, for research-based and learner-centered educational methods.

1.1.2 Language Nature Theories

Identifying what the nature of language is has always been an issue of controversy among linguists. Theories of language can be grouped under three main categories: The structural view, the functional view, and the interactional view.

A- The Structural View

Structuralism was the most influential approach to the study of language during the first half of the twentieth century. Structuralists tend to describe language as 'a system 'où tout se tient'—that is to say, a relational structure in which everything hangs together with everything else. This principle applies throughout language, from phonology to semantics (Cruse, 1990). Within the realm of this theory, language is viewed as an institution wherein each element in it is defined chiefly by how it is related to other elements.

Structuralist linguists have the preference of focusing solely on the basic components of language, sound, form, and meaning. There study is best described as an isolated investigation of the language system. For that reason, teaching approaches and methods influenced by the structural view hold that the target of language learning is the mastery of the component elements of that system. These are "generally defined in terms of phonological units, grammatical units (e.g., clauses, phrases, sentences), grammatical operations (e.g., adding, shifting, joining, or transforming elements), and lexical items (e.g., function words and structure words)" (Richards & Rodgers, 2001, pp. 20-21).

B- The Functional View

As stated by Bischoff and Jany (2013), "functionalism views language as a dynamic, adaptive, and emergent system representing crystallizations of recurrent patterns and frequent use and outcomes of internal and external competing motivations" (p. 1). The functional view is an approach to the description of language that gives more importance to the purposes for which language is used. This theory holds that grammar is not an autonomous system and therefore seeks to find explanation of linguistic structure in language use; it combines the investigation of structure with the investigation of function.

According to Richards and Rodgers (2001):

This theory emphasizes the semantic and communicative dimension rather than merely the grammatical characteristics of language, and leads to a specification and organization of language teaching content by categories of meaning and function rather than by elements of structure and grammar (p. 21).

Functional syllabi take the desired communicative capacity in learners as the starting point. Selection of the elements that comprise the syllabus is rather determined by what functions and notions students need to express and not the number of structures they need to know. "In short, the linguistic content is planned according to the semantic demands of the learner" (Wilkins, 1976, p. 19).

C- The Interactional View

Interactionists such as Kasper (1979, as cited in Kramsch 1987) purported that "speaking a language means more than *referring* to the world, it also means *relating* to one's interlocutor" (p. 17). This theory sees language "as a vehicle for the realization of interpersonal relations and for the performance of social transactions between individuals" (Richards & Rodgers, 2001, p. 21). Description and explanation of language within the interactional view is based on a concept
of language as socially motivated; it is concerned with the linguistic devices and the social strategies language users draw on to create and maintain interpersonal relations.

As for language teaching and learning, according to this view, the content of the syllabus can be "specified and organized by patterns of exchange and interaction or may be left unspecified, to be shaped by the inclinations of learners as interactors" (Richards & Rodgers, 2001, p. 21). Rivers (1987) justifies interactionists' stance by claiming that "students achieve facility in *using* a language when their attention is focused on conveying and receiving authentic messages" (p. 4). Therefore, effective language teaching is all about creating sufficient opportunities for learners to engage in meaningful interactions.

1.1.3 Learning Theories

According to Snelbecker (1974), "it is necessary to have a comprehensive basic science theory of psychology before attempting application of any psychological principles and theories" (p. 1). Translation of principles of learning and instruction into specifications for teaching materials and activities requires a full understanding of learning theories on the part of practitioners in the field of education. Learning theories and research underlie effective pedagogy and provide valuable information about relationships among instructional components and the design of instruction (Keller, 1979). They respond to two questions:

"-What are the psycholinguistic and cognitive processes involved in language learning?

What are the conditions that need to be met in order for these learning processes to be activated?" (Richards & Rodgers 2001, p.17).

Due to the complexity of learning as a phenomenon, a variety of models have been advanced. Theories differed mainly in terms of determining how learning occurs and in identifying the factors that influence learning. Some scholars were inclined to focus on the

biological endowment and the learners' innate capacity for language acquisition. Others tended to focus more on environmental features. Here follows a description of the main learning theories the field of psychology has known:

A- Behaviorism

Behaviorism is the school of thought that dominated the world of psychology during the first half of the twentieth century. The term *behaviorism* (and its variants) was coined by the American psychologist J.B. Watson (1913). In his seminal article "*Psychology as the Behaviorist Views it*", he (1913) established the foundations of psychological behaviorism and laid down a systematic set of principles and theoretical procedures for the scientific study of human psychology. "Behaviorism is linked with empiricism, which stresses scientific experiment and observation" (Leahy, 2009, p. 20). It defines psychology as the science of behavior and consequently rejects introspection as a method for the study of the mind and internal mental processes (Watson 1913).

Leahy (2009) stated that behaviorist theorists "deny free will and maintain that behavior is the result of external forces, which cause humans to behave in predictable ways" (p. 20). Accordingly, behaviorism purports that learning, no matter how complex it is, can be explained in terms of three basic elements: stimulus, response, reinforcement. The connection that is created between these elements is referred to as conditioning.

Traditionally, behaviorists relied on *classical conditioning* (when a stimulus automatically prompts an involuntary response) to account for change in human behavior. Skinner considered *classical conditioning*, however, to be too simplistic a concept. It was noticed that environmental factors shape behavior and the type of person and actions can be the product of design. He theorized that the best way to understand human behavior was to identify its causes

and consequences and, therefore, expanded the notion of conditioning to include *operant conditioning*; that is the process of modifying behavior through the use of positive and/or negative reinforcement (as cited in O'Donohue & Kitchener, 1999).

As far as language learning is concerned, behaviorists identified *imitation*, *association*, and *practice* as the primary processes in language development. They "hypothesized that when children imitated the language produced by those around them, their attempts to reproduce what they heard received positive reinforcement" which could take the form of reward, praise or just successful communication (Lightbown & Spada, 2006, p. 21). The encouragement learners receive from the environment would make them continue to imitate and practise these sounds and patterns until they formed 'habits' of correct language use (Lightbown & Spada, 2006).

Despite the valuable contribution rendered by behaviorists, their explanation of learning in general and language acquisition in particular was never a satisfactory one. Sole reliance on imitation and practice to account for the complex learning process cannot explain, for one thing, students' creative use of the language. The learning model suggested by behaviorists received heavy criticism especially when it comes to explaining learners' capacity to produce novel utterances different from the ones they hear in the immediate environment. Inconvenience of behaviorism paved the way for the emergence of new theories that tried to look at the phenomenon from a different perspective and answer the questions that behaviorists left unanswered.

B- Innatism

The first successful assault on the behaviorist theory came from Chomsky through his 1959 review of Skinner's book "*Verbal Behavior*" (Hutchinson & Waters, 1987; Lightbown & Spada, 2006). Chomsky (1959) dismissed the behaviorists' idea as unworkable since, for him, the behaviorist theory failed to account for the logical problem of language acquisition. Innatists base their criticism on the 'poverty of the stimulus' argument which is the belief that "the knowledge acquired in language acquisition far outstrips the information that is available in the environment" (Laurence & Margolis, 2001, p. 221). Imitation alone cannot justify possession of a characteristic that distinguishes the most the human species, *creativity*. "It simply could not explain how from a finite range of experience, the human mind was able to cope with an infinite range of possible situations" (Hutchinson & Waters, 1987, p. 50).

Chomsky (1959) purported that explanation of the behavior of a complex organism would require more than just information about external stimulation. He asserted that researchers' attention should be rather directed towards the understanding and analysis of "the internal structure of the organism, the ways in which it processes input information and organizes its own behavior" (Chomsky, 1959, p. 02). From the innatist perspective, first language acquisition is all about the biological endowment children are born with; the environment makes only a basic contribution. Lightbown & Spada (2006) reported that innatism proceeds to explain first language acquisition as follows:

Children's minds are not blank slates to be filled by imitating language they hear in the environment. Instead, [it is hypothesized that] children are born with a specific innate ability to discover for themselves the underlying rules of a language system on the basis of the samples of a natural language they are exposed to. This innate endowment was seen as a sort of template, containing the principles that are universal to all human languages. This UNIVERSAL GRAMMAR (UG) would prevent the child from pursuing all sorts of wrong hypotheses about how language systems might work. If children are pre-equipped with UG, then what they have to learn is the ways in which the language they are acquiring makes use of these principles (p. 15).

Language acquisition is viewed, therefore, as a creative process where the learner is continuously testing hypotheses about how the language works, leading eventually to the construction of a mental grammar that underlies language use.

Obviously, Chomsky's theory was primarily concerned with the explanation of first language acquisition. He did not make specific claims about the implications of his theory for second language learning, but it is argued, however, that UG may offer the best perspective from which second language acquisition can be understood (Lightbown & Spada 2006). As for the role played by these innate mechanisms humans are predisposed with for the acquisition of a second language, four hypotheses were proposed by innatist theorists:

- 1- They continue to operate during second language learning (SLL), and make key aspects of SLL possible, in the same way that they make first-language learning possible. This position was popularized in the SLL field by Stephen Krashen in the 1970s, in a basic form.
- 2- After the acquisition of the first language in early childhood, these mechanisms cease to be operable, and second languages must be learnt by other means.
- 3- The mechanisms themselves are no longer operable, but the first language provides a model of a natural language and how it works, which can be 'copied' in some way when learning a second language.

4- Distinctive learning mechanisms for language remain available, but only in part, and must be supplemented by other means. (From a Universal Grammar point of view, this would mean that Universal Grammar was itself modular, with some modules still available and others not.) (Mitchell & Myles, 2004, p. 14).

C- Constructivism

Drawing on work by educators and researchers, such as John Dewey (1938), Jerome Bruner (1960), Jean Piaget (1977), and Lev S. Vygotsky (1962), constructivism emerged as a leading learning theory in the second half of the twentieth century.

Constructivism was proposed as an alternative to the objectivist model which sees learning as a sort of passive mirror imaging of the external, objective reality. The keynote of the constructivist approach is that problem solving is at the heart of learning, thinking, and development. People construct their own understanding as they solve problems and discover the consequences of their actions (Lamon, 2002). Constructivism rejected the traditional view of learners being passive recipients of knowledge. It regards the teacher as a facilitator who helps students acquire understandings and put them to individual use and posits that learners play a crucial role in "constructing" their own knowledge (Walling, 2002). Instead of soaking up knowledge and copying it from an authority in decontextualized, formal situations, learners are encouraged to strive for shaping their own understanding of the world. Jonassen (1994, as cited in Chelli, 2012) proposed eight characteristics of the constructivist learning environment:

1- They provide multiple representations of reality.

2- Multiple representations avoid oversimplification and represent the complexity of the real world.

3- They emphasize knowledge construction instead of knowledge reproduction.

4- They emphasize authentic tasks in a meaningful context rather than an abstract instruction out of context.

5- They provide learning environments such as real-world settings or case-based learning instead of predetermined sequences of instruction.

6- They encourage thoughtful reflection on experience.

7- They enable context and content- dependent knowledge construction.

8- They support collaborative construction of knowledge through social negotiation, not competition among learners for recognition (p. 76).

As regards developing linguistic behavior, constructivists suggested a different explanation for the process of language acquisition as they looked at the phenomenon from a different perspective. Unlike mentalists who give more weight to the innate learning mechanism, constructivists allotted equal importance to internal and external factors. The interactionists approach stresses the balanced interaction of nature and nurture. In such a framework, both genetics and environment play an important role, and it is the dynamic relations among such internal and external influences that ultimately shape development. These researchers saw that "language acquisition is but one example of the human child's remarkable ability to learn from experience, and they see no need to assume that there are specific brain structures devoted to language acquisition" (Lightbown & Spada, 2006, p. 19). In their view, language acquisition is tightly bound to the learner's cognitive development and interaction with the physical world.

The field of education has known two major types of constructivism: a) cognitive or individual constructivism which is based on Piaget's work. b) social constructivism which was introduced by the Russian psychologist Lev Vygotsky. For Piaget, learning occurs through two main operations, adaptation and organization. "Adaptation is a process of assimilation and accommodation, where external events are assimilated into existing understanding, but unfamiliar events, which don't fit with existing knowledge, are accommodated into the mind, thereby changing its organization" (as cited in Lamon, 2002, p. 1463). He viewed language, therefore, as a symbol system that is used to represent what the person has learned through experience. Vygotsky, on the other hand, held that "thought was essentially internalized speech, and speech emerged in social interaction" (as cited in Lightbown & Spada 2006, p. 20). He believed that the individual does not establish a direct relationship with the world; this relationship is rather mediated and cognitive development results from an internalization of language.

1.2 Historical Foundations of Competency Based Education

The use of the term 'competency based education' to refer to an educational movement within which definition of educational objectives is grounded on the precise identification of the knowledge, skills, and behaviors students ought to show mastery of at the end of an instructional program, began with the United States' efforts to reform teacher education and training in the 1960s. CBE is one of the outcomes-based models that define effective learning as successful attainment of desired performances and predetermined objectives.

Teaching for outcomes is not a recent phenomenon though. For centuries, societies have implemented educational approaches that target eventual achievement of context-specific competencies. The history of CBE, therefore, "can be traced back hundreds of years to craft guilds, apprenticeship training programs, technical training programs, and licensure programs where established standards for competence and performance have been identified for specific jobs and roles" (Nodine, 2015, p. 6).

The early manifestations of a movement towards CBE, in the modern era, began with John Dewey's ideas in the early 1900s. "Around that time, and as a result of Dewey's influence, progressive educators were placing increased emphasis on whole-child development and real-world engagement, in addition to algorithms and facts" (Le, Wolfe, & Steinberg, 2014, p.9). Later on, works of scholars such as Ralph Tyler 1949, publication of Benjamin Bloom's taxonomies for cognitive domains in 1956, and the work of Bloom, John Carroll, and others in developing mastery learning helped in establishing firm foundations of the CBA as it is known today (Nodine, 2015).

An historical overview of the competency based movement reveals that the approach went through a number of sequential phases in its development. M. Brown (1994) identified five generations of competency based learning models:

"The first generation of competencies mirrored the developments and application of scientific management to the workplace" (M. Brown, 1994, p. 10). Such training programs embodied the philosophy of the efficiency movement that emerged in the wake of the First World War. "This training was designed to provide 'farm hands' with the skills to support the machinery and equipment in what was considered to be the first mechanized war" (M. Brown, 1994, p. 10).

Introduction and elevation of the element of mastery learning characterized, according to M. Brown (1994), the second developmental phase of the competency movement. It took place in the USA during the 1920sand 1930s. This approach promoted personalized learning as it advocated the principle of time flexibility and emphasized that students should be allowed to demonstrate mastery of preset content regardless of time or pace of learning. The major

proponents were Washburne (1922) and Morrison (1926). They worked independently in developing instructional programs based on these methods.

Reliance of vocational education and training programs on concepts and approaches derived from psychology marked **the third generation** of competencies. "The training methods developed for the armed services for the Second World War were highly formative. This stage provided Competency Based Teaching (CBT) with its connection to behaviorism" (M. Brown, 1994, p. 10). This generation relied heavily on contributions coming from behaviorism. The work of Skinner (1938), the inventor of the teaching machine, helped in the development of programmed instruction.

The fourth phase took place during the 1960s and it knew the promotion of behavioral objectives. Learning objectives had to be made very specific and statement of these objectives had to carry information about three related elements: *performance, standard,* and *conditions. Performance* refers to the behavior that the learner should be able to demonstrate at the end of the instructional program. Performance is attached to a *standard* which specifies the minimum acceptable level of achievement. The third component, *conditions,* stands for the tools, equipment or other necessary elements the instructional program requires. It is worth mentioning as well that the term 'competency' first appeared during this phase.

The fifth generation rose to the surface during the 1980s and early 1990s. It represents the current approach to CBT.

M. Brown (1994) sums up:

Common throughout all the models for competency-based programs is the focus on outcomes. Further, these outcomes are always derived from an analysis of the work role desired. Therefore this becomes the first step in the course design process. Initially, the

industrial parties establish competency standards for the work role or occupation under consideration. These become what is to be aimed for as the outcomes of a training program. The curriculum document is developed in accordance with these statements and standards. These describe the learning outcomes that will be achieved and what the criteria will be for their assessment. Most often these are clustered together to form modules. Finally if the program is to be high CBT as described earlier then delivery and assessment needs to be organised in an appropriate manner. This is most often in the form of self paced and/or individualised materials. It needs to be noted, though, that a course designated as being CBT does not necessarily mean that it is or should be self-paced (pp. 10-11).

It is worth mentioning though that further developments are still occurring on CBE as proponents of this approach are continuously seeking new improvements; implementing it in different contexts and trying to fix the emergent shortcomings.

1.3 What Is Competency Based Education?

Unlike input-based instructional approaches, which hinge on the assumption that effective learning will take place through the improvement of the syllabi and materials students will be exposed to, outcome-based approaches, such as CBA, contend that educators' focus should rather be directed towards what learners will be able to do by the end of the instruction. CBA is an approach where stakeholders responsible for the development of society and employment are involved by educational institutions in deciding about curricula, syllabi, and their objectives. It is more about making learners receive the type of instruction that would make them acquire the generic and specific competences required in the workplace. Sanchez and Ruiz (2008) defined CBA as follows: [It] consists in developing the necessary generic or transversal (instrumental, interpersonal and systemic) competences and the specific competences pertaining to each profession. The aim is to endow students with scientific and technical knowledge, and enable them to apply such knowledge in diverse complex contexts. To this end, knowledge is integrated along with attitudes and values in ways that are appropriate for each student's personal and professional life (p.33).

According to Garrett and Lurie (2016), CBE is:

An instructional system in which the time it takes to demonstrate competencies varies and the expectations about learning are held constant. Students acquire and demonstrate their knowledge and skills by engaging in learning exercises, activities, and experiences that align with clearly defined programmatic outcomes. Students receive proactive guidance and support from faculty and staff. Learners earn credentials by demonstrating mastery through multiple forms of assessment, often at a personalized pace (p. 2).

A more comprehensive definition was provided by Spady (1994) who stated that CBE is:

a data-based, adaptive, performance-oriented set of integrated processes that facilitate, measure, record and certify within the context of flexible time parameters the demonstration of known, explicitly stated, and agreed upon learning outcomes that reflect successful functioning in life role (p. 22).

This operational definition articulates the main characteristics of CBE and identifies the six critical elements which combine to generate a full-blown CBE program. These are:

Outcomes: Evidently, the most important aspect of this definition of CBE is the concept of competency. Unlike traditional programs, in which learners' success and failure was determined in closed classrooms through paper-pencil tests, competency based programs associate students' success with the attainment of the targeted competences. What is specific about CBE is that prospective life roles and their attendant activities are the prime movers in framing outcome goals and desired competences.

- Time: CBE advocated a shift from a time-based to an outcome-based school organization. This means that opportunities for evaluation and instruction should not be necessarily determined within fixed time parameters. CBE makes it clear that learner's attainment of outcome goals should be teachers' prime concern and flexibility with the required time is highly advisable.
- Instruction: Teaching objectives within CBE are directly connected with the life-roles required of the learner after training. Instructional programs are designed in a way which guarantees that students be equipped with the necessary skills and competences needed at workplace. Instruction revolves around exposing learners to the range of experiences and activities that might promote success in a given area.
- Measurement: Within CBE, assigning grades and making placement decisions is based on measurement criteria that are explicit, agreed upon, criterion-referenced, and known in advance by students. Clearly, CBE reduces the discretion of individual teachers in determining both the criteria to be used in evaluation and the uses to which the latter can be put.
- Certification: In a competency based program, certification is earned only through competency demonstration. Learners are not simply certified according to such criteria as attendance and compiling some course credits.

Program adaptability: A salient characteristic of CBE programs is that they are highly dynamic. Learners' performances are a reflection not only of their ability and endeavor but of the adequacy and appropriateness of the instruction provided, the evaluation tools used, or the goals themselves. Educators should be continuously adapting their instructional programs to suit students' needs and they can take learners' performances as indicators (Spady 1994).

Blank (1982, pp. 34-35) summed up the main characteristics of CBE, compared to traditional programs, in table 1.

Table 1.1

Basic Characteristics That Distinguish between Competency-based and Tradition	ıal
Training Programs	

Characteristics	Competency-Based Programs	Traditional Programs
1 WHAT	1 Are based solely on specific,	1 Are usually based on textbooks,
Students Learn	precisely stated student outcomes	reference material, course outlines or
	(usually called competencies or tasks)	other sources removed from the
	that have been recently verified as	occupation itself. Students rarely
	being essential for successful	know exactly what they will learn in
	employment in the occupation for	each successive part of the program.
	which the student is being trained.	The program is usually built around
	These competencies are made available	chapters, units, blocks, and other
	to all concerned and describe exactly	segments that have little meaning
	what the student will be able to do	within the occupation-instructors
	upon completing the training program.	focus on 'covering material.'
2 HOW	2 Provide trainees with high quality,	2 Rely primarily on the instructor to
Students Learn	carefully designed, student-centered	personally deliver most of the
	learning activities, media and materials	instruction through live

	designed to help them master each task. Materials are organized so that each individual trainee can stop, slow down,	demonstrations, lectures, discussions and other instructor-centered learning activities. Students have little control		
	speed up or repeat instruction as needed to learn effectively. An integral part of this instruction is periodic feedback throughout the learning process with opportunities for trainees to correct their performance as they go.	over the pace of instruction. Usually, little periodic feedback on progress is given.		
3 WHEN students proceed from task to task	3 Provide each trainee with enough time (within reason) to fully master one task before being allowed or forced to move on to the next.	3 Usually require a group of students to spend the same amount of time on each unit of instruction. The group then moves on to the next unit after a fixed amount of time which maybe too soon or not soon enough for many individual trainees.		
4 IF Students Learned Each Task	4 Require each individual trainee to perform each task to a high level of proficiency in a job like setting before receiving credit for attaining each task. Performance is compared to a preset, fixed standard.	4 Rely heavily on paper and pencil tests and each student's performance is usually compared to the group norm. Students are allowed (and usually forced) to move on to the next unit after only marginally mastering or even 'failing' the current unit.		

Competency-Based Language Teaching (CBLT) is an application of the principles of CBE to language teaching. According to Nunan (2013), "teaching ESL to competencies requires the instructional focus to be on functional competencies and life-coping skills. It is not what the

students know about language but what they do with the language" (p. 25). Auerbach (1986) identified eight features involved in the implementation of CBLT programs in language teaching:

- 1. A focus on successful functioning in society. The goal is to enable students to become autonomous individuals capable of coping with the demands of the world.
- 2. A focus on life skills. Rather than teaching language in isolation, CBLT teaches language as a function of communication about concrete tasks. Students are taught just those language forms/ skills required by the situations in which they will function. These forms are normally determined by needs analysis.
- 3. Task- or performance-oriented instruction. What counts is what students can do as a result of instruction. The emphasis is on overt behaviors rather than on knowledge or the ability to talk about language and skills.
- Modularized instruction. Language learning is broken down into meaningful chunks. Objectives are broken into narrowly focused sub-objectives so that both teachers and students can get a clear sense of progress.
- 5. Outcomes are made explicit. Outcomes are public knowledge, known and agreed upon by both learner and teacher. They are specified in terms of behavioral objectives so that students know what behaviors are expected of them.
- 6. Continuous and ongoing assessment. Students are pre-tested to determine what skills they lack and post-tested after instruction on that skill. If they do not achieve the desired level of mastery, they continue to work on the objective and are retested.
- 7. Demonstrated mastery of performance objectives. Rather than the traditional paper-andpencil tests, assessment is based on the ability to demonstrate pre-specified behaviors.

8. Individualized, student-centered instruction. In content, level, and pace, objectives are defined in terms of individual needs; prior learning and achievement are taken into account in developing curricula. Instruction is not time-based; students progress at their own rates and concentrate on just those areas in which they lack competence (pp. 414-415).

The philosophical foundations that form the basis of CBLT originate from a behaviorist learning theory and an experimentalist view of education. Instead of basing instructional programs on the acquisition of knowledge, competency based curricula take as a starting point the analysis of what people need to do. However, Burns and Klingstedt (1972) pointed out that CBE can, and should, be viewed and utilized in different ways by educators adhering to thought patterns other than behaviorism and experimentalism. Dewey (1938, as cited in Burns & Klingstedt, 1972), who is considered by many as the father of experimentalism, admitted that:

Any theory and set of practices is dogmatic which is not based upon critical examination of its own underlying principles. . . furthermore, anyone who is looking ahead to a new movement in education . . . should think in terms of education itself rather than in terms of some 'ism' about education, even such an 'ism' as 'progressivism' [experimentalism] (p. 13).

The competency based movement was able to adapt with the major changes fields like education and psychology have witnessed. CBLT has espoused ideas coming from the cognitive, constructivist, and humanistic camps. The concept of competence has been enlarged to include besides the discrete, observable behaviors the underlying attributes (such as knowledge, required cognitive capacities, and attitudes) and successful social, contextual coping strategies.

1.4 Defining some Key Terms: Skill, Competency, Competence, and Standards

When introducing CBA, terms such as skill, competency, competence, and standards are recurrent. They, in fact, make the essence of this approach and, obviously, a proper implementation of CBA requires from practitioners a thorough understanding of these concepts.

1.4.1 Skill

Jordan, Carlile, and Stack (2008) defined skill as "the ability to carry out a particular activity consistently. This ability may depend on physical or mental competence or attitude" (p. 203). Skills are the basic units out of which competence is built. An illustrative example might be the case of a student possessing a skill in identifying key words in a definition.

1.4.2 Competency and Competence

Defining these terms and drawing clear boundaries between them have been a source of constant controversy among educators. As reported by Pérez Cañado (2013), "no academic consensus has been reached regarding the difference between 'competence/competences' and 'competency/ competencies' " (p.4). Basically, two major opinions have been formed. While a group of researchers posit that the two terms are synonymous and can be used interchangeably, other scholars maintain that the aforementioned terms refer to two different constructs.

Representing the first category, Pennock-Speck (2009) contends that a working definition of competencies would include the meaning of competence; "the ability to carry out tasks and also the behaviors and attitudes needed to carry out the tasks successfully" (p. 172).

For the second category of researchers, however, *competence* and *competency* stand for two connected but different concepts where the former terms refer to a broad capacity or capability, whereas the latter involve a narrower use of the term to describe particular abilities (Fleming, 2009). Accordingly, *competency* was defined as "the ability to carry out a complex task that requires the integration of knowledge, skills and attitudes" (Jordan et al, 2008, p. 2003). For example, if a student has the skill of identifying key words, guessing correctly their meaning, and connecting them appropriately, then this student possesses a competency in deciphering complex definitions. *Competence*, on the other hand, was defined as "a broad concept which embodies the ability to transfer skills and knowledge to new situations within the occupational area. It encompasses organization and planning of work, innovation and coping with non-routine activities" (Debling, 1989, p. 70). Mansfield (1989), in his turn, suggested that competence should be described in general terms as:

being able to perform 'whole' work roles (perform—not just know about—whole work roles, rather than just specific skills and tasks);

To the standards expected in employment (not just 'training' standards or standards divorced from industrial reality);

In real working environments (i.e. with all the associated pressures and variations of real work) (p. 25).

For example, a student having the competence of deciphering complex definitions, explaining them, and presenting them conveniently to his classmates in a course.

Table 1.2

Definitions of Competence/ Competency

Competence is the ability to perform a role effectively within a						Jordan et al (2008, p.		
context. It requires a range of competencies.						2003)		
"Competences	are	the	sum	of	knowledge,	skills	and	Common European
abaratoristics that allow a nargan to northern actions ?					Framework of Reference			
characteristics that allow a person to perform actions.						for Languages (CEFR) (
								2001 p 9)

"A competence is de fined as the ability to successfully meet complex demands in a particular context. Competent performance or effective action implies the mobilization of knowledge, cognitive and practical skills, as well as social and behavior components such as attitudes, emotions, and values and behaviors. A competence – a holistic notion – is therefore not reducible to its cognitive dimension, and thus the terms competence and skill are not synonymous."

"the necessary knowledge, skills and capacity to perform in a Bunk (1994, p. 10) profession, ...to solve occupational problems in an autonomous and flexible manner and...to contribute to his professional environment and the organization of work."

"Key competencies represent a multifunctional and transferable European Commission (set of knowledge, skills and attitudes that all individuals need for personal fulfillment and development, inclusion and employment."

 "Las competencias son una combinación de conocimientos, habilidades (intelectuales, manuales, sociales, etc.), actitudes y valores que capacitarán a un titulado para afrontar con garantías la resolución de problemas o la intervención en un asunto en un contexto académico, profesional o social determinado."
Ministerio de Educación y Ciencia (MEC) (2006, p. 6)

Competence is a wide concept which embodies the ability to Ashworth and Saxton transfer skills and knowledge to new situations within the (1994, p. 252) occupational area. It encompasses organization and planning of work, innovation and coping with non-routine activities. It includes those qualities of personal effectiveness that are required in the workplace to deal with co-workers, managers and customers.

Adapted from Pérez Cañado (2013)

1.4.3 Standards

The statement of competence should incorporate specific standards. CBE sets as outcome goals learners performing, by the end of an instructional program, up to certain recognized standards that are relevant to employment. According to Mitchell (1989), standards can be defined as "external reference points to individuals as they are descriptions of what any individual would have to do in order to demonstrate competence in meeting a particular outcome" (p. 48). Standards reflect the way we look at associated competence and describe what effective performance means. We can derive standards which describe competent performance in specific occupations and work roles if we are clear about what we mean by competence.

CBA makes it clear that standards should be expressed explicitly and made known to all those involved in the teaching/learning process: Instructors, assessors, learners, and third parties. Proponents of competency based programs go even further to suggest that since the standards relate to the needs of employment, "employers [may] have a sense of ownership of such standards such that they recognise them and take responsibility for their modernization and utilization" (Debling, 1989, p. 70).

Regarding the main criteria standards are designed according to, Mansfield (1989) pinpointed six main features. Examination of numerous standards reveals that standards are generally conceived as being to do with:

- Following procedures (at all times).
- Dimensional accuracy.
- Accuracy/correctness in respect of laid down procedures.
- Time taken.
- Quality specifications.

•Number of times an activity should be performed (Mansfield, 1989, p. 28).

Atomization of competence helps in the process of developing standards for a particular occupational area. Standards are derived according to the set of individual elements of competence. These are, in turn, associated with specific performance criteria which define the expected level of performance.

1.5 Teaching for Behavioral Objectives

CBE, as we have seen previously, is an approach that was founded basically on experimentalist philosophies and behaviorist principles. It is believed within the framework of CBE, that doing is the essence of learning. "The competency movement is loaded with adjectives and nouns signifying the important role of or emphasis on behavior" (Burns, 1972, p. 42). Terms such as 'shaping behavior', 'behavior modification', 'terminal behaviors', 'behavioral objectives', 'performance and behavior criteria' are often encountered in competency based curricula.

One of the important steps in designing competency based curricula is the precise specification of the behaviors to be acquired by the learner at the end of an instructional program. These specified behaviors are conventionally referred to as 'objectives'. An objective is defined by Burns (1972) as "a straightforward, written statement expressed from the learner's point of view describing the exact behavior (and the conditions under which the behavior will operate) the learner is to exhibit at the end of a period of instruction"(p. 43).

To prepare useful objectives, according to Mager (1997), the teacher's draft should be modified until these questions are answered:

- ▶ "What do I want the learners/students to be able to do?
- ▶ What are the important conditions or constraints under which I want them to perform?

► How well must students perform for me to be satisfied?" (p. 1)

So, three main criteria of well specified behavioral objectives are identified:

1- Clear statement of the action to be performed by the learner. For example: The student will be able to tell a personal anecdote (in the target language).

2- Specification of the conditions that accompany the performance of the targeted action. For instance: The student will be able to tell a personal anecdote to the whole class/ only to the teacher (here we have two types of examples of conditions: to the whole class vs only to the teacher).

3- Specification of acceptable performance criteria. For example: The student will be able to narrate a personal anecdote to the whole class committing no grammatical mistakes.

Mager (1997) further suggests that in case the teacher states an objective the intent of which is covert, an *indicator behavior* should be appended. He explains: "Indicator behaviors are always the simplest, most direct behaviors possible, and they are always something that every trainee already knows how to do well" (p. 4). For example, an affective-domain objective such as *'the learner will value the need for discipline'*, is hard to observe, so, an indicator behavior should be added to state the objective in the following way: 'The learner will stand up, in a classroom debate, for the need for discipline'.

When writing behavioral objectives it is very important to pay attention to the language used. "Such 'non-observable' verbs as think, understand, learn, and know are unacceptable while specific, observable action verbs (e.g., writes, assembles, states) are given a stamp of approval" (Geis, 1972, p. 1). Table 1.3, which is inspired by Bloom's taxonomy of educational objectives, samples some of the action verbs that can be used for various levels of cognitive, affective, and psychomotor learning.

Table 1.3

Action Verbs for Effective Learning Objectives

ACTION VERBS

Concrete verbs such as "define," "apply," or "analyze" are more helpful for assessment than verbs such as "be exposed to," "understand," "know," "be familiar with."

Cognitive Learning	Action Verbs
<u>Knowledge</u> - to recall or	arrange, define, duplicate, label list, memorize, name, order,
remember facts without	recognize, relate, recall, reproduce, list, tell, describe,
necessarily understanding	identify, show, label, collect, examine, tabulate, quote
them	
<u>Comprehension</u> – to	classify, describe, discuss, explain, express, interpret,
understand and interpret	contrast, predict, associate, distinguish, estimate,
learned information	differentiate, discuss, extend, translate, review, restate,
	locate, recognize, report
<u>Application</u> – to put ideas and	apply, choose, demonstrate, dramatize, employ, illustrate,
concepts to work in solving	interpret, operate, practice, schedule, sketch, solve, use,
problems	calculate, complete, show, examine, modify, relate,
	change, experiment, discover
<u>Analysis</u> – to break	analyze, appraise, calculate, categorize, compare, contrast,
information into its	criticize, differentiate, discriminate, distinguish, examine,
components to see	experiment, question, test, separate, order, connect,
interrelationships and ideas	classify, arrange, divide, infer
<u>Synthesis</u> – to use creativity to	arrange, assemble, collect, compose, construct, create,
compose and design	design, develop, formulate, manage, organize, plan,
something original	prepare, propose, set up, rewrite, integrate, create, design,
	generalize
<i>Evaluation</i> – to judge the value	appraise, argue, assess, attach, defend, judge, predict, rate,
of information based on	support, evaluate, recommend, convince, judge, conclude,
established criteria	compare, summarize
	appreciate, accept, attempt, challenge, defend, dispute,

Affective Learningjoin, judge, praise, question, share, supportPsychomotor Learningbend, grasp, handle, operate, reach, relax, shorten, stretch,
differentiate (by touch), express (facially), perform
(skillfully)

Source: Osters (2003, p. 4).

Behavioral objectives, according to Geis (1972), differ from traditional statements in three mains ways:

a) In traditional education, statement of objectives revolves chiefly around teacher's activity (for example: For the first fifteen minutes I'll lecture on the concept of intelligence as viewed by different psychologists). Behavioral objectives, on the other hand, target instead change in student behavior.

b) Even when the emphasis is on student activity, traditional statements can target nonobservable behaviors which makes it difficult for the teacher to determine later whether the course objectives have been achieved. CBE, on the contrary, emphasizes that the teacher should state from the beginning well specified, measurable, and observable objectives.

c) In competency based programs, statement of objectives puts emphasis on outcomes. Behavioral objectives refer to terminal points in instruction. The target is what the student will be able to do by the end of an instructional program not the process or procedure that leads to it.

1.6 Developing Competencies through Project Works

It is believed that the project work can be implemented as a powerful competency based teaching method. Project based learning is built on the same premises that started the competency based movement; it is learner centered and focuses on contextualized learning outcomes. It is a teaching method that bases knowledge construction on investigation and problem solving rather than memorization of new and isolated facts.

1.6.1 Definition of the Project Work

Project works according to Tan and Chapman (2016) are those challenging tasks that "involve students in design, problem-solving, decision-making, or investigative activities, and giving students the opportunity to work relatively autonomously over extended periods of time, and culminating in realistic products or presentations" (p. 1). Project based instruction is an effective medium for students to develop the required competences; it allows for learning to take place through the integration of knowledge, skills and attitudes in real lifelike situations.

An important advantage of project based learning, Fried-Booth (2002) asserts, is that it "draws together students of mixed ability and creates opportunities for individuals to contribute in ways which reflect their different talents and creativity" (p. 6). It not only gives students the chance to collaboratively and autonomously move towards the achievement of outcome goals, it also makes the learning process more enjoyable as it allows for more variety. Learners can deal with the instructional material in the way that suits best their profiles.

1.6.2 Types of Project Work

Stoller (2002) demonstrated that project works can be classified according to three main taxonomies:

A- According to the Nature and the Sequencing of the Project Related Activities

Depending on the role played by the teacher or the students in planning and organizing projects, three types can be identified: *unstructured projects, structured projects, and semistructured projects.*

In unstructured projects, learners are given total freedom. This type of project is largely determined by the students themselves. Structured projects, on the other hand, are determined, specified, and organized by the teacher in terms of topic, materials, methodology, and presentation. As regards *semistructured projects*, the teacher collaborates with his students to decide about the management of the project work's activities.

B- According to Data Collection Techniques and Source of Information

Looking at project works from a different perspective, that is data collection techniques, we can distinguish between five types: *research projects, text projects, correspondence projects, survey projects,* and *encounter projects.*

Research projects, as the name suggests, require the student to gather information consulting references (books, the internet . . . etc). Similarly, *text projects* involve encounters with "texts" (e.g., literature, reports, news media, video and audio material, or computer-based information) rather than people. In *correspondence projects*, data are gathered through communication with people using different media such as: letters, faxes, phone calls, electronic mails . . . etc. *Survey projects* involve students in designing questionnaires or inventories and then collecting and analyzing data from the participants. *Encounter projects* are about training students on how to analyze data collected through interviews and face-to-face contact with people outside the classroom.

C- According to the Way Information Are Reported

Regarding the way students may report information, project works can be classified into three types: *performance projects, production projects, and organizational projects*.

Performance projects are those which set as outcome goals performance of such tasks as staged debates, oral presentations, theatrical performances, food fairs, or fashion shows. *Production projects* involve the creation of bulletin-board displays, videos, radio programs, poster sessions, written reports, photo essays, letters, handbooks, brochures, banquet menus, travel itineraries. . . etc. *Organizational projects* aim at developing learners' management and planning abilities. Examples may include: planning and formation of a club, organizing a conversation table, or a conversation-partner program.

1.6.3 The Process of Developing a Project Work

For a successful implementation of project works in the EFL classroom, it is recommended that teachers, along with students, follow these ten steps suggested by Stoller (2002):

Step 1: 'Students and the instructor agree on a theme for the project'. It is always preferable to involve students in decision making because it is the learner who is going to carry out the task after all. So, students' inclinations matter.

Step 2: 'Students and the instructor determine the final outcome'. Again transparency and explicitness are emphasized. The nature of the project, its objectives, and the appropriate means to achieve them should be known by the student right from the beginning. Also, students are allowed the freedom to work with the material they feel more comfortable dealing with. They can choose from a variety of options, including a

written report, letter, poster or bulletin-board display, debate, oral presentation, information packet, handbook, scrapbook, brochure, newspaper, or video.

Step 3: 'Students and instructor structure the project'. This phase is about finding the right plan to achieve the targeted goals. A number of questions proposed by Stoller (2002) may guide students through the structuring the body of the project: What information is needed to complete the project? How can that information be obtained? How will the information, once gathered, be compiled and analyzed? What role does each student play in the evolution of the project? What time line will students follow to get from the starting point to the end point? (p. 115). Answering to these questions will put students in the picture and make them aware of what is required from them to carry out the task successfully.

Step 4: 'Instructor prepares students for the language demands of information gathering'. The teacher is advised to plan language activities that would help his students carry out the project properly. If, for example, students are going to collect information by means of interviews, the instructor might plan exercises on question formation, introduce conversational gambits, and set aside time for role-plays to provide feedback on pronunciation and to allow students to practice listening and note taking or audio-taping. If, on the other hand, students are going to use a library to gather materials, the instructor might review steps for finding resources and practice skimming and note taking with sample texts.

Step 5: 'Students gather information'. Having practiced the language, skills, and strategies needed to gather information, students are now ready to collect information and organize it so that others on their team can make sense of it.

Step 6: 'Instructor prepares students for the language demands of compiling and analyzing data'. This stage is about training students to acquire the necessary skills for data analysis and interpretation. For example: Introducing students to graphic representations that might highlight relationships among ideas is particularly useful at this point.

Step 7: 'Students compile and analyze information'. With the help of a variety of organizational techniques and statistical procedures, students make an interpretation of the gathered data.

Step 8: 'Instructor prepares students for the language demands of presentation of the final product'. The instructor plans a set of language activities that are believed to equip his students with the essential prerequisites for a successful presentation of their project results.

Step 9: 'Students present final product'. At this stage, students are ready to present to an audience the final outcome of their project.

Step 10: 'Students evaluate the project'. Presenting the final product of the project work should not be the last step. It is important to give students the chance to reflect on the experience they have gone through working on the project. Such a move would allow students to diagnose their own strengths and weaknesses; capitalize on the strengths and improve the areas they are lacking in.

1.7 Psychological Implications of Competency Based Education

Compared to conventional systems, modern learner-centered approaches are more concerned with modelling the individual differences among students and their implications for eventual learning success. In this section, the main advantages of CBE at the affective level are examined.

1.7.1 Interest

Interest as a psychological phenomenon was aptly defined by Bingham (as cited in Parida, 2007) as the "tendency to become absorbed in an experience and to continue it" (p. 25). An inherent characteristic of interest, therefore, is that interests are not in-born; they are rather the result of the life experiences the student goes through.

Educators have long believed in interest being an essential ingredient for success. They have been in constant search for the right practices that would make learning more appealing. CBA can inspire effective solutions. This approach raises the likelihood of elevating interest and maintaining students' personal commitment. In a study conducted by Heslin and Blake (1969), it was shown that allowing students the freedom to choose their own goals made them more interested in the task at hand. This interest developed into strong personal commitment leading eventually to significant improvement in learners' performance.

Another aspect of interest is the spirit of competition. "Although competition is frequently employed under conventional systems, it is between students, while in CBE it is within the student" (Young & Van Mondfrans, 1972, p. 22). Competing with oneself proves to be more effective and CBE allows for that to happen. Flexibility with time, which is one of CBE's main characteristics, grants students the possibility of learning and attaining the desired outcome goals at their own pace. It, most importantly, makes the challenge of augmenting developmental sequences more attractive.

1.7.2 Motivation

Motivation is "a social-psychological factor that is frequently used to account for differential success in learning a second language" (Gass & Selinker, 2008, p. 426). It can be generally defined as "the energization and direction of behavior" (Elliot & Zahn, 2008, p. 687). There is almost a total agreement among educators now that motivation is one of the strongest predictors of success.

One of motivation taxonomies identifies two types of motivation: intrinsic and extrinsic. "Extrinsically motivated behaviors are those in which an external controlling factor can be readily identified" (Cameron and Pierce, 2008, p. 555). Intrinsic motivation, on the other hand, comes rather from internal drives. It is defined as the "behavior that is driven by the internal desire to explore or learn—an activity that you participate in for the pleasure it gives or the challenge it provides" (Reeve et al, 2003 as cited in Harpine, 2015, p. 88).

Researchers suggest that learners' success is more dependent on intrinsic motivational desires. As reported by Harpine (2015), "from kindergarten to the college classroom, intrinsic motivation has been repeatedly documented to produce 'better school outcomes': more determination, originality, and performance— grades and test scores" (p. 89). From a study conducted at the Department of Psychology-University of Rochester, Ryan, Mims, and Koestner (1983) came to the conclusion that external motivators would not yield successful performance unless the person's intrinsic goals and desires are fulfilled.

CBE helps in creating a more favorable learning environment compared to conventional systems. In conventional education, students' motivation is mainly stimulated via such techniques as rewards, recognitions and grades for excellence. Young and Van Mondfrans (1972) noted that within such systems "students only have one opportunity to demonstrate

their knowledge of a particular area, and often the external rewards become so important that cheating is used to achieve the goals" (p. 23). Competency-based instructional programs, however, offer several advantages in this domain. According to Young and Van Mondfrans (1972), in competency based programs:

- Students may select their own routes to developing these performances and use their own strategies to learn skills.
- The student is not concerned with whether he will pass or fail; he can take all the time he needs and make as many attempts as necessary to achieve the goal.
- The system also allows for more intra-personal competition (p. 23).

For such reasons, it is believed that adoption of CBE and its principles facilitates the creation of an atmosphere where learners' motivation is rather intrinsically oriented.

1.7.3 Frustration

According to Marx and Tombough (1967 as cited in Young and Van Mondfrans, 1972) "frustration is frequently defined as a condition which results when a subject is blocked from reaching a goal" (p. 23). In general, reaching the desired objectives generates that feeling of pleasure and motivates us to do more. When prevented from reaching our goals, however, we may surrender to frustration.

Young and Van Mondfrans (1972) reported a brief examination of conventional programs. They identified five frustration-causing characteristics inherent to conventional education. Under conventional systems frustration is created when:

Teacher goals conflict with student goals.

- Alternatives are not available to teachers and students; there exists generally one method of achieving the goal.
- When the student does not have a clear image concerning what is expected from him by the end of the instructional program. And if he does know, he is not sure whether it is worth his effort to wade through all the material his teacher believes to be essential.
- Students are given one chance to achieve on a test.
- Students are not held back due to low grades but would still feel the academic frustration of being above or below the scope of the instruction.

It is argued, however, that powerful remedies can be found in competency based programs. Learning objectives are never solely decided by teachers or syllabus designers. An effective competency based instructor is one that bases his decisions on his students' needs. Besides, there is no need to stick to one method to attain the aims. As stated by Richards (2006), competency-based instruction "shifts attention away from methodology or classroom processes, to learning outcomes. In a sense, one can say that with this approach it doesn't matter what methodology is employed as long as it delivers the learning outcomes" (p. 3). Frustration would decrease significantly if students realize that they can alternate procedures to reach their goals. Furthermore, "in competency-based environments there is no failure. If a student doesn't achieve a goal the first time, he tries again until he succeeds" (Young & Van Mondfrans, 1972, p. 24).

To dissipate the ambiguity that may surround learning objectives, CBE recommends that outcome goals should be expressed explicitly and transparently. Teachers are advised against concealing from their students what is expected from them on a test; learners should be made aware of the required standards. Finally, concerning the academic frustration conventional systems can result, CBE, as Young and Van Mondfrans (1972) argue, has the solution. Competency-based systems according to them (1972) may eliminate such a problem by "allowing students of the same age group to be actively pursuing goals above or below their peer level. Only the teacher and the students involved need be aware of level of achievement" (p. 25). Instructional programs should be flexible enough to permit for variation within one group. Each student is given the chance to set goals specific to him and advance towards achieving them at his own pace.

1.7.4 Anxiety

According to Huberty (1997 as cited in Lowe & Raad, 2008) anxiety is an "emotional state characterized by feelings of distress and tension about real or anticipated threats that may manifest in cognitive, behavioral, or physiological patterns"(p. 38). It is perceived that anxiety plays an important role in a person's life and may interfere with his learning. "Too much anxiety normally reduces a student's effectiveness, while moderate anxiety increases his effectiveness"(Young & Van Mondfrans, 1972, p. 25).

Psychologists distinguish between *situational anxiety* which is tied to a specific situation and *manifest anxiety* which "manifests itself without any underlying psychological problem" (Manifest anxiety, 2013).

It was shown through many studies that it is situational anxiety that affects performance and not manifest anxiety (Lott & Lott, 1968; Harleston, 1962). Furthermore, Young and Van Mondfrans (1972, p 26) argue that it is not within the teacher's remit to "practice therapeutic techniques to reduce manifest anxiety, but he can alter the characteristics of a specific situation" to create a more relaxing environment for his students. The inbuilt vagueness found in test taking environments within traditional educational systems is believed to increase anxiety. CBE, by contrast, proposes effective ways to reduce students' anxiety. Competency based programs not only make performance criteria and standards transparent, they even allow learners to examine the task prior to showing their competency. More confidence will be gained if students are granted the chance to acclimatize to the test-taking procedures (Young & Van Mondfrans, 1972).

1.7.5 Self-concept

Self-concept in Walsh's words (2008) "refers to one's collective self-perceptions across many different tasks and assembled from many different interactions" (p. 892). Psychologists and educators have always been interested in investigating the relation between self-concept and achievement. A study of Coopersmith (1959), for instance, has confirmed that self-concept is a significant contributing variable in academic success.

CBE as an educational system, according to Young and Van Mondfrans (1972), plays an important role in improving learners' self-concept. Such a claim was supported by Festinger (1957, as cited in Young & Van Mondfrans, 1972) who asserted that "self-concept will become more positive if the behavior is positive and is accompanied by a high degree of freedom of choice"(p. 27). Being student-centered, CBA allows for greater autonomy which is thought to have a huge impact on how the student will come to view himself in a new more powerful way.

Conclusion

We tried to clarify through this chapter why CBA can be the answer to many of the educational problems that are hard to overcome under conventional systems. We highlighted the
main characteristics that make CBA the ideal approach to adopt when the aim is to equip learners with the essential skills and competences that real-life situations require.

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CHAPTER TWO: The Theory of Multiple Intelligences and Its Application in EFL Classrooms

Introduction

Teaching methods that are based on the principles of MIT are rapidly gaining ground in the last decade or two. Implementation of MIT into our current teaching practices is believed to be one of the most effective ways for catering for our learners' different needs and profiles. This chapter will start with a discussion of some prominent philosophers and psychologists' definitions and theories of intelligence. We will proceed then to acquainting the reader with MIT, its different aspects, and how it can be successfully incorporated into our educational systems.

2.1 The Concept of Intelligence and Its Different Interpretations

2.1.1 Definitions of Intelligence

Sternberg (1990) wrote: "There may be as many different definitions of intelligence as there are people who are asked to define it" (p. 33). Determining what intelligence is is one of the highly contentious issues in the field of psychology. It was even claimed by Wechsler (1950) that no definition can circumscribe the concept of intelligence. For him, general intelligence is a kind of energy which was neither definable nor measurable. A main source of controversy is the complexity of the concept. In fact, the best most psychologists can do, generally through IQ tests, is to measure some aspect of intelligence. Sternberg, Grigorenko, and Kidd (2005) admittedly declared: "As professionals, some of us may understand that there is a large gap between the conceptualization and operationalization of intelligence" (p. 47). Everyone, according to Seternberg et al. (2005, as cited in Mason & Wilcox, 2009), "thinks they know

intelligent performance when they see it, but when they try to define it, the elusiveness of the trait becomes apparent" (p. 497).

We will attempt through this section, however, to gain some insight into what intelligence is by reviewing the main definitions dispensed by philosophers and psychologists over the years. We chose to introduce those definitions in their respective chronological order. Staring with an examination of the historical views that date back to the ancient Greeks, this section proceeds then to discuss more contemporary theories of intelligence.

For Plato (428/427 or 424/423– 348/347 BC), intelligence was the love of learning – and the love of truth (Mackintosh, 2011). As reported by Sternberg (1990), Plato proposed an interesting metaphor of a block of wax in the mind of man in order to elaborate his views on intelligence:

Imagine that there exists in the mind of man a block of wax, which is of different sizes in different men. The block of wax can also differ in hardness, moistness, and purity. When the wax is pure and clear and sufficiently deep, the mind will easily learn and retain and will not be subject to confusion . . . But when the wax is muddy or impure or very soft or very hard, there will be defects of the intellect. People whose wax is soft will be good at learning but be apt to forget. People whose wax is hard will be slow to learn, but will retain what they learn (p. 24).

Plato, as this quote suggests, believed that nature played a significant role in determining a person's intelligence.

A different and highly controversial opinion was evoked by the early Christian theologian and philosopher St. Augustine (354–430). In his *Confessions* (as cited in Sternberg 1990), he questioned the value of intelligence and wondered "whether those who are less

intelligent might not be better off, in that they would be less susceptible to departing from the will of God and the "nest" of the Church" (p. 25). While most scholars and philosophers looked at intelligence as an admirable quality, Augustine believed that superior intelligence might lead the person to wander from the path of rectitude.

Thomas Hobbes (1588 –1679), in his 1651 book, Leviathan, "went into more detail, arguing that superior intelligence involved a quick wit and the ability to see similarities between different things, and differences between similar things" (Mackintosh, 2011, p. 3). He identified two constructs of intelligence: natural and acquired 'wit'. Natural wit is a term Hobbes used to refer to the intellectual skills a person develops through life experiences. Acquired wit, on the other hand, is the result of direct instruction (Sternberg 1990).

Immanuel Kant (1724–1804), who is a central figure in modern philosophy, "believed that intelligence, or what he referred to as 'the higher faculties of cognition,' comprises three parts: understanding, judgment, and reason"(Sternberg, 1990, p.30). He also distinguished between two types of intelligence: *genius* vs *spirit of imitation. Genius* is, in other words, creative intelligence; the ability to generate new ideas when facing novel unfamiliar situations. *Spirit of imitation*, or imitative intelligence, however, refers to the person's aptness to learn from others the society set as exemplars (Sternberg 1990).

It was until the late nineteenth century that more systematic studies of intelligent behavior came into existence. Galton started the tradition of research on psychometric intelligence by administering a battery of tests to the visitors of the South Kensington Museum in London. Over Seven years, he measured participants' different psychophysical abilities (auditory and visual sensory discrimination abilities as well as reaction times to stimuli and the ability to exert hand-squeeze pressure on a dynamometer) (Brody, 2000). For Galton (as cited in Sternberg, 1990), two main qualities influenced intellectual ability: *energy* and *sensitivity*. Intellectually gifted individuals according to him were characterized by remarkable levels of energy in a variety of fields. He also observed that acute sensitivity to external stimuli appertained to highly intelligent people. Actually, Galton's intelligence theory was influenced by British empiricist philosophy. It was argued that since people interacted with the environment through the five senses, "then a 'larger', more intelligent mind must be one capable of finer sensory discrimination and thus able to store and act upon more sensory information" (Mackintosh, 2011, p. 4).

Galton believed that intelligence is a hereditary, fixed personal trait. He (1869, as cited in Mackintosh, 2011) openly proclaimed:

I have no patience with the hypothesis occasionally expressed, and often implied, especially in tales written to teach children to be good, that babies are born pretty much alike, and that the sole agencies in creating differences between boy and boy, and man and man, are steady application and moral effort. It is in the most unqualified manner that I object to pretensions of natural equality. The experiences of the nursery, the school, the University, and of professional careers, are a chain of proofs to the contrary (pp. 3-4).

Despite his undeniable contributions to intelligence studies, Galton's theory came under heavy criticism. For one thing, he did not formally succeed in understanding and defining the construct he was trying to measure. Second, his "measures were primarily physical and sensory rather than mental or cognitive in nature" (Konold & Canivez, 2009, p. 48).

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In 1905, Binet introduced the first test of general mental ability. Binet's theory came as a reaction to Galton's as he questioned the process of measuring intelligence by focusing only on simple cognitive operations. Tests of intelligence, according to him, should target instead higher level psychological functions: attention, memory, imagination, common sense, judgment, and abstraction (Mackintosh, 2011).

Binet viewed intelligence as a unitary ability equated with judgment. To him (1916, as cited in Sternberg, 1990), the core of intelligence is:

Judgment, otherwise called good sense, practical sense, initiative, the faculty of adapting one's self to circumstances. To judge well, to comprehend well, to reason well, these are the essential activities of intelligence. A person may be a moron or an imbecile if he is lacking in judgment; but with good judgment he can never be either. Indeed the rest of the intellectual faculties seem of little importance in comparison with judgment (pp. 74-75).

Binet also rejected Galton's view of intelligence as a structural feature of the mind. He viewed intelligent behavior as rather susceptible to developing and context-dependent. For him, intelligence is "a human condition that can be modified through education and social interventions" (Yun Dai, 2008, p. 537).

In comparison with his predecessors, Spearman was a different kind of researcher. He was critical of experimental psychology, the methods of which he deemed insignificant and trivial. As he firmly believed that human intelligence can be clearly defined and measured with accuracy, Spearman proposed a new 'correlational psychology' which would better do justice to the complexity of human behavior (Sternberg, 1990). So, he "developed a statistical method known as factor analysis, which demonstrated that Galton's hypothesis of a general ability was

supported after all" (Kyllonen & Gitomer, 2002, p. 1113). Spearman's study (1904) reported positive correlations between tests of sensory discrimination and measures of academic performance (Brody, 2000). He also observed that there is a significant relationship between diverse psychometric tests which led him to theorize that there is a broad mental capacity, *general factor 'g'*, which influences all subsequent mental abilities, *specific factors 's'* (Pellegrino, 2002).

Based on Spearman's work, Thurstone (1931) and Guilford (1960) developed more refined models. Thurstone's identification of the seven primary mental abilities (verbal comprehension, verbal fluency, number, spatial visualization, inductive reasoning, memory, and perceptual speed) helped in improving Spearman's basic batteries. Guilford, in his turn, developed a model of intelligence in which he distinguished five mental operations (cognition (knowing), memory, divergent production (generation of alternatives), convergent production, and evaluation) that were organized around three dimensions: operation, product, and content. Each of these operations could be applied to one of four types of contents: figural, symbolic, semantic, and behavioral. Those different contents can be expressed in terms of six products which are units, classes, relations, systems, transformations, and implications. The possible combinations between all these elements results in a model of 120 diverse abilities (Brody, 2000; Mackintosh, 2011; Kyllonen & Gitomer, 2002).

In the 1960s, a new operationalization of intelligence was proposed by Raymond Cattell. He suggested that Spearman's general factor 'g' should be divided into two distinct but correlated factors: fluid intelligence (Gf) and crystallized intelligence (Gc). Fluid intelligence (Gf) is a biologically based form of intelligence that is innate, affects all types of problem solving, and is mainly concerned with the speed of mental processing of new information. Fluid intelligence, studies revealed, reaches its peak in late adolescence and then declines with age. Crystallized intelligence (Gc), on the other hand, is largely dependent on education and experience. It refers to the person's ability to use previously acquired knowledge and skill. Unlike fluid intelligence which decreases with aging, crystallized intelligence is believed to increase over the life span.

Earl Hunt (1978, as cited in Sternberg, 1990) defined intelligence in terms of demonstrated individual differences in mental competence. While preceding theorists concerned themselves chiefly with the structure of intelligence, Hunt's main interest was in identifying the information processing routines underlying intelligent thought. His theory allowed for the creation of a cognitive theoretical base that can be used to account for individual differences. It correlated conventional psychometric tests scores with performers' individual differences on tasks that experimental psychologists were using in their laboratories to study the basic phenomena of cognition.

In 1983, research on intelligence witnessed new developments with the introduction of Gardner's theory of multiple intelligences. New theoretical perspectives were brought to the field as Howard Gardner thoroughly examined new research evidence. Gardner challenged the traditional view of intelligence as a unitary ability and postulated that the typical constructs used to define and measure intelligence in the past were too narrow.

As the name suggests, MIT is built on the assumption that intelligence is manifold. Gardner sounded the need for psychologists to move away from laboratory studies and try to understand intelligence instead "in terms of variations in types of naturally occurring cognition in the everyday environment" (Sternberg, 1990, p. 45).

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A couple of years later, a new theory, the triarchic theory of intelligence, came to the surface. Robert Sternberg "suggests that intelligence should be viewed as mental self-government" (Sternberg, 1990, p. 49). According to Sternberg (1985, 1988, 1997, as cited in Davidson & Downing, 2000):

There are three interacting aspects to intelligence. The first, which is internal to the individual, consists of the information- processing skills that guide intelligent behavior. The second aspect involves the ability to create an optimal match between one's skills and one's external environment. The third involves the ability to capitalize on one's experiences to process both novel and unfamiliar information successfully (p. 42).

The first component, which is referred to as analytical intelligence, is primarily involved in dealing with relatively familiar kinds of problems where the judgments to be made are of a fairly abstract nature. This type of capacity is related to the academic view of intelligence. The second component that is necessary for success in everyday life is termed practical intelligence. Creative intelligence, however, is the term Sternberg coined to refer to the third component. It involves the ability of reacting to new situations and generating novel solutions.

Other psychologists, such as Eysenck 1987, tried to understand the concept by referring to the biological factors that govern intelligent behavior. Eysenck viewed intelligence as deriving from the error-free transmission of information through the cortex. His studies reported the existence of a high positive correlation between reaction-time and IQ. An inference was made that that short reaction-time is related to small operational energy consumption by the brain. Eysenck theorized, therefore, that brains of more intelligent subjects transmitted neural messages with more accuracy which explains why their brains consume less energy (Sternberg, 1990; Fidelman, 1998; Nettelbeck, 2011; Vernon, Wickett, Bazana, & Stelmack, 2000).

2.1.2 Intelligence Paradigms

Examining the myriad of definitions psychologists have provided, Sternberg (2009) noted that:

Theories of human intelligence have traditionally relied on some basic unit of analysis for explaining sources of individual differences in intelligent behavior. Theories have differed in terms of (a) what is proposed as the basic unit; (b) the particular instantiations of this unit that are proposed somehow to be locked inside our heads; and (c) the way in which these instantiations are organized with respect to one another. Differences in basic units have defined "paradigms" of theory and research on intelligence; differences in instantiations and organizations of these units have defined particular theories within these paradigms (p. 4).

Each researcher focused on a particular set of factors that are believed to influence intelligent behavior. Consideration of the basic mental capacities that comprise intelligence, and how they are organized are also important sources of diversity in the theory of intelligence. Theories differed because researchers have looked at the concept of intelligence from different perspectives.

For the sake of clarification and to facilitate the study and understanding of intelligence theories, an attempt is made to classify them into for main types or paradigms: psychometric theories, cognitive theories, cognitive-contextual theories, and biological theories.

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A/ Psychometric Theories

Psychometric theories are mainly concerned with the study of the structure of intelligence. Traditionally, for a successful operationalization of intelligence, psychometric tests were designed to discover the form intelligent behavior takes. These models are typically developed by first administering a range of tests of cognitive ability (e.g., vocabulary, number series, perceptual speed, general knowledge, analogies, etc.) to large numbers of individuals. Tests are then scored and latent sources, or 'factors' of intelligence are obtained by "factor analyzing" a matrix of intercorrelations (or covariances) between scores on tests of measures of ability (Davidson & Kemp, 2011; Sternberg, 2009).

Psychometric theories can be divided by the number of factors that they emphasize: one, a few, or many. British psychologist Charles E. Spearman, understood intelligence as a structure in which "g" has a dominant position either as the single factor responsible for the mental faculty of intelligence , or as the governing body over a range of specific cognitive skills. Cattell's studies led to the identification of two components of general cognitive ability (fluid and crystallized). Thurstone proposed that intelligence involves seven primary mental abilities: verbal comprehension, verbal fluency, number, spatial visualization, memory, reasoning, and perceptual speed. Guilford went even to the extent of proposing, originally, 120 factors.

Although psychometric theories embody a large amount of empirical evidence in support of their well-specified, hierarchical structures of intelligence, they came under heavy criticism for the fact that such tests capture a very narrow slice of human cognition. Sternberg (1996) was quoted (as cited in Hunt, 2011) denouncing psychometric tests arguing that "almost everything you know about intelligence - the kind of intelligence psychologists have most often written about - deals with only a tiny and not very important part of a much broader and more complex intellectual spectrum". Test taking represents only a small portion of a person's life and is definitely far from being the perfect reflection of his real life situations problem-solving abilities.

B/ Cognitive Theories

Dominance of psychometrics came to demise with the coming of age of cognitive theories. According to Pellegrino (2002):

The cognitive perspective helps to define the scope of a theory of intelligence by further emphasizing the dynamics of cognition, through its concentration on precise theories of the knowledge and processes that allow individuals to perform intellectual tasks. Psychometric and developmental theories typically give little heed to these processes, yet they are necessary for a theory of intelligence to make precise, testable predictions about intellectual performance (p. 1203).

The cognitive or information-processing perspective emerged out of dissatisfaction with psychometric theories. Psychometricians focus on merely the structure of intelligence was a major inconvenience. Psychometric theories failed to explain what happens in someone's mind when they are using the ability in question and this led cognitive psychologists to call for a new approach that prioritizes detailed description of the cognitive processes involved in human intelligence. Prominent figures of the cognitive paradigm include among others Baddeley and Hitch 1974, Hunt 1978, and Pellegrino and Goldman 1987.

C/ Cognitive-contextual Theories

Cognitive-contextual theories, represented by two major theories, Gardner's MIT and Sternberg's triarchic theory, are founded on the premise that there is an interaction between people's social environment and their development of intelligence. As reported by Hunt (2011): Social behavior is not solely the product of the individual doing the behaving. Behaviors can be elicited or constrained by properties of the situation. Gardner has provided a compelling example, in a series of biographical essays on creativity, as illustrated by such disparate figures as Einstein, Picasso, T. S. Eliot, and Mahatma Gandhi. Each of the creative geniuses Gardner wrote about benefited from the support of people who, often at considerable sacrifice to themselves, played supporting roles so that the geniuses could concentrate on the work that, ultimately, made them famous (p. 113).

In addition to the internal individual differences and the mental operations that take place in the person's mind, theories under this paradigm take account of contextual features. Experience plays a significant role in developing someone's abilities and an intelligence or intelligences are only those skills that are environmentally or culturally valued.

D/ Biological Theories

Another group of researchers tried to understand intelligence from a radically different perspective. Intelligence, according to biological theories, should be directly connected to its biological bases. It is even argued that hypothetical mental constructs are not of great use when it comes to explaining intelligent behavior (Pandey 2005). Biological theorists, usually called reductionists, investigated how the anatomy and physiology of the brain and the central nervous system account for intelligent thought. Works of researchers such as Jensen 1982, Eysenck 1987, Haier et al 1988, and Ceci 1996 helped in developing and broadening the scope of study of this paradigm (Davidson & Downing, 2000).

2.2 A Brief Review of the Theory of Multiple Intelligences

MIT was an outgrowth of a research project, Project Zero, that was founded in 1967 at the Harvard Graduate School of Education. Understanding the nature of human potential and how it could best be catalyzed was the main objective of the project. The scholarly work perfectly reflected Gardner's interest in studying human cognition and creativity along with his ceaseless fascination with the arts.

To his surprise, a wide range of human abilities were downplayed in theories of cognitive and developmental psychology. In his 2003 article, *Multiple Intelligences After Twenty Years*, for example, he unveiled to the public that:

As a young person I was a serious pianist and enthusiastically involved with other arts as well. When I began to study developmental and cognitive psychology, I was struck by the virtual absence of any mention of the arts. An early professional goal was to find a place for the arts within academic psychology. I am still trying! In 1967 my continuing interest in the arts prompted me to become a founding member of Project Zero (p. 2).

An elaborate version of Gardner's theory was published in his 1983 book, *Frames of Mind*. MIT challenged the traditional view of intelligence as a unitary, biological cognitive ability that can be adequately assessed by standard psychometric instruments. Gardner has always believed that confinement of intelligent behavior within an academic context represented a serious flaw in psychologists' conceptualization of intelligence. He "saw intelligent behavior as related to specific kinds of functioning in the real world" (Mason & Wilox 2009, p. 498). Intelligence from the perspective of MIT was defined 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". (Gardner 1999, pp. 33-34).

Two premises constitute the basis of MIT. The first is that there is no such general intelligence that presides over all kind of mental ability. For Gardner, "positive manifold is a statistical artifact that arises because conventional schools emphasize only a limited range of

skills - language, abstract reasoning, and rapid responding - and because virtually all the tests are presented using language" (Hunt, 2011, p. 115).

The second premise concerns the existence of a variety of different and independent intelligences, ranging from linguistic intelligence to bodily/ kinesthetic intelligence. About the way he prepared for his first book in 1983, Gardner (1999) said:

I had always been intrigued by the challenge and promise of examining human cognition through a number of discrete disciplinary lenses. I enjoyed investigating psychology, neurology, biology, sociology, and anthropology as well as the arts and humanities. And so I began reading systematically in these areas in order to gain as much information as possible about the nature of various kinds of human faculties and the relationships among them.

The idea of "multiplicity" backbones Gardner's entire methodology as he aimed to develop a theory that is, both in form and substance, multidisciplinary:

MI theory bears similarities to several other contemporary theories of intelligence, yet it remains distinct. Although it shares a pluralistic view of intelligence with Robert Sternberg's triarchic theory, MI theory organizes intelligences in terms of content areas, and no single cognitive function, such as perception or memory, cuts across all domains (Chen 2002, p. 1198).

The intelligences identified by Gardner correspond to various domains of knowledge and skill. Over and above that, Gardner had recourse to diverse disciplines to establish the criteria that justify his theory. Unlike his predecessors, who founded their premises relying on one field's data: data gathered using psychometric instruments, Gardner (2003) combed "literature from brain study, genetics, anthropology, and psychology in an effort to ascertain the optimal

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taxonomy of human capacities" (p. 3). He undertook a research project that "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 1993, p. 9).

However, it must be conceded that we are a long way from formulating a thorough, exhaustive list of intelligences. Gardner himself admitted that the exact number of human intelligences is still unidentified. For that reason, he emphasized the importance of setting "an algorithm for the selection of an intelligence, such that any trained researcher could determine whether a candidate intelligence met the appropriate criteria" (Gardner 1993, p. 67). So, a thorough examination of the previously mentioned disciplines helped him to establish eight criteria for defining an intelligence.

The first two criteria are biological, i.e., the trait in question should be the product of a biological system:

1-Potential Isolation by Brain Damage: The aim attached to the concept of brain modularity is the key to understanding the scientific basis of the theory of multiple intelligences. Gardner claimed that for an ability to stand out as an intelligence, there must be a possibility for it to be dissociated from the other abilities. He collected evidence from neuropsychology and some natural experiments where it was observed that either patients exist who have some ability spared despite other damaged faculties, or there are patients in whom this capacity has been impaired while others have been spared. "Either pattern increases the likelihood that an intelligence has been discovered" (Gardner, 1999, p. 36).

2- An Evolutionary History and Evolutionary Plausibility: Gardner (1999) claimed that: "Despite all its gaps, evidence about the evolution of our species is crucial to any discussion of the contemporary mind and brain" (p. 36). Thus, the second criterion to use for judging a candidate intelligence is to trace the origin of the ability in question in the evolution of human beings. Gardner (1993/1999) believes that an intelligence should have its roots which reach back millions of years in the history of the species. Inferring, for instance, that the spatial/ visual intelligence has its roots in hominids' capability of spatially finding their way around diverse terrains.

Two other criteria were derived from logical analysis:

3-An Identifiable Core Operation or Set of Operations: Despite admitting to the fact that diverse intelligences are typically used in conjunction in the real world, Gardner maintained that an intelligence must have its own identifiable core operation or set of operations. As he (1993) believed that an intelligence is a "neural mechanism or computational system that is genetically programmed to be activated or 'triggered' by certain kinds of internally or externally presented information" (p. 68), Gardner stressed the importance of identifying the capacities that seem to be central to a candidate intelligence. Musical intelligence, for example, consists of sensitivity to melody, harmony, rhythm, and musical structure. Linguistic intelligence consists of sensitivity to structure and syntax, vocabulary, rhythm, and literary tools.

4- Susceptibility to Encoding in a Symbol System: According to Gardner (1993/ 1999), one of intelligence key features is its natural gravitation toward embodiment in a culturally contrived symbolic system. Examples might include: spoken and written language systems, mathematical codes, charts, drawings, logical equations, and so on.

Gardner derived criterion five and six from developmental psychology:

5- A Distinctive Developmental History, Along with a Definable Set of Expert "End-State" Performances: Each intelligence must have its own developmental history. For a person to become a writer, he will progressively develop his linguistic abilities. Typically, an intelligence will not develop in isolation, especially in normal people. That is why experts and end-state performers represent optimal cases for researchers to observe the distinctive developmental paths of disparate intelligences (Gardner, 1993/1999; Chen 2002).

6- *The Existence of Idiots Savants, Prodigies, and Other Exceptional Individuals*: A prodigy is a young person who is unusually intelligent or skilful for their age, and an idiot-savant is a person who has a mental disability or learning difficulties but who has an unusually high level of ability in a particular skill, for example in art or music, or in remembering things (Hornby, Cowie, & Lewis, 1974). The existence of such cases, according to Gardner, allows us once again to to observe the human intelligence in relative isolation "to the extent that the condition of the prodigy or the idiot savant can be linked to genetic factors, or to specific neural regions, the claim upon a specific intelligence is enhanced" (Gardner, 1993, p. 68).

And the last two criteria emanate from traditional psychology:

7- Support from Experimental Psychological Tasks: Methods used in cognitive psychology help researchers investigate the relative autonomy in which various specific computational mechanisms operate. Psychological tasks are a good way to see the intelligences working in isolation from one another. "If one activity does not interfere with the other, researchers can assume that the activities draw on discrete brain and mental capacities" (Gardner, 1999, p. 40). For example, most of us have no trouble walking or finding our way around while we are conversing; the intelligences involved (bodily/ kinesthetic, spatial/ visual, and verbal/ linguistic) are therefore separate (Gardner, 1993/ 1999, Chen, 2002).

8- Support from Psychometric Findings: Although MIT emerged as a reaction to psychometrics, results of psychometric studies, Gardner believes, provide supporting evidence

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for his theory for its low correlation to other intelligences. Gardner (1993) observed that "the tasks that purportedly assess one intelligence correlate highly with one another, and less highly with those that purportedly assess other intelligences" (p. 70).

For an ability to be qualified as an intelligence, it has to meet all or at least most of the aforementioned criteria. As stated by Hunt (2011), "Gardner uses these criteria somewhat loosely, for most but not all of his intelligences satisfy all the criteria" (p. 116). Here are the intelligences that he has identified:

1/ Verbal/Linguistic Intelligence (VL)

Linguistically gifted peopole excel at acquiring languages, managing linguistic structures, coping with language forms and using them resourcefully to attain the desired goals. According to Gardner (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).

2/Logical/Mathematical Intelligence (LM)

Individuals with high LM intelligence tend to adopt scientific approaches to investigate issues. They excel in utilizing logical reasoning and solving mathematical riddles (Gardner, 1999; McKay, 2008; Kincheloe & Feltman, 2007).

3/Bodily-kinesthetic intelligence (BK)

BK intelligence entails skillful use of body parts to work out problems and accomplish intricate tasks (Gardner, 1999).

4/ Musical Intelligence (M)

M intelligence is characterized by sensitivity to rhythmic patterns and artistry in the creation and deciphering of musical pitches and tones (Gardner, 1999).

5/ Spatial/Visual Intelligence (SV)

SV intelligence is characterized by powerful mental imagery. It entails success in solving problems through effective generation of mental representations of the physical space (Gardner, 1999).

6/ Interpersonal Intelligence (IR)

IR intelligence is characterized by the capacity to comprehend, evaluate, and cope with other peoples' emotions, desires, thoughts and psyches. It involves a person's ability to successfully interpret others' facial expressions, gestures, and verbal cues (Gardner, 1999)

7/ Intrapersonal Intelligence (IA)

IA intelligence involves, according to Gardner, "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).

8/ Naturalistic Intelligence(N)

Naturalistically intelligent people demonstrate expertise in coping with environmental issues and show great interest in the fauna and flora and (McKay, 2008; and Kincheloe & Feltman, 2007).

Armstong (2009, pp. 10-11) summarized in table 2.1 the main aspects of Gardner's eight intelligences and demonstrated the brain structures each intelligence comprises.

Table 2.1

MI Theory Summary Chart

Components	Symbol Systems	High End- States	Neurologi cal Systems (Primary Areas)	Developm ental Factors	Ways that Cultures Value	Evolution ary Origins	Presence in Other Species	Historical Factors (Relative to Current U.S. Status)
Sensitivity to the sounds, structure, meanings, and functions of words and language	Phonetic languages (e.g., English)	Writer, orator (e.g., Virginia (e.g., Volf, Martin Luther King Jr.)	Left temporal and frontal lobes (e.g., Broca's/ Wernicke's areas)	"Explodes" in early childhood; remains robust until old age	Oral histories, storytelling, literature	Written foundations found dating to 30,000 years ago	Apes' ability to name	Oral transmission more important before printing press
Sensitivity to, and capacity to discern, logical or numerical patterns; ability to handle long chains of reasoning	Computer languages (e.g., Basic)	Scientist, mathematicia n (e.g., Madame Curie, Blaise Pascal)	Left frontal and right parietal lobes	Peaks in adolescence and early adulthood; higher math insights age 40 age 40	Scientific discoveries, Mathematical theories, counting and classification systems	Early number systems and calendars found	Bees calculate distances dances	More important with influence of computers
Capacity to perceive the visual-spatial world accurately and to perform transformations on one's initial perceptions	Ideographic languages (e.g., Chinese)	Artist, architect (e.g., Frida Kahlo, I. M. Pei)	Posterior regions of night hemisphere	Topological thinking in early childhood gives way to Euclidean paradigm around age 9– 10; artistic eye stays robust into old age	Artistic works, mavigational systems, Architectural designs, inventions	Cave drawings	Territorial instinct of several species	More important with advent of video and other visual technologies
Ability to control one's body movements and to handle objects skillfully	Sign languages, Braille*	Athlete, dancer, sculptor (e.g., Martha Graham, Auguste Rodin)	Cerebellum, basal ganglia, motor cortex	Varies depending upon component (strength, flexibility) or domain (gymnastics, baseball, mime)	Crafts, athletic performances Dramatic works, dance forms, sculpture	Evidence of early tool use	Tool use of primates, anteaters, and other species	Was more important in agrarian period

Intelligence	Linguistic	Logical- Mathematical		Spatial		Bodily- Kinesthetic
Was more important during oral culture, when communicati on was more musical in nature		More important with increase in service economy	Continues to be important with increasingly complex society	choice- making	Was more important during agrarian period: then fell out of favor during	industrial expansion; now "earthsmarts" are more important than ever to preserve endangered ecosystems
Bird song		Maternal bonding observed in primates and other species	Chimpanzees can locate self in mirror; apes experience fear		Hunting instinct in Innumerable species to between prey and nonnev	
Evidence of musical instruments back to Stone Age		Communal living groups required for hunting/ gathering	Early evidence of religious life		Early hunting tools reveal understanding of other species	
Musical compositions, performances , recordings		Political documents, Social institutions	Religious systems, psychological theories, rites of passage		Folk taxonomies, herbal lore, hunting rituals, animal spirit mythologies	
Earliest intelligence to develop; prodigies often go through developmenta l crisis		Attachment/ bonding during first 3 years critical	Formation of boundary between "self" and "other" during fi rst 3 years critical		Shows up dramatically in some young schooling or experience	formal or informal expertise
Right temporal lobe		Frontal lobes, temporal lobe (especially right hemisphere), limbic system	Frontal lobes, parietal lobes, limbic system		Areas of left parietal lobe important for discriminatin g "living" from "nonliving" things	
Composer, performer (e.g., Stevie Wonder, Midori)		Counselor, political leader (e.g., Carl Rogers, Nelson Mandela)	Psychotherapi st, religious leader (e.g., Sigmund Freud, the Buddha)		Naturalist, biologist, animal activist (e.g., Charles Darwin, E. O. Wilson, Jane Goodall)	
Musical notational systems, Morse Code		Social cues (e.g., gestures and facial expressions)	Symbols of the self (e.g., in dreams and artwork) artwork) Species classification systems (e.g., Linnaeus), habitat maps		Species classification systems (e.g., Linnaeus), habitat maps	
Ability to produce and appreciate rhythm, pitch, and timbre; appreciation of the forms of musical expressivenes s	Ability to N produce and n appreciate s rhythm, pitch, N and timbre; and timbre; appreciation of the forms of the forms of the forms of musical s expressivenes s s appropriately e the moods, temperations, a appropriately a appropriately a appropriately a appropriately a appropriately a ability to discriminate and the a ability to discriminate and the a ability to discriminate anong one's own th strengths and weaknesses weaknesses s anong s and the a ability to discriminate and the a ability to discriminate and the s		of other neighboring species; and charting out the relations, formally, among several species			

	nal	nal	
Musical	Interperso	Intraperso	Naturalist

In his 1999 book, *Intelligence Reframed*, Gardner identified two new candidate intelligences: spiritual intelligence and existential intelligence. Studies are being conducted to check these abilities' conformity with Gardner's (1993) criteria for an intelligence.

2.3 Educational Implications of Gardner's Theory of Multiple Intelligences

Gardner's theory of multiple intelligences came originally as an attempt to broaden the concept of human cognition. "Gardner did not develop MI theory with an intended educational agenda or audience" (Seider & Gardner, 2009, p. 637). The impact it had on the educational world, however, was massive. Right after its inception, Gardner (2003) started receiving a steady stream of communications from instructors consulting him about effective ways for integrating MIT into their current teaching practices. MIT was embraced with great enthusiasm by the schooling society and it has indeed "provided a useful framework for improving school-based practice in the areas of curricula, instruction, and assessment" (Chen, 2002, p. 1199).

VL and LM intelligence dominated traditional schooling on the grounds that these too abilities can be measured and compared with less difficulty. Armstrong (2003) pointed up, as well, the role played by our culture in assigning, unjustifiably, more importance to the VL intelligence at the expense of other intelligences. MI-based instruction, however, invigorated interest in the six non-traditional intelligences (SV, BK, M, IR, IA, and N) that have been often overlooked in conventional systems. Armstrong (2003) argued that:

While our culture may value linguistic intelligence above the other seven, it certainly *shouldn't* continue to do so. The theory of multiple intelligences, in this view, serves as a critique of the values of our schools and our culture, suggesting that we need to pay much more attention to the neglected intelligences, especially those such as spatial, bodily-kinesthetic, musical, and naturalist, that may be particular strengths of individuals who have had special difficulties in successfully making their way through our heavily linguistic schools (p. 4).

Chen (2002) justified the importance of providing variety in educational settings by stating that "each child's biopsychological potential is different, providing a broad range of subject areas at a young age also increases the likelihood of discovering interests and abilities that can be nurtured and appreciated" (p. 1200). Catering for students' MI would breed not only more engaged learners but also more inclined and competent citizens. MIT aids in achieving goals broader than those strictly attached to the academic context (Gardner, 1993). Furthermore, the fact that we use different combinations of intelligences when we perform daily tasks, as pointed out by Tele (2000), supports the call for MIT implementation.

Evidence of the Value of MIT was demonstrated through many studies and research projects. In the late 1990s, Mindy Kornhaber conducted a study, as part of Harvard's Project Zero, in which she reported the results documented by forty one US elementary schools after applying MI theory to school-based practice for at least three years. Most of the schools "reported improvement in standardized-test scores, student discipline, parent participation, or performance of students with learning differences" (Chen, 2002, p. 1200). Another research project, Project Spectrum, which was a ten-year study conducted between 1984 and 1993, investigated the effect of MI-based instruction on at-risk first grade students. The study reported that students who were at risk for school failure were not necessarily low performers in all domains. More importantly, "identifying and nurturing these at-risk children's strengths led to statistically significant increases in these children's self-direction, self-confidence, positive classroom behavior, positive affect, self-monitoring, and active engagement" (Seider & Gardner, 2009, p. 638).

2.3.1 The Multiple Intelligences Theory in the EFL/ESL Classroom

An important aspect of Gardner's theory is his belief that the human brain is organized in terms of independent modules dedicated to problems and solutions respective to specific domains. Gardner also asserted that an intelligence is the product of a constant and dynamic interaction between biological and environmental factors. He strongly opposed the "nature-nurture" dichotomy. For one thing, human abilities certainly have a genetic base as at least revealed by studies and new discoveries in the fields of biology and neuropsychology. But then again, disregarding the influence of environmental factors would seem implausible and far-fetched. In Gardner's (1999) words:

Even people who seem gifted in a particular intelligence or domain will accomplish little if they are not exposed to materials that engage the intelligence . . . shrewd environmental interventions can convert ordinary people into highly proficient performers or experts. Indeed, the "smarter" the environment and the more powerful the interventions and the available resources, the more proficient people will become, and the less important will be their particular genetic inheritance (p. 88).

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All intelligences, within MIT framework, are educable and susceptible to development. Educators should re-think intelligence, as suggested by Gardner (2006), in terms of the two dimensions: contextualization and distribution.

Contextualization refers to psychologists call for attention to aspects of intelligence that are external to the individual thinker. Genetic predisposition has its influence on intellectual potential but the way in which such potential will be expressed, and the extent to which it is expressed, is highly dependent on the culture the person belongs to and the set of experiences undergone within that culture (Gardner, 2006). The notion of *distribution* moves intelligence conceptualization beyond personalized capacities and skills. One's intellectual facility depends not merely on the ideas and abilities that the individual has obtained and can access himself; "they equally depend on the various material and human resources to which the person has access" (Gardner, 2006, p. 237).

The notion that intelligence is contextualized and distributed, denotes the significance of environmental factors in facilitating the occurrence and activation of MI. In other words, intelligent behavior is enhanced when appropriate tools are accessible within a context that is familiar and meaningful to the individual. From the perspective of MIT, all intellectual abilities, learning foreign languages included, are tightly bound to the sociocultural context. Intelligences do not work in isolation, and many human faculties cannot be exhibited without proper stimulation and enrichment from the environment. So, implementation of MIT in EFL/ ESL teaching, Gardner (2006) believes, would allow students the opportunity to experience learning in more authentic fashion outside the classroom setting.

Gardner's theory makes MI independent cognitive domains, but when put into practice, Gardner accentuated that no intelligence functions in isolation. No one intelligence can actually exist by itself; rather, intelligences work cooperatively especially when stimulated by multisensory activities (Gardner, 1999; E. Jensen, 1998).

Admittedly, VL intelligence is, by definition, Gardner's most closely related intelligence to foreign/ second language learning. However, achievement of diverse communicative goals requires the engagement of a whole range of intelligences, besides VL intelligence. According to Richards and Rodgers (2001):

MI proponents believe there is more to language than what is usually subsumed under the rubric linguistics. There are aspects of language such as rhythm, tone, volume, and pitch that are more closely linked, say, to a theory of music than to a theory of linguistics. Other intelligences enrich the tapestry of communication we call "language". In addition, language has its ties to life through the senses. The senses provide the accompaniment and context for the linguistic message that give it meaning and purpose (p. 117).

It is hard to imagine VL intelligence operating independently when carrying out meaningful interaction. A hotel receptionist, taking part in an oral conversation with a client, combines VL intelligence with BK intelligence (e.g. appropriate use of body language and gestures), interpersonal skills (e.g. being sensitive to clients' needs), as well as IA intelligence (e.g. receiving criticism gracefully).

So, based on the premise that linguistic intelligence cannot work by itself in authentic settings of human communication and needs to cooperate with other intelligences to function meaningfully, educators are advised to take a more holistic approach to language teaching. The

multi-sensory view of language, or 'Full-Frontal Communicativity' as Rodgers (2001/ 2003) prefers to call it, that is suggested by MIT, is necessary.

According to Richards & Rodgers (2001), however, "MI theory lacks some of the basic elements that might link it more directly to language education" (p. 117). For example, there is no syllabus, "either prescribed or recommended, in respect to MI-based language teaching" (Richards & Rodgers 2001, p. 118). To make up for this, efforts are being made; Lazear (1991 as cited in Richards & Rodgers 2001), for instance, proposed a basic developmental sequence of four stages as an alternative type of syllabus design. In the first stage, intelligence should be awoken through multisensory experiences. In the second stage, teachers amplify the intelligence. At the third stage, the intelligence is linked to the focus of the class, that is, to some aspect of language learning; we teach with and for the intelligence. At the final stage, students transfer the intelligence and relate it to the real world outside the classroom.

2.3.2 The Multiple Intelligences Theory in the Adult EFL/ESL Classroom

The set of claims proposed by MIT and its proponents can be exploited by language teachers in adult EFL/ ESL classrooms. If the *critical period hypothesis proves* to be valid, MIT offers effective solutions to maximize learning in adult language students.

According to Gardner (1993), "it has now been established beyond reasonable doubt that the left hemisphere is dominant for language in most normal right-handed individuals" (p. 54). However, after the completion of lateralization by the end of the critical period, language learning (most likely foreign/ second language learning) will occur through the exploitation of right-hemisphere regions. We have seen previously, in chapter 1, that a group of theorists hypothesize that the original mechanism children are pre-equipped with at birth ceases to be operable after the acquisition of the mother tongue. New cognitive processes are resorted to then to facilitate learning foreign/ second languages (Mitchell & Myles, 2004; Lightbown & Spada, 2006). This is where MI can be of great benefit. MIT, according to Armstrong (2009), "provides an ideal context for making sense out of students' cognitive skills. The eight intelligences in the model are themselves cognitive capacities".

Another issue was raised by Schumann (1997, as cited in Chao, 2004). He discussed the important role played by motivation in adults' second language acquisition. He explained that learning a new language for learners that have passed the sensitive period is like a brain recovering from damage that requires devotion to therapeutic treatment. During that period, personal motivation determines to a great extent the individual's success in acquiring the target language. He then concluded that "providing suitable learning situations to resonate with the learner's neural system where the emotional relevance and motivational significance of stimuli are appraised" is of great importance (Schumann, 1997, as cited in Chao, 2004, p. 80). Based on such findings, Chao (2004) suggests that an effective way for positively satisfying adult foreign or second language learners' affective needs and learning experiences is to arrange a brain-compatible instruction through the adoption of MI-based techniques.

Furthermore, a study conducted by Brundage and MacKeracher (1980) emphasized again the importance of multisensory stimulation especially for adult EFL/ ESL learners. They proved that adult learners' performance increased when information were presented "through a variety of sensory modes and experiences, with sufficient repetitions and variations on themes" (Brundage and MacKeracher, 1980, p. 30). A MI-based instruction would definitely guarantee the engagement of students' multiple senses and make learning organized around diverse topics and domains.

2.4 Multiple Intelligences and Technology

The impact new technology can have on education is now beyond doubt. The rapid changes in electronic and digital technologies, paralleled by theoretical advancement in cognitive psychology, are revolutionizing the world of education. "These new technologies and learning theories are now converging making major changes in the way teachers and learners interact" (Nelson, 1998, p. 90). Education is becoming more learner-centered and new technologies make it easier to incorporate new learning theories. Technological instruments allow for notions such as 'individualized instruction', 'teacher as facilitator', and 'student as active learner' to be implemented with great success.

Gardner (2000) criticized traditional education for limiting the ways learning can be approached. He deemed 'uniform schooling' as fundamentally unfair; it has "long privileged one or two forms of human intelligence—those involving language and logic—while ignoring the other powerful ways in which we can come to know the world" (Gardner, 2000, p.32). On the contrary, MIT, one of the prominent theories of individual differences, coupled with the resourcefulness of new technological tools can create an environment for teaching that capitalizes on students' individual strengths (Nelson, 1998). They have the potential to engage learners' wide range of abilities by addressing students' different senses and allowing for ample versatility. Technologies and technologically based exhibitions "invite students to use several intelligences; moreover, even when one is simply typing on one's keyboard, one can 'think' in spatial, musical, linguistic, or bodily intelligences" (Gardner 2000: 33).

Engaging students' diverse styles and profiles is not the only benefit multimedia technology can offer. Being consistent with a constructivist approach, technologically based materials are powerful learning tools. Having your students create their own projects is an outstanding vehicle for creating a student-centered, self-directed, and active learning (Wiley & Hemmerich, 2002; Crawford, 2002).

Another reason why technology tools may improve learning is related to students' affect. "Instructional materials with visual or audio adjuncts are simply more interesting to readers than plain text" (Wiley & Hemmerich 2002, p. 1494). Use of technology based instructional materials generally correlates with increased motivation, lowered anxiety and stress relief.

Table 2.2 summarizes MI teaching methods with a sample of some technological tool integrated:

Table 2.2

Intelligence	Teaching Activities (examples)	Teaching Materials (examples)	Instructional Strategies	Sample Educational Movement (primary intelligence)	Sample Teacher Presentation Skill	Sample Activity to Begin a Lesson
Linguistic	lectures, discussions, word games, storytelling, choral reading, journal writing	books, tape recorders, typewriters, stamp sets, books on tape	read about it, write about it, talk about it, listen to it	Critical Literacy	Teaching through storytelling	long word on the blackboard
Logical- Mathematical	brainteasers, problem solving, science experiments, mental calculation, number games, critical thinking	calculators, math manipulatives, science equipment, math games	quantify it, think critically about it, put it in a logical framework, experiment with it	Critical Thinking	Socratic questioning	posing a logical paradox
Spatial	Visual presentations, art activities, imagination games, mind- mapping, metaphor, visualization	graphs, maps, video, Lego sets, art materials, optical illusions, cameras, picture library	see it, draw it, visualize it, color it, mind-map it	Integrated Arts Instruction	drawing/ mind- mapping concepts	Unusual picture on the overhead

Summary of the Eight Ways of Teaching

Bodily- Kinesthetic	hands-on learning, drama, dance, sports that teach, tactile activities, relaxation exercises	building tools, clay, sports equipment, manipulatives, tactile learning resources	build it, act it out, touch it, get a "gut feeling" of it, dance it	Hands-On Learning	using gestures/ dramatic expressions	mysterious artifact passed around the class
Musical	Rhythmic learnings, rap ping, using songs that each	tape recorder, tape collection, musical instruments	sing it, rap it, listen to it	Orff Schulwerk	using voice rhythmically	piece of music played as students come into class
Interpersonal	Cooperative learning, peer tutoring, community involvement, social gatherings, simulations	board games, party supplies, props for role- plays	teach it, collaborate on it, interact with respect to it	Cooperative Learning	Dynamically interacting with students	"Turn to a neighbor and share "
Intrapersonal	individualized instruction, independent study, options in course of study, self esteem building	self-checking materials, journals, materials for projects	connect it to your personal life, make choices with regard to it, reflect on it	Individualized Instruction	bringing feeling into presentation	"Close your eyes and think of a time in your life when "
Naturalist	nature study, ecological awareness, care of animals	plants, animals, naturalists' tools (e.g., binoculars), gardening tools	connect it to living things and natural phenomena	Ecological Studies	linking subject matter to natural phenomena	bring in an interesting plant or animal to spark discussion about topic

Source: Armstrong (2009, pp. 58-59)

Crawford (2002) argued as well that implementing multimedia technology not only pledges flexibility in delivery; it also creates a learning environment that is rich in linguistic and cultural information about the target language. Cultural aspects and non-verbal cues such as intonation, tone, and body language are essential communication channels "which not only help learners understand the verbal language to which they are exposed, but are also an integral part of the system of meaning which they are seeking to learn" (Crawford, 2002, p. 29).

It should be noted, however, that teachers should carefully select the media to integrate in their classes. Wrong usage of multimedia technology can easily turn the effect in the opposite direction. Decorative, irrelevant illustrations can be more of a distraction from the objectives the lesson is originally designed to achieve. Hence, rather than serving mere ornamental ends, choice of teaching materials and multimedia should be fundamentally based on pedagogical motives.

2.5 Implementation of Multiple Intelligences Theory in EFL/ ESL Courses

There is in fact no single route for putting MIT theory into practice. When planning lessons in the light of MIT, at least two approaches can be identified: Basing the choice of activities to incorporate in the lesson on the learners' profiles you have built beforehand. Or else, teachers can just provide enough versatility to make sure all of learners' abilities are equally engaged.

A. For the creation of more individualized learning, teachers can start by identifying students' strengths and weaknesses and then plan lessons according to learners' profiles. Some teachers may choose to capitalize on strengths, by choosing activities that your students are most likely to engage with. Others may opt for focusing on weaknesses; helping students overcome their deficiencies. The best option, however, is to work on both.

As for the ways educators may use to determine a learner's intelligence profile (which is a combination of the eight intelligence types), Fleetham (2006) identifies five main tools:

1/ Using questionnaires and inventories: Teachers can learn about their students' strengths and weaknesses via some ready-made questionnaires and inventories. Armstrong (2009), for example, developed an eight-section inventory with every section comprising ten statements

related to one particular intelligence. Other examples include McKenzie's *Multiple Intelligences Survey* (1999) and some online questionnaires such as the Multiple Intelligences Developmental Assessment Scales (MIDAS) and the Birmingham Grid for Learning (BGfL) MI wheel.

According to McKenzie (1999), nonetheless, MI inventories must be used with the following cautions born in mind:

- M.I. is meant to empower, not label people! because:
- these inventories are 'meant as a snapshot in time'; anyone's intelligence profile is due to change and can hardly remain the same.
- Although the quantitative information obtained from such inventories help to enlighten its users about their inclinations, it should not be considered as the only way to identify someone's' intelligence profile (p. 6).

2/ *Observing behavior*: Actions and interactions in the classroom should not pass unnoticed. It is advisable to watch for signs of diverse intelligences from the way learners interact with each other and interact with their teacher. The way students behave can reveal a great deal of information about their intelligence profiles.

3/ *Talking with learners*: Developing students' understanding of MIT can help them reflect on the results of their MI questionnaires and their actions inside and outside the classroom. Raising learners' awareness helps the teacher extract more valid information about every student's MI profile.

4/ *Talking with parents*: According to Fleetham (2006), parents "whether they realize it or not, [are] experts - experts in the children they look after" (p. 67). Parents are generally an important source of knowledge about their children's interests, inclinations, strengths, and weaknesses. Such expert knowledge can turn into a gold mine of information for the teacher especially if parents themselves are instructed about MIT and its benefits.

5/ Using work samples: Indications about the student's intelligence profile can be taken from the way the learner prefers to carry out a task. As different end products of learning illustrate different intelligences, teachers are encouraged to build portfolios and document performances with an eye on identifying the different intelligences involved.

B. The second approach is to plan lessons in a way which guarantees that the diverse intelligences are amply catered for, i.e., lesson planning by varying the way you choose to present information. Here again, there are at least two ways in which MIT can be incorporated into lessons.

1/ To proceed in the usual way with planning and teaching, but to also plan for a range of follow-up activities, each set in the domain of a different intelligence (Pritchard 2009).

2/ Use the eight intelligence types as gateways to engage learners' different abilities. Under this strategy we will present two models proposed by McKenzie (2005) and Armstrong (2009).

McKenzie (2005) developed a model he calls the POMAT approach: Procedure, Objective, Materials, Assessment, and Technology.

Before deciding about the different parts of the model, the teacher should start by brainstorming ideas for making connections across the intelligences. Figure 2.1 illustrates how such a process can be facilitated.


Figure 2. 1 Example of an Inspiration Concept Map

Source: McKenzie (2005, p. 90)

The POMAT approach, as stated by McKenzie (2005), is "based on the notion of 'backward planning'. The teacher first looks at a lesson's procedure, and then maps back through the objective, materials, and assessment to determine a consistency of purpose" (p. 77). Hence, the five steps of POMAT are described as follows:

I/*Procedure*: Without looking at any other part of the existing lesson, the teacher is advised to go directly to the procedure and make notes on each prescribed activity and the intelligences it accommodates.

2/ *Objective*: Now the teacher can go to the beginning of the lesson plan and examine the stated objective. He should note on the POMAT chart which intelligences seem to fit this objective.

3/ *Materials*: With the procedure and objective reviewed, the teacher can now look at the list of materials he has generated for the lesson. He should again note on the POMAT chart the intelligences these materials stimulate.

4/ Assessment: At this phase, the teacher should check his assessment plan and make sure with the procedure, objective, and materials in the intelligences it utilizes

5/ *Technology*: The final step is about revising the chart created and decide which technologies, if any, should be incorporated.

McKenzie's (2005) model comes with the following important recommendations:

a) A lesson cannot be expected to successfully incorporate all nine intelligences at once.To accommodate an intelligence, a lesson or activity should utilize that intelligence for the explicit purpose of instruction.

b) The objective comes first, the targeted intelligences come second, and the selected technologies (if any) come third when building a lesson plan.

c) The Wheel of MI Domains can be used to check and balance the intelligences addressed in a lesson (p. 89).

Armstrong (2009) in his turn proposed a seven-step procedure for designing MI based lesson plans.

1/ Focus on a specific objective or topic: The teacher should start by stating clearly and concisely the course objective(s).

2. Ask key MI questions: The teacher should then ask questions (as illustrated in figure 2.2) that can help prime the creative pump for the next steps.





Source: Armstrong (2009, p. 65)

3. *Consider the possibilities*: At this phase, the lesson planner considers the MI techniques and materials that are appropriate to the course objectives.

4. Brainstorm: This phase is about listing all the MI related ideas that come to mind.

5. Select appropriate activities: Now from the list of ideas that have been compiled in the previous step, the teacher should circle the approaches that seem most workable in your educational setting.

6. Set up a sequential plan: At this phase, the teacher designs a lesson plan or unit around a specific topic or objective using the approaches he has selected

7. *Implement the plan*: Finally, the teacher assembles the materials and activities needed, decides on an appropriate time frame, and then carries out the lesson plan.

Conclusion

In this chapter, the researcher reviewed literature related to the concept of intelligence in general and the theory of multiple intelligences in particular. For a better understanding of MIT, we opened the chapter with a discussion of intelligence theories, classified them under four main categories, and clarified why MIT should be placed under the cognitive-contextual paradigm. After that, we proceeded to present educators' efforts in implementing MIT with a particular focus on the implications of the theory for language classrooms.

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CHAPTER THREE: Teaching the Speaking Skill

Introduction

The fact that face-to-face communication is the most fundamental mode of human language justifies learners' ever-growing need for fluency in the target language. More importance should be assigned to developing students' speaking skills and this should be reflected in our teaching programs. For a better understanding of this important skill, since educators' practices will highly depend on the way they regard speaking as a skill, this chapter will start with a thorough delineation of what speaking is; followed by a detailed description of its component parts. The researcher will move after that to discuss some of the main challenges both teacher and student may face in the speaking classroom. Then, the researcher will suggest a number of activities and techniques that are believed to promote students' oral communicative competence. In the end, this chapter will introduce important measures teachers should be aware of when assessing their students' speaking performance.

3.1 What Is Speaking?

Speaking is the systematic process of communicating meaning via verbal utterances. It is a spontaneous, open-ended, and intricate procedure that entails production, reception, and processing of information. Speaking is actually a dynamic operation that is highly dependent on the context in which it occurs; interlocutors, shared knowledge, personal experience, physical setting, and the purposes for speaking (H. Brown, 1994; Florez, 1999; Bailey, 2005).

In many educational settings, speaking is an undervalued skill. Bygate (1987) surmised that this can be because we take the skill too much for granted; humans are biologically endowed

to acquire mastery of speaking (especially in the case of the mother tongue) almost effortlessly. It is underrated as it is often regarded as transient and improvised hence facile and superficial. Another reason why the skill is underestimated is that "speaking is often thought of as a 'popular' form of expression which uses the unprestigious 'colloquial' register: literary skills are on the whole more prized" (Bygate, 1987, p. vi). Other skills such as writing and reading are, therefore, assigned more importance in most language classrooms.

According to many researchers, however, the speaking skill is as important as the other skills if not more. Bygate (1987) stated that speaking is "a skill which deserves attention every bit as much as literary skills, in both first and second languages" (p. vi). Most of our everyday conversations and basic transactions are carried out by word of mouth. Speech is the medium we frequently use to express ourselves and maintain social relations. Furthermore, Nunan (1991), based on his long experience in educational research, accentuated that "to most people, mastering the art of speaking is the single most important aspect of learning a second or foreign language, and success is measured in terms of the ability to carry out a conversation in the language" (p. 39). Despite the vast array of objectives for which students learn foreign/ second languages, we rarely find a student who is unconcerned with developing his oral skills. Effectively using the target language inside and outside the classroom to attain diverse communicative goals would give any student a real sense of achievement.

One more reason for which speaking should be given more importance is the fact that it is a difficult skill that requires a lot of practice and takes a long time to develop. "To speak in a foreign language, learners must master the sound system of the language, have almost instant access to appropriate vocabulary and be able to put words together intelligibly with minimal hesitation" (Luoma, 2004, p. ix). More importantly though is the fact that speaking is a behavior that has to be done in real-time. The amount of time learners are generally allowed to plan, process, and produce speech is extremely thin.

3.2 Aspects of Speaking Performance

Traditionally, when thinking of breaking down speaking performance into identifiable individual aspects, the first concept that comes to mind is the dichotomy: fluency/ accuracy.

3.2.1 Fluency

Fluency as a speaking sub-skill was given different definitions. According to Ellis (2009), for instance, fluency refers to "the capacity to use language in real time, to emphasize meanings, possibly drawing on more lexicalized systems" (p. 2). Nation and Newton (2009) extended the concept of fluency to include not only the planning and delivery of utterances, but also comprehension of speech. In order to decide a learner's fluency level, Nakano et al. (2001, as cited in Abbaspour, 2016) identified the five following criteria:

- (1) The total number of words spoken in a fixed time.
- (2) The number of silent pauses for thinking.
- (3) The number of repetition of words, phrases or clauses.
- (4) The number of repair or reformulation for correction.
- (5) Mean length of utterance.

As it is difficult for the distinction between fluency and accuracy to be maintained in actual language use, Segalowitz (2003), interestingly, defined fluency as "the ability to use language rapidly, smoothly, and accurately" (290). This definition illustrates how these two subskills are inextricably interwoven.

3.2.2 Accuracy

Accuracy, quite obviously, refers to the quality of being correct or exact. Linguistically speaking, speech accuracy refers to the "ability to avoid error in performance, possibly reflecting higher levels of control in the language as well as a conservative orientation, that is, avoidance of challenging structures that might provoke error" (Ellis, 2009, p. 2). Accuracy emphasizes precision and correctness and learners are encouraged to make the best use of their language system whenever they engage in communicative ventures to meet the communicative demands placed upon them. A detailed description of accuracy by Harmer (2001), suggests that it is to the capacity to produce correct sentences involving the correct use of grammar, vocabulary and pronunciation.

3.2.2.1 Grammar

Grammatical accuracy generally refers to the extent to which the speaker applies correctly the morphological and syntactic rules of the language. Developing learners' grammar is an objective that should be always present in the language classroom. A common mistake some language teachers fall into is the underestimation of the importance of developing learners' grammatical competence. Misunderstanding of some current communicative teaching approaches' principles led them to think that it is permissible to disregard formal aspect of the language. Wilkins (1976), a revolutionary and one of the fiercest opponents of traditional teaching methods, stated that the advantage of communicative methods is that they take "the communicative facts of language into account from the beginning without losing sight of grammatical and situational factors" (p. 19). Teachers are, therefore, advised to balance the activities that address learners' diverse skills and competences.

3.2.2.2 Vocabulary

A learner's speaking vocabulary refers to all the lexical items he knows and can retrieve while performing oral tasks. Lexical accuracy then is a measure of the exactness and correctness of word use and selection.

3.2.2.3 Pronunciation

Pronunciation is another important aspect of the speaker's language. Precision in sound production, and use of intonation, rhythm and stress patterns plays an important role in communication. Pronunciation needs special attention in foreign/ second language classrooms as it is a known fact now that correct/ incorrect pronunciation can have a huge impact on the intelligibility of an utterance.

3.3 Approaches to Speaking

Language teaching in the past was seen as helping students develop their linguistic knowledge. Language syllabi targeted formal aspects of the language. The objective was to aid students acquire the basic components of the target language, that is, sounds, grammatical structures and vocabulary. The idea was that by studying the bits and pieces of a language, students could eventually put them all together and communicate.

In the 1970s, however, significant developments in linguistic theory resulted in strong waves of educational reform. Following Hymes's (1972) reaction against the perceived inadequacy of Chomsky's (1954) *'linguistic competence'* in fulfilling the language user's communicative needs, new approaches to foreign/ second language teaching came to the surface. Grammatical competence came to be viewed as a component of the broader idea of communicative competence, that is, "the ability of language learners to interact with other

speakers, to make meaning, as distinct from their ability to perform on discrete-point tests of grammatical knowledge" (Savignon, 1991, as cited in Baily, 2005, p. 3).

Acquisition of oral communicative competence requires more than just linguistic knowledge; learners need to develop awareness of the culturally acceptable ways of interacting with others in different situations and relationships. For that reason, different models have been developed by scholars to provide a theoretical framework for the explanation of how different aspects of speech interconnect in actual language use. We will present here three models proposed by Bygate (1987), Harmer (2001), and Thornbury (2005).

3.3.1 Bygate's Theory

According to Bygate (1987), acquisition of the speaking skill is not only about the construction of abstract knowledge of the language system. In addition to such knowledge, speech production depends on developing the skill of how to utter sentences and adapt them to the situation. "This means making decisions rapidly, implementing them smoothly, and adjusting our conversation as unexpected problems appear in our path" (Bygate, 1987, p. 3). He asserted that four main elements need to be given equal attention if we aim to develop our students' speaking skill, namely: knowledge, motor-perceptive skills, production skills, and interaction skills.

Obviously, in order to be able to speak a foreign language, a certain amount of knowledge of grammar, phonology, and vocabulary is needed. But knowledge itself is not enough. Knowledge has to be put into practice and the abilities involved in using such knowledge in action must be made known so that they too can be included in our teaching.

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The first practical skill Bygate (1987) identified was referred to as *motor-perceptive skill*. It involves, according to Bygate (1987), "perceiving, recalling, and articulating in the correct order sounds and structures of the language" (p. 5). This skill was emphasized in some traditional approaches such as the audio-lingual method, and development of students' speaking skill relied heavily on extensive use of exercises such as model dialogues, oral drill tables, and pattern practice. This method was popular in the first half of the twentieth century but it came to a decline when educators discerned that there were serious problems this method could not solve; "an important one is that of ensuring a satisfactory transition from supervised learning in the classroom to real-life use of the skill" (Bygate, 1987, p. 5). Our teaching should, therefore, take learners beyond motor-perceptive skills. *Production* and *interaction skills* are the abilities our students need to develop in order to successfully manage real-life situations.

Production skills refer to the set of abilities required for overcoming some 'processing constraints'; *time pressure* being the most important one. For students to achieve the appropriate oral production inside and outside the classroom, they need to acquire some techniques either to make it easy through 'facilitation' or to enable them to surmount some difficulties by means of 'compensation'. Facilitation comprises four main strategies:

a) Simplification of structure: Due to time pressure, speakers are advised to avoid using complex sentences and opt instead for short, simple ones with the help of conjunctions to coordinate between the utterances.

b) Use of ellipsis: Speakers may save time by omitting parts of the sentence that are believed to be known to the listener.

c) Use of formulaic expressions: Learners should be made aware of the importance of prefabricated patterns in facilitating fluency. Our teaching should provide enough opportunities for students to exploit this feature.

d) Use of fillers and hesitation devices: This strategy is a rather time-creating device. Examples of such devices include the use of phrases such as 'well', 'erm', 'you see', 'kind of', 'sort of, 'you know', rephrasing, and hesitating and repeating until the speaker finds the right word. Such tools help the speakers generate more time to plan, organize and execute the message.

Compensation strategies, on the other hand, are those devices employed by the speaker to alter what he already said in case the original utterance needs modification. Tools such as substitution, rephrasing, reformulating, self-correction, repetition and hesitation are often used by the speaker to give the listener more time to process and understand the message being conveyed.

Successful communication does not depend only on what the speaker wants to say, but also on what the listener will get from the message, and this is where interaction skills come to play. A good communicator possesses a set of skills that allow him to convey the meaning of his ideas in a way which the listener finds understandable. Interaction skills are divided into two sub-categories: routines and negotiation skills.

Routines were defined by Bygate (1987) as "conventional ways of presenting information ... these [are patterns that] correspond more or less to typical kinds of message, and so deal with recurring cognitive problems" (pp. 22-23). Use of conventional, predictable patterns is an important element ensuring clarity. There are two main kinds of routines. The first type, information routines, are recurrent types of information structures (like the ones employed in

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stories; descriptions of places and people; presentation of facts; comparisons; instructions . . . etc). The second type of routine is interactional. In Bygate's (1987) words, "interaction routines are routines based not so much on information content as on sequences of kinds of terms occurring in typical kinds of interactions" (p. 25). Interactions such as 'service encounters', telephone conversations, interview situations, casual encounters, conversations at parties, conversations around the table at a dinner party, and lessons are typical examples of situations where this kind of routine is utilized.

Negotiation skills, the second sub-branch of interaction skills, are strategies speakers use for solving communication problems and getting through the routines by the management of interaction and negotiation of meaning.

Negotiation of meaning refers to the skill of achieving mutual rather than individual understanding. It is a skill that is specific to spoken language as it allows the speaker to signal understanding or misunderstanding during a conversation. In this domain, two factors ensure understanding:

- The level of explicitness: basing the choice of expressions on the listener's knowledge and understanding.
- Procedures of negotiation: These are strategies we employ to control the extent to which our utterances should be specific. There are situations where the use of general term would adequately convey the desired meaning. In other situations, however, misunderstanding can generate if we are not careful with our choice of words. We consequently make a point of using words more carefully, choosing a metaphor or a

paraphrase to emphasize a particular aspect of a message, its seriousness or its humor" (Bygate, 1987, p. 32).

Management of interaction, on the other hand, is an umbrella term for turn-taking skills (who speaks, when, and for how long) and agenda management skills (choice of topic of exchange).

3.3.2 Harmer's Theory

Effective oral communication, according to Harmer (2001), requires the integration of two key elements: knowledge of 'language features' and 'mental/ social processing'. In order to put into practice what they know about language *in real-time*, speakers must possess a set of information processing abilities.

As for the first aspect, *language features*, Harmer (2001) identified four elements that are according to him necessary for successful actual oral communication. He lists them as follows:

• *Connected speech*: By connected speech, Harmer (2001) refers to the phonological processes that facilitate fluency. Our teaching should include activities that are specifically designed to improve learners' ability in using tools such as:

-Assimilation which is the process of making a speech sound more similar or identical to a neighboring sound. For example: Good boy: $/gud//bi/ \Rightarrow /gubbi/$

- Elision which is the process of omitting one or more sounds when pronouncing a word. For example: I will \Rightarrow I'll, I have \Rightarrow I've, She is \Rightarrow She's, ... etc.

- Linking 'r': The linking 'r' is an extra sound that is used to connect two words, the first ending with a vowel or a diphthong and the second beginning with a vowel. For example: The spar is open.

• *Expressive devices*: Expressive devices in Harmer's (2001) terms refer to non-verbal and paralinguistic features that aid in making speakers messages more intelligible. Examples of such devices include:

- Suprasegmental features: These are features which cannot be segmented or separated from linguistic utterances, as is the case with individual speech sounds. For instance: juncture, stress, pitch, accent, prosody, and intonation.

- Non verbal aspects, that is, the use of a variety of sensory channels in order to facilitate communication (e.g. gestures and facial expressions)

- *Lexis and grammar*: This element is about some common lexical phrases that are particularly connected to the performance of certain communicative functions such as: agreeing, disagreeing, expressing shock, surprise, approval, etc. Teachers should put more emphasis on particular phrases especially when the specific speaking context the student will be involved in is identified (e.g. a business meeting, touring, job interview, etc).
- *Negotiation language*: Effective oral communication depends on speakers' ability of using specific strategies to seek clarification (e.g. 'I did not really understand what you mean?', 'Can you explain that again, please?) and to show structure of what they are saying especially when they see that they are not being understood. Harmer (2001) claimed that we can help our students to structure discourse by giving them language such as the following:

The important thing to grasp is that . . .

To begin with/ and finally . . .

What I am trying to say is that . . .

What I mean is . . .

The point I am trying to make is that . . .

 \ldots or, to put it another way \ldots , (p. 270).

According to Harmer (2001) though, knowledge of the previously discussed skills on its own does not guarantee successful communication. What distinguishes speaking from the other productive skill, writing, is that it has to be planned and delivered on the spot. Success in oral production is then dependent as well on the rapid processing skills that the situation necessitates. 'Mental/social processing' comprises the following three features:

- *Language processing*: "Language processing involves the retrieval of words and phrases from memory and their assembly into syntactically and propositionally appropriate sequences" (Harmer, 2001, p. 271). To be able to produce coherent, well understood speech, learners' habits of rapid language processing need to be developed through exposure to diverse speaking activities.
- *Interacting with others*: Speaking is dependent and tightly connected to listening. Being a good communicator is not only about what the speaker says, it is also about what he makes out of what is said to him. "This means that effective speaking also involves a good deal of listening, an understanding of how the other participants are feeling, and a knowledge of how linguistically to take turns or allow others to do so" (Harmer, 2001, p. 271).
- *On-the-spot' information processing*: This feature is about the speaker's ability to immediately process information he receives from his interlocutor. This is an important skill because most interactions require the speaker to respond rapidly.

3.3.3 Thornbury's Theory

A more comprehensive and elaborate theory was introduced by Thornbury (2005). He argued that speaking is a complex skill that requires both a command of certain skills and several different types of knowledge. Elements of speaking, according to Thornbury (2005), can be grouped under two main categories: What speakers can do and what speakers know.

A/ What Speakers Do

Examination of speech production highlights three main characteristics that make speaking different from writing. Time for planning what to say next is very limited as oral production is contingent upon the interlocutor's responses, and it may overlap with the production of the previous utterance. The first step in speech production is *conceptualization and formulation*. Conceptual preparation involves the speaker's in making choices about the content of the message and deciding discourse features in terms of topic, purpose, and discourse type (narration, exposition, argumentation, etc). The next related process, formulation, represents the speaker's mental mapping of the message and how it will be conveyed. The speaker formulates his utterance by making decisions about discourse structure (i.e. how its parts are assembled), grammar and vocabulary.

The second step is *articulation*. It is a physiological process responsible for sound production through the use of speech organs (consisting of the vocal tract, larynx, and lungs). Articulation is a complex operation that may involve the engagement of multiple speech organs simultaneously. Production of a particular phoneme may, therefore, influence the way other neighboring speech sounds are uttered. Articulation also concerns control of the diverse suprasegmental features like loudness, pitch direction, tempo, and pausing. Such paralinguistic elements play a central role in determining the utterance's meaning.

Self-monitoring and repair, according to Thornbury (2005), is an important process that accompanies the operations discussed previously, namely conceptualization, formulation and articulation. Self-monitoring is the process that allows speakers to check their speech for accuracy (relying on their metalinguistic knowledge) and appropriateness (relying on their pragmatic knowledge). "Hand in hand with monitoring is the ability to make running repairs" (p. 6), either by rectifying one's own utterances or mistakes detected in the interlocutor's speech.

All this conceptualizing, formulating, articulating, and monitoring, Thornbury (2005) pointed out, "mean that a speaker's attentional resources are very thinly stretched" (p. 6). The complexity of these operations makes it difficult, if not impossible, for the speaker to process them consciously all at once. What a good communicator needs to develop then is some degree of *automaticity*. "Automaticity allows speakers to focus their attention on the aspect of the speaking task that immediately requires it, whether it is planning or articulation" (Thornbury, 2005, p. 6). As language teachers we need to be aware of the significance of automaticity and learn about the diverse activitie-types that promote such important cognitive operation. One way for developing automaticity in speech formulation (of foreign/ second language learners, and even of native speakers), for example, is intensive exposure to prefabricated patterns, such as ready-made expressions and routinized conversations.

The next feature of speech identified by Thornbury (2005) is *fluency*. Thornbury (2005) purported that fluency is reflected mainly in three aspects:

- Speed of delivery, that is, the ability to speak fast.
- Regularity which means a natural amount and placement of pauses.
- Length of runs, i.e., the number of syllables between pauses. Obviously, the longer the utterances, the more fluent the speaker sounds.

Lack of fluency can be compensated for through the use of some 'production strategies' as Thornbury (2005) prefers to call them. "One of them is the ability to disguise pauses by filling them" (Thornbury, 2005, p. 7). Repetition and expressions like *uh*, *um*, *er*, *well*..., *sort of*, and *I mean*... are of the most common pause-fillers speakers make use of.

Another skill that successful oral communication requires is *talk management*. Speaking in most cases takes the form of an interaction and therefore rules of *turn-taking* should be known to both interlocutors. The fundamental rule of turn-taking, according to Thornbury (2005) is:

- a) Speakers should take turns to hold the floor (it is inappropriate that speakers talk at once).
- b) Long silences are to be avoided.
- c) Listen when other speakers are speaking.

Thornbury (2005) went further to explain that the skills by means of which these rules are observed include:

- Recognizing the appropriate moment to get a turn.
- Signalling the fact that you want to speak. This can be achieved through the use of discourse markers that signal a speaker's conversational intentions. Examples of such discourse markers include: *that reminds me* (= I'm continuing the same topic), *by the way* (= I'm indicating a topic change), *well anyway* (= I'm returning to the topic), *like I say* (= I'm repeating what I said before), *yes, but* (= I'm indicating a difference of opinion).
- Holding the floor while you have your turn.
- Recognizing when other speakers are signalling their wish to speak.
- Yielding the turn.

• Signalling the fact that you are listening.

It is worth mentioning at this point that turn-taking skills can also be performed with the help of non-verbal cues. A raise of hand or a shoulder may indicate the desire to take a turn. Little nods inform the speaker that he should carry on the talk, but when the listener keeps looking away or keeps looking at his watch, for example, this may be an indication that the speaker should end the conversation.

B/What Speakers Know

As much as it is required to have a good mastery of the previously discussed skills, knowledge of language features (linguistic knowledge) and extralinguistic elements is also necessary. Thornbury (2005) listed six elements that comprise the linguistic system, these are: phonology, vocabulary, grammar, genre knowledge, discourse knowledge, and pragmatic knowledge. Extralinguistic knowledge, on the other hand, includes such things as topic and cultural knowledge, knowledge of the context, and familiarity with the other speakers.

Most speaking situations rely to a great extent on the shared knowledge of contextual aspects which explains, in part, the elliptic nature of speech. Whole words, phrases and clauses are left out because they are already known to the listener. Other examples of spoken language characteristics that derive from its being grounded in a shared context are:

- "high frequency of personal pronouns, especially *you* and I;
- and the use of **deictic** language, that is, words or expressions that make direct reference to the context" (Thornbury, 2005, p. 12).

Another important extralinguistic factor is sociocultural knowledge. It involves awarness of a particular speech community's shared values, norms and behaviors. Linguists empasized the role sociocultural awareness plays in achieving successful interaction and avoidning communication

breakdowns.

Linguistic knowledge includes familiarity with the diverse genres that diverse speech situations yield. Speakers need to be aware of the different types of speech events, how these speech events are labelled by its participants, and the moves that help interlocutors achieve them. According to Thornbury (2005):

There is a difference between saying 'I had a chat with the boss' and 'I had a job interview with the boss' or 'I did a presentation to the boss'. Knowledge of how specific genres — such as chatting, job interviews, or business presentations - are realized is part of the linguistic knowledge that speakers in a particular speech community share. An important factor that determines the structure of a genre is whether it is interactive or non-interactive. Multi-party speech, as in a shopping exchange or casual conversation between friends, is jointly constructed and interactive. Monologues, such as a television journalist's live report, a university lecture, or when you leave a voice-mail message, are non- interactive (p.14).

Knowledge of the way a genre is structured, how its individual elements are connected to form coherent, well organized utterances, in addition to knowledge on to the turn-taking structures of interactive talk is referred to as *discourse competence*.

Pragmatic knowledge, another important construct of linguistic knowledge, refers to the way speakers adjust their message to match contextual circumstances. It involves knowing how to carry out successfully communicative functions, i.e., how to perform and interpret specific speech acts.

The final elements of linguistic knowledge Thornbury (2005) discussed relate to the

formal aspects of spoken language: phonology, vocabulary, and grammar. He, however, emphasized that the considerable constraints imposed on the speaker make retrieval and execution of these aspects differ from when they are used in writing. For example, features of spoken grammar that distinguish it from written grammar are summarized in table 3.1:

Table 3.1

Grammar of Written Language vs Grammar of Spoken Language

Written grammar	Spoken grammar
Sentence is the basic unit of construction	Clause is the basic unit of construction
Clauses are often embedded (subordination)	Clauses are usually added (co-ordination)
Subject + verb + object construction	Head + body + tail construction
Reported speech favoured	Direct speech favoured
Precision favoured	Vagueness tolerated
Little ellipsis	A lot of ellipsis
No question tags	Many question tags
No performance effects	Performance effects, including:
	• hesitations
	• repeats
	• false starts
	• incompletion
	• syntactic blends

Source: Thornbury (2005, p. 21)

Thornbury (2005) concluded description of spoken language features by discussing three kinds of influential factors: Cognitive factors, affective factors, and performance factors.

Combined, these factors are referred to, by Thornbury (2005), as *speech conditions*. First, Cognitive factors deal with processing demands and explain how fluency is achieved as a result of the speaker's familiarity with the topic, genre, and the interlocutors. Second, affective factors are about the speaker regulating his feelings about oneself, the topic, and the participants. Third, performance factors are described by Thornbury (2005) as follows:

- *Mode:* speaking face-to-face, where you can closely monitor your interlocutor's responses and where you can use gesture and eye-contact, is generally easier than speaking over the telephone, for example.
- *Degree of collaboration:* giving a presentation on your own is generally harder than doing it with colleagues because in the former case you can't count on peer support.
- *Discourse control:* on the other hand, it is often easier if you can control the direction of events, rather than being subject to someone else's control.
- *Planning and rehearsal time:* generally, the more time to prepare, the easier the task will be; telling a joke is usually easier the second time round.
- *Time pressure:* if there is a degree of urgency, it is likely to increase the difficulty for the speaker.
- *Environmental conditions:* trying to speak against a background of loud music or in poor acoustic conditions (as in many classrooms!) is difficult (pp. 25-26).

It must be reiterated, in conclusion, that the aim behind providing these detailed accounts of speaking skill constructs is to help teachers improve their practices in language classrooms. Teachers need to be aware of the various elements that comprise speaking because problems in acquiring diverse aspects may require different pedagogical actions. Such knowledge will certainly facilitate the task of writing objectives and designing teaching materials and activities.

3.4 Problems and Challenges in Teaching and Learning Speaking

Speaking is one of the most complex skills. There is not much difference between native and target languages regarding the stages of mental processing involved in speaking. Both require intricate combinations of such processes as conceptualization, formulation, articulation, self-monitoring, and negotiation. What adds to the complexity of foreign/ second language speaking though is that the skill of speaking is not automatically transferable from the speaker's first language into the second. Contexts in which students acquire first and second language speaking skills are not typically the same. A number of factors get in the way of students developing an appropriate mastery of oral communication. In the next lines, we will discuss a number of problems that make teaching and learning the speaking skill more challenging.

3.4.1 Inhibition

Inhibition is the state of being restrained or prevented. Colman (2003) defined inhibition as "a psychological state or condition characterized by lack of confidence and restriction of the range of expressive behavior" (p. 362). It is a deficiency that ensues when learners undergo negative feelings like anxiety, shyness, and fear of making mistakes. According to Ur (1996):

Unlike reading, writing and listening activities, speaking requires some degree of realtime exposure to an audience. Learners are often inhibited about trying to say things in a foreign language in the classroom: worried about making mistakes, fearful of criticism or losing face, or simply shy of the attention that their speech attracts (p. 121).

Based on an experiment conducted by a group of secondary school EFL teachers in Hong Kong, Tsui (1996, as cited in Bailey, 2005) proposed a number of practical solutions for this kind of problem. First, teachers are advised to lengthen their wait-time as it is believed to give learners more thinking time to plan their speech, considerably lower the tension and

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consequently help students gain more confidence. Another strategy to use is for teachers to accept a variety of answers by choosing, for example, discussion topics that draw on students' personal experience. Last but not least, learners' anxiety may hit its lowest levels if teachers can successfully build good relations in their classes.

3.4.2 Having Nothing to Say

Even when they are not inhibited, learners often deliver replies to teachers' questions in the form of 'I don't know', 'I have nothing to say', or just resort to silence. Limited vocabulary and/ or limited knowledge about the topic are among the reasons that make students refuse to take part in classroom discussion. Students' resistance can also be attributed to lack of interest. Sometimes, the topics that teachers choose fail in attracting learners' attention and encouraging active engagement in classroom interaction.

A problem of that kind can be remedied if teachers adopt the right strategies. Instructors must implement methods that promote vocabulary and enrich learners' lexical knowledge (e.g. intensive and extensive listening and/ or reading). Development of positive relationships with (and between) students should be emphasized again, along with the personalization of discussion topics to meet learners' diverse needs and inclinations.

3.4.3 Lack of Learning Opportunities

Based on a constructivist epistemology, success in acquiring a second language is highly dependent on practice. Language learning, from the perspective of constructivist theories, is personally constructed and takes place only as a result of students engaging in meaningful interaction. So, deficiency in oral communication skills may be attributed, in some contexts, to the lack of opportunities to speak the language. Another hindrance on the way to effective acquisition of the speaking skill is poor listening practice. Speaking in most situations is an interactional activity that requires the speaker to express himself appropriately, but equally important is the speaker's understanding of his interlocutor's utterances. Communication break-downs are likely to result if the speaker's listening comprehension skills are deficient.

3.4.4 Mothertongue Use

A problem most teachers face is students' use of the native language in foreign/ second language classes, especially when these students share the same mother tongue. Ur (1996) noted that:

In classes where all, or a number of, the learners share the same mother tongue, they may tend to use it: because it is easier, because it feels unnatural to speak to one another in a foreign language, and because they feel less 'exposed' if they are speaking their mother tongue. If they are talking in small groups it can be quite difficult to get some classes - particularly the less disciplined or motivated ones - to keep to the target language (p. 121).

As foreign/ second language teachers we understandably want all of our students' interactions in the classroom to be carried out using the target language. However, it is not necessarily wise to completely ban native language use. Exclusion of the mother tongue in language education may give students the impression that the teacher is devaluing their native language which would negatively affect their self-concept in consequence. So, the best to overcome this problem is not to discourage students from using their mother tongue but to build their confidence in using the target language.

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3.4.5 Characteristics of Speaking

According to H. Brown (1994) some of the features that are inherent to speaking make it a difficult skill to acquire. H. Brown (1994) listed the following characteristics:

- *Reduced forms*: Unfamiliarity with reduced forms commonly used in speech such as contractions, elisions, reduced vowels, etc., is likely to make the task of interacting in the target language more difficult.

- *Performance variables*: Inherent to spoken language is the use of certain time-gaining strategies like hesitation, pausing, backtracking, and correction. If not trained on how to use such performance facilitators appropriately, learners will find speech production very complex.

- *Colloquial language*: "Make sure your students are reasonably well acquainted with the words, idioms, and phrases of colloquial language and that they get practice in producing these forms" (H. Brown, 1994, p. 270).

- *Rate of delivery*: Achieving rapid speech delivery, a salient feature of spoken language, is generally a difficult aim

- *Stress, rhythm, and intonation*: These are very important elements for appropriate message transmission, but their acquisition requires a lot of time and effort.

- *Interaction*: "As noted previously, learning to produce waves of language in a vacuum without interlocutors—would rob speaking skill of its richest component: the creativity of conversational negotiation" (H. Brown, 1994, p. 270). What makes the acquisition of the speaking skill difficult is that it must go hand in hand with the development of other related skills (e.g. listening) and competences (e.g. management of interaction and negotiation of meaning).

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3.4.6 Teaching Mixed Ability Classes

Another problem that makes teaching speaking more challenging is when you have multi-level speaking group. According to Bailey (2005), "Unless you are teaching true beginning level students, every class will have some variation, but many groups have widely different proficiency levels in one class" (p. 178).

In a mixed ability class, planning speaking lessons that cater for learners' diverse needs is a demanding task. "Some students may be more fluent, while others may be more accurate. Some have creative ideas but may not be able to express them well in English. Some have academic strengths, while others have more varied and interesting life experiences" (Bailey, 2005, p. 179). So, considering the complexity of the speaking skill and the various elements that comprise it, teaching to students' strengths and weaknesses is a very difficult chore.

A situation of this type may also generate a number of negative feelings in the language classroom. Proficient students may feel impeded by low-level classmate. Less proficient students, on the other hand, may feel intimidated by more proficient ones.

3.4.7 Responding to Oral Errors

Provision of corrective feedback is an essential element in the teaching/ learning process. Whether this feedback should be immediate or delayed is still debatable though. Some researchers following the behaviorist tradition, for example, believe that errors should be disposed of right away. According to them, correction of errors on the spot eliminates the possibility of bad habit formation. It was shown through many studies, nonetheless, that there are some good reasons it is better not to react to students' oral errors immediately. As reported by Bailey (2005), a number of points suggest that teachers' feedback is more beneficial when delayed:

- Immediate interference from the teacher may discourage students as it interrupts them while they are trying to communicate their ideas and feelings.
- Generally, learners do not benefit from immediate feedback because the pressure of the communicative situation may prevent them from internalizing the correct form provided by the teacher.
- "In addition, research suggests that correcting grammar points which are too advanced for the learners' current level of linguistic development probably doesn't result in learning anyway" (Bailey, 2005, p. 172).

Tolerating students' structural errors is believed to yield better results as it creates a safer environment for learning to take place.

3.5 Activities in the Language Classroom

It is important at this point to present a number of activities that we believe can effectively help teachers develop their students' speaking skill. The content under this heading will be divided into two parts. The first part discusses a number of rules teachers should abide by in order to successfully design speaking lesson plans. In the second part, some speaking activity types are suggested.

3.5.1 Principles for Designing Speaking Techniques

To make an appropriate choice of speaking tasks, there are basic principles teachers should respect when planning language lessons. According to H. Brown (1994), applying the following rules when designing speaking activities will aid students develop their oral communicative competence:

a) Use techniques that cover the spectrum of learner needs, from language-based focus on accuracy to message-based focus on interaction, meaning, and fluency: This principle calls for creating balance when addressing different aspects of the speaking skill. Enthusiastic endeavors to conform to current interactive language teaching trends should not make teachers inattentive to the formal aspects of the spoken language. H. Brown (1994) suggested that:

When you do a jigsaw group technique, play a game, or discuss solutions to the environmental crisis, make sure that your tasks include techniques designed to help students to perceive and use the building blocks of language. At the same time, don't bore your Students to death with lifeless, repetitious drills . . . make any drilling you do as meaningful as possible (p. 275).

Teachers are advised to carefully design and choose activities that develop students' communicative competence as a whole. All of speaking skill constructs should be attended to equitably.

b) *Provide intrinsically motivating techniques*: H. Brown (1994) advised teachers to "try at all times to appeal to students' ultimate goals and interests, to their need for knowledge, for status, for achieving competence and autonomy and for 'being all that they can be'" (p. 275). Planning lessons should be always based on the results of students' needs analysis. Identification of needs should be a continuous process; needs analysis should be carried out during the life of each course.

c) Encourage the use of authentic language in meaningful contexts: In order to adequately develop learners' communicative competence, teachers are recommended to involve students in

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meaningful interactions. Classroom activities should yield the use of the same language real-life situations require.

d) *Provide appropriate feedback and correction*: Teachers should be aware that most foreign/ second language learners are totally dependent on the teacher for useful linguistic corrective feedback.

e) *Capitalize on the natural link between speaking and listening*: Many interactive techniques that involve speaking will also of course include listening. When planning lessons, the teacher should integrate these two skills because focusing on speaking goals would naturally coincide with targeting some listening goals. The two skills can reinforce each other.

f) *Give students opportunities to initiate oral communication*: H. Brown (1994) warns against the traditional classroom organization where the teacher takes full control of classroom interaction management; he is the one asking questions, giving directions, and providing information. He claimed that learners' oral communicative competence can be enhanced only when learners are given the freedom to initiate conversations, to nominate topics, to ask questions, and to change the subject.

g) *Encourage the development of speaking strategies*: According to H. Brown (1994), the language classroom should be one in which students become aware of, and have a chance to practice, such strategies as:

- Asking for clarification (*What?*).
- Asking someone to repeat something (*Hub? Excuse me?*).
- Using fillers (*Uh*, *I mean*, *Well*) in order to gain time to process.
- Using conversation maintenance cues (Uh huh, Right, Yeah, Okay, Um).
- Getting someone's attention (*hey, Say, So*).

- Using paraphrases for structures one can't produce.
- Appealing for assistance from the interlocutor (to get a word or phrase, for example).
- Using formulaic expressions (at the survival stage) (*How much does* _____ cost? How do you get to the ____?)•
- Using mime and nonverbal expressions to convey meaning.

3.5.2 Speaking Activities

There are numerous ways to promote students interactional abilities. The advantage of such variety is that it grants teachers the luxury of being able to choose from a wide array of activity types what suits more their students' needs in specific educational contexts. It should be known to teachers that efficiency of interactional activities is likely to differ from learner to learner and from group to group. Techniques that prove to be successful with one class may terribly fail with another. It is unwise to force on students activities they do not find interesting. Learners' competencies are given a better chance to develop with tasks which are intrinsically motivating. Here follows a list of activity types teachers can choose from when designing speaking lesson plans:

a) *Information gap activities*: An information gap is an activity type where students need to communicate with each other to get the information that is necessary for task completion. Nation and Newton (2009) identified two ways through which knowledge can be shared and distributed among students. They called the first type '*split information arrangement*' where each student possesses a different essential information. The second type is referred to as '*superior-inferior arrangement*' where all the information that the task requires are known to one learner. This learner will in turn share the knowledge he has with the group.

A typical example of an information gap activity is illustrated in figure 3.1.

Figure 3. 1 An Example of an Information Gap Activity

Ordered by:				Ship to: Use only it different from 'ORDERED B			
Address				Address			
City				City			
State Telephor	ve	Zip		State		Zip	
ltem number	Quantity	Color	Size	Descript	ion	Unit price	Total
heck M	ethod of Bo	ument-			Merch	Indise Total	
) chec	k/	()VIS	ŝA	Shipping and Handling			
mon	ey order	() M/	ASTERCAR	:D		Total	
Card nur Expiratio	nber: an date:						
xpiratio	on date:						



Source: H. Brown (1994, pp. 280-281).

Information gaps can be an interesting tools teachers use for the sake of developing students' oral proficiency. It is satisfying and meaningful to both, the speaker and the listener; giving the speaker some sense of achievement, being the provider of significant information the task requires. It is an intrinsically motivating activity for the listener as well being a good opportunity for new knowledge acquisition.

b) *Communication games*: Another type of activities that are believed to raise students' motivation and improve their speaking skill are Communication games. According to Ur (1996):

Game-like activities provide pleasurable tension and challenge through the process of attaining some 'fun' goal while limited by rules. The introduction of such rules (an
arbitrary time limit, for example) can add spice to almost any goal-oriented task (p.

281).

Games can involve riddles, quizzes, miming, guessing, and board games.

They have many advantages like creating entertaining competitions among students but, nonetheless, communication games should be used sensibly. A good game-like activity is one that is meaningful and serves the course objectives in the first place. Teachers should be careful not to include in their lesson plans activities that may engender anarchy in the language classroom and waste students and teachers' valuable time.

c) Simulations and role-plays: Simulations are very beneficial interactive tasks that involve students in acting out imagined communication situations. Students assume roles and simulate real life encounters such as a phone conversation, an encounter at the grocery store, or a business meeting. Jones (1982, as cited in Harmer, 2001) stated that three features characterize a good simulation activity:

- ▶ Reality of function: the students must not think of themselves as students, but as real participants in the situation.
- ► A simulated environment: the teacher says that the classroom is an airport check-in area, for example.
- ► Structures students must see how the activity is constructed and they must be given the necessary information to carry out the simulation effectively (p. 274).

Role plays are similar activities to simulations. The main difference between these two activity types, according to Harmer (2001), is that "in a role-play we add the element of giving the participants information about who they are, and what they think and feel" (p. 275). An

example can be assigning a student the role of a customer complaining about a hotel's service quality.

Role plays and simulations are effective teaching techniques as they offer, as claimed by Harmer (2001), the following advantages:

- They are motivating tasks because of their obvious amusing and entertaining nature.

- They allow hesitant students to be more forthright in their opinions and behavior than they might be when speaking for themselves, since they do not have to take the same responsibility for what they are saying.

- They give students the chance to use a much wider range of language because they involve learners in simulations of real life situations and not just task-centered activities.

d) *Interviews and questionnaires*: An interesting instrument language teachers can use to develop their students' interactional abilities are interviews and questionnaires. "Depending upon how tightly designed they are, they may well encourage the natural use of certain repetitive language patterns - and thus be situated in the middle of our communication continuum" (Harmer, 2001, p. 274). They represent an ideal opportunity for learners to practice basic language functions in authentic contexts.

e) *Discussions*: Discussions and debates are highly effective activities in the speaking classroom. A discussion is a form of teacher-student and/ or student-student sustained exchange that is initiated with the aim of developing learners' skills and improving their understanding of a certain concept. Discussions and debates can be organized to weigh the advantages and disadvantages of a particular product or item, reflect upon some controversial issues, revolve around some culture-specific topics, or tackle some up-to-date subjects (such as globalization).

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An abundance of student talk opportunities accompany the implementation of discussions as a teaching technique. Harmer (2001) noted, however, that students' hesitation and resistance may make discussions and debates less beneficial. As a solution he suggested a technique he referred to as 'buzz group'. A buzz group is about giving students the chance to discuss the topic in question within small groups before they have to speak in public. Conducting discussions following such fashion will give students the opportunity to think of the language the debate requires and arrange their ideas under less pressure.

To conclude, it is worth mentioning that the list of communicative activity types provided here is far from being exhaustive. Teachers can always rely on their creativity to generate effective techniques to address their students' needs. What is of paramount importance is that teachers create balance catering for the different aspects of the speaking skill.

3.6 Assessing Speaking

Selection of appropriate evaluation design and tools is integral to the process of teaching/ learning the speaking skill. The assessment techniques implemented enable teachers to monitor their learners' progress, keep them informed about students' strengths and weaknesses, and help them decide what to do next. Three main issues will be discussed under this heading. These are the important criteria a satisfactory speaking test must fulfill, the three different approaches teachers can choose from when testing speaking, and the diverse methods used to score students' performance.

The quality of a test should be measured against three principles: validity, reliability, and practicality. A valid test is one that measures what it is intended to measure. Test validity according to Nation and Newton (2009) involves another condition, that is being used for the purpose for which it is designed. "A test may be valid when it is used for a particular purpose but

not valid when it is used for another purpose" (Nation & Newton, 2009, p. 167). A pronunciation test, for instance, is a valid instrument if it is used to measure learners' pronunciation accuracy but not valid as a test of interactional abilities.

A reliable test is a consistent and dependable measurement tool. It is a test that would yield the same scores even if it is administered by different testers under different conditions (H. Brown, 1994; Nation & Newton, 2009). For example, a test is unreliable if you ran a fifteen-point scale oral proficiency test in collaboration with your colleagues, and one of the teachers became more lenient with the last candidates because he got tired. Another example of unreliability is when a listening comprehension test is administered in a noisy classroom; low performers would likely achieve higher scores if the conditions were different.

The third important criterion tests have to fulfill is practicality. A practical test is one that is run with limitations of available resources (time, money, and personnel) taken into consideration. A test is not practical if it is too long and requires time much more than what the administration have allocated.

Another important issue to discuss relates to the testing approaches teachers may adopt when evaluating learners' speaking skill. According to Clark (1979, as cited in Bailey, 2005) three main approaches can be identified: direct, indirect, or semi-direct.

In a direct speaking test the learner is prompted to speak and interact using the target language. Tests such as oral proficiency interviews, group debates and discussions, having to describe something for someone to draw, unscripted role plays etc., come under the direct approach. Indirect tests, on the other hand, try to measure a student's knowledge and set of abilities that underlie the speaking skill. The candidate does not perform the communicative skill being tested; he does not have to speak. Examples of indirect speaking tests include multiple choice questions, conversational cloze tests, and phoneme discrimination tasks. Indirect tests are resorted to to solve practicality issues as when teachers have to measure the speaking proficiency of large groups (Harmer, 2001; Bailey, 2005; Nation & Newton, 2009). Finally, semi-direct tests borrow features from both direct and indirect tests. In semi-direct assessment instruments, the candidate actually speaks but he does not interact with the tester or other test takers. For example, the test-taker listens to prompts and tasks delivered by a recorded voice then responds by talking to a recording device.

Concerning the diverse methods teachers may rely on to grade students' speaking performance, Bailey (2005) distinguished between three main approaches: objective scoring, holistic scoring, and analytic rating.

Objective scoring, as stated by Bailey (2005), "does not involve any judgment during the scoring process" (p. 25). The test items have only one correct answer which makes it possible for the test to be scored by an untrained person using a scoring key. There is no negotiation of meaning while the test is running. Holistic scoring, as the name suggests, is conducted by giving the speaker's performance and overall evaluation. It can take the form of a rating (a score, e.g. 15 out of 20), a designation (pass or fail), or an advanced designation (assignment to a particular level e.g. beginner, pre-intermediate, intermediate or advanced). The third scoring method, analytic rating, involves, according to Bailey (2005), "rating systems in which the abilities underlying the speaking skill have been analyzed and the test-takers are evaluated on how well they perform the various sub-skills" (p. 25). Analytic rating requires the tester to compile a number of criteria against which the candidate's performance will be measured. Thornbury (2005) provided an example of scoring criteria and classified them under four categories:

- *Grammar and Vocabulary*: On this scale, candidates are awarded marks for the accurate and appropriate use of syntactic forms and vocabulary in order to meet the task requirements.
- *Discourse Management*: On this scale, examiners are looking for evidence of the candidate's ability to express ideas and opinions in coherent, connected speech.
- *Pronunciation*: This refers to the candidate's ability to produce comprehensible utterances to fulfill the task requirements, i.e. it refers to the production of individual sounds, the appropriate linking of words, and the use of stress and intonation to convey the intended meaning.
- *Interactive Communication*: This refers to the candidate's ability to interact with the interlocutor and the other candidate by initiating and responding appropriately and at the required speed and rhythm to fulfill the task requirements. It includes the ability to use functional language and strategies to maintain or repair interaction, e.g. in conversational turn-taking, and a willingness to develop the conversation and move the task towards a conclusion.

Conclusion

In this chapter we reviewed literature related to one of this study's variables, that is developing students' speaking skill. We tried to focus on a skill that is, according to our informal observation, often ignored or at least not given its worth in our instructional programs. We started with a definition of what speaking is and illustrated why developing this skill should be one of the priorities of language curricula. After that, we presented, in detail, the main constructs of the speaking skill. It was also necessary to discuss the main problems that make teaching

speaking a challenging task. We, therefore, followed that by suggesting a number of activities and techniques that may inspire language teachers and facilitate their chore.

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CHAPTER FOUR: Analysis of the Students' Questionnaire

Introduction

This chapter discusses students' perspectives on a number of issues related to the speaking skill. A self-designed questionnaire was distributed to first year students at the English department- Larbi Ben M'hidi university. By administering the questionnaire, the researcher collected data about the participants' levels, EFL students' valuation of the speaking skill, the way they were taught, and the main problems that stand in their way to develop a good mastery of oral communication skills. Analysis of the questionnaire results is achieved with the help of a set of descriptive statistical measures.

4.1 Data Collection

The main aim of this research was to investigate the effect change of teaching style may have on the development of learners' ability to orally express knowledge of a specific academic content, but it was important to collect data relevant to the following issues:

1- How important is the speaking skill for our students? And was it catered for sufficiently in the previous phases of their educational path?

2- How do students perceive the factors that may influence their speaking performance and development of oral communication skills?

Setting as a goal answering the aforementioned questions, the researcher believes that the questionnaire is the most appropriate tool to utilize. Surveys, by definition, are the tools used to collect data describing the opinions, attitudes, and characteristics of people that are important to a study (students, teachers, ... etc).

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The questionnaire has also served as a needs assessment tool that guided our lesson planning (especially with the experimental groups A and B).

4.2 Piloting the Questionnaire

The accurate choice of words comprising the questionnaire item is of paramount importance. The clarity of the questions has to be verified and the researcher needs to make sure that all the items are intelligible to the participants. A measure to be taken to test the questionnaire's explicitness and face validity is piloting. "A pilot study is an important means of assessing the feasibility and usefulness of the data collection methods and making any necessary revisions before they are used with the research participants" (Tavakoli 2012, p. 475). Bradburn, Sudman, and Wansink (2004) go even further to claim that "if you do not have the resources to pilot-test your questionnaire, don't do the study" (p. 317).

Our pilot questionnaire (Check Appendix G) was administered to a group of twenty students similar to the research participants, i.e., first year LMD students at the department of English- Larbi Ben M'hidi university. The students were given almost thirty minutes to complete the questionnaire. The researcher supervised the whole process which gave him the chance to identify what statements students would probably find ambiguous, what items needed modification and eventually some of the questions that did not actually serve the purposes of the study were removed. To yield the accuracy that is required for scientific measurements purposes, the main adjustments were about using a five-point Likert scale to format the questionnaire items.

4.3 Description of the Questionnaire

The students' questionnaire is comprised of ten items (besides the "personal information" section). Through it, the researcher tried to find out whether or not students did choose to major in English and to identify their main objectives in learning English. The questionnaire sought as well to gather information about the speaking skill from the perspective of students. It was deemed important, for the purposes of this study, to consider the learners' point of view for the significant role they play in the learning/teaching process; their opinions matter to some extent. We attempted to determine the extent to which improving such a skill is important for them, to collect some data about the way they were taught speaking in secondary school, and to identify the main factors that influence their oral performance development.

4.4 Population and Sampling

The target population in this study are first year LMD students at the department of English, faculty of letters and languages – Larbi Ben M'hidi University.

Typically, the researcher does not have the resources, time, money, and effort that allow him to study the whole members of the population, and since "it is generally not necessary to study all possible cases to understand the phenomenon under consideration" (Ary, Jacobs, Sorensen & Razavieh, 2010, p.149), sampling comes to the researcher's aid by enabling him to attain valid results by studying only a portion rather than the entire population. Cohen et al (2005) define sampling as the process of collecting "information from a smaller group or subset of the population in such a way that the knowledge gained is representative of the total population under study" (p. 174). So, the most important characteristic of a sample is its *representativeness*.

To make sure that the sample selected represents the study's population, random sampling technique was adopted by the researcher. From a population of 329 students, we opted

for administering our questionnaire to a sample that is comprised of ninety six (96) first year students at the department of English.

The "personal information" section was, chiefly, included in the questionnaire to verify the representativeness of the sample. According to Dorney (2003), "a good sample is very similar to the target population in its most important general characteristics" (p. 71); characteristics like gender, age, educational background, culture and ethnicity.

As far as the cultural and ethnic backgrounds are concerned, we know for a fact that almost all students of Larbi Ben M'hidi university come from the same (eastern) region of Algeria. We were more particularly interested, though, in exploring if certain traits of the sample (that is age, gender, and educational background) are analogous to those of the whole target population.

The total number of first year LMD students –at the English department- in the academic year 2015/2016 was: 329. Females constituted a large portion with a percentage of 84.80 % (279). Males, however, were only 50 with a percentage of 15.20%. Results relating to the participants' gender showed that most students in the sample were females as well, 86.46 %, while males represented only 13.54 % of the sample.

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The findings also revealed that the average age of the participants is close to the typical age of a first year university student, 18/19. The mean value of the students' age was 19.41, the median 19 and the mode 19, with a standard deviation :1.07.

Table 4.1

Students' Age: Mean, Mode, and Median

NI	Valid	96		
IN	Missing	0		
Mean		19,4167		
Median		19,0000		
Mode		19,00		
Std. Deviation		1,07279		

The frequency distribution of the participants' ages is displayed in table 4.2:

Table 4.2

Frequency Distribution of the Participants' Ages

		Frequency	Percent	Valid Percent	Cumulative
					Percent
	18,00	20	20,8	20,8	20,8
Valid	19,00	36	37,5	37,5	58,3
	20,00	23	24,0	24,0	82,3

21,00	14	14,6	14,6	96,9
22,00	3	3,1	3,1	100,0
Total	96	100,0	100,0	

Figure 4. 2 Frequency Distribution of the Participants' Ages



The third question in the *personal information* section concerns the streams students belonged to at secondary school (data were numerically coded as: 1 = literary, 2 = scientific, 3 = technical). Forty five students (46.9 %) came from the *scientific* stream, thirty nine students (40.6 %) from the *literary* stream, and only twelve participants (12.5 %) said that they came from a *technical* stream. The mean score of this statement is 1.71 and standard deviation is 0.67. The standard deviations did not scatter too much. This small standard deviation (0.67) indicates that the pile of numbers is compact and that the answers did not vary too much.

Again, the sample reflects the same characteristics of the whole population because most of the students we receive each year come mainly from the *scientific* and *literary* streams.



Figure 4. 3 Participants Streaming at Secondary School

4.5 Results and Discussion

According to Dörnyei (2003) "The standard method of analyzing quantitative questionnaire data is by means of submitting them to various statistical procedures" (p.114). The data in this study was subjected to analysis through descriptive statistics which by themselves can be the appropriate numerical characterizations when the researcher is examining his data for patterns. "Descriptive statistics are closer to [the researcher's] data, they give a more direct numerical picture of the patterns that [he] sees, and they tend to be the cleanest summaries of [his] results" (Katz, 2006, pp 48-9).

Data gathered through the students' questionnaire were analyzed using The Statistical Package for the Social Sciences (SPSS), version 21.

Question 1: Is learning English your choice? a.No b. Yes

This item was included to partially assess students' motivation for learning English. Whether or not students chose to major in English determines to some extent learners' level of motivation. Twenty one learners (21.88 %) admitted that majoring in English was not their first choice when they got their baccalaureate (BAC). Some of these students found themselves here just because their BAC average did not allow them to gain admission to other majors, while others were forced by their parents to choose this branch. Nonetheless, the results were promising to some degree because the findings showed that most participants, seventy five (78.13 %), chose to study English. We can safely claim then that the highest majority of freshman students come with a relatively strong desire to learn English.







Question 2: What is your major purpose in learning English?

a. To get a job

b. To go for further studies

c. To communicate with people and know more about English speaking communities

This question sums up the main aims learners choose to study English for. As illustrated in figures 4.4, most students, fifty four (56 %), chose to major in English to go for further studies, forty three students (44.79 %) study English to get a job, and only thirty participants (31.25 %) declared that communicating with and knowing more about the target language people was one of the main objectives they study English for.

It appears, therefore, that most students are instrumentally motivated. This explains to some extent why it is hard to sustain learners' motivation when they realize at a certain point that it is difficult to get a job and that pursuing studies and getting higher degrees would not be attainable by most students.



Figure 4. 5 Purposes for Which Learners Chose to Major in English

Question 3: On a scale of one to five, how would you rate the importance of the speaking skill for you as an EFL learner ?(1 = unimportant, 2 = undecided, 3 = slightly important, 4 = important, 5 = very important)

The insertion of this item helped in exploring the extent to which students value speaking as a skill. As illustrated in figure 4.6 none of the students ticked choice 1, "unimportant", one student was "undecided", only one participant considered it "slightly important" and six students (6.25 %) claimed that it is important. The highest majority of students (91.67 %) confirmed that it is "very important" for them. The mean score for this item is 4.88 and the small standard deviation (0.43) clearly indicates that the answers did not vary too much.



Figure 4. 6 Importance of the Speaking Skill for Students

What I noticed, as a teacher in the department of English for at least six years, is that the speaking skill is not adequately weighed despite the fact that it is a skill students greatly aspire to develop. Most of our teaching and assessment focuses on the other skills, especially *writing*. In most modules, students are passive recipients of information and are rarely given the opportunity to interact orally with the teacher or their classmates. Written assessments also prevail and our students' oral performance is hardly tested. It is undeniable that writing is of paramount importance to our students in this specific educational context but, nonetheless, proper regard should be paid to our students' desires. The researcher advises teachers, therefore, to pay attention to the wants of their students and use their best endeavors to address those language skills equitably.

It is worth mentioning as well that one of the aims behind the inclusion of this item (i.e. Question 3) was to justify our choice of testing the learners' speaking skill in the experiment's pre and post tests. Deciding to make the pre-test and the post-test specific topical knowledge speaking tests mirrored the importance of that skill to most of the students, and the researcher as well.

➤ In case it is, why is speaking important as a language skill?

Through the follow up question, we tried to investigate why developing the speaking skill, from the perspective of students, is significant in the learning process. Students' responses clearly suggest that learners measure their progress in EFL learning through their confidence to speak fluently in authentic situations. Some of the answers were:

- "Allows students to be more confident and therefore more effective in sharing information among themselves and with their students in the future".

- "We can't speak fluently without learning the speaking skill".

- "It is important to communicate with people and comprehend others and be more confident".
- "I need to be fluent if I had oral tasks at classroom".
- "You need it in the future, for eg, if you teach you have to speak".

Students have also shown awareness of the functional priority of speech over writing. Some respondents justified by saying, for instance, "*because most of every-day communication is done via speaking*".

Question 4: *How often were you given the opportunity to speak in the classroom (at secondary school level) ?*

Participants were given five choices: 1=Never, 2=rarely, 3=sometimes, 4=often, and 5= always. Only one student (1.04 %) said that he was always given the opportunity to speak in the classroom at secondary school level. A small portion of the sample, thirty one students (32.29 %) claimed that they were often allowed to speak. Most of the participants (fifty one, i.e. 53.13 %), however, confirmed that they were granted the chance to orally perform in the classroom only sometimes, and thirteen participants (13.54 %) even went so far as to assert that opportunities to speak were rarely provided. The mean score is 3.20. The small standard deviation (0.67) indicates that the data were equally distributed.

Despite the claims of syllabus designers, at secondary school level in Algeria, that the speaking skill was allotted sufficient attention, this is not always reflected in teachers' practices inside the classroom. Riche, Arab, Ameziane, Hami, and Louadj (2005), for example, said that one of the general aims of "*At the Crossroads*" was to consolidate competencies such as interacting orally in English (p. 9). Regrettably though, this does not seem to be the case because in effect most students confirmed that the speaking skill is not addressed sufficiently inside the classroom.



Figure 4. 7 Opportunities to Speak in the Classroom at Secondary School Level

It is true that different factors may combine to make the teacher's task to offer each student sufficient talking time hard. Algerian secondary school classrooms are generally overcrowded; moreover, some students if not most of them are introverted which explains why our participants answers differed concerning the amount of speaking opportunities they were provided with. However, adopting more learner-centered approaches would definitely help them overcome such a setback. Teachers should incorporate in their lesson plans activities that maximize the amount of time learners spend using the target language. Group work activities, for instance, would create ample opportunity and generate abundant student-student interaction time.

Question 5: Were the topics you were asked to talk about: (rate them on a scale of one to five) : 1=not interesting, 2= undecided, 3= slightly interesting, 4= interesting, 5 =very interesting ?

As displayed in figure 4.8, most of the participants, sixty six (68.75 %), stated that the topics they dealt with at secondary school were *interesting*, five other students (5.21 %) went even further to claim that they were *very interesting*. Only sixteen participants (16.67 %) considered them *slightly interesting*, two participants (2.08 %) were *undecided*, and seven

students (7.29 %) estimated that topics discussed at secondary school were not interesting. The

mean score for this item is 3.62 with a 0.90 standard deviation.





These findings came to confirm one more time that classroom management might be the problem. Although most participants found issues discussed in the classroom interesting, not all of them were given the chance to participate. We reiterate again then that teachers should resort to learner-centered approaches and provide more variety in their language classrooms to cater for the different needs and profiles of their learners.

Question 6: At secondary school level, did you receive feedback on your response?

•No ()•Yes ()

Feedback is an important element in the teaching/learning process. It allows students to diagnose their own learning and find out whether or not they are on the right path leading to the achievement of desired objectives. As indicated by results obtained from item 6, the highest majority of students, eighty seven (90.63 %), confirmed that they received feedback on their

responses at secondary school level. Only nine students (9.38 %) said that their teachers did not provide them with any feedback.



Figure 4. 9 Reception of Feedback at Secondary School Level

Question 7: If your answer is "yes", who provided the feedback ?a. The teacherb. Your peer or peers

As illustrated in figures 4.10, participants' responses confirmed that most of the feedback

students received at secondary school level was provided by teachers, seventy five participants

(78.13 %) ticked choice "**a**".







Figure 4. 11 Percentage of Feedback Provided by Peers

Only fifteen participants (15.63 %) said that their teachers gave students the opportunity to comment on their peers' utterances. It is good that teachers are constantly providing guidance through feedback, but, nevertheless, students should be allowed some space to take the initiative and be responsible for their own learning. *Peer feedback* according to many scholars and researchers (Jacobs & Zhang, 1989; van der Pol, van den Berg, Admiraal & Simons, 2008) is an effective way for the encouragement of autonomous and self-regulated learning. Peer assessment is also one of the best ways teachers may use to promote learner-learner interaction and increase student talking time inside the classroom.

Question 8: *Do you prefer direct or indirect corrective feedback?*

- Direct corrective feedback () Indirect corrective feedback ()
- *Please justify:*

Results in this section showed that most students, seventy three (76.04 %), prefer *direct corrective feedback*. Only twenty three students (23.96 %) said that they prefer to receive feedback indirectly. Answers of the few respondents who chose the option *"indirect corrective feedback"* implied students' inclination to be responsible for their own learning; a sample answer

was: "*I want to be given time and another chance to correct myself*". Students who said they prefer direct corrective feedback, on the other hand, provided justifications like:

- "because when the teacher or peers provide feedback you will not make the same mistakes again and make a better progress".

- "The corrected form will be memorized better".

- "Pay more attention next time, learn from my mistakes".

- "It makes me realize that the teacher is paying attention to what I am saying and giving it some importance".

Figure 4. 12 Type of Feedback Students Prefer

Indirect Corrective Feedback
Direct Corrective Feedback



The largest part of the sample showing preference for direct corrective feedback is a clear indication that most students require constant guidance from the teacher, or even assistance from their peers. This can be partially explained by the fact that most of our students have not been raised as independent learners. Learner autonomy is an aspect that has been obviously neglected and not catered for sufficiently.

Question 9: On a scale of 1 to 5, how would you rate your level in speaking? (1=weak, 2= undecided, 3= average, 4=good, 5=very good)

> If you find that your level in speaking is not acceptable, can you say why?

Figure 4.13 demonstrates that most students, sixty three (65.63 %), think that they have an *average* level in speaking, three students (3.13 %) were *undecided*, and seventeen participants (17.71 %) deemed their speaking skill as *weak*. Only four students (4.17 %) ticked choice "4", *good*, and nine others (9.38 %) claimed that their oral skill is *very good*. The mean score for this item is 2.84 with a 1.06 standard deviation.





As to why some students find their level in speaking unacceptable, an array of diverse answers was provided. A few students blamed it on the teachers or the priorities set by the educational program ("My teachers at secondary school didn't teach me well", "Most of the homeworks are written assignments"). Other learners held that deficiencies are mainly rendered by internal factors, like confidence, anxiety, motivation, and learning styles ("when I speak I feel stressed", "I worry about my mistakes", "I didn't find someone who motivates me to speak well", "I don't talk much because I am an introvert"). Most students, however, related it to the lack of learning opportunities; either lack of practice ("because I didn't practice at all; only inside the classroom sometimes", "We do not use this language every day") or lack of sufficient input or exposure to the target language ("I don't read and don't listen to smth in English"). Interestingly, some learners did not shy away from admitting that such inadequacy is caused by student inertia ("I do not make enough efforts / don't do my homeworks").

Question 10: <i>To what extent</i>	does each	of the fol	llowing fa	actors in	ıfluence y	our s	peaking
performance?							

	not at all	undecided	to a small extent	to a moderate extent	to a large extent
Feedback during speaking activities					
Listening ability					
Motivation to speak					
Confidence					
Anxiety					
Topical knowledge					
Listeners' support					
Time for preparation					
Pressure to perform well					

Time allowed to perform a speaking task			

This question sought to measure the effect some internal and external factors have on learners' oral performance. Results from this section guided our lesson planning in the treatment period. So, the researcher tried to incorporate activities and tasks that would help students overcome the problems that hamper their progress the most.

Table 4.3

	Mean	N	Std. Deviation
Feedback	3.3333	96	1.11135
Listening ability	3.9375	96	1.13149
Motivation to speak	4.0833	96	1.09224
Confidence	4.1667	96	1.25377
Anxiety	3.4375	96	1.35190
Topical knowledge	3.5833	96	1.06293
Listeners' support	3.5625	96	1.23810
Time for preparation	3.9271	96	.97597
Pressure to perform well	3.6563	96	1.35202
Time allowed	3.8854	96	1.03486

Factors Influencing Learners' Speaking Performance from the Perspective of Students (Mean Scores)



Figure 4. 14 Factors Influencing Learners' Speaking Performance from the Perspective of Students

The collected data revealed that, according to students, the factors which influence their oral communication skills the most are rather internal ones, namely confidence and motivation (with mean scores 4.2 and 4.1 respectively), followed by the contextual factor of time (for preparation and time allocated for the performance of the speaking task) and students' listening ability, with mean scores of 3.9.

It is obvious that CBA helps here as one of its principles is to allow each student to learn at his own pace. CBA prioritizes successful attainment of the objectives and no strict approach is necessarily adopted in setting time constraints. Such an attitude is believed to have significantly positive effects: reducing FL anxiety, strengthening learners' confidence, and raising their motivation.

4.6 Summary of Findings

Analysis of the students' questionnaire helped in reaching the following findings:

- The highest majority of the sample value highly the speaking skill. Most students associate their progress in learning the target language with successful acquisition of oral communication skills. Results revealed, however, that this skill was not adequately addressed as most learners confirmed that they were not granted enough talking-time inside the classroom.
- Another significant finding concerns students' perception of the main factors that influence their speaking skill. Results indicated that confidence, motivation, time for preparation, and time allocated for the performance of the speaking task are the factors that impact learners' speaking performance the most . Review of literature related to CBA and MIT confirms that adoption of such an approach and theory may effectively help learners overcome such problems.

Conclusion

This chapter presented the analysis and discussion of the data gathered using the students' questionnaire. The questionnaire helped in investigating students' opinions and perceptions of the importance of the speaking skill. It also served in gaining insight into the main aspects and factors that influence learners' development of the speaking skill.

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CHAPTER FIVE: Analysis of the Teachers' Questionnaire

Introduction

This chapter is dedicated to the analysis and interpretation of data gathered using one of the instrument used in this study that is the teachers' questionnaire. The questionnaire was addressed to the English department EFL teachers at Larbi Ben M'hidi university- Oum el Bouaghi. It comprises a set of closed-ended items (in addition to a few open-ended questions) which aimed at eliciting teachers' opinions about the variables this study investigates. Submission of the collected data to a set of descriptive statistical measures will help in extracting information about teachers' knowledge and perception of competency based instruction, MIT and its application in the language classroom, as well as issues related to the speaking skill.

5.1 Data Collection

This questionnaire was designed and administered to gain insight into teachers' perceptions of issues related to the speaking skill, CBA, MIT, and their implementation in language classrooms. The data gathered helped in answering the following research questions: 1- How important is the speaking skill for our students from the perspective of teachers? And is it catered for sufficiently in their classes?

2- How do teachers perceive the factors that may influence their students' speaking performance and development of oral communication skills?

3- Are teachers in the department of English-at Larbi Ben M'hidi university- knowledgeable about CBA?

4- How often do they apply it, i.e. CBA, in their teaching?

5- How effective do they think CBA is in improving the teaching/learning process?

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6- Are teachers in our department knowledgeable about MIT?

7- How often are MI-based techniques implemented by teachers in our department?

8- How effective do they think MIT is in improving the teaching/learning process?

9- To what extent is it easy or difficult to implement MIT in our language classes?

5.2 Piloting the Questionnaire

Teachers' perceptions and attitudes are of huge significance to this study. Teachers are actually the ones who have constant interaction with learners; they are the ones supposed to be more aware of students' needs, what teaching approach serves the course objectives better, and what practices would prove more efficient and promote the learning process.

The researcher needed to make sure that the questionnaire addressed to teachers would elicit precise informative answers. Hence, piloting was used as a measure to ensure explicitness and face validity of the questionnaire items.

The teachers' questionnaire was piloted (Check Appendix H) to a group of teachers similar to the participants taking part in this study. Before the final administration of the questionnaire to teachers at the department of English at Larbi ben M'hidi university, it was distributed to ten teachers of English as a foreign language at Abbes Laghrour university-Khenchela. Piloting helped the researcher in refining the questionnaire and making the final version take the form it is now; some items were deleted, other items were added, and some questions needed modification.

5.3 Description of the Questionnaire

The teacher's questionnaire is comprised of sixteen items (in addition to the personal information section). As mentioned earlier, the questionnaire sought to probe teachers' knowledge and gather information about the speaking skill, CBA, and MIT. It was, therefore,

divided into three main sections. Section one investigates teachers' opinions about student's proficiency levels, the importance of speaking as a language skill, and how it is taught in our department. Section two examines teachers' knowledge and application of CBA and section three relates more to teachers' awareness of the MIT and the benefits it may bring to the language classroom if implemented appropriately.

5.4 Population and Sampling

Teachers of the English department, at Larbi Ben M'hidi university, are the target population of this study. In the academic year 2015/2016, the teaching staff was comprised of forty eight male (15, i.e., 31.25%) and female (33, i.e., 68.75%) university professors. All the teachers were Algerian and therefore share the same ethnic and cultural background. Four teachers held the PhD, thirty six had the Magister degree and eight respondents held the Master's degree.

From a population of forty eight EFL teachers we chose a sample of thirty teachers. Thirty questionnaires were distributed to male and female university professors but only twenty eight questionnaires were returned back. Our aim at making the twenty eight-participant sample as representative of the target population as possible was successfully met. Females comprised most of the sample with 64.28% (eighteen participants). Males, on the other hand, constituted only 35.72% (i.e., ten participants) of the sample. Concerning teachers' qualifications, the results showed that the highest majority of the participants (twenty six) held the magister degree, while only two respondents held the PhD.

5.5 Results and Discussion

Analysis and interpretation of data collected through the second research instrument, the teachers' questionnaire, were facilitated by submitting them to a set of descriptive statistical measures. Data gathered through the teachers' questionnaire were analyzed using SPSS, version 21.

Item 1: Experience in teaching English:

```
• First year () • 2-5 years () • More than 5 years ()
```

Results from *item 1* showed that most of the teachers (twenty three, i.e., 82.14 %) have more than five years of experience in EFL teaching. Having been practicing EFL teaching for all those years, participants are conceivably able to offer insightful observations. It is believed that teachers' long practical experience is going to be of great benefit to our research.





Item 2: *Have you ever had any training in ELT (English Language Teaching) methods, approaches, and/or theories?*

Most of the participants (eighteen, i.e., 64.3 %) confirmed that they have been trained in ELT methods, approaches, and theories, while only ten teachers (35.7 %) claimed that they did not receive any training.

Figure 5. 2 Training in ELT Methods



Findings indicated, however, that only a small portion of the sample received such training in *workshops* (eight participants, i.e., 28.57 %) or *courses* (eight participants, i.e., 28.57 %), while half the sample made the claim that they gained experiential teaching knowledge on their own guided by books and other types of references.


Figure 5. 3 How Teachers Were Trained on ELT Methods, Approaches, and Theories

This might be an indication of a serious problem with regard to the way pre-service teachers are taught and trained on teaching methods and approaches. Courses are not delivered in a way which would guarantee that pre-service teachers are successfully geared for effective practical classroom management. Implementation of CBA can be the ideal remedy as it directly connects training and instruction with the acquisition of the skills the workplace would require. Obviously, among the necessary skills and competencies are those related to the effective application of teaching approaches and methods.

5.5.1 Section One: Teaching the Speaking Skill

Item 3: On a scale of one to five, how would you rate the importance of the speaking skill? (1= unimportant, 2= undecided, 3= slightly important, 4= important, 5= very important)

Results showed, as illustrated in figure 5.4, that most teachers (twenty six, i.e., 92.9 %) value highly the speaking skill. The mean score of this statement is 4.5714, and standard deviation is 0.63 (Rating scales were numerically coded as 1= unimportant, 2= undecided, 3=

slightly important, 4= important, 5= very important). The standard deviations did not scatter too much. This small standard deviation (0.63) indicates that the pile of numbers is compact and that the answers did not vary too much.



Figure 5. 4 Importance of the Speaking Skill According to Teachers

When asked to justify their choice, teachers' responses can be summed as follows. As for teachers who ticked choices "*very important*" and "*important*", some of the answers read:

- "The speaking skill is the one the learners need most. From the perspective of linguistics, oral language is the primary language, writing is secondary. In terms of frequency, speaking is more frequent, be it for a teacher, a traveler, etc".

- "Success is measured in terms of the ability to carry out a conversation in the target language".
- "We communicate to express our ideas, feelings, ... etc. The most effective way to communicate is through speech. Without speech we can't communicate with each other. The importance of the speaking skill, hence is enormous. Without speaking, a language is reduced to a mere script".

- "Language acquisition takes place via speaking".

Such answers demonstrated that teachers' pickings were based on an informed opinion. Speech, as it is asserted by most modern linguists, is prior to writing and hence speaking skill should be prioritized.

On the other hand, the justification provided by one of the two participants who rated speaking as "*slightly important*" was: "It is not important to express oneself like native speakers, but to communicate one's ideas successfully". Unfortunately, this response is highly irrelevant and this might have stemmed from a flawed understanding of the question. The question was not about accuracy level that must be shown by learners; it was more about the medium that is more effective; the medium that language users need the most. Compared to the written mode, the spoken language is used for a wider range of purposes than the written language (mass media, telephone, etc.). Teachers efforts should be directed more towards developing students' oral communication skills.

Item 4: The level of first year students in speaking this year is: 1=Weak, 2= Don't know, 3= Average, 4= Good, 5= Very good.

As illustrated through figure 5.5, the largest portion of the sample (eleven, i.e., 39,29 %) rated students' level in speaking, in the academic year 2015/2016 as "*average*". Eight participants (28.57 %) claimed that learners' speaking level is "weak", while only one participant (3.57 %) rated learners' speaking proficiency as "good". Eight other participants (28.57 %), however, stated that they cannot decide, which is maybe due to the fact that they do not give enough importance to that skill in their language classes (either they do not provide students with enough speaking opportunities or they do not continuously evaluate students' performance).

The mean score of this statement is 2.17, and the standard deviation is 0.9 (Rating scales were numerically coded as 1= unimportant, 2= undecided, 3= slightly important, 4= important, 5= very important). This small standard deviation (0.9) indicates that the pile of numbers is compact and that the answers did not vary too much.



Figure 5. 5 Students' Level in Speaking in the Current Academic Year



With a 2.32 mean score and a standard deviation of 0.94, findings showed that nine participants (32.14 %) believe that there is no difference between last year students and this year students' level as regards the speaking skill. Ten participants (35.71 %) could not decide (some

of them informed the researcher during the administration of the questionnaire that they did not teach first year students the year that preceded the academic year in which the research was conducted). Only three teachers (10.71) claimed that this year's students are "better", while double that figure (21.43 %) made the claim that first year students' level of speaking is degrading.



Figure 5. 6 Students' Level in Speaking Compared to the Previous Year

Justifications of teachers, whose choice was "*worse*", could be summed up as follows. A certain category of teachers expressed the belief that the downgrading of speaking level is exclusively rendered by deficiencies shown by the students themselves. According to them, students' speaking proficiency decline is caused by learners' lack of basic knowledge that is

required for successful oral communication ("students lack background knowledge about the language"), and lack of motivation ("students are not motivated") the result of which are highly lethargic students ("I think because nowadays students do not give much importance to their studies. They are more preoccupied with TV, radio, games, internet . . . etc". Another teacher's justification was: "I honestly think that students, to a large extent, neither read nor listen, i.e., the receptive skills are therefore totally missing").

Other respondents, on the other hand, associated speaking proficiency decline with other factors; making it the responsibility of teachers, educational institutions and the adopted curricula:

-"Students did not or do not receive too much training on how to practice the language".

-"Less much time is devoted to the speaking classes".

- "More emphasis is put on other skills as writing".

- "Maybe the teachers who taught them in the previous years are not competent, because most of them have got their jobs through intervention".

Regarding justifications of teachers who estimated that first year students' level in speaking has improved, most of the responses related it to the technological advances in the modern era. Information and Communication Technologies (ICT) create an abundance of authentic learning and practice opportunities. Language learning and use is no more confined to the classroom environment as was the case a few decades back. Students now have the ability and sometimes have the need to communicate, using different modes, with people from all over the world. Teachers' own words were as follows:

- "Students are exposed to the English (standard and non-standard varieties) through a wide range of resources (e.g., social media, movies, songs, interacting with native speakers of English...etc".

- "Students are now more aware of the importance of language speaking. They try to develop this via their access to the different forms of ICT".

In fact, participants' contrasting answers are not necessarily contradictory. It is believed that each teacher has been reporting his own experience and such diversity may be a mere reflection of the fact that teachers deal with classes of different profiles and characteristics. What can be inferred from the conglomeration of such responses, after all, is that what is needed is a teaching approach that inspires learners, ignites enthusiasm, and actively engages students' senses. It is justifiable then to suggest that combining CBA and MIT would help both teachers and students to capitalize on the strengths already shown by some students and more importantly overcome oral communication deficiencies manifested by learners.

5.5.2 Section Two: Knowledge about and Application of CBA

Item 6: Have you ever learned about the competency based approach (CBA)?

• No () •Yes ()

► If your answer is yes, how did you learn about it?

• Book () • Course () • Workshop () • From co-workers/friends ()

Results positively indicated that the highest majority of teachers (twenty four participants, i.e., 85.71 %) know about CBA. While five participants (17.86%) confirmed that they got informed about CBA from coworkers, more than half the sample (57.14%) pointed out that they gained knowledge about CBA by merely reading books. However, only a fraction as meager as nine participants (32.12%) said that they learned about it in a course and an even

smaller portion (six participants, i.e., 21.43%) revealed that they received training on CBA in workshops.

🗖 no 🗖 yes



Figure 5. 7 Teachers' Knowledge about CBA

Figure 5.8 How Teachers Learned about CBA



Item 7: How often do you think you use CBA in your teaching? (1 = Never, 2 = Not sure, 3 = Seldom, 4 = Sometimes, 5 = Always)

Item 8: If you do implement it in your teaching, to what extent do you think it is effective? (1 = Not at all, 2 = Undecided, 3 = To a small extent, 4 = To a moderate extent, 5 = To a large extent)

Findings from items 7 revealed that the frequency with which participants use CBA in their language classrooms is not that high. Eleven participants indicated that they use it *"sometimes"*, seven participants *"seldom"* (25%), while five teachers (17.86%) claimed that they "never" apply it in their classes. Five participants (17.86%) ticked the choice "not sure". The mean score for this item was 2.85 with a standard deviation of 1.14.







Figure 5. 10 Effectiveness of CBA from the Perspective of Teachers

As illustrated in figure 5.10, only five participants (18.52%) confirmed that CBA is effective "*to a large extent*". Ten participants (37.04%) claimed that it is effective only to a moderate extent, and one teacher (3. 7%) averred that it is not effective at all. Eleven respondents, i.e., 40.74%, ticked the choice "undecided". One teacher did not answer the question. The mean score for this item was 3.25 with a standard deviation of 1.28.

Relative to the high percentage of teachers claiming that they know about CBA (twenty four participants, i.e., 85.71 %), interesting is the finding that a considerably big portion of the sample indicated that they are "not sure" if it is effective (11,i.e, 39.3%). Interesting as well is the finding that CBA is judged as not effective at all (one participant, i.e., 3.6%), or effective just to a moderate extent (ten participants, i.e., 35.7%) despite the fact that twenty three participants (%) confirmed that they "never", "seldom", or at best, used it only "sometimes".

It can be argued, then, that the theoretical knowledge (about teaching methods and techniques among other things) most teachers acquire from lectures and books (as shown by results obtained from previous items) is far from sufficient. Teaching is more than transmitting knowledge; it is a creative endeavor that entails the engagement of a whole range of skills, attitudes and competencies. Effective application of teaching approaches and methods requires pre-service teachers to receive practical training that is best served if CBA was implemented in our universities' teaching programs.

Item 9: *To what extent does each of the following factors influence your students' speaking performance?*

	Not at all	Undecided	To a small extent	To a moderate extent	To a large extent
Feedback during speaking activities					
Listening ability					
Motivation to speak					
Confidence					
Anxiety					
Topical knowledge					
Listeners' support					
Time for preparation					
Pressure to perform well					
Time allowed to perform a speaking task					

Data collected from item 10 revealed, as illustrated in table 5.1 and figure 5.11, that the affective variables, "*anxiety*", "*confidence*" and "*motivation*" (with the mean scores 4.64, 4.64, and 4.60 respectively) are the factors that influence learners' speaking the most. Of primary importance as well are learners' "*listening ability*" (mean: 4.5) and "*topical knowledge*" (mean:

4.17). In the third rank came the other factors which, according to teachers, affect learners' oral communication skills only to a moderate or small extent.

Table 5.1

	Feedback	Listening	Motivation	Confidence	Anxiety (T)	Topical	Listeners'	Time for	Pressure to	Time
	(T)	ability (T)	to speak	(T)		knowledge	support (T)	preparation	perform well	allowed (T)
			(T)			(T)		(T)	(T)	
Mean	3.5714	4.5000	4.6071	4.6429	4.4643	4.1786	3.5714	3.7500	4.0000	3.6071
Ν	28	28	28	28	28	28	28	28	28	28
Std.	.95950	.83887	.68526	.73102	.92224	.86297	1.10315	.84437	.94281	.87514
Deviation										

The Mean Scores of Teachers' Responses on Item 9





This item was inserted in the questionnaire mainly to compare teachers' and students' perspectives concerning the effect such factors have on learners' speaking performance. This is illustrated in figure 5.12 and table 5.2.

Table 5.2

	Mean	Ν	Std. Deviation
Feedback (T)	3.5714	28	.95950
Feedback (S)	3.3333	96	1.11135
Listening ability (T)	4.5000	28	.83887
Listening ability (S)	3.9375	96	1.13149
Motivation to speak (T)	4.6071	28	.68526
Motivation to speak (S)	4.0833	96	1.09224
Confidence (T)	4.6429	28	.73102
Confidence (S)	4.1667	96	1.25377
Anxiety (T)	4.4643	28	.92224
Anxiety (S)	3.4375	96	1.35190
Topical knowledge (T)	4.1786	28	.86297
Topical knowledge (S)	3.5833	96	1.06293
Listeners' support (T)	3.5714	28	1.10315
Listeners' support (S)	3.5625	96	1.23810
Time for preparation (T)	3.7500	28	.84437
Time for preparation (S)	3.9271	96	.97597
Pressure to perform well (T)	4.0000	28	.94281
Pressure to perform well (S)	3.6563	96	1.35202
Time allowed (T)	3.6071	28	.87514
Time allowed (S)	3.8854	96	1.03486

Comparison of the Mean Scores of Teachers and Students' Responses to Item 9



Figure 5. 12 Comparison between Teachers and Students' Perception of Factors Influencing Speaking

Teachers and students' assessment of the extent to which each of those factors impacts learners' speaking was relatively similar. Both teachers and students regard "motivation", "confidence", "listening ability", and "anxiety" as the most influencing features; teachers responses, however, being slightly more emphatic, which is reflected in the higher mean scores. Evidently, such results suggest that, if the aim is to effectively develop learners' oral communication skills, what is needed is an approach that is concerned with learners as social beings, one that caters for the often ignored internal and affective factors. **Item 10:** To what extent does each of the following problems make the teaching of speaking difficult?

	Not at all	Undecided	To a small extent	To a moderate extent	To a large extent
It is too difficult to use authentic materials					
Classroom of mixed ability students					
Students insist on translating what is happening into their native language					
The teaching aids and media provided are not adequate for creating a healthy learning atmosphere					
The time specified for the lesson is not sufficient for performing a variety of activities.					
The size of the class is very large					
Students are not cooperating with the teacher in directing the lesson					
In traditional classrooms, the desks are organized in rows and it is difficult to organize group work					
Homework is good for students and the more time they spend working with English, the better they get at it. But the students do not usually do it					
Teachers are not fully competent in managing an oral English class					

This question listed the main hurdles that make the teaching of speaking a challenging task. Teachers' responses suggest that the major hindrances they face in the language classroom relate more to physical properties of the learning environment: classroom size (with a 4.39 mean score), availability of necessary teaching aids and media (with a 4.04 mean score), availability and use of authentic materials (mean= 3.89), and the difficulty with organizing group work because of traditional desk arrangement (the mean score for this item was 4.04). To a lesser degree is the influence of the student-related problems: learners' non-cooperative behavior (mean=3.82) and refusal to carry out homework assignments (mean= 3.82). Results shown,

however, that the rest of the listed problems are not of great influence, with a mean score closer

to 3 (3= to a small extent).

Table 5.3

	Mean	N	Std. Deviation
Availability of authentic materials	3.8929	28	1.25725
Mixed ability classes	3.3571	28	1.19301
Use of NL	3.3929	28	1.42307
Lack of Media	4.0357	28	1.42678
Session time limits	3.6786	28	1.27812
Class size	4.3929	28	1.10014
Students cooperation	3.8214	28	1.24881
Difficulty of organizing groupwork	4.0357	28	.99934
Getting homework done	3.8214	28	1.18801
Teachers' incompetence	3.6071	28	1.19689





Item 11: *Do you think the implementation of the competency-based approach (CBA) would help teachers and students overcome those problems?*

Whatever your answer is(except for "undecided), would you please justify:

As expected, teachers' limited knowledge about CBA led the largest portion of the sample (ten participants, i.e., 35.7%) to tick the choice "*undecided*", as regards the extent to which CBA is effective in solving classroom problems. Nine subjects (32.14%) deemed it as effective to a "*moderate extent*" and five participants (17.86%) "*to a small extent*". Only four participants (14.29%) claimed that it is effective "*to a great extent*". The mean score for this item was 3.25 with a 1.1 standard deviation.

Figure 5. 14 The Extent to Which CBA Can Help Teachers and Students Overcome the Listed Problems



Some of the teachers, who ticked the option "*to a large extent*", justified their choice by delineating the salient characteristics of CBA (being learner-centered for example) and listing the various benefits that accompany the implementation of the approach:

- "Because it helps developing problem solving skills and critical thinking which helps breaking down obstacles".

- "Because it fosters learners' autonomy".

- "Each student will have some time to express himself within a small group. Students are required to make more efforts instead of being passive recipients. Students are required to display their competencies".

- "Linking what is learned at school to relevant contexts of use will make students feel that learning is a beneficial activity; thus, they will be able to deal with different situations".

- "CBA aims at enhancing learners' competencies in order to use them in their real life. Moreover, it focuses on learning and student's abilities (learner centered) rather than on the teacher's role. The purpose of this approach is the formation of a learner who can apply his knowledge in real life, i.e., it aims to enable learners to put what they have learned in other life settings (learning with themselves to face problems in their society)".

One of the respondents, who ticked the option "undecided", explained that she based her choice on the noticeable decline in the abilities of learners especially after the reform implemented by the Algerian ministry of education; allegedly founded on the adoption of CBA. In the teacher's words: "*This approach has been implemented in Algeria in middle and secondary schools and the results are the students we are teaching now, i.e.*, *their level reflects the approach*". It can be argued, however, that this is not necessarily a limitation of CBA. Many

factors might have instigated the claimed decrease in students' levels; misapplication of the approach for instance.

Participants who rated CBA as effective only "to a small extent" based their choice on the contention that CBA is effective in dealing with student-related factors, while it stands helpless before environment-related problems. One of the answers read: "The CBLT cannot solve all of the aforementioned problems, especially those related to the size of the classroom". It is true that, in most cases, the teacher has little to do in face of hindrances resulting from the physical characteristics of the learning environment, but this is in fact one of the areas CBA surpasses traditional teaching methods. CBA condemns the increasingly frustrating, antiquated methods within which learning is contained in the confined educational institution perimeter. Competency based programs allow students and teachers to overcome the conventional classroom limitations by moving learning beyond school or university walls. The adoption of competency based techniques and methods, project works for example, offers better opportunities for the exploitation of the broader cultural, social, and physical resources.

5.5.3 Section Three: Knowledge about and Application of MIT

Item 12: Have you ever learned about Gardner's multiple intelligences (MI) theory?

No ()
Yes ()
Yes ()
If yes, how did you learn about it?
Book ()
Course ()
Workshop ()
From co-workers/friends ()

When asked if they are familiar with Gardner's MIT, surprisingly only half the sample (fourteen participants, i.e., 50%) affirmed that they know about it. Eight participants (28.6%) indicated that they learned about MIT through self-study and books, three participants (10.7%) were informed about it by co-workers, only five participants (17.9%) were taught about the

theory in a course, and it was confirmed, unfortunately, that none of the participants received training about the theory in a workshop.



Figure 5. 15 Teachers' Knowledge about MIT

Figure 5. 16 How Teachers Learned about MIT



Item 13: *Would you like to know more about MI theory?* (1=Not at all, 2= Undecided, 3= To a small extent, 4= To a moderate extent, 5= To a large extent)

The mean score for this item was 4.14 but data were skewed because the high standard deviation (1.4) indicates that data were not equally distributed. As illustrated in figure 5.17, only one participant (3.6%) ticked the choice "*to a small extent*" and two participants (7.1%) confirmed that they had no desire to learn about Gardner's MIT. The highest majority of the subjects, however, showed great interest in learning more about MIT (nineteen participants, i.e., 67.86% ticked the choice "*to a large extent*") in addition to two participants (7.1%) ticking the choice "*to a moderate extent*".



Figure 5. 17 Desire to Learn more about MIT

Despite the findings revealing that half the sample lack knowledge about MIT and hence the great benefits it can bring about if implemented in the language classroom (as shown by many experimental studies, including this one), what looks promising is that a large number of participants affirmed that they want to learn more about it. Such eagerness may be of no value if MIT continues to be neglected. Teachers and institutions are urged, therefore, to multiply efforts through lectures, seminars and workshops in order to raise awareness and train students and preservice teachers on how to benefit from and effectively implement the theory.

Item 14 How often do you think you use MI theory in your teaching? (1 = Never, 2 = Not sure, 3 = Seldom, 4 = Sometimes, 5 = Always)

Despite the fact of teachers being made aware of the existence of MIT and what it is generally about during the administration of the questionnaire, most teachers (seventeen subjects, i.e., 60.71%), including those who said they know about it before, indicated that they were "*not sure*" if they use MIT in their classes. Only five subjects (17.86%) confirmed that they use it "*sometimes*". Four participants (14.29%), on the other hand, claimed that they "*never*" use it, while two participants (7.14%) said they "seldom" incorporate it in their lessons. This confirms again that teaching about MIT and how it can be successfully incorporated in our lesson plans should be given more importance. The mean score for this item was 2.28 with a standard deviation of 0.9.



Figure 5. 18 MIT Usage Frequency

Item 15: Do you think that the use of multiple intelligence-based techniques in teaching would improve the teaching/learning process? (1 = Not at all, 2 = Undecided, 3 = To a small extent, 4 = To a moderate extent, 5 = To a large extent)

► Whatever your answer is (except for "undecided), would you please justify

As expected, since most teachers are not well informed about Gardner's MIT and MIbased techniques, most of them (eighteen participants, i.e., 64.29%) ticked the choice *"undecided"* when asked about the effectiveness of the theory if implemented in language classrooms. Three teachers (10.71%) said that it is effective *"to a moderate extent"*, and seven participants (25%) ticked the choice *"to a large extent"*. The mean score of this item was 2.96 with a relatively high standard deviation of 1.34.



Figure 5. 19 Effectiveness of MIT

When asked to justify their choices, most subjects' responses revolved around the fact that the incorporation of MIT in a language lesson plan allows teachers to cater for their learners' diverse profiles. Better results are expected if we teach to our students' strengths. Some of the teachers' responses are presented below:

- "MIT provides 8 ways of teaching/learning styles. If teachers know about these kinds of learning styles and how to apply them in classrooms they would ensure a variety in the tasks and activities they use so that their learners' abilities can be improved".

- "It would help students develop their learning capacity and discover their abilities. It would make it easier for teachers to present the lessons and to get better results".

- "Using multiple intelligence based techniques, teachers are well served to help students develop a wide range of competencies in the classroom. For instance, tasks which are associated with the so called "Linguistic Intelligence" would help EFL learners to enhance their speaking, writing skills...etc".

One of the teachers (who had ticked the choice "to a moderate extent") justified his choice by saying: "I think it is important to pay attention to the different learning styles and type of intelligence of the learners, but again I believe the problems are beyond methods and approaches, for example learners' potentials and motivation to learn English". It is true that students' individual characteristics (such as aptitude, attitude, intelligence, motivation, etc.) play an important role in making the learning process successful, but such characteristics, as proved by many studies, are not fixed and they themselves can be improved and developed if the right teaching approach or method is adopted. MIT is one of those methods; it raises students' motivation because each student is given the opportunity to learn in the way he finds more interesting and enjoyable. It also enhances learners' potential because MI-based techniques are

grounded on the principle that diversity in delivering courses creates better learning opportunities; allowing students to capitalize on their strengths and improve their weaknesses.

Item 16: To what extent is it easy or difficult to make multimedia available in Algerian language classrooms? (*1* = Very easy, *2* = Easy, *3* = Difficult, *4* = Very difficult, *5* = Impossible)

The mean score for this item was 3.07. The small value of the standard deviation (0.68) indicates that data did not scatter too much. Only five participants (17.9%) said that it is easy to make multimedia available in the language classroom. The highest majority of the subjects, however, have confirmed that it is difficult to make educational technologies available in Algerian language classes, with fourteen participants (50%) ticking the choice "difficult" and seven participants (25%) opting for the choice "very difficult". Two teachers did not answer this question.

Figure 5. 20 Making Multimedia Available in the Algerian Language Classroom



Effective implementation of CBA and MIT requires availability of multimedia and educational technologies. Institutions are then urged to provide teachers with the necessary media if they aspire for optimal education.

5.6 Summary of Findings

Analysis of the teachers' questionnaire data helped in yielding useful and valuable information. CBA was not deemed, according to most participants, as highly effective (findings from *question 8*). Although it was revealed that the majority of the sample (twenty four participants, i.e., 85.71 %) claim to possess at least basic knowledge about CBA, only six respondents, i.e., 21.43%, revealed that they received training on CBA in workshops. Such blatant lack of practical knowledge and training on CBA added to the low usage frequency of the approach by the respondents (no teacher ticked the choice "always" in *question 7*) justify the researcher's questioning of the participants' answers to *question 8*.

The results revealed as well that although the majority of teachers (92.9%) value highly the speaking skill, this is not all the time reflected in their teaching practices. According to some of the responses provided by the participants, teachers admitted that "*Less much time is devoted to the speaking classes*" and that "*More emphasis is put on other skills as writing*". In addition to that, at least eight participants (28.57%) could not make a decision concerning their students' level of speaking. This can be an indication that their classes do not afford students enough talking time or that the evaluation of learners' oral performance, despite its importance in the teaching/learning process, is not adequately valued. An answer to why the speaking skill is not sufficiently catered for in these teachers' classes can be also found in *item 10* results. It was revealed that the physical properties that characterize most of the EFL Algerian classrooms (overcrowded classes, dearth of necessary teaching aids and media, and the difficulty with

organizing group work because of traditional desk arrangement) make it hard for teachers to address satisfactorily such an important skill. As it is believed that the adoption of CBA can help with overcoming such problems, the researcher recommends that educational institutions take necessary measures to improve pre-service and in-service teachers' knowledge (both theoretical and practical) about CBA.

Concerning teachers' familiarity with MIT, only fourteen respondents (50%) indicated that they are aware of the theory. Unfortunately, although most teachers manifested great eagerness to learn more about MIT, results came to confirm again the scantiness of practical training made available to pre-service teachers by educational institutions and relevant authorities. No participant received training on MIT in a workshop. In addition to teachers' lack of knowledge, another problem that may impede effective implementation of MIT in our language classrooms is the unavailability of the required multimedia technologies.

Conclusion

This chapter discussed the findings we have reached using a questionnaire that was administered to EFL teachers at the English department – Larbi Ben M'hidi University. The questionnaire sought to investigate teachers' knowledge and application of CBA and MIT in their language classes. With the help of the teachers' questionnaire, the researcher attempted to gather as well information concerning teachers' perceptions of the speaking skill and suggest more effective ways (ones that are particularly CBA and MIT-based) to improve learners' oral communication skills.

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CHAPTER SIX: Implementation of the Quasi-experimental Design and Analysis of the Results

Introduction

This chapter presents the main procedures followed by the researcher implementing the quasi-experiment and analyzing its results. The experiment was used to test the hypotheses set out at the beginning of study. It stands as the most important part of the research and it was conducted in order to investigate the effects implementation of CBA and MIT may have on EFL learners' achievement, their speaking skill in particular.

6.1 Research Methodology

6.1.1 Choice of the Method

To achieve the main aim of this study, which is investigating the effect of three different teaching styles on learners' speaking performance in a specific topical knowledge test, the researcher opted for a quasi-experimental design. "Experiments constitute a very powerful technique for the investigation of causal links between different things, and this is why they are ideal for testing causal hypotheses" (Sani & Todman, 2006 p.6). In this study, we aimed at examining how change in teaching style (we implemented three different teaching styles that are going to be further described in detail later) affects the development of learners' ability to express knowledge of a specific academic content orally. The research is merely quasi-experimental because the participants were not randomly chosen by the researcher; they were rather assigned to different groups by the English department administration at Larbi Ben M'hidi University.

6.1.2 Participants

Participants in this study are first year LMD students from the department of English at Larbi Ben M'hidi university in the academic year 2015/2016. Three groups were selected and assigned randomly to control and experimental groups "A" and "B". Only sixteen students from each group were part of the study because the researcher had to eliminate learners who did not attend regularly, learners who did not carry out the tasks required of them, and those who did not take the pre and/or post test.

6.1.3 Instrumentation

The present study investigates whether difference in teaching style would affect learners' speaking performance in a linguistics class. Thus, the research was an attempt to establish a causal relationship between two variables:

-The dependent variable, which is learners' development of the ability to express knowledge of a specific academic content orally.

-The independent variable, which is, as stated before, teaching style. The independent variable in this study has three levels:

- 1) Teaching using the traditional method where students are passive receivers of information.
- 2) Teaching by implementing the principles of CBA.
- **3**) Combining the principles of CBA and MIT.

Experimentation was, therefore, used as the main method for gathering data and testing the research hypotheses which were formulated as follows:

H₁: Experimental group *A* will outperform the control group in the specific topical knowledge speaking test.

H₂: Experimental group B will outperform both the control group and experimental group A in the specific topical knowledge speaking test.

And the null hypothesis which was formulated as:

Ho: 'Change in the teaching style will have no effect on students' development of speaking performance on a specific topical knowledge test'. In statistical terms, there will be no statistically significant difference between learners' performance on the specific topical knowledge speaking test across the three groups.

The schema of the study was organized in the following way:

The design: quasi-experimental

Control group: 16 students.

Experimental group A: 16 students.

Experimental group B: 16 students.

Duration: The study was carried out over the whole academic year 2015/2016. Students of the three groups took the pre-test in the second week of September 2015 and the post-test was administered in the first week of May 2016. The total number of treatment sessions was twenty five sessions; one hour and a half per week.

6.2 The Procedure

The study began by selecting, randomly, three groups: a control group and two experimental ones. Then, the research went through the following three important phases:

6.2.1 The Pre-test

The speaking test was designed and developed by the researcher. This pre-test was administered to three intact groups during the second week of September, 2015 at the level of the English department at Larbi Ben M'hidi university- Oum el Bouaghi. It was in the form of an interview and it was comprised of two main parts. First, a warm up phase where students were asked some biographical questions just to prepare them and make them feel more relaxed and comfortable. After that, participants were asked more specific questions (six questions precisely) about language and linguistics (Check Appendix C).

The main purpose of the pre-test was to assess learners' background knowledge in that specific field, linguistics, before the implementation of three different instructional methods in order to investigate the effect of each teaching style on the development of participants' ability to express knowledge of a specific academic content orally.

Students' performance on the pre-test was evaluated according to a sixteen-point grading scale. The researcher relied on three main criteria to assess learners' performance:

-Accuracy (5 points)

-Fluency (5 points)

-Specific topical knowledge (6 points)

Accuracy and fluency were evaluated according to two five-scale checklists respectively (check Appendix E) and specific topical knowledge was scored out of six because learners were asked six questions (about language and linguistics); one point for each correct and complete answer.

It is worth mentioning that the researcher did not score the pre-test on the spot; the participants' speaking performance was recorded and evaluated later according to the aforementioned criteria.

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6.2.2 The Treatment

After the administration of the pre-test, experimental group A and experimental group B underwent a treatment period which lasted the whole academic year 2015/2016, precisely, twenty five weeks with one session of ninety minutes per week. It is worth reiterating that the experiment was conducted in a linguistics class.

During that treatment period, two different teaching styles were implemented; each group received the same content using a different instructional method.

First, the instructional method that was used with experimental group *A* was competency based (figure 6.1). The teacher/researcher within this approach tried to move away from the traditional, teacher-centered methods that grant the learners no opportunity to take the initiative and exhibit their creativity. This approach is more learner-centered and therefore required students to be more active. Learners were all the time made aware of the objectives of each course beforehand and were therefore more responsible for their own learning since they had to collaborate together and with their teacher to reach those set objectives.

Figure (6.1	A Sa	mple	Lesson	Plan	for]	Exp	erime	ntal	Group) A

Lesson Title: Characteristics of Human Language
Department of English
Level: 1 st Year LMD
Time Frame: 90 mins x 3
Resources: Blackboard, chalk, handouts, paper/pencil.
Objectives:
- Students will be able to demonstrate understanding of, explain, and discuss concepts related to
the salient characteristics of human language with the whole class using coherent and cohesive

speech.	
Target CompetenciesInd- Be able to autonomously decipher complex- Hskiskidefinitions and linguists' statements aboutinffeatures specific to human language.argundindteatteat	ndicators Employ a number of higher-order thinking kills (such as deduction, guessing, making inferences, synthesis, analysis, evaluation and regumentation) in order to attain a good inderstanding of certain concepts independently (with the guidance of the eacher).
- Successful management of the event. - Successful management of the event. - U to aud - N usa - (th lan pre- - Cuu - A and - Engage in a variety of self-development activities. - mod act - A act - A - Management - Cuu - A - Cuu - Cuu - A - Cuu - A - Cuu - A - Cuu - A - Cuu - A - Cuu -	Demonstrate skill in optimizing content rganization. Use the appropriate strategies and techniques o successfully transfer knowledge to the adience. Make the students' background knowledge sable by relating it to the new tasks. Be cognizant of audience engagement hrough successful interpretation of body- inguage for example) while delivering a resentation. Change strategies midstream when the urrently used ones are not working. Articulately respond to unrehearsed comments ind questions during and after the presentation Plan for the use of self-development rategies. Demonstrate willingness to experiment, hodify, and evaluate when applying newly equired knowledge and skills Critically reflect on own actions and experiences to identify areas for personal rowth. Achieve personal growth by accepting and eting upon feedback received from the teacher ind peers.

Procedure:

Phase 1:

- Students will be required to prepare reports about seven salient language characteristics and present them in class (the characteristics are: Creativity, displacement, duality, cultural transmission, arbitrariness, discreteness, prevarication).

- Each student will be given the freedom to choose his partner and then students and the teacher will discuss choice of the topics (i.e., the characteristics) each pair will work on.

- Students are made aware of the course objectives and competencies they are required to achieve.

Phase 2:

- The teacher makes it clear that students should abide by the following instructions when they make class presentations:

- > Do not just read and you are invited to improvise.
- Use your voice and body effectively. You have to be intelligent in using the appropriate verbal and non-verbal aspects that will help you get your audience attention and succeed in getting your message across.
- Make your presentation more interactive. You can achieve this purpose resorting to such techniques as asking questions, making polls, and brainstorming in order to build on what the audience have as background information to reach the new information.
- > Tend to your classmates' needs and explain further what they cannot fathom.
- Be alert to your classmates' body language and facial expressions and make a good interpretation of such cues. Provide more clarification in case such non-verbal aspects indicate that further explanation is required.

Phase 3:

- Students will make the class presentations following the aforementioned instructions.

- The teacher should not interfere. Only if necessary should he provide students with some indirect feedback to put them on the right track.
Phase 4:

- The teachers provides students with feedback on their performance and re-explains the concepts that have been mis-explained by students.

Second, with experimental group *B*, an instructional design where MI-based techniques, coupled with CBA, was implemented (figure 6.2). Combining the learner-centered approach (CBA) and theory (MIT) made learners' roles in the classroom exceed being plain passive receivers of knowledge. Furthermore, the implementation of MI-based instruction guaranteed more variation; it allowed students to perceive information and deploy their skills in a multitude of ways across various domains.

Figure 6. 2 A Sample Lesson Plan for Experimental Group B

Lesson The: Characteristics of Human Language	Lesson	Title:	Characteristics	of Human	Language
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Department of English

Level: 1st Year LMD

Time Frame: 90 mins x 3

Resources: Overhead projector, Computer, speakers, videos, songs, internet, blackboard, chalk, handouts, paper/pencil.

Objectives:

- Students will be able to demonstrate understanding of, explain, and discuss concepts related to the salient characteristics of human language with the whole class using coherent and cohesive speech.

Target Competencies	Indicators
- Be able to autonomously decipher complex definitions and linguists' statements about features specific to human language.	- Employ a number of higher-order thinking skills (such as deduction, guessing, making inferences, synthesis, analysis, evaluation and argumentation) in order to attain a good understanding of certain concepts independently (with the guidance of the teacher).

- Successful management of the event.	- Demonstrate	skill in	optimizing content
	organization.		1
	- Use the appropr	riate strate	egies and techniques
	to successfully audience	transfer	knowledge to the
	audience.		
	- Make the stude usable by relating	ents' back to the r	kground knowledge new tasks.
	- Make good use	of technol	ogical aids.
	- Be cognizant (through success language for expresentation.	t of auc sful inter cample)	lience engagement pretation of body- while delivering a
	- Change strate currently used on	egies mic es are not	dstream when the working.
	-Articulately resp and questions dur	ond to un ing and af	rehearsed comments fter the presentation.
- Engage in a variety of self-development activities.	- Plan for the strategies.	e use of	f self-development
	- Demonstrate modify, and eva acquired knowled	willingne iluate wh lge and sk	ss to experiment, en applying newly ills
	- Critically ref experiences to growth.	lect on identify	own actions and areas for personal
	- Achieve persor acting upon feedb and peers.	hal growth back receiv	h by accepting and ved from the teacher
Procedure:		Intell	igences Engaged
Phase 1:			
- Students will be required to prepare reports at	oout seven salient	VL, LM,	, IR, IA, N.
language characteristics and present them	in class (the		
characteristics are: Creativity, displacement,	duality, cultural		
transmission, arbitrariness, discreteness, prevaric	ation).		

- Each student will be given the freedom to choose his partner and	
then students and the teacher will discuss choice of the topic (i.e.,	
the characteristics) each pair will work on.	
- Students are made aware of the course objectives and	
competencies they are required to achieve and master.	
Phase 2:	
- The teacher makes it clear that students should abide by the	VL, LM, IR, IA, BK, SV
following instructions when they make class presentations:	
> You should incorporate educational technologies in your	
presentation: PowerPoint, videos, songs, pictures, etc.	
Do not just read and you are invited to improvise.	
\succ Use your voice and body effectively. You have to be	
intelligent in using the appropriate verbal and non-verbal	
aspects that will help you get your audience attention and	
succeed in getting your message across.	
Make your presentation more interactive. You can achieve	
this purpose resorting to such techniques as asking	
questions, making polls, and brainstorming in order to	
build on what the audience have as background	
information to reach the new information (students are	
allowed to use dictionaries and the internet).	
> Tend to your classmates' needs and explain further what	
they cannot fathom.	
➢ Be alert to your classmates' body language and facial	
expressions and make a good interpretation of such cues.	
Provide more clarification in case such non-verbal aspects	
indicate that further explanation is required.	

Phase 3:	
- Students will make the class presentations following the	VL, LM, IR, IA, BK, SV,
aforementioned instructions.	M, N
- The teacher should not interfere. Only if necessary should he	
provide students with some indirect feedback to put them on the	
right track.	
Phase 4:	
- Students' performance in "phase 3" is tape recorded and in this	VL, LM, IR, IA, BK, SV, N,
phase (4) the tapes will be played giving each student the	М
opportunity to self-evaluate his presentation and also comment on	
his classmates' performance.	
- If necessary, the teacher interferes and provides feedback (with	
the priority given to indirect feedback).	

When implementing MIT, the researcher took account of three main factors: a) Content of the course, b) age of the students and c) means available to the researcher.

The researcher made sure that the way he engaged experimental group B MI, as illustrated in lesson plans B, was appropriate to the course content and to the learners' age. For example, it was difficult to incorporate a large number of activities from the bodily-kinesthetic or musical domains. If it were a general English course, more diversification would have been possible, if not needed, but since it was about presenting specific content lectures, we had to choose activities and techniques that match the nature of the content covered in this module.

The control group, it should be pointed out, received no treatment. Over the same period of time, students of this group were taught using the traditional method; learners were merely passive recipients of information. A sample lesson plan used with the control group is presented in figure 6.3.

Figure 6. 3 A Sample Lesson Plan for the Control Group

Lesson Title: Characteristics of Human Language
Department of English
Level: 1 st Year LMD
Time Frame: 90 mins x 3
Resources: Blackboard, chalk, paper/pencil.
Objectives:
- Students will acquire more knowledge about the phenomenon under study in linguistics, that is
"language".
- Learners will be able to understand what makes human language unique, compared to other
species' systems of communication, through the identification of its salient features.
Procedure:
-The teacher will provide students with information about a number of characteristics linguists
claim to be specific to human language.
- The teacher will explain those characteristics one at a time. Clarifying on key words in each
definition and providing examples which illustrate that animals' systems of communication lack
the following features:
1- Creativity
2- Displacement
3- Duality
4- Cultural transmission
5- Arbitrariness
6- Discreteness
7- Prevarication

6.2.3 The Post-test

The post-test took the same form as the pre-test, an interview. It was therefore comprised of two main parts: First, a warm up phase where students were given the chance to be readied and relaxed. After that, they were asked six questions that specifically relate to language and linguistics; questions similar to the pre-test questions. In order to eliminate the possibility that it is only the learners' memorization that is being tested, questions from the pretest were paraphrased by the researcher to ensure that participants taking the post-test will be rather tested on their understanding of the materials. The post-test was administered in the first week of May, 2016.

Similar to the pretest grading procedure, the post-test was not scored by the time learners answered the questions. Students' responses were recorded and evaluated later according to the same criteria used in scoring the pre-test (accuracy (5/5), fluency (5/5), and specific topical knowledge (6/6)). (Check Appendix E)

It should be reiterated that the researcher selected only 16 students to eventually take the posttest. Some participants were eliminated due to the following reasons:

- Some students did not take the pretest and/or the posttest so it was not possible to make them part of the study; the progress they could have made during the treatment period could not be traced or documented.
- Some students (from experimental groups *A* and *B*) did not attend regularly and others did not carry out the projects or the home-works they were assigned. Eliminating this category of subjects was an obvious decision as they cannot be considered as students receiving the treatment implemented in this study.

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6.3 Data Analysis and Discussion

SPSS version 21 was used to describe and analyze data for this study. To make the reading and interpretation of data easier and more organized, we went through the following steps:

- The researcher started by carrying out some necessary descriptive statistics;

- First, an account of the participant's scores in the pre-test and post-test was reported.
- Second, data obtained from the three groups (the control group and experimental groups A and B) in the pre and post-tests were compared via the calculation of the mean, median, mode, standard deviation and frequency distribution of scores.

- After that, another set of statistical measures, known as inferential statistics, were used to examine the relationship between the variables of the study. So:

- The researcher conducted a between groups one way Analysis of Variance (ANOVA) to test the null hypothesis.
- After that, to test the alternative hypotheses, compare between the results of the three groups in the post-test, and determine which group means are significantly different from each other, we undertook a planned comparisons test.

6.3.1 Scores Frequency Distribution

As mentioned earlier, participants' performance in both the pre-test and the post-test were graded out of sixteen (16) and their results were as follows:

6.3.1.1 Scores Frequency Distribution of the Three Groups in the Pre-test

Tables 6.1, 6.2, and 6.3 illustrate that pre-test scores in the three groups ranged from "5" to "7.5".

Table 6. 1

The Control Group Scores Frequency Distribution in the Pre-test

		Frequency	Percent	Valid	Cumulative
				Percent	Percent
	5.00	2	12.5	12.5	12.5
Valid	5.50	3	18.8	18.8	31.3
	6.00	6	37.5	37.5	68.8
	6.50	4	25.0	25.0	93.8
	7.00	1	6.3	6.3	100.0
	Total	16	100.0	100.0	

Table 6.2

Experimental Group A Scores Frequency Distribution in the Pre-test

		Frequency	Percent	Valid	Cumulative
				Percent	Percent
	5.00	3	18.8	18.8	18.8
Valid	5.50	3	18.8	18.8	37.5
	6.00	7	43.8	43.8	81.3
	6.50	1	6.3	6.3	87.5
	7.00	1	6.3	6.3	93.8
	7.50	1	6.3	6.3	100.0
	Total	16	100.0	100.0	

Table 6.3

Experimental Group B Scores Frequency Distribution in the Pre-test

		Frequency	Percent	Valid	Cumulative
				Percent	Percent
	5.00	3	18.8	18.8	18.8
Valid	5.50	4	25.0	25.0	43.8
	6.00	4	25.0	25.0	68.8
	6.50	2	12.5	12.5	81.3
	7.00	3	18.8	18.8	100.0
	Total	16	100.0	100.0	

According to my experience, teaching this module (linguistics) for at least three years before carrying out this research, first year students come equipped with limited linguistic skills and enter this course having restricted background knowledge about that subject matter. I was, therefore, expecting the same from the participants in this study. This was confirmed after the pre-test was administered. Just from the scores frequency distribution tables, we can notice that, at the beginning of the study, the learners' achievements were low. Most importantly, we notice as well that students' levels in each group and also across the three groups were close; the difference between the highest mark and the lowest one was only 2.5.



Figure 6. 4 The Three Groups Scores Frequency Distribution in the Pre-test

From figure 6.4, we can see clearly that the control group and the two experimental groups' scores frequencies in the pre-test are approximately similar in most cases.

To get a clearer image and make a better reading of the data of the participants' scores in the pretest, we had to measure central tendency and represent the center of our data set. For that purpose, three basic statistics were used: the mean, the median, and the mode. It should be noted that we have also used standard deviation as a measure of dispersion.

The mean is the most commonly used measure of central tendency. It is the sum of scores divided by the total number of scores. As displayed in table 6.4, the three groups mean scores were as follows:

$$\overline{X}C_{\text{pre}} = 5.96$$
 $\overline{X}Ea_{\text{pre}} = 5.90$ $\overline{X}Eb_{\text{pre}} = 5.93$

(Where $\overline{X}C_{pre}$ refers to the control group mean value, $\overline{X}E_{apre}$ refers to experimental group A mean, and $\overline{X}E_{pre}$ refers to experimental group mean score).

We notice here that the mean values of the three groups are very close and the difference between them is not significant.

Table 6.4

		Control Gr Pre-test	Experiment al Gr A Pre- test	Experiment al Gr B Pre-test
	Valid	16	16	16
N	Missing	0	0	0
Mear	n	5.9688	5.9063	5.9375
Media	an	6.0000	6.0000	6.0000
Mode	e	6.00	6.00	6.00
Std. [Deviation	.56181	.68845	.70415

Mean, Median, Mode, and Standard Deviation of the Three Groups in the Pre-test

In addition to that, Table 6.4 illustrates that the most repeated value (*the mode*) in the control group and the experimental groups as well was "6". The *median* was also the same across the three groups, "6".

The distribution of data is symmetric, meaning that both halves of the distribution curve around the midpoint are mirror images of each other, because the mean and the median (of the three groups) were at approximately the same point (also because the standard deviation in the three groups is small: 0.5/0.6/0.7 respectively). This is illustrated graphically in histograms 6.1, 6.2, and 6.3:



Histogram 6. 1 Control Group Scores Frequency Distribution in the Pre-test



Histogram 6. 2 Experimental Group A Scores Frequency Distribution in the Pre-test

Histogram 6. 3 Experimental Group B Scores Frequency Distribution in the Pre-test



The collected data demonstrate clearly that achievement scores of students from *the control group*, *experimental group* A, and *experimental group* B in the pre-test were comparable

to a great extent. We can safely declare that students, across the three groups, had approximately the same proficiency level before the treatment period.

6.3.1.2 Scores Frequency Distribution of the Three Groups in the Post-test

As displayed in tables 6.5, 6.6, and 6.7, participants' post-test scores ranged from "6" to "9" in the *control group*, from "7.5" to "13.5" in *experimental group A*; and from "10" to "14" in *experimental group B*.

Table 6. 5The Control Group Scores Frequency Distribution in the Post-test

		Frequency	Percent	Valid	Cumulative
				Percent	Percent
	6.00	2	12.5	12.5	12.5
Valid	6.50	2	12.5	12.5	25.0
	7.00	6	37.5	37.5	62.5
	7.50	3	18.8	18.8	81.3
	8.00	2	12.5	12.5	93.8
	9.00	1	6.3	6.3	100.0
	Total	16	100.0	100.0	

Table 6. 6Experimental Group A Scores Frequency Distribution in the Post-test

		Frequency	Percent	Valid	Cumulative
				Percent	Percent
	7.50	1	6.3	6.3	6.3
	8.50	1	6.3	6.3	12.5
valid 1 1 1 1 1	9.00	1	6.3	6.3	18.8
	9.50	1	6.3	6.3	25.0
	10.00	1	6.3	6.3	31.3
	10.50	1	6.3	6.3	37.5
	11.00	1	6.3	6.3	43.8
	11.50	1	6.3	6.3	50.0
	12.00	2	12.5	12.5	62.5
	12.50	4	25.0	25.0	87.5

13.00	1	6.3	6.3	93.8
13.50	1	6.3	6.3	100.0
Total	16	100.0	100.0	

Table 6. 7	
Experimental Group B Scores Frequency Distribution in the P	ost-test

		Frequency	Percent	Valid	Cumulative
				Percent	Percent
	10.00	2	12.5	12.5	12.5
	11.50	1	6.3	6.3	18.8
12.00 12.50	2	12.5	12.5	31.3	
	2	12.5	12.5	43.8	
valid	13.00	5	31.3	31.3	75.0
	13.50	3	18.8	18.8	93.8
	14.00	1	6.3	6.3	100.0
	Total	16	100.0	100.0	





Table 6.8 shows that students from *experimental group A* and *experimental group B* have clearly outperformed *the control group* students. And participants from *experimental group B*, in turn, have outperformed *experimental group A* students.

Table 6.8

		Control Group	Experiment	Experiment al Group B
		Post-test	Post-test	Post-test
NI	Valid	16	16	16
N Missing	0	0	0	
Mear	ı	7.1563	11.1250	12.5000
Media	an	7.0000	11.7500	13.0000
Mode	è	7.00	12.50	13.00
Std. I	Deviation	.7690	1.7750	1.1690

Mean, Median, Mode, and Standard Deviation of the Three Groups in the Post-test

There is a considerable difference between the mean scores of the three groups:

 $\overline{X}C_{post} = 7.15$ $\overline{X}Ea_{post} = 11.12$ $\overline{X}Eb_{post} = 12.5$

(Where $\overline{X}C_{post}$ refers to the control group mean value, $\overline{X}Ea_{post}$ refers to experimental group A mean, and $\overline{X}Eb_{post}$ refers to experimental group mean score).

We can notice from table 6.8 and histogram 6.4 that data obtained from the *control group* were normally distributed; the values of the *mean*, *median*, and *mode* (7.15, 7, and 7 respectively) were at approximately the same point with a small standard deviation (0.76). This means that students' scores in the *control group* did not vary too much.

Results recorded by experimental groups *A* and *B*, as clearly demonstrated in table 6.8 and histograms 6.5 and 6.6, show that data were slightly skewed to the left. We had the mean scores of both experimental groups to the left of the median, $\overline{X}Eapost = 11.12$ to 11.75 and $\overline{X}Ebpost$

=12.5 to 13 with relatively high standard deviations; 1.77 and 1.17 respectively. Consequent upon the finding that data were slightly skewed, the *mode* was considered as the best indicator of central tendency. Experimental group *B*'s mode (13) was higher than the modal value of data obtained from experimental group A (12.5).







Histogram 6. 5 Experimental Group A Scores Frequency Distribution in the Post-test

Histogram 6. 6 Experimental Group B Scores Frequency Distribution in the Post-test



To sum up, the descriptive statistics carried out so far showed that the participants started from the same level because their scores in the pre-test were comparable to a great extent. Then, after going through the treatment period, students in the three groups made some improvement. It is clear though that while students' achievements have improved significantly in both *experimental groups A* and *B*, participants from the *control group* did not make a similar progress.

6.3.2 Comparative Evaluation of the Results:

To have a clearer image of the progress participants made in the control group, experimental group A, and experimental group B, students' achievements were contrasted. We carried out a comparison of the participants' recorded scores before and after the treatment period.

6.3.2.1 Comparison between the Control Group Pre-test and Post-test Results

Students of the control group took the pre-test in the second week of September, 2015, and started receiving linguistics courses right after that to take the post-test by the end of the academic year 2015/2016. The control group was taught using the traditional method (level 1 of the independent variable). So, students in this group, as mentioned before, were merely passive recipients of information introduced to them by the teacher/researcher.

We compared the results of the control group participants in the pre-test and the pos-test and the difference in scores is displayed in table 6.9:

Table 6.9

Student	Pre-test	Post-test	Difference
1	5.5	6	+0.5
2	7	8	+1
3	6	7	+1
4	6	7	+1
5	6	6	+0
6	6.5	7	+0.5
7	5.5	7	+1.5
8	6	7	+1
9	6.5	6.5	+0
10	6	7.5	+1.5
11	5.5	7	+1.5
12	6.5	7.5	+1
13	5	7.5	+2.5
14	5	8	+3
15	6.5	9	+2.5
16	6	6.5	+0.5

Control Group Scores Difference

Two students (12.5 %) from the control group did not make any progress. Three students (18.75 %) made a progress of only half a point (0.5). 50 % of the participants in that group achieved an improvement of just one point or one point and a half (1/1.5). Two participants' scores increased by two points (2) and the ultimate progress a student achieved in the control group did not go beyond three points (3).

A graphical representation of those data is depicted in figure 6.6:



Figure 6. 6 Control Group Scores in the Pre-test vs Control Group Scores in the Post-test

Table 6. 10

Control Group Means in the Pre-test and the Post-test

Number of Participants	Mean Score of the Control Group in Pre- test	Mean Score of the Control Group in Post- test	Mean Difference
16	5.96	7.15	1.19

Teaching students using the traditional method did not help them make considerable improvement. As illustrated in table 6.10, the mean score difference, of that same group, between the pre-test and the post-test was just "1.19".

6.3.2.2 Comparison between Experimental Group A Pre-test and Post-test Results

The instruction *experimental group A* received during the treatment period was based on the principles of CBA. The teacher/researcher tried to make students in this group more than just containers to be filled with knowledge. They were rather active participants and dynamic contributors to the lecture. The treatment period lasted for the whole academic year preceded by a pre-test and followed by a post-test. Differences in achievements of experimental group A between the pre-test and the post-test are documented in table 6.11:

Table 6.11

Student	Pre-test	Post-test	Difference
1	5	7.5	+2.5
2	6	10	+4
3	5.5	9	+3.5
4	6	12	+6
5	6	12	+6
6	6.5	8.5	+2
7	7	12.5	+5.5
8	5.5	12.5	+7
9	6	10.5	+3.5
10	6	11.5	+5.5
11	5	11	+6
12	5	9.5	+4.5

Experimental Group A Scores Difference

13	6	13	+7
14	7.5	13.5	+6
15	5.5	12.5	+7
16	6	12.5	+6.5

The lowest improvement recorded in *experimental group A* was a progress by "2" points; made by one student (i.e.6 %). The highest improvement, on the other hand, was by "7" points and it was achieved by three participants (18.75 %). In between, some students attained a progress of different degrees "2.5" (one student ,i.e. 6%), "3.5" (two students ,i.e.12.5%), "4"(,i.e.one student 6%), "4.5" (one student,i.e. 6%), "5.5" (two students,i.e. 12.5%), "6" (four students,i.e. 25%), "6.5" (one student,i.e. 6%).

Figure 6. 7 Experimental GroupA Scores in the Pre-test vs Experimental GroupA Scores in the Post-test



As illustrated in table 6.12, students in the *experimental group A* made considerable progress after the treatment period.

Table 6. 12

Experimental Group A Means in the Pre-test and the Post-test

Number of	Mean Score of Experimental	Mean Score of Experimental	Mean Difference
Participants	Group A in Pre-test	Group A in Post-test	
16	5.90	11.12	5.22

The mean score of experimental groupA in the post-test increased by "5.22" compared to the mean score of the pre-test.

6.3.2.3 Comparison between Experimental Group B Pre-test and Post-test Results

Experimental group B, as was the case with the other two groups, took the pre-test in the second week of September, 2015. During the treatment period, students in that group were taught using CBA along with MIT. MI-based techniques and activities were essentially introduced to provide more variety and cater more for learners' different profiles. At the end of that treatment period, by the first week of May, 215; participants took the post-test and differences between students' results in the pre and post-tests are recorded in table 6.13:

Table 6.13

Experimental	Group	B Scores	Difference

Student	Pre-test	Post-test	Difference
1	6	10	+4
2	7	12.5	+5.5
3	7	12	+5

4	6.5	13.5	+7
5	5.5	13	+7.5
6	5.5	13	+7.5
7	5	11.5	+6.5
8	5.5	13	+7.5
9	6	13	+7
10	5	13.5	+8.5
11	5.5	12	+6.5
12	5	10	+5
13	6.5	13.5	+7
14	6	12.5	+6.5
15	7	13	+6
16	6	14	+8

Students in *experimental group B* made substantial development. The lowest difference was of "4" points, scored by one student. The highest progress was by "8" points. The highest majority of learners (15, i.e., 93.75%) made a progress of more than 5 points. This evolution is better illustrated in figure 6.8:



Figure 6. 8 Experimental Group B Scores in the Pre-test vs Experimental Group B Scores in the Post-test

Table 6. 14

Experimental Group B Means in the Pre-test and the Post-test

Number of	Mean Score of Experimental	Mean Score of Experimental	Mean Difference
Participants	Group B in Pre-test	Group B in Post-test	
16	5.93	12.50	6.57

Table 6.14 provides a clearer image of the progress made by the group taught using a teaching style that combined both CBA and MIT. The mean score of *experimental group B* in the post-test improved by "6.57" compared to the mean score of the same group in the pre-test.

6.3.2.4 Comparing the Three Groups Achievements in the Pre-test

The experiment was conducted on three intact homogeneous groups. These groups were comprised of participants who shared similar characteristics. The characteristic of utmost importance to us in this study was learners' proficiency level. The pre-test was conducted to evaluate students' abilities in expressing orally their knowledge about some fundamental linguistic concepts. As displayed in tables 6.15, 6.16, and 6.17, learners in this study made it from the same point of departure:

Table 6.15

Comparing the Mean Scores of the Control Group and Experimental Group A in the Pretest

Number of Participants in each Group	Mean Score of the Control Group in Pre-test	Mean Score of Experimental Group A in Pre-test	Mean Difference
16	5.96	5.90	0.06

Table 6.16

Comparing the Mean Scores of the Control Group and Experimental Group B in the Pretest

Number of Participants in each Group	Mean Score of the Control Group in Pre-test	Mean Score of Experimental Group B in Pre-test	Mean Difference	
16	5.96	5.93	0.03	

Table 6.17

Comparing the Mean Scores of Experimental Group A and Experimental Group B in the Pre-test

Number of Participants in each Group	Mean Score of Experimental Group A in Pre-test	Mean Score of Experimental Group B in Pre-test	Mean Difference	
16	5.90	5.93	0.03	

The difference between the mean scores of the three groups in the pre-test is very small.

Only a "0.06" margin separated the means of the control group and experimental group A in the pre-test. Also, the mean value of the control group was just "0.03" higher than the mean of

experimental group B. When comparing the means of experimental groups A and B, we found that they were very close as well; the difference between the two was merely "0.03".

So, this confirms again that students' achievements at the beginning of the study were highly comparable.

6.3.2.5 Comparing the Three Groups Achievements in the Post-test

We have already examined the three groups' performance on the pre-test and we came to the conclusion that results of students in that test were highly similar. After the treatment period, where each group was taught using a different teaching style, the post-test was administered and differences in achievements between the control group and the experimental groups A and B were documented in tables 6.18, 6.19, and 6.20:

Table 6.18

Comparing the Mean Scores of the Control Group and Experimental Group A in the Posttest

Number of Participants in each Group	Mean Score of the Control Group in Post-test	Mean Score of Experimental Group A in Post-test	Mean Difference	
16	7.15	11.12	3.97	

Table 6.19

Comparing the Mean Scores of the Control Group and Experimental Group B in the Posttest

Number of Participants in each Group	Mean Score of the Control Group in Post-test	Mean Score of Experimental Group B in Post-test	Mean Difference	
16	7.15	12.50	5.35	

Table 6.20

Comparing the Mean Scores of Experimental Group A and Experimental Group B in the Post-test

Number of Participants in	Mean Score of Experimental Group	Mean Score of Experimental	Mean Difference
each Group	A in Post-test	Group B in Post-test	

16	11.12	12.50	1.38

Experimental group A and *experimental group B* made considerable improvement compared to the *control* group with a mean difference of "3.97" between the *experimental group A* and the control group and "5.35" between the *control group* and *experimental group B*. Moreover, contrasting the two experimental groups' achievements showed that experimental group B outperformed experimental group A with a recorded "1.38" mean difference.

At this point, we came to the result that the *control group* which was taught using the traditional method was outperformed by *experimental group* A which was taught using CBA and that *experimental group* A was, in turn, outperformed by experimental group B which was instructed by implementing CBA and MIT. However, the numerical data obtained so far concern only the sample of the study. The statistical measures, *descriptive statistics*, employed so far do not enable us to make inferences; we cannot generalize results obtained from the sample to the whole target population yet.

Descriptive statistics are helpful in facilitating the task of summarizing complex numerical data but they cannot be sufficient for the researcher to draw conclusions and inferences from them especially when it comes to deciding about the relationship between the study's dependent and independent variables. For that purpose, it is necessary to perform another set of statistical measures known as inferential statistics.

6.3.3 Testing the Hypotheses

A research report would usually seek to generalize the findings of the study from the selected sample to a wider population. Large amounts of data can be made user-friendly by applying descriptive statistics but they cannot be enough if the purpose is to make the claim that results obtained from the sample are valid to the whole target population as well. To attain such an aim, implementing inferential statistics is indispensible.

"Inferential statistics are those that can be used to make inferences to the population that the sample is assumed to come from" (Larson-Hall 2010, p.44). They are, therefore, typical for testing hypotheses about relationships between variables and deciding whether any change on the dependent variable of the study is due to the manipulation the independent variable.

A massive number of statistical measures are available to the researcher and choice of the right kind of statistical analysis depends on the nature of the gathered data and on the particular questions the researcher is trying to answer (Crawley, 2015). The inferential statistics we decided to employ then are the following:

- **The between groups one way ANOVA**: We decided to use this statistical measure to test the null hypothesis because it the most appropriate one when the aim is to examine the difference between more than two groups.
- **The planned comparisons test**: Which is a test used to make all possible comparisons between the three groups' achievements. For that reason, it is a necessary procedure for testing the alternative hypotheses of the study.

6.3.3.1 Testing the Null Hypothesis

The main aim of this study is to investigate the relationship between two variables. First, students' performance on a specific topical knowledge speaking test; which is the dependent variable. Second, teaching style which is the independent variable.

The independent variable in this research is organized at three levels:

- Teaching using the traditional method.
- Teaching using CBA
- Teaching using CBA and MIT combined.

To conduct the research it was necessary to choose three groups to be the sample of this study. The first group was taught in a traditional way (the control group). With the second group the teacher/researcher implemented CBA and with the third group both CBA and MIT where applied.

The null hypothesis of the research was then formulated as follows:

H₀: Change in teaching style (the traditional method, CBA, or CBA and MIT combined) will not have an effect on students' performance on specific topical knowledge speaking test.

Since we were planning on the examination of the difference between three groups mean scores, the most appropriate inferential statistical measure to employ was the *Between Groups One Way* ANOVA. Kerr, Hall, and Kozub (2002) stated that: "One-way ANOVAs are employed to address research questions that focus on the difference in the means of one dependent variable and one independent variable with two or more levels" (p. 79).

So, the null hypothesis predicted that there will be no statistically significant difference between the means of the control group, experimental group A and experimental group B in the post-test. To check the validity of this hypothesis we run a *between groups one way ANOVA* using SPSS software and the results were as follows:

Table 6.21

Descriptives

	Ν	Mean	Std.	Std. Error	95% Confidence		Minim	Maxim
			Deviation		Interval f	or Mean	um	um
					Lower	Upper		
					Bound	Bound		
Control Group Post-test	16	7.1563	.76852	.19213	6.7467	7.5658	6.00	9.00
Experimental GroupA Post-test	16	11.1250	1.77482	.44371	10.1793	12.0707	7.50	13.50
Experimental GroupB Post-test	16	12.5000	1.16905	.29226	11.8771	13.1229	10.00	14.00
Total	48	10.2604	2.62149	.37838	9.4992	11.0216	6.00	14.00

Table 6. 22

Test of Homogeneity of Variance Results

Levene	df1	df2	Sig.	
Statistic				
6.525	2	45	.003	

Table 6.22 displays the results of the homogeneity of variance test. "In testing the homogeneity of variance assumption researchers hope that the probability will be greater than 0.05 as they want to accept the null hypothesis that the variances are not significantly different" (Kerr, Hall, and Kozub, 2002, p.91). The Levene test we conducted found that the assumption of homogeneity of variance was not met, p = .003.

We carried out then an ANOVA test and results are illustrated in table 6.23:

Table 6. 23

ANOVA Test Results

	Sum of	df	Mean	F	Sig.
	Squares		Square		
Between Groups	246.385	2	123.193	72.363	.000
Within Groups	76.609	45	1.702		
Total	322.995	47			

The ANOVA revealed a significant between-group effect of teaching style change (the independent variable) on the participants' performance on a specific topical knowledge speaking test (the dependent variable), F(2, 45) = 72.36, P < .001.

Since the *p value* is less than .05 (which means that only 5% of the results is due to chance while 95% are likely to be sure) the null hypothesis is rejected.

6.3.3.2 Testing the Research Hypotheses

The ANOVA test allows the researcher to only check whether or not all of the groups' means are equal; it does not help in the identification of which means are significantly different from each other. To test the set alternative hypotheses, we had to contrast the control group mean with the two experimental groups means, and also compare between the means of experimental group A and experimental group B. For that purpose, we employed a planned contrasts test which is used when you wish to test specific preplanned hypotheses concerning the differences between a subset of your groups (Tavakoli 2012, p. 17).

The research hypotheses were formulated in the following way:

H₁: Experimental group *A* will outperform the control group in the specific topical knowledge speaking test.

H₂: Experimental group B will outperform both the control group and experimental group A in the specific topical knowledge speaking test.

Tables 6.24 and 6.25 display results of the planned comparisons test:

Table 6.24

Contrasts Coefficients

Contrast	Group						
	Control	Control Experiment Experiment					
	Group	al GroupA	al GroupB				
	Post-test	Post-test	Post-test				
1	1	-1	0				
2	0	1	-1				

Table 6.25

Planned Contrasts Test Results

		Contrast	Value of	Std. Error	t	df	Sig. (2- tailed)
			Contract				tanoa)
Scores	Assume equal variances	1	-3.9688	.46131	-8.603	45	.000
		2	-1.3750	.46131	-2.981	45	.005
	Does not assume equal variances	1	-3.9688	.48352	-8.208	20.434	.000
		2	-1.3750	.53131	-2.588	25.954	.016

Because a Levene Test found that the homogeneity of variance assumption had been violated, p=.003, hypothesis tests were based on unequal variances (we should, therefore look at results on the bottom line of table 6.25).

A significant effect was found for the first comparison, which contrasted the control group (M=7.15, SD=.77) with experimental groupA (M=11.12, SD=1.77), [t(20.43) = -8.20, p < .0001]. The second test compared experimental groupA with experimental groupB (M=12.5, SD=1.17), this comparison was also significant [t(25.95) = -2.58, p = .0016]

Conclusion

In order to test the research hypotheses, the researcher conducted a quasi-experimental study that sought to investigate the relationship between two variables: teaching style (the

independent variable) and learners' performance on a specific topical knowledge speaking test (the dependent variable). The quantitative data gathered using the pre and post-tests were submitted to a set of descriptive and inferential statistics, and analysis of the results confirmed the causal relationship that exists between the two aforementioned variables. We came to the conclusion that the teaching style implemented affects students' development of the speaking skill. On specific topical knowledge speaking test, Students who were taught using an instructional design that draws on both CBA and MIT outperformed students who were taught using the traditional method.

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CHAPTER SEVEN: Conclusions, Implications, and Recommendations

Introduction

This chapter sums up the research findings, discusses its main implications, and suggests a number of guidelines that may inspire innovation and lead to successful application of CBA and MIT. This chapter presents as well the study's key weaknesses. Reflecting upon and evaluating ones' own research is an important step; it can instigate endeavor to conduct further research. So, like any other study, this research has some limitations that will be acknowledged.

7.1 Pedagogical Implications

7.1.1 Promotion of Autonomous Learning

The CBA+MIT intervention provided students with an abundance of personally meaningful authentic learning opportunities, opportunities that have improved their autonomy. Engaging students in such activities as role-plays, reports, and project works, where learners take charge of their own learning, had noticeable effects on students' willingness, self-concept, self-direction and management, critical thinking, and self-assessment.

Students were placed in an environment where they had to construct their own knowledge and understanding. By considering students' inclinations concerning the materials they prefer to work with and by making them reflect on and set goals, it was observed that learners' willingness and interest rose significantly. Self-direction and self-management skills were also addressed through the incorporation of activities and tasks that make the student observe, explore, create, and test new information independently. Employment of such a strategy was a powerful tool for the promotion of learner autonomy.
7.1.2 Enhancement of Student Engagement

The study proves that the implementation of student-centered approaches and theories, such as CBA and MIT, guarantees the elevation of students' engagement and active learning. When comparing students from the control group with their counterparts in the other groups, especially students with whom the CBA+MI-based intervention was used, the researcher noticed clearly that the instructional design that incorporates both CBA and MIT successfully improved learners' emotional, social/behavioral, and cognitive engagement.

It is undeniable that teacher's style and attitude may have a great impact on students' motivation and active engagement. It was noticed that teaching according to the principles of CBA and MIT helped in creating a safe learning environment. Employment of various teaching strategies, diversifying learning opportunities, catering for students' needs, and encouraging learners to take responsibility for their own learning played a considerable role in regulating students' affect. Negative feelings of boredom, hesitation, and anxiety were diminished to a great extent and the intervention positively affected students' reactions to the teacher, classmates and the course content.

Conscientizing students about the course objectives and allowing them to have a voice in determining the way those objectives should be achieved were among the various strategies used within the CBA+MI-based intervention. It was noticed that involving students in decision making had significant effects on improving the quality of student participation and interaction. Students were constantly making valuable contributions by carrying out assignments, raising interesting issues, getting involved in fruitful debates, and even engaging voluntarily in extracurricular activities. The researcher noticed as well that the intervention helped in building

strong teacher-student and student-student relationships. This was manifested in various ways, collaboration and consistent communication inside and outside the classroom for example.

Another engagement dimension is cognitive engagement. It entails willingness, strong desire and commitment to fathom complex concepts, master difficult skills, and achieve successful performance of the tasks at hand. In a traditional classroom, performance and completion of most learning tasks fall on the shoulders of the teacher. This generally results in students lacking interest in the course. The researcher observed, per contra, that the instructional design implemented with the experimental groups, especially experimental group B, allowed students to develop and deploy mental processes such as judging, problem solving, selective attention, self-evaluation, and self-management. Students' progressive development of self-regulated meta-cognitive strategies was an indication of a significant improvement at the level of this form of engagement.

7.1.3 Promotion of Creative Thinking

There is no need to point up or to argue for the importance of creative thinking. This is a competence everyone needs in both professional and personal lives. Creative thinking entails training individuals to be flexible in figuring out solutions. In order to develop our learners' creative thinking, we are required to adopt teaching methods that encourage students to be reflective, synthetic and analytical, innovative, and open-minded, to be problem solvers and decision makers. The CBA+MI-based strategies employed by the researcher in this study facilitated the development of such vital skill. Learners' divergent thinking was addressed by involving students in some activities where they had to collaborate together to decipher and discuss certain definitions of some complex concepts and come up with different interpretations, or when they were required to carry out project works and investigate certain controversial issues

in the field of linguistics. Creativity was also attended to by allowing students to express knowledge through a broad range of intelligences including linguistic, musical, logical/mathematical, spatial/visual, bodily-kinesthetic, naturalistic, interpersonal, and intrapersonal intelligences.

7.2 General Recommendations

7.2.1 Recommendations for Relevant Authorities and Educational Institutions

- Ongoing support from educational institutions plays an important role in optimizing teachers' performance. To improve teachers' theoretical and practical skills, and make them more knowledgeable about such learner-centered approaches and theories as CBA and MIT, support can come in many forms. Relevant authorities and educational institutions should join forces for successful planning of teacher preparation programs for pre-service teachers, induction programs for newly recruits, seminars, workshops, professional development programs, and teacher study groups.

- Implementation of CBA and MTI in our current teaching systems requires the availability of multimedia and educational technologies. Relevant authorities must assume their share of responsibility in facilitating educators' task and making such media accessible to teachers and learners. Knowing that the funding educational institutions in Algeria falls mainly on the shoulders of the government, relevant authorities have an important role to play in setting an ideal learning environment.

-It is becoming common knowledge now that employers require a workforce that effectively manages complex work roles and one that has the ability to make creative contributions. Educational institutions are therefore compelled to adopt educational systems that can build

strong partnerships with employers and initiate robust connections with local communities. CBE makes it clear that third parties should be viewed as important strategic partners. Determining course objectives, within the realm of CBA, follows employers' needs. Workplace requirements must be the primary concern of syllabus designers and employers should have a sense of ownership of the target competences along with performance standards.

7.2.2 Recommendations for EFL Teachers

For an effective implementation of CBA and MIT, teachers are advised to consider the following suggestions and recommendations:

- Learning needs assessment should always guide educational planning. Our teaching practices are supposed to help learners attain specific objectives and lesson plans should reflect the needs for which our students learn a second language. Students' 'lacks' and 'wants' should be taken into account, but the needs analysis process should better commence with a consideration of the skills and competences the workplace requires. These can be better identified if stakeholders and employers' professional opinions are consulted.

- Transparency regarding course objectives and performance standards is highly advisable. Teachers should, right from the beginning, make students aware of what is required from them.

- Teachers should consider students' inclinations. We should better teach to our students' strengths, make them choose the routes to achieve course objectives, and allow them to have a say regarding the learning processes they prefer to employ.

- Students' weaknesses, however, should also be attended to. I am not necessarily contradicting myself by advising teachers to help students conquer their fears and surmount their weaknesses.

It is good to consider learners' preferences, but to construct well-rounded students we should address both their strengths as well as their weak spots.

- Teachers are recommended to incorporate as much as possible authentic learning experiences. The likelihood of students acquiring more effective understandings and more convenient practical skills is higher if the learning tasks they carry out, inside or outside the classroom, mirror real-life contexts.

- Traditional authoritarian teaching styles should be discarded. Within modern learner-centered approaches and theories (CBA and MIT for example), educators should assume different roles: guiders, facilitators, and even co-learners. It is believed that students' achievements will improve significantly if power shifts to a more egalitarian classroom.

- Teachers are advised to alternate assessment techniques. It need not necessarily be a penciland-paper test all the time. It is recommended that teachers resort to multiple assessment forms ,such as observation, interviews, journals, and portfolios, in order to construct a complete picture of what students can do in a second language.

- Teachers should prioritize the development of learners' higher order thinking skills. Table 7.1 presents a number of suggestions teachers might find helpful for the improvement of students' critical thinking.

Table 7.1

Name of key skill	
Adopted denomination	Critical thinking
Other denominations	Critical capacity and self-criticism.
	Arguments conceiving and defending.
	To deliver judgments including reflections on relevant social, scientific or ethical

Template to develop critical thinking

	issues.			
	Willingness to enquire about one's own ideas and others'.			
	Critical point of view.			
	Critical and reflective thinking.			
De fi nition of the key skill				
Definition:	Skilled and active interpretation and evaluation of observations, communications,			
	information, and argumentation.			
Description	Ability to make informed judgments about their worth, as well as the value and			
	relevance of information.			
	Ability to make informed judgments or evaluations about the worth, validity and			
	reliability of opinions, ideas and knowledge, independently of one's own opinions.			
	Ability to examine processes, systems, objects, artefacts, issues and ideas in terms			
	of their component parts, being able to detect what is beside them.			
	Ability to maintain an attitude of doubt and questioning that contributes to			
	continuous evaluation of the subjects and ideas.			
	Ability to create a particular idea or perspective for an issue or question, and to			
	establish criteria to make an informed decision.			
Required key skills	Decision-making.			
Other skills developed from	Initiative and entrepreneurial spirit.			
this one	Self-confidence.			
key skill development				
Learning activities to	Lecture about the skill, its development and assessment.			
develop the skill	Problems, exercises and written evaluations done by peers/colleagues.			
	Debate about the different solutions to a given technical or mathematical problem.			
	Reflection exercises about practical cases exposed by the lecturer.			
	Student's evaluation of each section in a proposed exercise, test or exam.			
	Role-playing.			
	Explanation of the reasoning used in the assignments.			
	Detection and analysis of the mistakes made by peers.			
Assessment:				
Skill development level	Being able to analyze phenomena from different points of view.			
indicators	Ability to make inferences.			
	Ability to contrast different approaches.			
	Ability to distinguish intuitions and opinions from rigorous information.			
	Ability to recognize ideas and implicit principles.			

	Ability to discern the effects and the consequences of the facts with a wide
	perspective.
	Ability to build arguments based on rigorous information.
	Ability to generate reasoned value judgement.
	Ability to incorporate new points of view into an approach.
	Ability to evolve reasoning integrating new approaches.
	Ability to gather sufficient, credible, relevant information: observations,
	statements, logic, data, facts, questions, graphs, themes, assertions, descriptions,
	etc.
	Ability to follow where evidence and reason lead in order to obtain defensible,
	thoughtful, logical conclusions or solutions.
	Ability to identify the most significant implications and consequences of
	reasoning (positive and/or negative).
	Ability to detect and analyze mistakes made by the teacher and/or peers.
Assessment procedures	Instructor's evaluation of the solutions given to exercises, problems,
	demonstrations, etc.
	Instructor supervision of the learning process with feedback.
	Instructor's evaluation of the argument presented to defend a position in a debate,
	an exercise, a demonstration, etc.
Assessment instruments	Resolution of exercises, problems, papers, templates, etc.
	Skill self-assessment templates.
	Continuous assessment templates for readers.
	Activity scales or rubrics for co-evaluation, self-assessment or reader assessment.

Source: Terrón-López and García-García (2013, pp. 156-157).

- 'Two heads are better than one'. Successful implementation of CBA and MIT may hinge on the teacher collaborating with colleagues to come up with inventive ideas and strategies. A number of practices in that respect can help educators improve their teaching. Teachers are recommended to:

- Attend professional development programs, workshops, seminars, and courses on aspects of teaching.
- Observe other teachers and have their own teaching observed by other teachers.

- Get inspired by more experienced colleagues through holding frequent discussions about issues related to teaching practices.
- Self-evaluate one's own teaching and constantly reflect upon the educational practices employed inside the language classroom.

- An example of a lesson plan that incorporates both CBA and MIT (for a general language course) will be presented below:

Figure 7. 1 A Suggested CBA+MIT Based Lesson Plan

Topic: Police Road Stop

Level: 1st Year LMD

Time Frame: 90 minutes.

Objective: Students will learn how to use the lexical items they are provided with to perform a

police road stop role-play.

Aids: Overhead projector, computer, speakers, videos, flashcards, pictures.

Competencies: Managing Information, Managing Situations, Coexistence. **Intelligences Engaged:** VL, LM, IR, IA, BK, SV.

Procedure:

Phase 1:

- The teacher introduces the course objectives and sets the scene: a driver has been pulled over by a police officer.

- To inspire students and provide them with a performance model, the teacher plays a video of an authentic police-driver interaction at a traffic stop.

Phase 2:

- The teacher provides students with flashcards containing vocabulary and structures that may help them in performing the role-play.

- The teacher gives each student the freedom to choose his partner.

Each pair discuss among themselves and decide who will play the police officer and who will

play the role of the driver.

Phase 3:

- The students perform the role-plays in front of the whole class.

Phase 4:

- Students' performance is evaluated and learners are provided with feedback (from the teacher and peers).

7.3 Limitations of the Study

It has been noted before that effective application of CBA and MIT requires the availability of multimedia and educational technologies. The researcher in this study relied solely on his own resources, which are relatively limited, to make the implementation of competency based and MI-based techniques and strategies possible. Results could have been better if some support from the university authorities had been provided.

The lesson plans (incorporating CBA and MIT principles) were designed by the researcher, and to identify the competences and skills students need, the researcher relied mainly on introspection. Unfortunately, coordinating with potential employers in order to develop a more comprehensive list of competences and standards was beyond the researcher's grasp. It should also be pointed out as well that it would have been more realistic to make the acquisition of these competences stretch over at least the entire three-year license program which would require the collaboration of the whole department academic staff.

7.4 Suggestions for Further Research

This study was achieved through the implementation of a learner-centered instructional design that incorporated CBA and MIT, but it focused mainly on the effect the implemented

intervention on students' development of speaking within a specific academic subject-matter course. Further work is necessary to examine the effect of such an intervention on students' progress in other areas: students' affect for example.

It has been indicated in the previous section that one of the limitations of this study is that it was conducted over one academic year and only in one single module. Knowing that a more efficient application of CBA would necessitate the collaboration of the whole faculty teaching personnel, relevant authorities, and stakeholders, this study could be extended in a longitudinal way (to stretch over the full license or master's program) involving all concerned parties.

Conclusion

The major aim of higher education is to prepare a highly-skilled and qualified workforce. There is, in fact, no one single route to develop successful individuals, but it is believed that the implementation of CBE along with the integration of MIT into our current teaching systems can be one of the best ways to make our community deliver rounded citizens that can lead productive, prosperous lives. This study was an attempt to investigate whether students' achievements will be boosted if we incorporate teaching practices that draw on CBE and MIT principles. We had special interest in tracing learners' speaking skill development within a specific academic subject-matter course. To achieve such an aim, a quasi-experimental design was implemented at the level of the English department, Larbi Ben M'hidi university. Three intact groups were chosen randomly to take part in the study (a control group and two experimental groups, A and B). After the administration of the pre-test, which showed that students had almost the same proficiency level at the beginning of the study, the teacher/researcher employed three different teaching styles over the whole academic year 2015/2016. The control group received no treatment and was taught using the traditional method.

Experimental group *A* was taught using CBA, and experimental group B was taught using an instructional design that combined CBA and MIT. Participants were then post-tested and the results confirmed the research hypotheses which were formulated as follows:

H₁: Experimental group *A* will outperform the control group in the specific topical knowledge speaking test.

H₂: Experimental group B will outperform both the control group and experimental group A in the specific topical knowledge speaking test.

Investigation of the issue relied basically on the experiment results, but to gain more insight into the phenomenon under study, various data sources were triangulated and the researcher resorted to additional research instruments (that is the teachers' and the students' questionnaires) to collect further information. Data gathered using those instruments helped the researcher put his finger on the main problems that impede students' development of the speaking skill, which they consider very important, and therefore guided the lesson planning process (the lesson plans used with the experimental groups). Data have also revealed that most teachers' knowledge about CBA and MIT is extremely limited. Despite the great benefits that may accompany the application of CBA and MIT, most of our teachers are, unfortunately, not ready yet to adopt such innovative teaching approaches.

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Appendix A

THE STUDENTS' QUESTIONNAIRE

Dear student,

I hereby invite you to complete this questionnaire for the sake of research. Please read every statement carefully then tick the choice that you find most suitable. Feel free to add any relevant information for each question.

I really appreciate your cooperation and participation. Thank you very much indeed.

First Name:Family Name:					
• Gender:	●male	●female			
• Age:					
• Baccalaureate:	●literary	●scientific	●technical		
 Is learning English your choice? a. Yes b. No What is your major purpose in learning English? 					
a) To get a job					
b) To go for furth	ner studies				
c) To communicate with people and know more about English speaking communities					
3. How important is the speaking skill for you as an EFL learner ?					
a)unimportant	b) undecided	c) slightly import	ant d)important	e) very important	

> In case it is, why is speaking important as a language skill?

4. How often were you given the opportunity to speak in the classroom (at secondary school level) ?:

b) rarely e) always a) Never c) sometimes **d**) often 5. Were the topics you were asked to talk about: c) slightly interesting d) interesting **a**) not interesting **b**) undecided e) very interesting 6. Did you receive feedback on your response? •Yes()•No () 7. If your answer is "yes", who provided the feedback ? **b.** your peer or peers **c.** You do the revision by yourself a. the teacher 8. Do you prefer direct or indirect corrective feedback? • Direct corrective feedback () • Indirect corrective feedback () -Please justify: 9. How would you rate your level in speaking? a) weak **b**) undecided c) average **d**) good e) very good If you find that your level in speaking is not acceptable, can you say why?

10. To what extent does each of the following factors influence your speaking performance?

	not at all	undecided	to a small extent	to a moderate extent	to a large extent
Feedback during speaking activities					
Listening ability					
Motivation to speak					
Confidence					
Anxiety					
Topical knowledge					
Listeners' support					
Time for preparation					
Pressure to perform well					
Time allowed to perform a speaking task					

Further Suggestions or Comments

If you have any further suggestions, please share.

.....

Thank you for time

Appendix B

THE TEACHERS' QUESTIONNAIRE

Dear teacher,

I hereby invite you to complete this questionnaire for the sake of research. Please read every statement carefully then tick the choice that you find most suitable. Feel free to add any relevant information for each question.

I really appreciate your cooperation and participation. Thank you very much indeed.

► Gender: • Male ()	•Female ()	
Qualification:		
1. Experience in EFL teaching:	$v_{aars}(\cdot) = More then 5 v_{aars}(\cdot)$	
2. Have you ever had any trainin	in ELT (English Language Teaching) methods, approaches,	
and/or theories?		
• No ()	•Yes ()	
➢ If yes, how?		
•Self-study/Books ()	• Workshop () • Course ()	

3. On a scale of one to five, how would you rate the importance of the speaking skill? (1= unimportant, 2= undecided, 3= slightly important, 4= important, 5= very important)

	1	2	3	4	5
Importance of speaking					

Whatever your answer is, would you please justify:

.....
First- year students' level in speaking:

4. The level of first year students in speaking this year is:

Weak	Don't know	Average	Good	Very good

5. If compared to the previous years, the level of the students in speaking this year is:

Worse	Don't know	The same	Better	Much better

What causes that according to you? (in case your answer is "worse/better/much better") :

6. Have you ever learned about the competency based approach (CBA)?
• No ()
• Yes ()

If your answer is yes, how did you learn about it?
Book ()
Course ()
Workshop ()
From co-workers/friends ()

7. How often do you think you use CBA in your teaching?

Never	Not sure	Seldom	Sometimes	Always

8. If you do implement it in your teaching, to what extent do you think it is effective?

Not at all	Undecided	To a small extent	To a moderate extent	To a large extent

9. To what extent does each of the following factors influence your students' speaking performance?

	Not at all	Undecided	To a small extent	To a moderate extent	To a large extent
Feedback during speaking activities					

Listening ability			
Motivation to speak			
Confidence			
Anxiety			
Topical knowledge			
Listeners' support			
Time for preparation			
Pressure to perform well			
Time allowed to perform a speaking task			

10. To what extent does each of the following problems make the teaching of speaking difficult?

	Not at all	Undecided	To a small extent	To a moderate extent	To a large extent
It is too difficult to use authentic materials					
Classroom of mixed ability students					
Students insist on translating what is happening into their native language					
The teaching aids and media provided are not adequate for creating a healthy learning atmosphere					
The time specified for the lesson is not sufficient for performing a variety of activities.					
The size of the class is very large					
Students are not cooperating with the teacher in directing the lesson					
In traditional classrooms, the desks are organized in rows and it is difficult to organize group work					
Homework is good for students and the more time they spend working with English, the better they get at it. But the students do not usually do it					
Teachers are not fully competent in managing an oral English class					

11. Do you think the implementation of the competency-based approach (CBA) would help teachers and students overcome those problems?

Not at all	Undecided	To a small extent	To a moderate extent	To a large extent	
> Whatever y	our answer is (ex	xcept for "undeci	ded), would you	please justify:	•
12. Have you e	ver learned abou	t Gardner's mult	iple intelligences	s (MI) theory?	
First how	did you learn ab	out it?	kshon (•From co wor	kars/friands()
• DOOK ()	• Course	••••01	KSHOP ()	•110111 CO-WOI	()

13. Would you like to know more about MI theory?

Not at all	Undecided	To a small extent	To a moderate extent	To a large extent

14. How often do you think you use MI theory in your teaching?

Never	Not sure	Seldom	Sometimes	Always

15. Do you think that the use of multiple intelligence-based techniques in teaching would improve the teaching/ learning process?

Not at all	Undecided	To a small extent	To a moderate extent	To a large extent

> Whatever your answer is (except for "undecided), would you please justify:

16. To what extent is it easy or difficult to make multimedia available in Algerian language classrooms?

Very easy	Easy	Difficult	Very difficult	Impossible

CBA: It consists in developing the necessary generic or transversal (instrumental, interpersonal and systemic) competences and the specific competences pertaining to each profession. The aim is to endow students with scientific and technical knowledge, and enable them to apply such knowledge in diverse complex contexts. To this end, knowledge is integrated along with attitudes and values in ways that are appropriate for each student's personal and professional life (Sanchez & Ruiz, 2008, p. 33).

MIT: The theory contends that human intelligence is not a single complex entity or a unified set of processes. Instead, Gardner posits that there are several relatively autonomous intelligences, and that an individual's intellectual profile reflects a unique configuration of these intelligences (Chen, 2002, p. 1198).

Further Suggestions or Comments

If you have any further suggestions, please share.

Thank you for your time

Appendix C

THE PRE-TEST

A) Warm-up Questions:

- 1. Hello, Could you tell me your name please?
- 2. How is it going?
- 3. Where are you from?
- 4. Are you a good student?
- 5. Did you choose to study English? Why?

B) **Questions about Language and Linguistics:**

- 1. Do you have any idea what linguistics is? How can you define it?
- 2. Can you specify what is to be studied about language?
- 3. What is, according to you, the importance of studying linguistics?
- 4. How can you define language?
- 5. What is the importance of language? What do we use language for?
- 6. What makes human language distinct from other systems of communication?

Appendix D

THE POST-TEST

C) Warm-up Questions:

- 1. Hello, can you remind me of your name please?
- 2. How are you today?
- 3. Was studying English your choice?
- 4. Do you regret it/did you change your mind?

D) Questions about Language and Linguistics:

- 1. What is linguistics?
- 2. Can you specify what is to be studied about language?
- 3. How can you define language?
- 4. Can you explain how linguists' theories differed in identifying what the nature of language is?
- 5. What is the importance of language? What do we use language for?
- 6. What makes human language distinct from other systems of communication?

Appendix E

The	Specifications	for	the	Speaking	Skill	Test

Accuracy		Fluency	
Little or no language production	1	Little or no communication. Very hesitant	1
		and brief	
Poor vocabulary, mistakes in basic	2	Utterances sometimes difficult to	2
grammar, very strong foreign accent		understand	
Adequate but limited vocabulary, makes	3	Gets ideas across but hesitantly and briefly	3
obvious grammar mistakes, slight foreign			
accent			
Good range of vocabulary, occasional	4	Effective communication in short turns	4
grammar slips, slight foreign accent			
Wide vocabulary appropriately used,	5	Easy and effective communication, uses	5
virtually no grammar mistakes, native-like		long turns	
or slight foreign accent			

Appendix F

THE STUDENTS' QUESTIONNAIRE – PILOT

Dear student,

I hereby invite you to complete this questionnaire for the sake of research. Please read every statement carefully then tick the choice that you find most suitable. Feel free to add any relevant information for each question.

I really appreciate your cooperation and participation. Thank you very much indeed.

First Name:						
1. Gender:	●male	●female				
2. Age:						
3. Baccalaureate:	●literary	●scientific	●technical			
4. Is learning English	your choice?	a. Yes	b. No			
5. What is your major	purpose in learn	ing English?				
a. To get a job	b. To go	for further studies	c. To communicate with people			
6. Which of the follow from the most importa	ving skills do you ant to the least im	ı consider more imp portant):	oortant (rank them from 1 to 4 going			
a/ Listening						

b/ Speaking

c/ Reading

d/ Writing

7. For you, why is speaking important as a language skill? 8. How often were you given the opportunity to speak in the classroom (at secondary school level) ?: a. Often b. Sometimes c. Rarely d. Never 9. Were the topics you were asked to talk about: a. very interesting b. interesting c. not interesting d. not interesting at all 10. Did you receive feedback on your response? \bullet Yes () •No () **11.** If your answer is "yes", who provided the feedback ? a. the teacher b. your peer or peers c. You do the revision by yourself **12.** Do you prefer immediate corrective feedback ? •Yes (•No()) -Please justify: **13.** How would you rate your level in speaking? a. Highly proficient b. proficient c. adequate d. weak 14. If you find that your level in speaking is not acceptable, can you say why? 15. Which among the following factors influences your speaking performance more (rank them

from 1 to 10):

- Feedback during speaking activities
- Listening ability

- Motivation to speak
- Confidence
- Anxiety
- Topical knowledge
- Listeners' support
- Time for preparation
- Pressure to perform well
- Time allowed to perform a speaking task

Further Suggestion or comments

If you have any further suggestions, please share.

Thank you for time

Appendix G

THE TEACHERS' QUESTIONNAIRE - PILOT

Dear teacher,

I hereby invite you to complete this questionnaire for the sake of research. Please read every statement carefully then tick the choice that you find most suitable. Feel free to add any relevant information for each question.

I really appreciate your cooperation and participation. Thank you very much indeed.

Qualification:

1- Experience in teaching English:

• First year () • 2-5 years () • More than 5 years ()

2- Have you ever had any training in ELT (English Language Teaching) methods, approaches, and/or theories?

•Yes () • No ()

 \succ If yes, how?

•Self-study/Books ()	• Workshop ()	• Course ()
-----------------------	----------------	--------------

1. Which of the following skills do you consider more important? (Rank them from 1 to 4 going from the most important to the least important):

a/ Listening

b/ Speaking

c/ Reading

d/ Writing

Please justify:

.....

.....

First- year students' level in speaking:

2. The level of first year students in the previous years was:

a. weak () b.average () c. fairly good () d. good ()

3. The level of first year students in speaking this year is:

a. weak () b.average () c. fairly good () d. good ()

4. If compared to the previous years, the level of the students in writing this year is:

a. better b. the same c. worse d. don't know

5. Which among the following factors, do you think, influences your students' speaking performance more (Rank them from 1 to 10):

- Feedback during speaking activities
- Listening ability
- Motivation to speak
- Confidence
- Anxiety
- Topical knowledge
- Listeners' support
- Time for preparation
- Pressure to perform well
- Time allowed to perform a speaking task

6. Which among the following problems, do you think, teachers face more when teaching speaking? (Rank them from 1 to 10):

- It is too difficult to use authentic materials.
- Classroom of mixed ability students.
- Students insist on translating what is happening into their native language.
- The teaching aids and media provided are not adequate for creating a healthy learning atmosphere.
- The time specified for the lesson is not sufficient for performing a variety of activities.
- The size of the class is very large.
- Students are not cooperating with the teacher in directing the lesson.
- In traditional classrooms, the desks are organized in rows and it is difficult to organize group work.
- Homework is good for students and the more time they spend working with English, the better they get at it. But the students do not usually do it.
- Teachers are not fully competent in managing an oral English class.

7. Are first year students' weaknesses due to the reform undergone in middle and secondary education?

a. Yes b. Partly c. No d. don't know

8. Are the students' strengths due to the reform undergone in middle and secondary education?

a. Yes b. Partly c. No d. don't know

9. Do you think the implementation of the competency-based approach would help teachers and students overcome those problems ?

•Yes () •No () •Not sure ()

If your answer is yes, can you explain how ?

.....

10. Have you ever learned about Gardner's multiple intelligences (MI) theory?

•Yes () • No ()

➢ If yes, how did you learn about it?

• Book ()	• Course ()	•Workshop ()
------------	--------------	---------------

•From	co-workers/friends	())
-------	--------------------	----	---

11. If you read any books related to MI, mention the book(s), if	
possible	

12. Have	you ever res	earched abo	out MI theory?			
	•Yes ()				•No ()	
13. Woul	ld you like to	know more	e about MI theory?			
۰Y	es ()	•No()		•May	be ()	
If you	ı do not, why	v (not)? :				
14. Do yo	ou think you •Yes ()	use MI theo	ory in your teaching •Not sure ()	g?	•No ()	
15. If yes	s, how often a	lo you appl	y it in your lessons	?		
•Always(() •Ofte	en() •	Sometimes()	•Seldom()		
16. Do yo improve	ou think that the teaching/	the use of n learning pr	nultiple intelligence ocess ?	e-based technic	ques in teach	ing would
•Yes () •No () •N	ot sure ()			
If your a	nswer is yes,	can you exp	plain how ?			
		• • • • • • • • • • • • • • • • • • • •				

17. State the media that can engage learners' multiple intelligences:.....

.....

18. To what extent is it easy or difficult to make multimedia available in Algerian language classrooms?

•Very easy () •Easy () •Difficult () •Very difficult () •Impossible ()

Further Suggestion or comments

If you have any further suggestions, please share.

Thank you for time

يعتبر تدنى مستوى الطلبة و انخفاض مستوى التحصيل لديهم احد أهم التحديات التي يواجهها النظام التعليمي الجزائري. إن العوامل التي يمكن أن يعزي إليها نجاح الطلاب أو فشلهم متعددة وقد تكون منهجية التدريس في الواقع أعلى القائمة. تهدف هذه الدراسة إلى التحقق من الآثار المختلفة لأساليب التدريس على مستوى تحصيل الطلاب وبشكل أكثر تحديدا على تنميتها من مهارة التحدث ضمن درس أكاديمي محدد. يسعى الباحث إلى التحقيق فيما إذا كان أداء المتعلمين في اختبار محادثة خاص بمكاسب معر فية محددة سيتم تعزيزه إذا قمنا بتنفيذ تصميم تعليمي يتضمن مبادئ المقاربة بالكفاءات و نظرية الذكاءات المتعددة. وتحاول الدر اسة التحقيق في معرفة المعلمين وتطبيقهم للمقاربة بالكفاءات و نظرية الذكاءات المتعددة بالإضافة إلى در اسة تصورات المتعلمين والمدرسين حول أهمية مهارة التحدث والعوامل الأساسية والمشكلات التي تؤثر على اكتسابها. من أجل تحقيق أهداف البحث ، لجأنا إلى عدد من الأدوات ، وهي تصميم شبه تجريبي ، واستبيان للطلاب ، وإستبيان للمدر سين. أجريت التجربة على ثلاث مجموعات مختارة عشوائياً من طلاب السنة الأولى على مستوى قسم اللغة الإنجليزية بجامعة العربي بن مهيدي و قد ساعدت في اختبار فرضيات البحث: أن المجموعة التجريبية (أ) سوف تتفوق على المجموعة الضابطة في اختبار المحادثة الخاص بمكاسب معرفية محددة وان المجموعة التجريبية (ب) ستتفوق على كل من المجموعة الضابطة والمجموعة التجريبية (أ) في اختبار المحادثة الخاص بمكاسب معرفية محددة. من ناحية أخرى ، ساعد الاستبيانان في تحقيق الأهداف الثانوية للدر اسة. بينما سلط استبيان المدرسين الضوء على معرفة المعلمين واستخدامهم لمنهج المقاربة بالكفاءات و نظرية الذكاءات المتعددة. استكشف كل من الاستطلاعين مواقف الطلبة والمدرسين من مهارة التحدث والعوامل التي يعتقدون أنها تؤثر على تطورها. تكشف نتائج البحث أن مهارة التحدث تحظي بتقدير كبير من قبل الطلاب والمدرسين. تظهر نتائج التصميم شبه التجريبي أن الجمع بين المقاربة بالكفاءات و نظرية الذكاءات المتعددة يعطي نتائج أفضل في تحسين مهارة التحدث لدى الطلاب, ما يعني ان فرضيات البحث لدينا تم تأكيدها. غير ان نتائج استبيان المعلمين تشير ، للأسف ، إلى أن معرفه المعلمين بالمقاربة بالكفاءات و نظرية الذكاءات المتعددة محدودة. في ضوء النتائج التي توصل إليها الباحث ، تم طرح عدد من الاقتراحات لمساعدة المعلمين والمؤسسات التعليمية على التنفيذ الفعال للمقاربة بالكفاءات و نظرية الذكاءات المتعددة.

Resumé

Un défi difficile auquel le système éducatif algérien est confronté, concerne la sous-réalisation des étudiants. Les facteurs selon lesquels le succès ou l'échec des élèves peuvent être attribués sont multiples et la méthodologie d'enseignement peut en fait en haut de la liste. L'objectif de cette recherche est d'étudier l'efficacité différentielle des styles d'enseignement sur la réalisation des élèves, plus spécifiquement sur leur développement de la compétence de parler dans un cours spécifique de matière académique. Le chercheur Compte à déterminer si le rendement des apprenants sur un test de connaissances spécifiques sera amélioré si nous mettons en œuvre une conception pédagogique qui intègre les principes de l'approche par compétences et la théorie des intelligences multiples. L'étude tente d'étudier aussi bien les connaissances des enseignants et l'application de l'approche par compétences et la théorie des intelligences multiples en plus d'examiner les perceptions des apprenants et des enseignants quant à l'importance de la compétence orale et des principaux facteurs et problèmes qui influent sur son acquisition. Afin d'atteindre les objectifs de recherche, nous avons recouru à un certain nombre d'instruments, à savoir un modèle quasi-expérimental, un questionnaire pour les étudiants et un questionnaire pour les enseignants. La quasi-expérience a été menée sur trois groupes -choisis au hasardd'étudiants de première année au niveau du département d'anglais à l'Université Larbi Ben M'hidi. Ça a aidé à tester les hypothèses de recherche: que le groupe expérimental A surpasse le groupe de contrôle dans le test oral d'expression des connaissances spécifiques et que le groupe expérimental B surpasse à la fois le groupe de contrôle et le groupe expérimental A dans le test oral d'expression des connaissances spécifiques. Les deux questionnaires, d'autre part, ont aidé à réaliser les objectifs secondaires de l'étude. Bien que le questionnaire des enseignants jette quelque lumière sur la familiarité des enseignants et l'utilisation de l'approche par compétences et

la théorie des intelligences multiples, les deux sondages ont exploré les attitudes des élèves et des instructeurs envers la compétence orale et les facteurs qu'ils pensent influencent son développement. Les résultats de la recherche révèlent que la compétence orale est très appréciée tant par les étudiants que par les enseignants. Les résultats du modèle quasi expérimentale démontrent que la combinaison de l'approche par compétences et de la théorie des intelligences multiples donne de meilleurs résultats pour améliorer la compétence orale des élèves ; nos hypothèses de recherche ont été confirmées. Toutefois, les résultats du questionnaire des enseignants indiquent, malheureusement, que les connaissances des enseignants au sujet de l'approche par compétences et de la théorie des intelligences multiples sont limitées. À la lumière des conclusions auxquelles le chercheur est arrivé, un certain nombre de suggestions sont avancées pour aider les enseignants et les établissements d'enseignement à mettre en œuvre efficacement l'approche par compétences et la théorie des intelligences multiples.