

Peoples' Democratic Republic of Algeria
Ministry of Higher Education and Scientific Research
University Des Frères Mentouri – Constantine1
Faculty of Letters and Languages
Department of Letters and the English Language

**Teaching English as a Foreign Language Using Multiple
Intelligences, Cooperative Learning by Taking into Account
the Pupils' Perceptual Learning Styles: Case of First Year
Scientific and Literary Streams Pupils at Atti Abdelhafid
Secondary School in Oued Athmania**

**Thesis submitted to the department of Letters and English Language in candidacy for
the degree of Doctorat LMD in Didactics of Foreign languages**

Submitted by
Mrs. Imene CHEBRI

Supervised by
Prof. Hacène SAADI

Board of Examiners

Chairman : Prof. Nacif LABED University Frères Mentouri Constantine 1

Supervisor : Prof. Hacène SAADI University Frères Mentouri Constantine 1

Member: Prof. Riad BELOUAHEM University Frères Mentouri Constantine 1

Member : Prof. Said KESKES University of Sètif 2

Member :Prof. Hacène HAMADA ENS Constantine

Thesis defended on April 21st, 2019

DEDICATIONS

I gratefully and respectfully dedicate this thesis;

*To my beloved mother **Fatima**, who always gives me unconditional love and support. Thank you for believing in me! To my beloved father **Larbi**, the ever determined, eternally optimistic perfectionist.*

I am blessed for the strength that I feel because you loved me so adorably!

To my dearest husband for his patience;

*To the apple of my eye my son **Gheith**;*

“Your smile lights up the room as it has my life”

To my brothers and sisters;

To all my family;

To my friends and colleagues;



ACKNOWLEDGMENTS

Firstly, I am heartily grateful to my supervisor Prof. Hacène Saadi, whose genuine and unhesitating guidance, tender support, clear inspiration and feedback enabled me to expand an understanding of the topic throughout the development of the thesis.

I would like to express my sincere regards to the jury members, Prof. Nacif Labeled, Prof. Saïd Keskes, Prof. Hacène Hamada, and Prof. Riad Belouahem for their invaluable constructive feedback.

I owe my deepest gratitude to Prof. Farida Abderrahim for her help and guidance.

I am so grateful to the Head Master of Atti Abdelhafid Secondary School, Mr. Abdelmadjid Krbir for his encouragement and understanding during the whole period of research.

Particular thanks are due to my dearest pupils at Atti Abdelhafid Secondary School; who so willingly took part in this teaching experiment; indeed, it was an enjoyable journey. I also owe much to colleagues who trusted my potentialities to fulfill this work at the times when I doubted myself

Last but not least, I would like to thank my family; my lovely parents, my sisters and my brothers who stood by my side despite my short temperedness during my time of “hardship”

Your vote of confidence was what kept me through when all else seemed to fail.

There is no doubt in my mind that this would not be possible without your unwavering support and belief in me. He is the man behind this woman “My dearest father”. His words and sometimes just his smiles could and would erase the pain and stress of a perilous day.



Abstract

This research aims at investigating the effect of implementing Cooperative Learning (CL), Multiple Intelligences (MI), and Perceptual Learning Styles (PLS) on secondary school pupils' English language proficiency and attitude at Atti Abdelhafid High School. Thereupon, this investigation is based on the hypothesis that, if we implemented cooperative learning activities, incorporating the insights given by Gardner's theory of multiple intelligences, and the pupils' perceptual learning styles in secondary school EFL classrooms, these activities and assessments would have a positive effect on pupils' English language proficiency and attitude. To reach the overarching aim of our research and validate the hypothesis, a quasi-experimental study is adapted to two EFL classrooms (two experimental groups). A sample of 138 first year secondary school pupils (two classes from the scientific stream and two others from the literary stream) were divided into two control groups and two experimental groups and taught for a whole year (2013/2014). Many learning activities adapted from the first year secondary school textbook "At the Crossroads", and elaborated based on Gardner's theory of Multiple Intelligences, are used while a Cooperative Learning approach is practised, by taking into account the pupils' perceptual learning styles in designing the lesson plans. The data for the study are collected from two sources: the first one is from the pupils' pretest and posttest scores on their language proficiency tests. The pupils' first, mid and final-term examination marks are also taken into consideration. The second one is the pupils' questionnaire on attitudes and motivation (after the research experiment), regarding the implementation the various teaching tasks and activities. The results of the study show that the experimental groups that are taught using Cooperative Learning principles , Multiple Intelligences, including Perceptual Learning Styles , outperformed the control groups based on Competency Based Approach (CBA) on the stimulated English proficiency tests for the three skills (listening, reading and writing) and the three achievement school examinations (first, mid and last).



List of Abbreviations

ALM: Audio-lingual Method

ASTP: Army Specialised Training Programme

CBA: Competency Based Approach

CL: Cooperative Language

CLL: Community Language Learning

CLT Communicative Language Teaching

EFL: English as a Foreign Language

ELT: English Language Teaching

FL: Foreign Language

GTM: Grammar Translation Method

IPA: International Phonetic Alphabet

MIT: Multiple Intelligences Theory

NL: Native Language

NLP: Neuro-linguistic Programming

PLS: Perceptual Learning Styles

PMA: Primary Mental Abilities

SL: Second Language

STAD: Student-team Achievement Divisions

TBL: Task-based Learning

TL: Target Language

TPR: Total Physical Response

VAK: Visual, Auditory and Kinesthetic

List of Figures

Figure01	Summary of Elements and Subelements that constitute a Method (Adopted from Richards and Rodgers, 2001:33)	23
Figure 02	Components of the Competency –based- Approach	44
Figure 03	The Three Sub-theories of the Triarchic Theory	54
Figure04	Different Aspects of the Triarchic Theory	56
Figure 05	Some of Lazear’s Policy Assessment Rubrics	74
Figure06	Visual Learners’ Learning Aids and Cues	82
Figure07	Auditory Learners’ Learning Aids and Cues	84
Figure08	Kinesthetic Learners’ Learning Aids and Cues	86
Figure09	Kolb’s Learning Cycle	93
Figure10	Kolb’s Learning Styles	95
Figure 11	Cooperative Learning’s Five Elements (Adopted from Foundation Coalition, 2008)	109
Figure 12	Cooperative Learning Outcomes (Johnson et al, 1991: 29)	121
Figure13	The Teacher’s Profile	132
Figure14	Research Study Dependent and Independent Variables	136
Figure15	The Textbook Intelligence Profile	148
Figure16	Curriculum Design and Assessment Based on Learners’ Profiles and Portfolios (Adapted from Stefanakis, 2002:26)	151
Figure 17	Multiple Intelligences Lesson Plan (Adapted from Nicholson-Nilson, 1998)	154

List of Tables

Table01	The Main Characteristics of Grammar-Translation Method	25
Table02	Language and Language Learning from the Traditionalism and Communicative Language Teaching Perspectives (Adopted from Nunan and Lamb, 2001:31)	39
Table 03	Learners' Characteristics, Classroom Activities and Materials of the Linguistic Intelligence (Partially adapted from Armstrong, 1994 and Wheeler, 2013)	58
Table 04	Learners' Characteristics, Classroom Activities and Materials of the Musical Intelligence (Partially adapted from Armstrong, 1994 and Wheeler, 2013)	60
Table 05	Learners' Characteristics, Classroom Activities and Materials of the Logical/Mathematical Intelligence (Partially adapted from Armstrong, 1994 and Wheeler, 2013)	62
Table 06	Learners' Characteristics, Classroom Activities and Materials of the Spatial/Visual Intelligence (Partially adapted from Armstrong, 1994 and Wheeler, 2013)	63
Table 07	Learners' Characteristics, Classroom Activities and Materials of the Bodily-kinesthetic Intelligence (Partially adapted from Armstrong, 1994 and Wheeler, 2013)	64
Table 08	Learners' Characteristics, Classroom Activities and Materials of the Interpersonal Intelligence (Partially adapted from Armstrong, 1994 and Wheeler, 2013)	66
Table 09	Learners' Characteristics, Classroom Activities and Materials of the Intrapersonal Intelligence (Partially adapted from Armstrong, 1994 and Wheeler, 2013)	67
Table 10	Learners' Characteristics, Classroom Activities and Materials of the Naturalistic Intelligence (Partially adapted from Armstrong, 1994 and Wheeler, 2013)	68
Table 11	Learners' Characteristics, Classroom Activities and Materials of the Existential Intelligence (Partially adapted from Armstrong, 1994 and Wheeler, 2013)	70
Table12	Summary of Grasha's Five Teaching Styles (Adopted from Grasha, 1994:143)	99
Table 13	The Differences between Cooperative and Collaborative Learning (Brody, 1951)	108

Table 14	Types of Cooperative Learning Groups (Smith, Johnson and Johnson 1992)	116
Table 15	Distribution of the Participants by Streams and Gender	130
Table16	The Experiment Design Pattern	134
Table 17	Learners' Teaching Methods, Groupings and Ways of Assessment	135
Table 18	Textbook Intelligence Types Distribution	148
Table 19	Textbook Units and the Number of Lessons in Each of Them	153
Table 20	Multiple Intelligences Lesson Plan (Adapted from Nicholson-Nilson, 1998)	154
Table 21	Bloom's Taxonomy Verbs and Multiple Intelligences	156
Table 22	Lesson Plans Abbreviations	157
Table23	Descriptive Statistics for the Pre-test and Post-test of the Three Language Skills and the First, Mid and Last-term Examinations of the Control Group (A) and the Experimental Group (C) (Scientific Stream)	188
Table 24	Descriptive Statistics for the Pre-test and Posttest of the Three Language Skills and the First, Mid and Last-term Examinations of the Control Group (B) and the Experimental Group (D) (Literary Stream)	189
Table 25	Independent Sample Test for the Pupils' Development of the Three Language Skills between the Control group A and the Experimental group C	190
Table 26	Independent Sample Test for the Pupils' Development of the Three Language Skills between Control Group B and Experimental Group D	191
Table 27	Paired (related) Sample Tests of the Three Language Skills (Reading, Listening and Writing) for the Experimental Groups C and D and the Control Groups A and B	192
Table 28	Paired (related) Sample Test of the Writing Skill for Group A Writing a – Writing b	193
Table 29	Paired (related) Sample Tests of the Three Language Skills	194

Table 30	(Reading, Listening and Writing) for the Control Group B Cohen's Effect Size for Groups B and D (Literary Stream)	195
Table 31	Cohen's Effect Size for Groups A and C (Scientific Stream)	197
Table 32	Pupils' Responses to Item 01 I Really Enjoy Learning English, because the English Class is Interesting	200
Table 33	Pupils' Responses to Item 04 I Feel It Is not Difficult to Learn English Well	200
Table 34	Pupils' Responses to Item 06 I Hate English, but I Don't Have any Choice, I just Have to Sit in Class	200
Table 35	Pupils' Responses to Item 07 I Study English because I 'Am Interested in It, not for the Sake of Passing the Test or Examinations	201
Table 36	Pupils' Responses to Item 03 I Feel English Is Important to Find a Good Job	202
Table 37	Pupils' Responses to Item 05 I Like English Class, because I Like My English Teacher	203
Table 38	Pupils' Responses to Item 08 The Textbook or the Teaching Materials are more Practical and Useful this Year	204
Table 39	Pupils' Responses to Item 09 Classroom Activities Like Storytelling, Drama, Role plays, Songs, Picture Creating and so on Can Motivate My Interest in Learning English	204
Table 40	Pupils' Responses to Item 10 I Like Small and Group Work in the Classroom; It Can Lower My Anxiety and Fear about Learning English	206
Table 41	Pupils' Responses to Item 11 I Feel Cooperative Learning in Croup Work Can Improve Interpersonal Relationships Among Classmates	206
Table 42	Pupils' Responses to Item 02 I Like to Speak English in Class	207
Table 43	Pupils' Responses to Item 12 I Feel that Multiple Intelligences Based Activities Can Improve My Four Language Skills	208

Table 44	Pupils' Responses to Item 13 I Feel that Multiple Intelligences Based Assessment Can Give Me more Confidence and Lower My Anxiety in Learning English	208
Table 45	Pupils' Responses to Item 14 When in Group work, I Like to Work with Classmates that Have the Same Type of Intelligence	209
Table 46	Pupils' Responses to Item 15 When in Group Work, I Like to Work with My Classmates that Have the Different Types of Intelligences	209
Table 47	Pupils' Responses to Item 16 After Fill in the Blanks in the Multiple Intelligences Inventory for EFL Young Adults, I Agree that It Can Match My Learning and Intelligence Type	210
Table 48	Pupils' Responses to Item 17 After Fill in Blanks in the Learning Styles Inventory, I Agree that It Can Match My Way of Learning	210

Contents

Dedication	I
Acknowledgments	II
Abstract	III
List of Abbreviations	IV
List of Figures.....	V
List of Tables.....	VI
Contents.....	IX
General Introduction	1

CHAPTER ONE Teaching Approaches and Methods

Introduction.....	13
1.1. Terminologies	13
1.1.1. Definition of Learning	13
1.1.2. Definition of Education	14
1.1.3. Curriculum	15
1.1.4. Syllabus	16
1.1.5. Programme	16
1.1.6. Language Theory	17
1.1.7. Language Learning Theory	17
1.1.8. Approach (Axiomatic)	17
1.1.9. Method (Procedural)	19
1.1.10. Technique (Implementational)	19
1.2. Traditional Teaching Methods	21
1.2.1. Grammar-translation Method (GTM)	21
1.2.2. The Direct Method	24
1.2.3. The Reform Movement	26
1.2.4. The Audiolingual Method	26
1.2.5. Cognitive Code Learning	28
1.3. Innovative Teaching Methods 1970s and Early 1980s	29
1.3.1. Community Language Learning	29
1.3.2. The Silent Way	30
1.3.3. Total Physical Response (TPR)	32
1.3.4. Suggestopedia	33
1.3.5. The Natural Approach	34
1.4. The Present Teaching Approaches	36
1.4.1. Communicative Language Teaching (CLT)	36
1.4.2. Eclecticism	44

Conclusion.....	45
-----------------	----

CHAPTER TWO Multiple Intelligences Theory

Introduction.....	46
2.1. Definition of Intelligence.....	46
2.2. Theories of Intelligence.....	48
2.2.1. Spearman’s Two -factor Theory.....	49
2.2.2. Thurston’s Primary Mental Abilities	50
2.2.3. Sternberg’s Triarchic Theory of Intelligence.....	51
2.2.4. Gardner’s Multiple Intelligences Theory.....	55
Conclusion.....	74

CHAPTER THREE Learning Styles

Introduction.....	75
3.1. Definition of learning Styles.....	75
3.2. Learning Styles Modalities.....	76
3.2.1. Perceptual Learning Styles (Sensory).....	77
3.2.2. Personality Types.....	83
3.2.3. Cognitive Learning Styles.....	86
3.2.4. Kolb’s Experiential Model.....	89
3.3. Teaching Styles.....	92
3.2.1. Definition.....	92
3.2.2. Teaching Styles Classifications.....	93
3.4. Learning styles and Teaching Styles Compatibility.....	98
Conclusion.....	99

CHAPTER FOUR Cooperative Learning

Introduction.....	100
4.1. Definition of Cooperative Learning.....	100
4.2. Cooperative Learning versus Traditional Group Work.....	101
4.3. Cooperative Learning versus Collaborative Learning.....	102
4.4. The Five Elements (Pillars) of Cooperative Learning.....	104
4.4.1. Positive Interdependence.....	104
4.4.2. Individual Accountability.....	105
4.4.3. Positive Interaction.....	106
4.4.4. Social Skills.....	106

4.4.5. Group Processing.....	107
4.5. Types of Cooperative Learning Groups.....	107
4.5.1. Formal Cooperative Groups.....	108
4.5.2. Informal Cooperative Groups.....	109
4.5.3. Cooperative Based Groups.....	110
4.6. Cooperative Learning Methods.....	111
4.6.1. Jigsaw Methods	112
4.6.2. Learning Together.....	113
4.6.3. Student-team Achievement Division.....	114
4.6.4. Team-games Tournaments.....	115
4.7. Cooperative Learning Benefits.....	116
4.7.1. Learners' Academic Achievement.....	116
4.7.2. Social Interaction.....	117
4.7.3. Psychological Adjustment.....	118
Conclusion.....	119

**CHAPTER FIVE Research Design: Implementing Multiple
Intelligences Theory, Cooperative Learning and
Perceptual Learning Styles**

Introduction.....	120
5.1. Overall Research Design.....	120
5.2. Research Questions.....	121
5.3. Research Hypotheses.....	121
5.4. Participants	122
5.4.1. The Pupils.....	122
5.4.2. The Teacher.....	124
5.5. The Experimental Design.....	125
5.6. Description of Variables.....	128
5.7. Rationale of the Study.....	129
5.8. Research Means and Instruments.....	132
5.8.1. The Reading Test.....	132
5.8.2. The Listening Test.....	132
5.8.3. The Writing Test.....	132
5.8.4. The First, Mid and Last Term Examinations.....	133
5.8.5. Other Data Collection Means.....	133
5.9. Teaching Methods for the Different Groups.....	174
5.9.1. The Control Groups.....	174

5.9.2. The Experimental Groups	175
Conclusion.....	176
CHAPTER SIX	Results and Discussion
Introduction.....	177
6.1. Research Questions	178
6.2. Research Hypotheses	178
6.3. Data Analysis	179
6.3.1. Results of Pupils' Pre-test, Post-test of the Three Language Skills and the First, Mid and Last-tem Examinations	180
6.3.2. Cohen's Effect Size	186
6.3.3. Results of the Pupils' Motivation and Attitudes Questionnaire	191
6.4. Comprehensive Discussion	203
Conclusion.....	205
General Conclusion	206
References	215
Appendices	

General Introduction

1. Background of the Study

In an attempt to discover a more reasonable definition for the concept of intelligence, Gardner revealed, in the early 1980s, the multiplicity and versatile nature of this elusive concept and confronted its unity with the proposal of a compilation of intelligence types (verbal/linguistic, logical /mathematical, musical, spatial, bodily-kinesthetic, interpersonal and intrapersonal) embodied under the umbrella of “*Multiple Intelligences Theory*”. Originally, there were only 7 intelligences, and then an eighth intelligence “*naturalistic intelligence*” and a ninth one -“*existential intelligence*”- have been added to the catalog, and for the time being there is the possibility of another intelligence type named “*emotional intelligence.*” (Armstrong, 2001; Fogarty and Stoehr, 2008) From the Multiple Intelligences Theory (MIT) perspective, intelligence should be determined by measuring one’s capacity for solving problems and fashioning products in a rich context and naturalistic setting (Gardner, 1983). Chen and Gardner (2005) describe the types of intelligences as follows:

1. *Linguistic intelligence*, describes the ability to perceive and generate spoken and written language.
2. *Logical-mathematical intelligence*, involves the ability to appreciate and utilize numerical, abstract, and logical reasoning to solve problems.
3. *Musical intelligence*, entails the ability to create, communicate, and understand meanings made out of sound.
4. *Spatial intelligence*, refers to the ability to perceive, modify, transform, and create visual and/or spatial images.
5. *Bodily-kinesthetic intelligence*, deals with the ability to use all or part of one’s body to solve problems or fashion products.
6. *Naturalistic intelligence*, concerns the ability to distinguish among critical features of the natural environment.

7. *Interpersonal intelligence*, describes the ability to recognize, appreciate and contend with the feelings, beliefs, and intentions of other people.

8. *Intrapersonal intelligence*, involves the ability to understand oneself including emotions, desires, strengths, and vulnerabilities and to use such information effectively in regulating one's own life. (79)

The emergence of Multiple Intelligences Theory has sparked a revolution out of the field of psychology. Multiple Intelligences Theory potent role in the field of education, and precisely in Foreign Language (FL), teaching has been discussed in many forums. The multidimensionality of Gardner's theory helped in boosting learners' academic achievement in different disciplines, especially in FL classes, where the promotion of linguistic communicative competence is prior. Beyond this, however, the application of Multiple Intelligences Theory in FL classrooms enlightens the scope of learning to involve personal development and growth in all human dimensions as stated by Gardner

If we recognize [the various types of intelligences we possess], I think we will have at least a better chance of dealing appropriately with the many problems that we face in the world. [...] [people will] feel better about themselves and more competent; it is even possible that they will also feel more engaged and better able to join the rest of the world community in working for the broader good. (1993:12)

Moreover, schools in general expect pupils who possess diversified potentials and multilingual capacities, and who are ambidextrous and work hard to achieve their personal goals, who know how to work cooperatively and interact positively. Besides, our schools in particular and our country in general expect pupils who are curious and who know how

to solve multiple problems in any given context, and these pupils will grow up with these principles to be the best citizens who work for the development of their country, and implementing Multiple Intelligences Theory in FL classrooms can help achieving these goals. Furthermore, the educator Armstrong (1994) has synthesized Multiple Intelligences Theory implementation in the classroom into four attractive key points that educators find attractive about the theory:

1. Every individual possesses a compilation of the eight intelligences and they function together in a unique way.
2. All the Intelligence types can be improved through persistent encouragement, enrichment, and instruction.
3. Intelligences are a monolithic construct; they work jointly in perplexing ways.
4. There are various ways to be intelligent and there are no rubrics of attributes that one must possess to be intelligent.

These key points raised our awareness about the heterogeneity we observe in Algerian pupils and provide a solid and sound framework for incorporating these differences in our teaching.

Closely related to Multiple Intelligence Theory is that of Learning Styles. Learning styles are “a learner’s consistent tendencies or ways of responding to and using stimuli in the context of learning.” (Dunn and Brunner, 1997: viii) They are internally based characteristics, and enduring preferences that provide hints about how learners process or mediate (Kolb, 1984). Several dozen Learning Style models have been evolved; one of the most known models in teaching/learning classroom settings is Reid’s (1995) Perceptual Learning Styles model or Visual, Auditory and Kinesthetic Learning Styles “*the VAK.*” This is evidently related to Gardner’s Multiple Intelligences Theory, in view of that, if a learner uses the kinesthetic or the visual preference his/her dominant learning style, his/her

spatial intelligence will be more developed than someone processing information in an auditory way. In terms of FL learning, teachers have to bolster up their learners' various ways of learning to raise their confidence and enhance their Foreign Language proficiency.

2- Statement of the Problem

In most developed countries, teaching and learning are considered as the cornerstone in the development of those countries and this leads curricula designers, educators, and teachers to implement the new findings of different theories in education, psychology and even neurosciences to improve their learners' learning and strengthen the concept of "*We work all together for an autonomous learner*", raising the philosophy of "*No child left behind*". However, the philosophy imposed in teaching and learning in Algeria is that of "*One-size fits all*" in spite of the modern teaching method, or the so-called Competency-Based Approach implemented in our classes.

The teaching of English as a foreign language for all pupils in Algeria is regarded as crucial in their education. But, there exists a number of major problems. The first problem in English education in Algeria is that teaching is still teacher-centered as mentioned above, even though the method used in teaching English as a foreign language is the Competency-based Approach which is, in its basis, a learner-centered approach that requires from the teacher to build on his lessons on the learners' competencies. This approach may work with the mother tongue and not with a foreign language in which learners have no competencies, or other competencies that are completely different from English (Arabic and to some extent French). Consequently, pupils tend to be over-dependent on their teachers in their learning practice and always think of teachers as knowledge givers. The second problem is that Group work between pupils is seldom used as a teaching strategy. In class, it is the teacher that always initiates the discussion, whereas

pupils are passive listeners and receivers. Therefore, interaction is ignored since there is only one-way communication, which makes this approach of teaching restricting the practice of oral language skills.

The third problem is that the classes are very large. It is very difficult for a teacher to manage a class of over forty pupils and design a teaching strategy which will meet each pupil's needs. The reason for this is simple: the teacher is limited in time and energy and cannot deal successfully with the enormous number of pupils on an individual basis, even the ones that need extra help. Therefore, a teaching method should be found to enable teachers who have to teach large classes to better meet individual pupil needs.

In order to address the three problems presented above, we need to cultivate pupils' potential for interdependent study through group work, and create a suitable and rigorous learning environment for the pupils that have different proficiencies and intelligences to learn the four language skills.

Another possibility is to use some ideas from Multiple Intelligence Theory that focuses on engaging the pupils in their learning, and making them responsible for how they demonstrate their knowledge.

Furthermore, as mentioned above, closely related to Multiple Intelligence Theory is that of Perceptual Learning Styles, which explores the "how" of learning rather than the "what" of learning. In other words, it deals with strategies for learning to learn.

3- Aim of the Study

Children's difficulties in school learning were investigated by Bruner (1983). The results of his investigation revealed that children face these difficulties because they experienced learning in a way that is separate from their real life. To make the linkage

between the learning environment and the learners' real life, teachers have to use modern teaching methods and techniques to create a relaxing and free learning atmosphere, in which all learners are given the opportunity to express their strengths and weaknesses through their different learning preferences and intelligences. By doing so, teachers help learners to be active participants and not passive receivers, especially in the English language classes.

To reach these goals in our English classes, this research has been conducted to investigate whether the implementation of Cooperative Learning (CL) Activities, incorporating the insights given by Howard Gardner's theory of Multiple Intelligences (MI), and taking into account the pupils' Perceptual Learning Styles (PLS) in secondary school EFL classrooms will have a positive effect on pupils' English language proficiency and attitude.

4- Research Questions and Hypothesis

In the pursuit of our aim, the study attempts to answer the following questions underlying the research hypothesis:

- 4-1** In what ways can the language learning environment be constructed in order to improve the English learning outcomes of first year secondary school pupils in Algeria?
- 4-2** How can cooperative learning enhance pupils' attitudes?
- 4-3** In what extent can cooperative learning, multiple intelligences activities and the pupils' awareness of their perceptual learning styles used in conjunction improve the pupils' four language skills?
- 4-4** Does pupils' awareness of their perceptual learning styles have a positive effect on their self-directed learning?

In the light of the research questions and the above research concerns, this study is conceived and built on the hypothesis that, *if we implement Cooperative Learning (CL) Activities, incorporating the insights given by Howard Gardner's theory of Multiple Intelligences (MI), taking into account the pupils' perceptual learning styles in secondary school EFL classrooms, these activities and assessments would have a positive effect on pupils' English language proficiency and attitude.* To put the research hypothesis into practice, we have elaborated two sub-hypotheses:

4-5 The experimental groups C and D will score significantly better than the control groups A and B on English listening, reading and writing tests.

4-6 The experimental groups C and D will score significantly better than the control groups A and B on the first, mid and last-term achievement examinations.

5- Methodology of the Study

In order to attain the primary objective of our research study about the positive effectiveness of using Multiple Intelligences, Cooperative Learning, and the pupils' Perceptual Learning Style in teaching English as a foreign language in secondary school classes; we used two main tools: A quasi experiment and a questionnaire.

The data for the study will be collected from two sources: One will be from the pupils' questionnaires on attitudes and motivation, regarding Cooperative Learning, Multiple Intelligences, and Perceptual Learning Styles implementation in class (will be administered after the experiment). The second will be from the pupils' pre and post-tests scores on their language proficiency tests and their first, mid and last exam marks.

To consolidate our investigation in the current research, it is substantial to proceed with a teaching experiment in which Cooperative Learning, Multiple Intelligences, and Perceptual Learning Styles will be incorporated. A sample of one hundred thirty eight

(138) pupils (2 classes of Literary stream- 2 classes of Scientific stream) attending Atti Abdelhafid High school –Ouad Athmania- will be drawn randomly from a target population of two hundred ten (210) first year pupils. To make it clearer, pupils within the chosen sample are divided into:

- Two control groups; group A (39 pupils) represents the scientific and group B (30 pupils) represents the literary stream. In these groups, pupils are taught using the Competency-based Approach.
- Two experimental groups; group C (39 pupils) represents the scientific and group D (30 pupils) represents the literary stream. Pupils within these groups will receive the treatment based on a multidimensional teaching method.

At the beginning, a pre-test will be employed to test our participants' (*138 pupils*) listening, reading and writing skills. Then, the teaching experiment (an intervention) will take place in order to implement Cooperative Learning, Multiple Intelligences, and Perceptual Learning Styles in real classroom settings, an intervention which will last for the whole academic year (*69 pupils will attend for the experiment i.e. 2 classes; 1 Literary and 1 Scientific stream*). Therefore, a post-test will be undertaken, at the end of the teaching experiment (the end of the academic year), by the pupils in order to re-assess their English language proficiency in listening, reading and writing after accomplishing the experiment. Overall, the pupils' scores or the data gained from the pre-post-test and the first, mid and last term examinations would be compared, analyzed and statistically measured (t-test independent and paired samples will be used) to check the pupils' language proficiency before and after being taught using Cooperative Learning, Multiple Intelligences, and Perceptual Learning Styles. Furthermore, a questionnaire entitled *Pupils' motivation and attitude* which is designed to elicit the pupils' motivation and attitude vis-à-

vis the significance of CL, MI, and PLS implementation in enhancing their English language proficiency will be administered to the pupils of the 2 experimental groups (69) after the teaching experiment.

6- Structure of the Study

This research consists of six main chapters. The first four chapters are consecrated to the literature review about the pivotal underpinning variables of the study, whereas the last two chapters are devoted to the analysis and the interpretation of the results obtained as the consequence of the teaching experiment and the pupils' questionnaire.

The first chapter provides a synthesized historical background, i.e. a general review about a vast array of teaching methods as an introductory chapter to our forthcoming essential chapters; as they are considered as the main platform in order for learning to take place. A focus is, mainly, on the various trends of language teaching methodology and the chronological sequencing of the different historical changes that evolve from the Grammar-translation Method to the recent methods based on Communicative Teaching.

The second chapter is essentially devoted to the description and explanation of our chief construct Multiple Intelligences Theory (MIT) in some details. Firstly, we define the concept of intelligences in different depth and breadth. Thereafter, we will provide a comprehensive view on the most influential theories in this field of study. Furthermore, a detailed description of Multiple Intelligences Theory (MIT) is put forward, along with its ramifications for the classroom.

The third chapter is mainly concerned with discussing, in some length, our second main concept "*Learning Styles Modalities*", highlighting precisely Perceptual Learning Styles and elucidating their utility in bolstering up pupils' learning achievement. We will also attempt to shed light on the different teaching styles including their diverse types. And we will, tentatively, demonstrate the compatible relationship between learning styles and

teaching styles and their congruent impact on the learners' achievements in language classes.

The fourth chapter presents an overview about “*Cooperative Learning*”; we will provide a wide range of definitions and distinctions from other relatively similar teaching concepts. Further, Cooperative Learning five fundamental elements, types, and classroom methods are explained. A discussion is also given on how to manage and benefit from the application of Cooperative Learning group work in our classroom settings along with its pitfalls.

The fifth chapter is dedicated to the research methodology. It discusses the overall research design followed by restatement of the research questions and hypotheses. The chapter explains how the teaching experiment is conducted and provides a detailed presentation of the data collection tools and instruments.

The sixth chapter is concerned with the analysis of the research findings. The data obtained from the different research tools –pre and post-tests, first, mid and last term examinations scores as well as the questionnaire- are described and interpreted. Therefore, the chapter, tentatively, attempts to answer the research questions and check the findings of the experiment, to see if they are in the direction of the research hypothesis or not.

Last but not least, we will provide the reader with some useful conclusions (a brief summary of the study) and we will propose a compilation of educational implications on teaching English as a foreign language in the Algerian secondary school classrooms. Also, we will espouse the potential contributions that the study can display to develop the field of foreign language teaching. Limitations of the research and plausible explanations of unexpected results will also be outlined, at the same time we will highlight some recommendations for further research.

7- Definitions of Some Terms

To be clear and avoid any misunderstanding of some terms and variables which are related to this research, we have defined them as follows:

7-1 Competency-based Approach

Competency-Based Instruction began in 1970s in the United States as a basis of vocational education and industrial training programmes. According to Richards and Rodgers (2001) competency-based approach is a teaching approach which focuses on the language learning outcomes i.e. it emphasises what learners are expected to achieve with the target language based on their competencies; for Findley and Nathan “competency is the specification of a capability in designated areas of knowledge, assessed through student[’s] performance.” (1980: 222) The competencies acquired by any individual are those needed to function in a society.

7-2 Proficiency (the three skills)

7-2-1 Listening

Listening is the ability to handle with confidence, accuracy, clarity and precision a large number of communicative tasks; to participate in most informal and some formal exchanges on a variety of concrete and familiar topics.

7-2-2 Reading

Reading is the ability to understand all essential points in texts within areas of personal interest or knowledge, and to understand parts of unfamiliar or conceptually abstract and linguistically complex texts.

7-2-3 Writing

Writing is the ability to write about a variety of topics with precision and detail, including most social and informal correspondence, summaries, reports and research papers.

7-3 Attitude

An attitude can be defined as “an opinion [or a point of view] and evaluation a person may give on a particular topic, object or event.”(Fadel, 2016: 9)

CHAPTER ONE

Teaching Approaches and Methods

Introduction

1.1. Terminologies

1.1.1. Definition of Learning

1.1.2. Definition of Education

1.1.3. Curriculum

1.1.4. Syllabus

1.1.5. Programme

1.1.6. Language Theory

1.1.7. Language Learning Theory

1.1.8. Approach (Axiomatic)

1.1.8.1. The Structural View

1.1.8.2. The Functional View

1.1.8.3. The Interactional View

1.1.9. Method (Procedural)

1.1.10. Technique (Implementational)

1.2. Traditional Teaching Methods

1.2.1. Grammar-translation Method (GTM)

1.2.2. The Direct Method

1.2.3. The Reform Movement

1.2.4. The Audiolingual Method

1.2.5. Cognitive Code Learning

1.3. Innovative Teaching Methods 1970s and Early 1980s

1.3.1. Community Language Learning

1.3.2. The Silent Way

1.3.3. Total Physical Response (TPR)

1.3.4. Suggestopedia

1.3.5. The Natural Approach

1.4. The Present Teaching Approaches

1.4.1. Communicative Language Teaching (CLT)

1.4.1.1. Communicative Language Teaching Principles

1.4.1.2. Main Characteristics of CLT

1.4.1.3. Types of CLT Framework

1.4.1.3.1. Learner-Centered Instruction

1.4.1.3.2. Cooperative Learning

1.4.1.3.3. Interactive Learning

1.4.1.3.4. Whole Language Education

1.4.1.3.5. Task-based Learning (TBL)

1.4.1.3.6. Competency-based Approach (CBA)

1.4.2. Eclecticism

Conclusion

CHAPTER ONE

Teaching Approaches and Methods

Introduction

Throughout time, Second and Foreign Language teaching field faced tremendous fluctuations and innovations in its pedagogical tendencies. Besides; the history of language teaching has been characterized by diverse shifting stands in the different teaching methods, which tried to find out more effective ways of language teaching based on a particular language view and learning theory, as well as, how languages are best taught.

The aim of this chapter is to review the various trends of language teaching methodology, and the chronological sequencing of the different historical changes that evolved from the Grammar-translation Method to the recent methods based on Communicative Language Teaching.

1.1. Terminologies

Before dealing with the various language teaching methods, it is important to give clear definitions and explanations of some key terms which are related to the field of language teaching in general and second/foreign language in particular.

1.1.1. Definition of Learning

For decades the question of how people learn? Or exactly what is learning? Formed the heart of theorists' debates, starting from the ancient time philosophers Socrates, Plato and Aristotle (the period BC) who gave a philosophical basis to the definition of learning, to the nineteenth century where learning was given scientific dimensions by Thorndike (1870s), Skinner (early 1900s) and Piaget (1890s) who was the first to define learning as a developmental cognitive process. This idea was extended by the inclusion of Vygotsky's notion of social-cultural-cognition. According to Vygotsky "learning is more than the

acquisition of the ability to think; it is the acquisition of many specialized abilities for thinking about a variety of things. Learning does not alter our overall ability to focus attention but rather develops various abilities to focus attention on a variety of things.” (1978:86)

In spite of, the great stirring in the fields of psychology and education as specialists delve into the nature of learning and its core steps and ways; a clear cut definition of the concept is not agreed upon yet, and learning remains an elusory concept. Hence, we accept as a working definition of learning the one proposed by Sternberg (1995) in which he describes learning as an enduring change in people’s potential behaviours due to past experiences.

1.1.2. Definition of Education

Etymologically speaking, the term education has been derived from two Latin words:

- a-* “*Educare*” which means to bring up, to lead up or to raise.
- b-* “*Educere*” which means to lead out or to come out.

The two meanings stated above denote the act of developing children’s latent faculties and inner potentialities. On the other hand, some educationists assume that the term education has been derived from the Latin word “*Educatum*” which means to train, to devise or to mould i.e. it mainly indicates the act of teaching; its principles and practices (National Council of Educational Research and Training, 2014).

This state of affairs resulted in the absence of a consensually agreed upon definition of education. Besides, it is notoriously difficult to define concepts in a satisfactory manner, especially the broad and abstract ones as education; because the meaning educationists assigned to such a type of concepts is a belief, not an absolute fact. As a point of fact, it

will be of a great interest to explore the essential viewpoints from their narrow and broad senses of education. According to Raymont (1906)

Education in the narrow sense does not include self culture and the general influences of one's surroundings, but only those special influences which are consciously and designedly brought to bear upon the youngster by the adult persons of the community whether through the family, the church or the state. (cited in National Council of Educational Research and Training, 2014:5).

Hence, in its narrow sense education is the equivalent of school instruction i.e. it is the deliberate and preplanned acquisition of knowledge, skills and attitudes through a set of teaching methods.

In the broader sense, education is viewed as a life- long process, not limited only to schools; it goes beyond the narrow walls of the classrooms to incorporate all the experiences, skills, knowledge and wisdom used in polishing the individual's personality during the different stages of his/her life from cradle to the grave .

1.1.3. Curriculum

Curriculum has a Latin origin which means “the course of a chariot race.” However, the term broadened to mean more than a prescribed document that track one race, it comes to mean the theoretical document that has given meaning to education not just ethnically, but also functionally through guiding teachers and sharpening their understanding of the teaching and learning standards.

According to Roberton (1971) “the curriculum includes the goals, the objectives, content processes, resources, and means of evaluation of all the learning experiences planned for pupils both in and out of the school community through classroom instruction and related programs.” (cited in Hamada 2007:129)

Thus, a curriculum is a unified map which comprises “the syllabi, curriculum guides, course outlines, standards and lists of objectives” (Posner, 2004: 12) for a particular programme or training course. This map is addressed to all teachers in a particular country to follow its guidelines to achieve the desired results of the learners’ performance through the suggested, suitable activities and ways of assessment (Wiggins and McTighe, 2006 cited in Richards 2013:6).

1.1.4. Syllabus

The word syllabus has Greek origins which mean “table of content,” taking this term to the field of teaching/learning it refers to the set of units and topics covered in a particular subject during the school year. Richards (2001: 2) defines it as “a specification of the content of a course of instruction [that] lists what will be taught and tested,” without including “any type of evaluation” (Yalden, 1987 cited in Hamada 2007:129), or “[organization] of what is learnt.” (Brumfit, 1984 cited in White, 1988: 3) This outline of the subject content is determined by syllabus designers or the examination board and elaborated by the teachers; and this proves its diversity and changeability from one teacher to another.

1.1.5. Programme

Similar to syllabus, programme is used to refer to the list of topics and the content to be taught in a particular subject matter; which means, the term programme is used interchangeably with the term syllabus.

1.1.6. Language Theory

According to Jack, C Richards and T, S Rodgers(1987) a language theory or a language view deals with the nature of language; “its basic features of linguistic organization and language use” (19) such as the Structural View of language. Yet, these theories are not complete by themselves “and need to be complemented by theories of language learning.” (1987:17)

1.1.7. Language Learning Theory

A language learning theory is concerned with the psycholinguistic and cognitive processes implemented in learning any language and the conditions needed to be fulfilled to activate these processes to reach a successful language learning (Richards and Rodgers, 1987). According to this division we extract two types of language learning theories. The first type is named as Process-Oriented Theories which are based on the different processes involved in learning such as induction, inference, hypothesis testing and habit formation, etc. The second type is named as Condition-oriented Theories based on the “nature of human and physical context in which language learning takes place.” (Richards and Rodgers, 1987:18)

1.1.8. Approach (Axiomatic)

Any teaching expertise is based on theoretical assumptions or principles which are to some extent not explicit and even teachers cannot state them palpably. These theoretical foundations guide and influence the teachers’ daily classroom activities and help them achieve their teaching goals by moderating the different factors that affect the teaching process.

Anthony (1963) proposed his famous hierarchy of “approach, method and technique”. According to him an approach is a set of assumptions and beliefs dealing with the nature of language and the nature of learning and teaching and the applicability of both to pedagogical settings. Three theoretical views determine the nature of language and its proficiency:

1.1.8.1. The Structural View

According to this view, “language is a system of structurally related elements for the coding of meaning.” (Richards and Rodgers, 1987:17) The aim of language learning in structuralism is the mastery of the different elements of this system which are composed of the grammatical units (sentences), phonological units (phonemes), lexical units (function words) and the grammatical operations (adding, transforming) (Richards and Rodgers, 1987) that need to be studied one-by-one.

1.1.8.2. The Functional View

Richards and Rodgers (1987) state that the functional view sees language as “a vehicle for the expression of functional meaning” (17); the semantic and the communicative aspects of language form the heart of learning any language more than the grammatical aspect, which means that language is taught on the basis of its content meaning and function by specifying the topics and notions needed for learners’ communication and not just as a system of elements and grammar rules. Wilkin’s Notional-functional Syllabuses (1976) are the best example of this view.

1.1.8.3. The Interactional View

Interaction is the cornerstone in any language. This view sees language as a means of building and maintaining social relationships between human beings. Richards and

Rodgers (1987) described it as “a vehicle for the realization of interpersonal relations and for the performance of social transaction between individuals.” (17) According to this view language teaching is based on interaction and conversation analysis and patterns of interaction such as negotiation which form the subject matter of any language teaching process.

1.1.9. Method (Procedural)

The concept of method is the second of tripartite hierarchy proposed by Edward Anthony (1963) who defined it as an overall plan for the systematic presentation of language materials based upon a selected approach; in short it is the mediator between theory (approach) and practice (technique). According to Celce-Murcia (1979):

A method [...] is a set of procedures for Anthony. It spells out rather precisely in a step-by-step manner how to teach a second or foreign language. Examples of methods are the Silent Way, Community Language Learning, and Suggestopedia [.....]. A method is more specific than an approach but less specific than a technique. Anthony’s methods are typically compatible with one (or sometimes two) approaches (2).

1.1.10. Technique (Implementational)

Anthony (1963) defined a technique as “a particular trick, stratagem, or contrivance used to accomplish an immediate objective. Techniques must be consistent with a method, and therefore in harmony with an approach as well.” (67) So, a technique is a range of

tasks, activities and exercises used by the teacher in the classroom in order to achieve the underlined objectives.

A reformulation of Anthony's hierarchy "approach, method and technique" was proposed by Jack Richards and Theodore Rodgers between 1982 and 1986. They illustrated their improvement framework by the failure of Anthony's original proposal in giving "sufficient attention to the nature of method itself [...] [and] how an approach may be realized in a method, or how method and technique are related." (Richards and Rodgers, 1987:16) Thus, they renamed Anthony's concepts respectively as: approach, design and procedure, with a superordinate term to describe this three step-process, called 'method'.

According to Richards and Rodgers (1985) *a method* is "an umbrella for specification and interrelation of theory and practice." (154) Hence, *approach* is the level at which assumptions and theoretical principles about the nature of language and language learning are identified. *Design* presents the relationship between theory to classroom activities and materials including six important features presented as follows:

- 1- Objectives (to be attained at the end of the lessons).
- 2- Syllabus (criteria for selection and organization of linguistic and subject matter content)
- 3- Classroom activities.
- 4- Teacher's role (classroom management)
- 5- Learner's role.
- 6- The role of instructional materials such as textbooks, videos, or flashcards, etc.

Besides, *a procedure* is the level at which classroom techniques that are derived from the approach and design are put into practice (see figure 01).

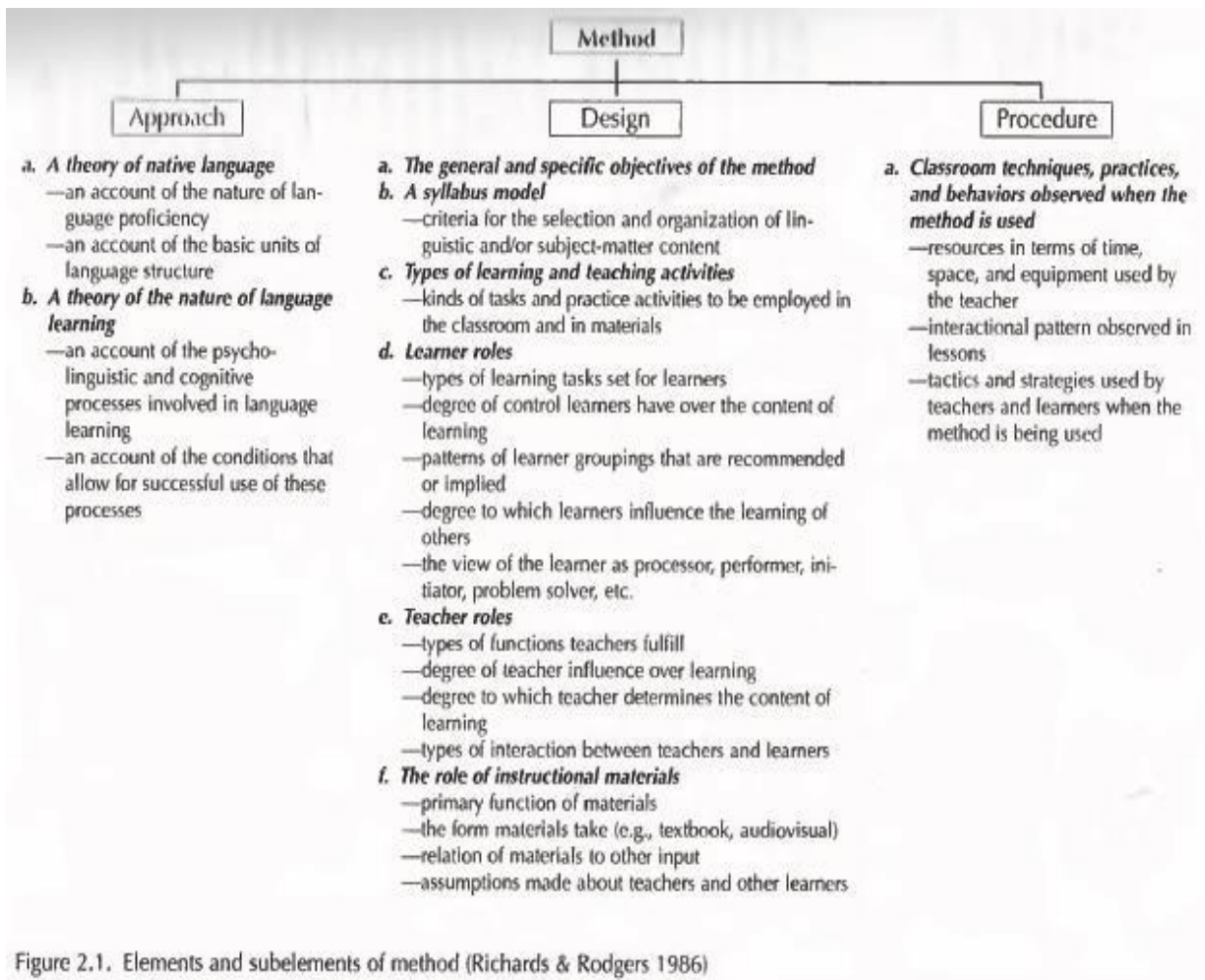


Figure01: Summary of Elements and Subelements that constitute a Method (Adopted from Richards and Rodgers, 2001:33)

1.2. Traditional Teaching Methods

Stern (1983) portrays that, “the conceptualization of language teaching has a long, fascinating, but rather tortuous history.” (453) By this is meant that, the historical background of the various trends of language teaching methodology evolved from the Grammar-Translation Method to the recent methods based on Communicative Language Teaching.

1.2.1. Grammar-translation Method (GTM)

It was the offspring of German Scholarship and it “was best [...] codified in the work of Karl Ploetz (1819- 1881), a German scholar who had a tremendous influence on

the language teaching profession during his lifetime and afterward.” (Celce-Murcia, 1979 :5)

Grammar-Translation Method or also referred to as the Classical Method is one of the oldest methods in language teaching. It was firstly used to teach Classical Latin and Greek in Europe for several centuries. As its name shows grammar constitutes the core of this method and translation is the most valuable exercise practiced by the learners of any foreign language. Its characteristics are summarized in the following table:

Characteristics	Description
<p>1- The use of the Mother Tongue</p> <p>2- Memorization</p> <p>3- Translation</p> <p>4- Reading and Writing Skills</p> <p>5- Grammar rules</p> <p>6- Accuracy and not fluency</p>	<p>1- Lessons are delivered in the learners' Native Language (NL) and little use of the Target Language (TL) when communicating in the classroom.</p> <p>2- Lists of vocabulary words in the Target Language and their translations in the Native Language are given to the learners in order to memorize them alongside with the grammatical rules such as the past form of the verbs.</p> <p>3- The sentence is the basic unit of study; much of the lesson is devoted to translating sentences from and into the Target Language and it is this focus on the sentence that is the distinctive feature of this method. Also literary passages are translated by the learners after reading them comprehensively.</p> <p>4- Reading and writing are given a major focus; little or no attention is paid to speaking and listening, and virtually nothing is done to enhance learners' communicative ability in the Foreign Language (FL).</p> <p>5- Grammar is taught deductively; by this is meant that, the rules and their study are presented, and then they are practised through translation activities. The sequencing of a textbook based on this method is done through grammar points.</p> <p>6- Accuracy is emphasized and learners are expected to attain high standards in translation without taking care to their communicative abilities in the TL.</p>

Table01: The Main Characteristics of Grammar-Translation Method

GTM remains popular and to this day is practised in some educational contexts, because it does not require qualified teachers with very high skills in the Foreign Language (FL); tests of grammar rules and translation are easy to construct. However, it is

“remembered with distaste by thousands of learners for whom foreign language learning meant a tedious experience of memorizing endless lists of unusable grammar rules and vocabularies and attempting to produce perfect translation of reading [passages] and literary prose.” (Richards and Rodgers, 1986:4)

H.E. Palmer (1966) states the weaknesses of this method in the following words:

It is one which treats all languages as if they were dead, as if each consisted essentially of a collection of ancient documents to be deciphered and analysed [...] It is the one which categorically ignores all considerations of phonetics, pronunciations and acoustic image, and boldly places language on a foundation of alphabets, spellings and writing systems... It is the one which assumes translation to be the main or only procedure for the learning of vocabulary [...] It is the one which assumes that word and sentence structure is to be attained mainly or solely through the memorizing of the so-called rules of grammar. (17-18)

In addition as Richards and Rodgers (1986) point out, “it has no advocates; it is a method for which there is no theory, there is no rational or justification for it or that attempts to relate it to issues in linguistics, psychology, or educational theory.” (5)

1.2.2. The Direct Method

The Direct Method or The Natural Method was established and firstly applied in teaching in France and Germany at the end of the nineteenth century by the Frenchman François Gouin. The basic premise of this method is that Second/Foreign Language learning should be like first language acquisition/learning; it stressed the constant oral interaction and spontaneous use of language by the learners just like a child acquires his

mother tongue, and this will lead us to consider the Direct Method as an offshoot of the Behaviouristic School of Psychology, since it insists on association in language learning.

Richards and Rodgers (2001) summarized the characteristics of the Direct Method as follows:

- 1- Classroom instruction is conducted exclusively in the Target Language.
- 2- Only everyday vocabulary and sentences were taught.
- 3- Oral communication skills were built up in a carefully graded progression [and] organized around question-and-answer exchanges between teachers and students in small, intensive classes.
- 4- Grammar was taught inductively.
- 5- New teaching points were introduced orally.
- 6- Concrete vocabulary was taught through Demonstration, objects, and pictures; abstract vocabulary was taught by association of ideas. [“The Direct Method receives its name from the fact that meaning is to be conveyed directly in the Target Language through the use of demonstration and visual aids, with no recourse to the students’ native language.” (Diller, 1978 cited in Larsen-Freeman, 2000: 23)]
- 7- Both speech and listening comprehension were taught.
- 8- Correct pronunciation and grammar were emphasized (12).

The Direct Method enjoyed considerable popularity at the beginning of the twentieth century; mainly in private language schools where native speaking teachers or native-like proficient teachers were employed and the learners were highly motivated; but not in public schools where “constraints of budget, classroom size, time, and teacher proficiency made it difficult to be used.” (Brown, 2001:22)

It was criticized for its weak theoretical foundations; in that, the comparison between the acquisition of the first language and second/ foreign language learning is not always right and this led to its decline by the first quarter of the twentieth century.

1.2.3. The Reform Movement

During the 1880s, the field of language teaching was characterized by a great reaction against the use of Grammar-translation Method in teaching second/foreign languages in a mechanical way and neglecting the oral aspects used in communications. Scientific contributions were introduced to the field by the scholars and exactly the phoneticians Sweet, Vietor, and Passy (1886) who gave insights to the spoken processes; by creating the discipline of phonetics. They established the International Phonetic Association in 1886 and “its International Phonetic Alphabet (IPA) was designed to enable the sounds of any language to be accurately transcribed.” (Richards and Rodgers, 2001:9)

The reformers advocated principles such as:

- 1- Spoken language is prioritized.
- 2- Phonetic training is emphasised so as learners build good and developed pronunciation habits.
- 3- Dialogues and conversation are presented to introduce conversations and idioms.
- 4- Grammar is taught inductively.
- 5- New meanings are introduced using the Target language and not the Native language as in GTM. (Richards and Rodgers, 2001)

1.2.4. The Audiolingual Method

The Audiolingual Method or “The Army Method” emerged after the entry of the United States in World War II. The urgent need for soldiers who can communicate effectively in different foreign languages such as German, French, and Japanese gave birth

to The Army Specialised Training Programme (ASTP) in 1942 which derived its basic features from Structural Linguistics (Bloomfield 1933, Fries 1945) and Behavioural Psychology (Skinner 1957). The main objective of this programme was for students “to attain conversational proficiency in variety of foreign languages.” (Richards and Rodgers, 2001:50)

Educational institutions adopted the new method which came to be known as the Audiolingual Method and “the basic premises on which [this] method was based were that language is speech, not writing, and language is a set of habits.” (Zainuddin et al, 2011: 65)

The characteristics of the Audiolingual Method (ALM) have been summed up in the following list by Celce-Murcia (2001):

1. Lessons begin with dialogues.
2. Mimicry and memorization are used, based on the assumption that language learning is habit formation.
3. Grammatical structures are sequenced and rules are taught inductively (through planned exposure).
4. Skills are sequenced: first listening and speaking are taught; reading and writing are postponed.
5. Accurate pronunciation is stressed from the beginning.
6. Vocabulary is severely controlled and limited in the initial stages.
7. A great effort is made to prevent learner errors.
8. Language is often manipulated without regard to meaning or context.

The teacher must be proficient only in the structures, vocabulary, and other aspects of the language that he or she is teaching, since learning activities and materials are carefully controlled (7).

The Audiolingual Method did not last long and declined because it failed in accomplishing its main goal and the students were not able to communicate using the foreign language they studied; even though, they remembered the dialogues they practised and drilled in their classes. Hence, “students had been taught a “script,” and people do not speak following a particular script” (Zainuddin et al, 2011:65). Moreover, specialists in the field criticized it for its basic foundations and declared that language could not be acquired through a process of habit formation and that errors were not necessarily to be avoided at all costs and that Structural Linguistics did not tell us everything about language that we need to know.

1.2.5. Cognitive Code Learning

This approach to learning (not a method) came from two frameworks: Linguistics (Chomsky 1959) and Cognitive Psychology (Neisser 1967). It arose as a reaction to the structural and behavioural foundations of the Audiolingual Method in which it took language learning from habit formation to rule formation and hypothesis testing, and from the emphasis on surface forms of language and the rote practise of patterns toward the deep structures of language, increasing interest in Transformational Generative Grammar.

The main characteristics of the Cognitive Code Learning are:

1. Language is learnt through the acquisition of its rules, and not through habit formation.
2. Learners take the responsibility of their own learning process.
3. Grammar is emphasised and can be taught either inductively or deductively.
4. Pronunciation is not emphasised.
5. All the four skills are of the same importance; reading and writing are as crucial as listening and speaking.

6. Vocabulary learning is again stressed, especially at intermediate and advanced levels.
7. Errors are viewed as inevitable, to be used constructively for enhancing the learning process (for feedback and correction).
8. The teacher has to be proficient in the target language in order to be able to analyse its different elements. (Celce-Murcia ,2001)

1.3. Innovative Teaching Methods 1970s and Early 1980s

The level of awareness of how people learn inside and outside the classroom increased and a variety of innovative teaching methods emerged as the latest applications of the multi-disciplinary research findings of the day. Although, these methods were differently implemented in the classroom, they share a common belief that gave primacy to the affective/emotional aspect involved in the learning process.

1.3.1. Community Language Learning

The lack of the affective and emotional aspects in the learning process was the standing point of this method which was based on “the Counselling-Learning Model of Education” developed by Charles, A Curran (1972). According to Curran’s view the relationship between the teacher and the learners should be changed from a leader and followers to a “counsellor” (Rodger, 1980) “who is a skilful understander of the straggle the students face as they attempt to internalize another language” (Larsen-Freeman, 2000:89) and the learners form a community or “clients” (Rodger, 1980) who are in need of counselling and guidance.

In order for any learning to take place, the learners and the teacher interact in an interpersonal relationship, and join together to facilitate learning in a social environment that valued each individual in the group, and the learners feel relaxed by lowering the defences that prevent communication using the foreign language in class. Celce-Murcia

named this method “Affective-humanistic Approach” and summarised its characteristics as follows:

1. Respect of learners’ and teacher’s feelings are emphasized.
2. Meaningful communication between learners is given priority.
3. Group and pair works are used most of the time.
4. The learning environment or atmosphere is given more importance than teaching materials or methods.
5. Peer interaction and evaluation are necessary for learning.
6. Learning a second/ foreign language is considered as a self-realization process.
7. The teacher is considered as a counselor or learning facilitator rather than the source of knowledge.
8. The teacher’s proficiency in both the Target language and the learners’ native language in order to be able to make translation heavily in the first stages to help learners feel at ease; then, it is gradually taken off (2001).

Community Language Learning (CLL) gave learners the opportunity to determine the type of conversation needed, and helped in raising their learning autonomy. However, this method had formed non-directive teachers.

1.3.2. The Silent Way

The Silent Way was devised by the materials developer Gattegno (1976) who considered learning as a problem-solving process in which the learner searches, creates and not just repeats in a parochial way what he/she has learnt, as stated by Richards and Rodgers (2001):

- 1- Learning is facilitated if the learner discovers or creates rather than remembers and repeats what is to be learned.

2- Learning is facilitated by accompanying (mediating) physical objects. Learning is facilitated by problem solving involving the material to be learned (81).

In the Silent Way classroom in which teaching is learner-centered; the teacher needs to be silent much of the time and allows the students to work out solutions by cooperating with each other in the process of solving language problems.

The essential principles of the Silent Way are presented by Larsen-Freeman (2000) as follows:

- Language is for self-expression.
- The Teacher works with the students while the students work on the language.
- Meaning is made clear by focusing students' perception, not through translation.
- Errors are important and necessary to learning. They show the teacher where things are unclear.
- A teacher's silence frees [him] to closely observe the students' behavior.
- The elements of the language are introduced logically [sounds, words then sentences; through colored charts and Cuisenaire rods], expanding upon what students already know.
- The syllabus is composed of linguistic structures.
- The Skills of speaking, reading, and writing reinforce one another. (61-62-63-64)

Although, the Silent Way focuses on learners' autonomy, it follows an Audiolingual perspective; translation is avoided at all costs, and the oral aspect of language is privileged and not the social one.

1.3.3. Total Physical Response (TPR)

The Total Physical Response method to language teaching/learning was designed by the psychologist (1977). This method is based on the principle that language learning takes place when learners are involved physically and mentally in the learning process.

In building the rationale of his method, Asher combined a number of insights, mainly:

- Memory is increased if it is stimulated through association with motor activity; hence language is associated with physical actions.
- Children's first language acquisition principles are taken into account; in the sense that, when acquiring their first language children do a lot of listening before speaking, and they respond physically to commands before doing so verbally.

In a TPR classroom, the imperative mood is the dominant; the students are required to respond physically and not verbally to the commands of the teacher who directs his/her class in an orchestrating way. After a certain period of time, the learners would feel comfortable enough to start verbal responses to questions, then to ask questions themselves.

Larsen-Freeman (2000) introduces the main principles of the Total Physical Response method as follows:

1. The imperative [mode] is a powerful linguistic device through which the teacher can direct student[s'] behavior.
2. Spoken language should be emphasized over written language.
3. Students can learn through observing actions as well as by performing the actions themselves.
4. [...] Feelings of success and low anxiety facilitate learning.

5. Students will begin to speak when they are ready [and they are expected to make errors] that teachers should tolerate. (112)

The TPR seems to be effective at the beginning levels of language proficiency, but not at advanced levels.

1.3.4. Suggestopedia

Suggestopedia or as it is called now Desuggestopedia – to emphasize the importance of desuggesting limitations to learning (Larsen-Freeman,2002)- was advocated by Lozanov (1979); who argued that learners are capable of learning much more than what they often do when they are given the appropriate conditions for learning. He emphasized the importance of eliminating the psychological barriers that the majority of learners face during the learning process.

According to Lozanov's view based on Yoga and extrasensory perception psychology, the human brain could process a great amount of materials and retain more information when put in a state of relaxation. In order to create such a warm and relaxed atmosphere in the classroom; music is played, especially, the Baroque music that plays a vital role in increasing the learners' Alpha Brain Waves, and decreasing their Blood Pressure and Pulse Rates. This state of mind relaxation will lead the learners to memorize and retain tremendous quantities of the leaning material.

In any Foreign language classroom where Suggestopedia is applied the teacher starts with relaxing his/her leaners through the suitable music, then he/she flooded the learners with vocabularies through reading passages, dialogues and role plays; after that, some activities are carried out in soft comfortable seats in relaxed states of consciousness. Zainuddin et al (2011) summarize the application of this method as follows:

In this method, the classroom atmosphere is crucial. Creating a relaxed, nonthreatening learning environment is essential for its success. The goal is that students will assimilate the content of the lessons without feeling any type of stress or fatigue. Classrooms are equipped with comfortable seating arrangements and dim lighting in an effort to provide an inviting and appealing environment. Soothing music is employed to invite relaxation and allow students to feel comfortable in the language classroom. The use of the native language is also allowed, especially to give directions and to create that welcoming atmosphere. [.....] [Also,] drama, songs, and games [are used to] provide [...] much practice, yet in a less-threatening and more enjoyable fashion (66).

Although, Suggestopedia had a sound psychological basis, it did not have a linguistic theory, since it focused only on memorizing language vocabularies, and neglected the communicative context of these items.

1.3.5. The Natural Approach

Krashen's Monitor Model about second language acquisition (1983) and Terrell's experience in teaching foreign languages (Spanish) constituted the platform of the Natural Approach. The main goal of this method is to develop learners' basic communication skills, for this reason, they emphasised the use of communicative activities during the entire session rather than the activities devoted for the grammatical aspects of language.

Krashen and Terrell believed that learners would benefit more from the delay of language production, until speech “emerged” and that acquisition and communication take place, just like the natural way that children follow to acquire their mother tongue. Learners in the classroom are provided by the oral comprehensible input that is just a little beyond their level of understanding (i+1) (Krashen’s Input Hypothesis) to trigger their acquisition and they are not asked to produce any output using the Target Language until they feel ready to do so.

In the Natural Approach learners go through three stages in acquiring the Target Language:

➤ **The Pre-production Stage**

This period is devoted to the development of the listening comprehension skill (the silent period).

➤ **The Early-production Stage**

During this stage, the teacher focuses on language meaning and not form, and therefore he/she is not allowed to correct errors unless they are major ones which hinder the meaning.

➤ **The Production Stage**

Since the objective of this stage is to promote fluency, learners are asked to perform role-plays, games and discussions, with a limitation in error correction from the side of the teacher.

The main characteristics of the natural Approach are summarized as follows:

1. The key to comprehension and oral production is the acquisition of vocabulary; thus, much opportunity for listening/speaking (when ready) is afforded to students.
2. Class time is not devoted to grammatical lectures or mechanical exercises. Any explanation and practice of linguistic forms should be done outside of class for the most part.
3. Teaching grammar for the sake of grammar instruction is not effective. However, clarifying it in context, using advanced organizers to tie it in with communicative activities, does have some value (Terrell, 1991).
4. Error correction is negative in terms of motivation and attitude; thus, he does not advocate the correction of speech errors in the process of oral language development.
5. The use of total physical response (TPR) is emphasized, particularly during the comprehension (silent/preproduction) stage (Zainuddin et al, 2011: 71-72).

1.4. The Present Teaching Approaches

In the late 1980s and early 1990s, the field of language teaching faced a bewildering diversity in the choices of teaching methods and techniques that were grounded on the best of what we knew about second language learning/teaching.

1.4.1. Communicative Language Teaching (CLT)

The emergence of the Communicative Approach -the proponents of CLT consider it as an approach, not a method (Richards and Rodgers, 1986; Savignon, 1991; Brown, 1994) - was bound by the failure of the previous methods, which characterized the

language teaching panorama for decades to enhance learners' language communication skills. Hence, in the late 1970s and early 1980s, CLT appeared out of the works of the American sociolinguists Labov and Hymes (1971) and Firth and Halliday (1973) who stressed the functional and communicative aspects of language, as a reaction to the traditional teaching principles, based on structuralism, about language and language learning as shown by Nunan (1992) in table 2.

Teaching	Traditionalism	Communicative Language [Teaching]
Theory of Language	Language is a system of rule-governed structures hierarchically arranged.	Language is a system for the expression of meaning: primary function – interaction.
Theory of Learning	Habit formation; skills are learned more effectively if oral precedes written; analogy not analysis.	Activities involving real communication; carrying out meaningful tasks and using language that is meaningful to the learner promote learning.
Objectives	Control of the structures of sound, form and order, mastery over symbols of the language; goal – native speaker mastery.	Objectives will reflect the needs of the learner; they will include functional skills as well as linguistic objectives.
Syllabus	Graded syllabus of phonology, morphology, and syntax. Contrastive analysis.	Will include some or all of the following: structures, functions, notions, themes and tasks. Ordering will be guided by learner needs.
Activities	Dialogues and drills; repetition and memorization; pattern	Engage learners in communication; involve process such as information

	practice.	sharing, negotiation of meaning and interaction.
Role of a learner	Organisms that can be directed by skilled training techniques to produce correct responses.	Learner as negotiator, interactor, giving as well taking.
Role of a teacher	Central and active; teacher dominated method. Provides model; controls direction and pace.	Facilitator of the communication process, needs analyst, counselor, process manager.
Role of materials	Primarily teacher oriented. Tapes and visuals; language lab often used.	Primary role of promoting communicative language use; task based, authentic materials.

Table02: Language and Language Learning from the Traditionalism and Communicative Language Teaching Perspectives (Adopted from Nunan and Lamb, 2001:31)

1.4.1.1. Communicative Language Teaching Principles

Communicative Language Teaching is based on three major theoretical premises or principles:

- a. The Communication Principle:** language acquisition is sustained the carrying out classroom activities and tasks based on communication.
- b. The Task-principle:** Learners will acquire language effectively if they are engaged in activities and tasks based on the real life contexts.
- c. The Meaningfulness Principle:** it is highly required to involve learners in classroom activities and tasks which promote language authenticity and meaningfulness. (Zainuddin et al ,2011)

1.4.1.2. Main Characteristics of CLT

- a) The overarching aim of language learning is to promote learners' communicative abilities/skills in the Target language.
- b) Semantic concepts and social functions are aspects of the language course, along with the language linguistic structures.
- c) Learners are regularly involved in cooperative activities (group/pair) to exchange information and transfer meanings in contexts.
- d) Dramatization and role plays are implemented to enhance the learners' use of the Target language in various social situations.
- e) Authenticity of classroom materials and activities is paramount to reflect the use of the Target language in real world contexts.
- f) Language skills; reading, writing, listening and speaking are involved in language courses from the beginning.
- g) The teacher is a facilitator; he/she facilitates communication for the learners, and corrects their errors when needed.
- h) The teacher should be fluent and accurate when he/she uses the Target language. (Celce-Murcia, 2001:8)

1.4.1.3. Types of CLT Framework

1.4.1.3.1 Learner-centered Instruction

Contrary to Teacher-centered Instruction, where the teacher lectures and the learners are passive receivers –they are considered as empty vessels to be filled with information-, Learner-centered Instruction puts the learners in the center of the learning process and focuses more on their needs.

In Learner-centered Instruction the instructor is a guide and a facilitator who treats the learners as co-creators in the learning process (McCombs and Whistler, 1997) and

allows them to work independently using their creativity and innovation to enhance their competences and knowledge in the subject matter.

1.4.1.3.2. Cooperative Learning

Cooperative Learning or Collaborative Learning as it is known in many sources is a method of teaching where students work actively in small groups to maximize their own and each other's language learning and social relationships, through the frequent interactions between them using the Target Language.

Furthermore, Collaborative Learning promotes intrinsic motivation and self-esteem and lower anxiety, since less capable and shy learners engage with more capable ones (mixed abilities) who provide assistance and guidance. (More details are available in chapter four)

1.4.1.3.3. Interactive Learning

Interactive Learning is based on the interactive nature of communication that forms the heart of current leaning theories of communicative competence.

Interactive Learning takes place in classes that include a significant amount of pair and group work that helps learners produce language for genuine; meaningful communication; and write to and for real audiences through the usage of authentic language input in real world contexts.

1.4.1.3.4. Whole Language Education

Whole Language is an approach, perspective, or a philosophy of education and not a teaching method, practice or technique. The major assertion of this philosophy is the “Wholeness” of language as opposed to views that fragment language into its bits and segments. Based on this view, the leading proponents of Whole Language argued that learning occurs naturally just like children acquire their language, i.e. for the betterment of leaning, language should be taught as a “whole system” –top-to-bottom approach- based

on learners' strengths and prior knowledge (Freeman and Freeman, 1988) rather than being broken into smaller components –bottom-up approach- as stated by Dixon and Tuladhar(1996) “if we take [language] apart of to focus on letters, lists of words or grammar patterns, we lose the essence of what language is.” (10)

The founder father of Whole Language Goodman (1986) identified its features and principles as follows:

- ✚ Whole-language learning builds around whole learners learning whole language in whole situations.
- ✚ Whole-language learning assumes respect for language, for the learner, and for the teacher.
- ✚ The focus is on meaning and not on language itself, in authentic speech and literacy events.
- ✚ Learners are encouraged to take risks and invited to use language, in all its varieties, for their own purposes.
- ✚ In a whole-language classroom, all the varied functions of oral and written language are appropriate and encouraged. (40)

1.4.1.3.5. Task-based Learning (TBL)

The rationale of Task-based Learning was provided by the Applied Linguist Skehan (1996) who stated that “[Task-based Learning] is theoretically defensible and practically feasible” (17) because the methodology of teaching followed is built on tasks “that are presented in the form of problem-solving negotiation between knowledge that the learner holds and new knowledge” (Candlin and Murphy, 1987:1 cited in Larsen-Freeman, 2000:144). So, the learning process is viewed as a set of communicative tasks linked to the objectives of learning- Nunan (2004) defines ‘Task’ as follows

A piece of classroom work that involves learners in comprehending, manipulating, producing or interacting in the target language while their attention is focused on mobilizing their grammatical knowledge in order to express meaning and in which the intention is to convey meaning rather than to manipulate form. The task should also have a sense of completeness, being able to stand alone as a communicative act in its own right with a beginning, middle and an end (4).

1.4.1.3.6. Competency-based Approach (CBA)

Competency-based Approach is an integrative teaching approach that was advocated in the 1970s in the USA, and was widely spread in the 1980s in different countries in the world where the national policymakers and curriculum developers accepted it as the “State-of-Art” approach (Auerbach, 1986).

CBA has a functional perspective that focuses on language learning outcomes rather than the learning process i.e. it emphasises what learners are expected to do with the Target Language and not what they know about it. Hence, “[CBA] is based on a set of outcomes that are derived from an analysis of tasks typically required of students in real life situations.” (Schenk, 1978: VI cited in Richards and Rodgers, 2001:141)

Components of CBA

The different components of CBA are outlined by Weddel (2006 cited in Muluh Nkwetisama, 2012:520) through the following figure:

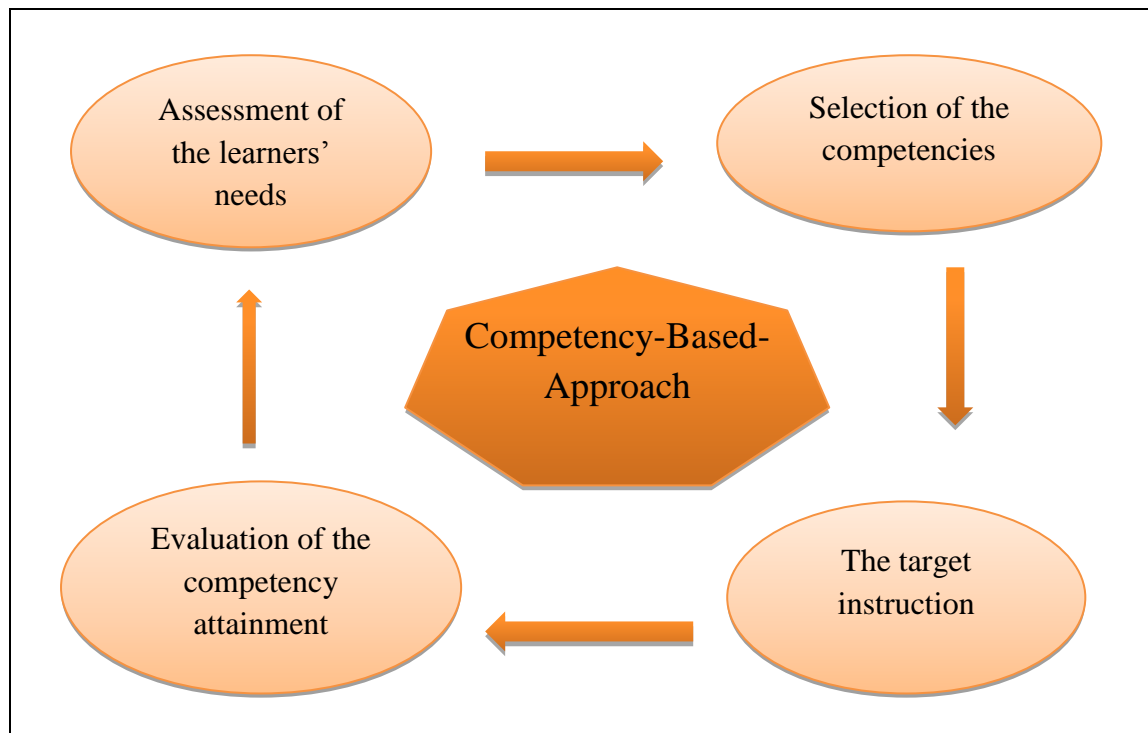


Figure 02: Components of the Competency –Based- Approach

✚ Features of the Competency-based Approach

The Competency-based Approach is characterized by the following:

1. Teachers have to designate the competencies in clear and measurable behavioural expressions.
2. Language course' contents are built upon learners' competencies or outcomes.
3. Learners have to continue their learning until they master the Target language.
4. A wide array of teaching techniques and group works are implemented in presenting the Target language at class.
5. Learners' mastery of the basic skills in life as well as language skills; reading, writing, listening and speaking form the heart of CBA.
6. An extensive use of realia and visual aids is adapted to bolster up the learners' competencies.

7. The teacher provides an immediate feedback on learners' assessment performance.
8. Learners' needs form the basis of any teaching process.
9. Competency statements or objectives have to be mastered and demonstrated by the learners. (Nkwetisama, 2012)

1.4.2. Eclecticism

The very vast diversity of language learners in multiple worldwide contexts led to the recognition of teaching professionals about the importance of tailoring eclectic blend of tasks. Each task addresses a particular group of learners, in a particular context, studying for a particular purpose in a given period of time. As a point of fact, fossilized ideas about the feasibility of one method in teaching all learners all over the world, one size fits all, are given up; as stated by Nunan (1991) "it has been realized that there never was and probably will be a method for all, and the focus in recent years has been on the development of classroom tasks and activities which are in keeping with the dynamics of the classroom." (228)

Thus, language teaching requires enlightened teachers who are knowledgeable in the subject matter and can make the connection between the theoretical background of Second/Foreign Language Learning/Teaching and the pedagogical processes they use in their classes. This will help them to be eclectic ones, and think in terms of possible methodological options at their disposal for tailoring the necessary classroom activities and tasks that meet individual learners' needs, interests and strengths. Moreover, good teachers and "teacher educators should not be blinded by the criticisms of methods and thus fail to see their valuable contribution to teacher education and continuing development. [...] to do so by moving beyond ideology to inquiry." (Larsen-Freeman, 2000: X)

Conclusion

In the process of Second and Foreign Language learning/teaching it is essential to be knowledgeable about the various approaches, methods and techniques which can be followed, as well as, when and how they can be implemented in the classrooms.

This chapter highlighted the main terminologies related to language teaching/learning. Moreover, throughout this chapter, it was attempted to provide a compilation of teaching approaches and methods along with their historical evolution and their dominant characteristics as well.

Teachers have to keep in mind that no teaching method is considered the best one, but all methods contributed in improving language learning through the different attempts of their advocates, regarded their theoretical backgrounds.

CHAPTER TWO

Multiple Intelligences Theory

Introduction

2.1. Definition of Intelligence

2.2. Theories of Intelligence

2.2.1. Spearman's Two -factor Theory

2.2.2. Thurston's Primary Mental Abilities

2.2.3. Sternberg's Triarchic Theory of Intelligence

2.2.4. Gardner's Multiple Intelligences Theory

2.2.4.1. Description of Multiple Intelligences Theory

2.2.4.1.1. Verbal/Linguistic Intelligence

2.2.4.1.2. Musical Intelligence

2.2.4.1.3. Logical-mathematical Intelligence

2.2.4.1.4. Spatial/Visual Intelligence

2.2.4.1.5. Bodily-kinesthetic Intelligence

2.2.4.1.6. Interpersonal Intelligence

2.2.4.1.7. Intrapersonal Intelligence

2.2.4.1.8. Naturalistic Intelligence

2.2.4.1.9. Existential Intelligence

2.2.4.2. The Application of Multiple Intelligences Theory in ELT Classrooms

2.2.4.3. Multiple Intelligences Based-assessment

Conclusion

CHAPTER TWO

Multiple Intelligences Theory

Introduction

When a teacher is asked to point out the best student in his/her class he/she may choose the “gifted or intelligent –as it is commonly known-” one who excels at almost every task during the lessons; while, the one who has pervasive difficulty in completing most of the tasks and fail at school may be counted as “a dull student”. This unjustifiable and trendy conceptualization in most of the educational systems was defied by Gardner’s Theory of Multiple Intelligences; which offered new frameworks for teachers making sense of their observations that different students have different strengths and learn in different ways.

This chapter addresses the core issues in understanding the concept of intelligence. The territory we traverse in this chapter ranges from a definition of the concept of intelligence in different depth and breadth. Then, a comprehensive view on the most influential theories is provided. Furthermore, a detailed description of Multiple Intelligences Theory (MIT) is put forward, along with its ramifications for the classroom.

2.1. Definition of Intelligence

For a long period of time, philosophers have tried to shed some light on the concept of intelligence, its nature and how we can measure it. Till now, this topic is still considered as highly controversial, because there are many definitions of the concept which do not agree with each other in the field of psychology and education where it is thoroughly investigated.

The term intelligence comes from old Latin roots and exactly from the word “Intellegere” which is divided into two parts “inter” which means between, within +

“legere” which means to bring together, gather, catch up with eye, and read .i.e. “intellegere” means to see into, perceive and understand(Collins English Dectionary,2009). This term gained more importance in the late 19th century when Sir Francis Galton (1883) revived the concept and made his first serious attempt to develop measures that would reflect a person’s intelligence.

Traditionally, human intelligence was seen as a single, unchanged, inborn or inherited capacity on which the ¹Intelligence Quotient (IQ) test was founded (Snider, 2001). Thus, intelligence was described on the basis of Linguistic and Mathematical abilities (Richard and Rodgers, 2001). According to Williams and Burden (1997)

This view states that people who are born more intelligent are much more likely to succeed at school or in any learning task than those who are born less intelligent. This often leads to the logically unjustifiable conclusion that anyone failing in school or having difficulty in learning must, therefore, lack intelligence.

(18)

In recent years and exactly in modern psychology, the concept intelligence can be described and used in two ways: firstly, the term can be used to mean intelligent acts which refer to the acts of composing a poem, designing a house or inventing a new way of calculating numbers. Secondly, the term intelligence can be used to refer to mental processes such as analysing and synthesising actions (Christison, 1998) “that give rise to [different] intelligent acts.” (Kail and Pellegrino, 1985:3)

¹ **IQ:** or as it is known “Intelligence Quotient”; this term was firstly introduced in the early twentieth century by the German psychologist William Stern in his book “The Psychological Methods of Testing Intelligence.” Stern suggested that the Mental Quotient” can be obtained by dividing the mental age by the chronological age.

$$\text{Mental Age/ Chronological Age= Mental Quotient}$$

Despite the plethora of research studies devoted to know the nature of intelligence, a satisfactory definition of this concept has always proved elusive, as stated by Mursel (1950) “the attempt to compress the concept of intelligence into a compact definition is too complex, too many-sided, too wide-ranging and too vague.”(4) Hence, we accept as a working definition of the notion of intelligence the one elaborated by Gottfredson in which she stated that

[Intelligence] [. . .] involves the ability to reason, plan, solve problems, think abstractly, comprehend complex ideas, learn quickly and learn from experience. It is not merely book learning, a narrow academic skill, or test-taking smarts. Rather it reflects a broader and deeper capability for comprehending our surroundings—“catching on,” “making sense” of things, or “figuring out” what to do. (1997:13 cited in Nisbett et al, 2012:131)

2.2. Theories of Intelligence

Research on intelligence dated back to the very ancient times of Plato and Aristotle. The topic attracted the attention of plenty of psychologists and educators who tried to, and still trying to decipher its complexity through their attempts to measure “human ability and intellectual potential, with far implications for learning, program design, and team building

Later on, Lewis Terman multiplied the Mental Quotient by 100 to remove the fraction and here was the birth of “Intelligence Quotient”

Mental Age/ Chronological Age × 100= Intelligence Quotient or $IQ=MA/CA \times 100$

However, the first IQ test was elaborated in 1905 by the French psychologist Alfred Binet to identify children who would have problems with formal education.

among countless other areas.”(Kaufman et al, 2012:3) An immense body of theories flourished out of their works, but some were more influential than others. The following section summarizes some of them.

2.2.1. Spearman’s Two -factor Theory

In the late 1800’s, the concept of intelligence was firstly introduced by the British Scientist Sir Francis Galton or as he is famously known “*the father of mental tests.*” (Kail and Pellegrino, 1985:8) Galton was influenced by “*evolutionism*”, which was clearly shown in his studies about differences between species (he patterned his half-cousin Charles Darwin).

Based on his belief that “[...]simple sensory, perceptual, and motor processes formed the fundamental elements of human intelligence” (Kail and Pellegrino, 1985:8), Galton elaborated the so-called “Sensory Discrimination Tests” to measure a variety of physical variables such as reaction time to find out the existing correlations between humans’ physical aspects and mental capacities that reflect their intellectual abilities. Galton’s endeavours in the field of intelligence testing formed the focal point for the emergence of many psychometric tools such as the Stanford-Binet scale, the Army Alpha and Army Beta tests, Wechsler scales and Raven’s Progressive Matrices.

Despite its simplicity in testing humans’ sensory functions, Galton’s views and tests were also influential and followed by his contemporaries; just like the British Engineer Charles Spearman who was one of the leading figures in the history of intelligence.

Keeping his engineering background, Spearman investigated the nature of intelligence by applying the logic of factor analysis to examine a number of mental aptitude tests. Precisely, he checked out the correlations between children’s scores on a

variety of cognitive tasks and their grades in the different scholastic achievement tests. Spearman found that some measures were highly correlated and others were low correlated; the profuse results obtained constructed the foundation stones of the inconsistency in people's intellectual performance. As an example, a learner who surpassed most of the cognitive tasks could score low in a particular part of the test (such as verbal memory).

Besides, the various statistical analyses carried out in Spearman's research studies formed the empirical platform of the Two-factor Theory (TFT) proposed in 1927. According to this theory humans' intellectual abilities composed of two types of factors: first, the General Intelligence Factor labelled "g" and it is the pool of innate and unchangeable energy needed for the accomplishment of all cognitive tasks (Fogarty, 1999). The second are the Specific Factors labelled "s" and refer to the unique and specific abilities required in each task separately. Thus, when *Beethoven* wrote the *Eroica* it was "g" that provided the energy –"mental energy" (Sternberg et al, 1998:16) - for writing the symphony, and a specific musical engine –mental aptitude- that was responsible for the execution of the task.

2.2.2. Thurston's Primary Mental Abilities

As a challenge to Spearman's emphasis on intelligence unity, Thurstone (1938) advocated a new theory; that declined many of the psychologists and educationists view of intelligence as a single general ability, and emphasised the multidimensionality of the concept based on seven distinct clusters called Primary Mental Abilities (PMA).

PMA flourished out of Thurstone's research studies on cognitive abilities. In 1938, fifty seven mental tests were administered to a large number of college students, numerous factors were extracted and rotated, and just seven primary factors that were identified and interpreted: memory, perceptual speed, inductive reasoning, word fluency, spatial ability,

numerical ability and verbal comprehension. (Carroll, 1993) Each of these Primary Factors is postulated to be relatively independent of the others; since it presents and operates through a group of unified mental operations that are specified for each factor apart.

To accomplish the various data calculations, Thurstone developed a new version of factor analysis¹ labelled as Multiple Factor Analysis. This innovation contributed in overcoming the problem of analysing large numbers of correlations.

However, Thurstone's (1938) obtained results were reanalysed by his following psychologists who found weak relationships, intercorrelations, between these clusters, and "the outcome is partial agreement between the theories of Spearman and Thurstone. Both were forced to accept a hierarchical theory of intellectual abilities, a type of theory [devised] by Burt (1949)." (Kail and Pellegrino, 1985:27)

2.2.3. Sternberg's Triarchic Theory of Intelligence

In response to previous intelligence theories' shortcomings modern views have been proposed and new theories of intelligence have been constructed to broaden its conceptualisation. The recent famous trends; that spark deeper interest in the study of the nature of intelligence, to exceed its narrow definition, have been presented by the two American Psychologists Howard Gardner (1983) and Robert Sternberg (1984).

Whilst, Sternberg was one of the first proponents of the information processing perspective (1977) through his works in reasoning and analogies, in 1985, his Triarchic Theory was advocated as a reaction to the limited view of cognitive psychologists that

¹**Factor analysis** a statistical method used to detect patterns of correlations among test items or clusters of tests of the study.

considered intelligence as a set of cognitive abilities used only in reasoning and problem solving, neglecting the role of individuals' past experiences and their surrounding environment, as posited by Sternberg (1985)

I started off as an information processing psychologist, and then I realized, well it's not that this stuff is wrong [;] it's only answering a subset of interesting questions. It does not deal with how business executives function in their jobs. It doesn't say anything about why my best student is the one with the relatively low Graduate Record Exam Scores, while people with high 700s, even 800s, sometimes come to Yale and flop (34).

For Sternberg (1997) “intelligence is defined [...] [as] the ability to achieve success in life in terms of one's personal standards, within one's sociocultural context.” (296-297) Hence, intelligence goes beyond individuals' success in academic settings –as predicted by intelligence tests- to account for individuals' success in life when reaching their goals (personal or for the society) within their living surrounding. Based on this broaden view of intelligence, the Triarchic or the three -pronged theory was constructed. This theory contains three fundamental aspects or sub-theories: a contextual sub-theory, an experiential sub-theory and a componential sub-theory as shown in figure 03:

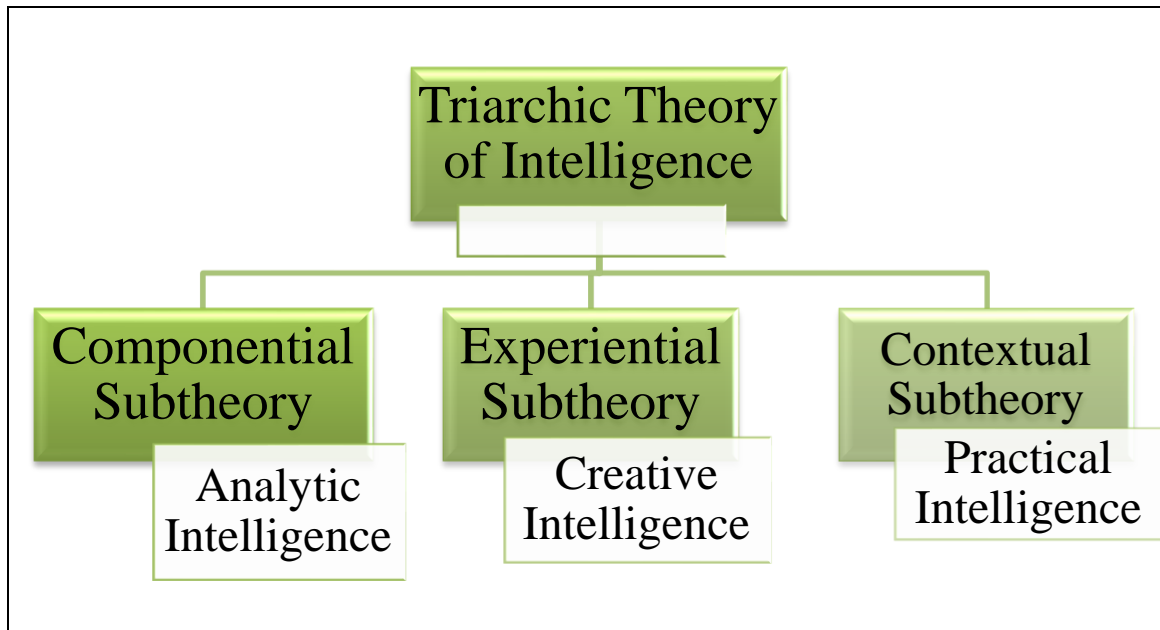


Figure 03: The Three Sub-theories of the Triarchic Theory

The first aspect is *the contextual sub-theory* (referred to as Practical Intelligence) which focuses on the connection between intelligent behaviours and the sociocultural context in which they occur, i.e. intelligence is related to individual’s “real-world behaviours that are valued [...] in a particular culture.” (Kail and Pellegrino, 1985:161)

Sternberg proposes that intelligent behaviours are governed by three steps:

- 1- Adaptation:** refers to the individual’s ability to adapt to the changing environmental conditions.
- 2- Selection:** refers to the individual’s ability to look for an alternative environment when he/she cannot adapt to the present one.
- 3- Shaping:** refers to the individual’s ability to make changes in the present environment to fit better his/her interests and goals.

The second aspect is *the experiential sub-theory* (referred to as Creative Intelligence) which emphasises the individual’s ability to cope with relatively novel situations and his/her automatic responses to a given task effortlessly, i.e. intelligence is demonstrated a long a continuum of novel tasks and automatic information processing. In a nutshell,

Creative Intelligence is required to formulate problems and solutions, and combine unrelated facts or information.

The third aspect *the componential sub-theory* (referred to as Analytic Intelligence) is related to the individual's ability to think abstractly and process information .i.e. it attempts to specify the various mental processes or mechanisms underlying intelligent behaviours. Sternberg (1984) distinguishes three types of processes or components:

- a- Metacomponents:** focus on the controlling processes that occur during the executive tasks i.e. the processes that enable the individual to monitor, evaluate and decide when executing a specific task.
- b- Performance Components:** refer to the different cognitive strategies and mental operations such as encoding and comparison processes involved in solving problems.
- c- Knowledge-Acquisition Components:** as its name suggests, it focuses on the selective mental processes involved in acquiring new information and combining them to the old ones.

Hence, Analytic Intelligence is demonstrated when solving problems, judging the quality of ideas and generating solutions. The following figure summarises the different intelligences identified by Sternberg (1984):

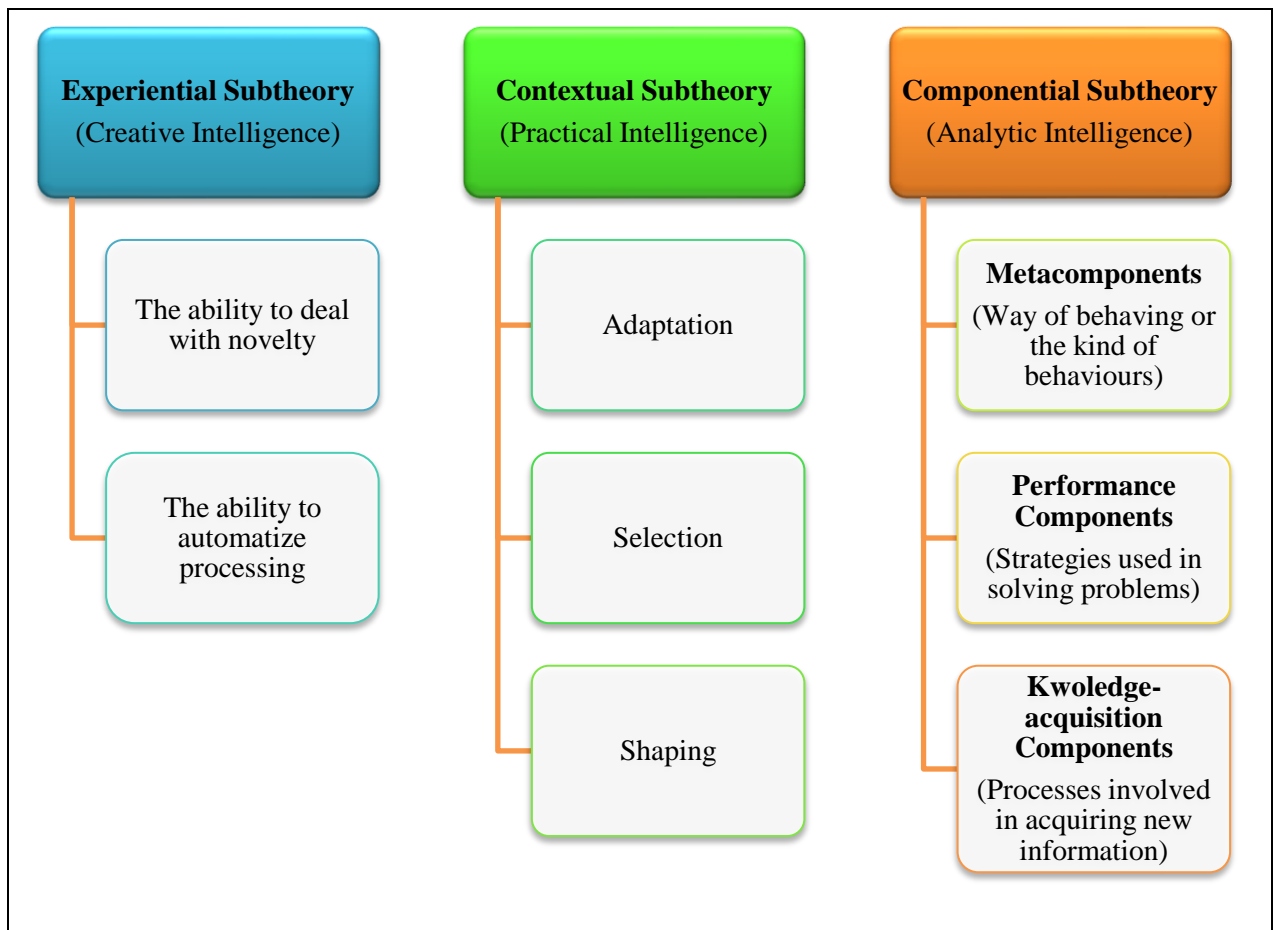


Figure04: The Different Aspects of the Triarchic Theory

2.2.4. Gardner’s Multiple Intelligences Theory

In the early 1980s Gardner proposed a multidimensional definition to the concept of intelligence through his Theory of Multiple Intelligences, as an attempt to challenge its unity.

2.2.4.1. Description of Multiple Intelligences Theory

Howard Gardner’s Multiple Intelligences Theory (MIT) emerged in 1980s from his work in “Project Zero” at Harvard University, and published in his book *Frames of Mind*.

By developing this theory, Gardner (1980s) challenged the too restricted definition of intelligence , which limits the human potential to IQ tests, and tried to broaden its scope by giving birth to nine types of intelligences (logical mathematical, musical , linguistic,

spatial, bodily-kinesthetic, intrapersonal, interpersonal, naturalist and existential). Each individual possesses the nine intelligence types and uses them to acquire knowledge and reveal understanding (Christenson and Kennedy, 1999) of new information in a variety of ways and store them in such a way that it can be easily retrieved when needed for use. However, the development of one intelligence type does not mean the exclusion of the others; which means that, all individuals have at least nine intelligences, but there is a dominant intelligence that is more developed than the other intelligences; “Gardner suggests that almost everyone has the ability to develop all right intelligences if they are given appropriate encouragement, enrichment, and instructions.” (Armstrong, 2000:9)

These different intelligences reflect a pluralistic panorama of learners’ individual differences; and constitute a learner-based philosophy which is “an increasingly popular approach to characterizing the ways in which learners are unique and to developing instruction to respond to this uniqueness.” (Richards and Rodgers, 2001: 123) Moreover, it allows learners to better understand themselves as lifelong learners, and to recognize how others acquire knowledge and apply their skills.

The following definitions describe each intelligence; the related occupations and directions any intelligence might take and the various learners’ characteristics and classroom activities the teacher can use when transmitting knowledge.

2.2.4.1.1. Verbal/Linguistic Intelligence

Linguistic intelligence involves the ability to communicate and use language in a variety of ways through speaking, writing, and reading. This intelligence includes sensitivity to the meanings or semantics, the sounds, rhythm and the pragmatic dimensions of language; which means that people with strong verbal/linguistic intelligence have the ability to manipulate and use language effectively for communicating meaning both in

speaking and writing. Lazear (1993) adds, “this intelligence is involved in any use of metaphors, similes, and analogies, and, of course, in learning proper grammar and syntax in speaking and writing.” (15)

Learners who enjoy playing with language, telling stories, and who quickly acquire foreign languages exhibit strengths in this intelligence and choose their careers as teachers, interpreters, editors, radio or television announcers, poets, journalists, speechwriters and reporters.

The following table summarizes the main characteristics, classroom activities and materials that suit learners with highly developed verbal/linguistic intelligence:

Learners’ Characteristics (Linguistic Intelligence - Word Smart)	Classroom Activities	Classroom Materials
<ul style="list-style-type: none"> • Have a good memory for names, places and dates • Appreciate nonsense rhymes, puns and tongue twisters • Write better than average for their age • Spin tales and tell jokes and stories • Enjoy word games • Spell words accurately • Communicate to others in a highly verbal way • Enjoy listening to the spoken word • Communicate to others in a highly verbal way 	<ul style="list-style-type: none"> • Lectures, debates • Large-and small-group discussions • Brainstorming • Writing activities • Word games • Storytelling • Journal writing • Choral reading 	<ul style="list-style-type: none"> • Books • Newspapers • Journals • Tapes and tape recorder • Worksheets • Manuals • Stories

Table 03: Learners’ Characteristics, Classroom Activities and Materials of the Linguistic Intelligence (Partially adapted from Armstrong, 1994 and Wheeler, 2013)

2.2.4.1.2. Musical Intelligence

Musical Intelligence is the ability to recognize and use the nonverbal sounds such as pitch, rhythm and total patterns. It also entails the ability to hum, whistle, sing or chant

to a tune of a melody. Thus, learners with highly developed musical intelligence have “[an elevated] sensitivity to rhythm, pitch, and melody” (Christison, 1996:11) and this type of intelligence is put into practice when we create and perceive sound patterns.

Composers, singers, conductors, and musicians exhibit this intelligence, as do poets and others who use word sounds and rhythms in their writing. Learners who sing well, enjoy making rhythmic sounds, and can distinguish between notes are displaying highly developed musical intelligence, and the musical part of their brains can be motivated by clapping hands, snapping fingers, chanting words or moving rhythmically.

The following table summarizes the main characteristics, classroom activities and materials that suit learners with highly developed musical intelligence:

Learners' Characteristics (Musical Intelligence –Music Smart)	Classroom Activities	Classroom Materials
<ul style="list-style-type: none"> • Remember the melody of songs • Have a good singing voice • Play a musical instrument or sings in a choir or other musical group • Have a rhythmic way of speaking and/or moving • Unconsciously hum to their selves • Tap rhythmically on the table or desk as they work • Are sensitive to the environmental noises, like rain on the roof • Can easily imitate the voices and inflections of others 	<ul style="list-style-type: none"> • Musical concepts • Singing, humming, whistling • Dictation of songs • Group singing • Mood music • Consonant/vowel game • Using background music • Linking old tunes with concepts • Creating new melodies for concepts 	<ul style="list-style-type: none"> • Songs and music tapes • Videos of concerts • Musical instruments

Table 04: Learners' Characteristics, Classroom Activities and Materials of the Musical Intelligence (Partially adapted from Armstrong, 1994 and Wheeler, 2013)

2.2.4.1.3. Logical-mathematical Intelligence

Logical-mathematical intelligence is involved when we order objects, assess their quantity, and make statements about the relationships among them. In Howard Gardner's words, it entails the ability to detect patterns, reason deductively and think logically. This intelligence is most often associated with scientific investigation and mathematical thinking (Gardner, 1999) Moreover, as Campbell et al (2004) write that

Logical -mathematical intelligence involves numerous components: mathematical calculation, logical thinking, problem- solving, deductive and inductive reasoning, and discerning patterns and relationships. At the core of mathematical thinking is the ability to recognize and solve problems. Although this intelligence has proven highly valuable Western society and is often credited with guiding the course of human history, Gardner (1983) contends that logical - mathematical intelligence is not necessarily superior to other intelligences. (32)

This intelligence can be observed in learners who can carry out complex mathematical calculations in their heads logically and analytically, enjoy finding patterns in shapes and numbers, and excel at making logical arguments. This group of learners enjoys working with data bases and spread sheds on computer. Scientists, mathematicians, and philosophers all display strength in these areas.

The following table summarizes the main characteristics, classroom activities and materials that suit learners with highly developed logical/mathematical intelligence:

Learners' Characteristics (Musical Intelligence – Music Smart)	Classroom Activities	Classroom Materials
<ul style="list-style-type: none"> • Ask a lot of questions about how things work • Compute arithmetic questions in his/her head quickly • Enjoy the challenges of math class • Find math games and math computer games interesting • Enjoy playing chess, checkers, or other strategy games • Enjoy working with logic puzzles and brainteasers • Like to experiment in a way that shows higher order thinking processes • Think on more abstract levels than peers • Have a good sense of cause and effect 	<ul style="list-style-type: none"> • Matching • Gap filling • Scrambled stories • make up analogies to explain • Logical sequential presentation • Ordering puzzles • Scientific demonstrations • Logical problem-solving exercises • creating • Classifications and categorization • Computer programming languages games 	<ul style="list-style-type: none"> • Index cards • Video tapes • Diagrams • Software • Computers

Table 05: Learners' Characteristics, Classroom Activities and Materials of the Logical/Mathematical Intelligence (Partially adapted from Armstrong, 1994 and Wheeler, 2013)

2.2.4.1.4. Spatial/Visual Intelligence

Spatial intelligence encompasses the potential to recognize and use the patterns of wide space and more confined areas (Gardner, 1999). It, also, involves “sensitivity to form, color, space, line and shape.” (Christison, 1996:11) We use this intelligence when we perceive a form or object (either visually or through touch), when we remember visual or spatial information, and when we recognize and imagine objects from different angles (Gardner, 1985). People’s spatial ability is often assessed by having them copy shapes or match one visual image with another. Architects, mechanics, and engineers possess strong spatial abilities.

Spatial intelligence can be observed in learners who understand and can create visual images of their understanding like charts, diagrams, or maps, as well as the ones who are drawn to the visual arts.

The following table summarizes the main characteristics, classroom activities and materials that suit learners with highly developed spatial/visual intelligence:

Learners' Characteristics (Musical Intelligence –Music Smart)	Classroom Activities	Classroom Materials
<ul style="list-style-type: none"> •Report clear visual images •Read maps, charts, and diagrams more easily than text •Daydream more than peers •Enjoy art activities •Draw figures and pictures that are advanced for age •Like to view movies, slides, or other visual presentations •Enjoy doing puzzles, mazes •Build interesting three-dimensional constructions •Get more out of pictures than words when reading •Doodle on workbooks, worksheets, or other materials 	<ul style="list-style-type: none"> •Visual puzzles and mazes •Sketching stories •Imaginative storytelling •Picture metaphors •Designing cartoons advertisements •Illustrating concepts and things •Visual thinking exercises •Visualization and word pictures •Photography •Interpreting directions •Reading maps 	<ul style="list-style-type: none"> •Graphs •Diagrams •Slides •Movies •Charts •Charts • Illustrated books •Art Peripherals

Table 06: Learners' Characteristics, Classroom Activities and Materials of the Spatial/Visual Intelligence (Partially adapted from Armstrong, 1994 and Wheeler, 2013)

2.2.4.1.5. Bodily-kinesthetic Intelligence

Bodily-kinesthetic intelligence entails the potential of using one's whole body or parts of the body to solve problems and express feelings or desires. It is the ability to use mental abilities to coordinate bodily movements. This type of intelligence is visible when

people use their bodies to create products or solve problems. Athletes, surgeons, dancers, choreographers, and craftspeople display competency in this area.

Learners who possess highly developed bodily-kinesthetic abilities show good coordination, and gross motor skill -on the stage or playing field- involved in making models or sculptures.

The following table summarizes the main characteristics, classroom activities and materials that suit learners with highly developed bodily-kinesthetic intelligence:

Learners' Characteristics (Musical Intelligence –Music Smart)	Classroom Activities	Classroom Materials
<ul style="list-style-type: none"> •Excel in one or more sports •Move, twitch, tap, and fidget while seated for a long time in one spot •Cleverly mimic other people's gestures and mannerisms •Love to take things apart and put them back together again •Have trouble keeping their hands off something new that they have just seen •Enjoy jumping, wrestling, or similar activities •Have dramatic way of expressing him/herself •Report different physical sensations while thinking or working 	<ul style="list-style-type: none"> •Role plays and drama •Field trips •Competitive and cooperative games •Physical awareness and relaxation exercises • All hands-on activities • cooking, gardening, and other "messy" activities • Physical education activities • Communicating with body language/ hand signals • Body answers 	<ul style="list-style-type: none"> •Things to build •Hands on learning materials •Sports and physical games materials •Tactile things •Crafts •Flashcards

Table 07: Learners' Characteristics, Classroom Activities and Materials of the Bodily-Kinesthetic Intelligence (Partially adapted from Armstrong, 1994 and Wheeler, 2013)

2.2.4.1.6. Interpersonal Intelligence

“Interpersonal intelligence denotes a person’s capacity to understand the intentions, motivations, and desires of other people and, consequently, to work [...] effectively with others” (Gardner, 1999:43); hence, it entails people’s cooperative and social capacities in maintaining relationships with others. Lazear adds “this intelligence utilizes our ability to engage in verbal and nonverbal communication and our capacity to notice distinctions among ourselves.” (1993:18) People exhibit interpersonal intelligence when they display an awareness or sensitivity to others’ feelings and intentions. Teachers, parents, politicians, psychologists, and salespeople rely more on interpersonal intelligence in their work.

Learners exhibit this type of intelligence; when they collaborate well, when they show thoughtfulness and sensitivity toward their friends, and when they interact with ease with people of all ages.

The following table summarizes the main characteristics, classroom activities and materials that suit learners with highly developed interpersonal intelligence:

Learners' Characteristics (Musical Intelligence –Music Smart)	Classroom Activities	Classroom Materials
<ul style="list-style-type: none"> • Enjoy socializing with peers • Seem to be natural leaders • Give advice to friends who have problems • Seem to be people smart - attuned to others • Belong to clubs, committees, or other organizations • Enjoy informally teaching other kids • Like to play games with other kids • Have two or more close friends • Have a good sense of empathy or concern for others • Others seek out their help 	<ul style="list-style-type: none"> • group and pair works • Interpersonal interaction • Conflict mediation • Peer teaching • Board games • Cross-age tutoring • Group brainstorming sessions • Peer sharing • Special spelling activities • Reporting events • Simulations • Buddy spelling 	<ul style="list-style-type: none"> • Polls • surveys • Interactive software programs • Questionnaires • Materials for group games

Table 08: Learners' Characteristics, Classroom Activities and Materials of the Interpersonal Intelligence (Partially adapted from Armstrong, 1994 and Wheeler, 2013)

2.2.4.1.7. Intrapersonal Intelligence

Intrapersonal intelligence entails our awareness to understand oneself, to appreciate one's feelings, fears and motivations. It helps individuals to “distinguish among their own feelings, to build accurate mental models of themselves, and to draw on these models to make [sound] decisions about their lives” (Kreshevsky and Siedel, 1998: 20). Therapists and religious leaders may exhibit strength in this intelligence.

Learners who understand their strengths and weaknesses have an awareness of their own emotional states, and are thoughtful when they make decisions about their lives are displaying intrapersonal intelligence.

The following table summarizes the main characteristics, classroom activities and materials that meet learners with highly developed intrapersonal intelligence:

Learners' Characteristics (Musical Intelligence –Music Smart)	Classroom Activities	Classroom Materials
<ul style="list-style-type: none"> • Display a sense of independence or strong will • Have a realistic sense of their strengths and weaknesses • Do well when left alone to play or study • March to the beat of a different drummer in their style of living and learning • Have a good sense of self-direction • Prefer working alone to working with others • Accurately express how they are feeling 	<ul style="list-style-type: none"> • Set and pursue a goal • Describe one of your personal values • Assess your own work • Self-paced instruction • Individualized projects and games • One-minute reflection periods • Homework assignments • Choice activities 	<ul style="list-style-type: none"> • Self-Paced projects • Reflective materials • Quiet environment • worksheets

Table 09: Learners' Characteristics, Classroom Activities and Materials of the Intrapersonal Intelligence (Partially adapted from Armstrong, 1994 and Wheeler, 2013)

2.2.4.1.8. Naturalistic Intelligence

Naturalistic intelligence allows people to recognize and classify objects and other aspects of their environment which helps them “[...] understand the natural world.” (Stefanakis, 2002:2) People such as biologists, gardeners, botanists, geologists, florists, and archaeologists all exhibit this intelligence. Learners who are concerned in observing, classifying and understanding the various parts of the physical environment, and enjoy

studying the world around them -insects, cars, or stamps- display strength in this intelligence.

The following table summarizes the main characteristics, classroom activities and materials that suit learners with highly developed intrapersonal intelligence:

Learners' Characteristics (Musical Intelligence –Music Smart)	Classroom Activities	Classroom Materials
<ul style="list-style-type: none"> • Have a strong affinity to the outside world, to the beauty in nature, or to animals • Enjoy subjects, shows, or stories that deal with animals or natural phenomena • May show unusual interest in subjects like biology, zoology, botany, geology, meteorology or astronomy • Are keenly aware of their surroundings and changes in the environment • Have highly developed senses that help them notice similarities, differences and changes in their surroundings • May be able to categorize or catalogue things easily • May notice things others might not be aware of • Like to collect, classify, or read about things 	<ul style="list-style-type: none"> • Outdoor learning • Camping • Hiking • Scuba diving • Observation • Gardening • climbing • Classifying and categorizing activities • taking nature walks or field trips • Environmental protection activities 	<ul style="list-style-type: none"> • Tools for investigating nature • Pictures and videos showing nature • Background music of sounds of nature

Table 10: Learners' Characteristics, Classroom Activities and Materials of the Naturalistic Intelligence (Partially adapted from Armstrong, 1994 and Wheeler, 2013)

2.2.4.1.9. Existential Intelligence

People who possess the proclivity to tackle abstract and deep questions about the human life and death, about the universe and their role in the world exhibit a strong existential intelligence. This type of intelligence is said to be the intelligence of understanding in large contexts or beyond the living environment. It entails philosophy, religion and aesthetic, and appreciates the values of goodness and beauty. This intelligence is described in the words of Gardner (1999)

The capacity to locate oneself with respect to the furthest reaches of the cosmos – the infinite and the infinitesimal- and the related capacity to locate oneself with respect to such existential features of the human condition as the significance of life, the meaning of death, the ultimate fate of the physical and the psychological worlds, and such profound experience as love of another person or total immersion in a work of art (60).

However, the existential intelligence has not been integrated into most of the work in Multiple Intelligences, yet. The following table summarizes the main characteristics, classroom activities and materials that suit learners with highly developed existential intelligence:

Learners' Characteristics (Musical Intelligence –Music Smart)	Classroom Activities	Classroom Materials
<ul style="list-style-type: none"> • The ability to be sensitive to, or have the capacity for, conceptualizing or tackling deeper or larger questions about human existence, such as the meaning of life, why are we born, why do we die, what is consciousness, or how did we get here. • "Wondering smart, cosmic smart, spiritually smart, or metaphysical intelligence". • People who are concerned with fundamental questions about existence, or who questions the intricacies of existence • Children who appear to have "old souls," it is often easy to accept the existence of existential intelligence as something very real and important. These are the children who appear to have a sixth sense, they may be psychic, or ones who pose, and sometimes even answer, life's larger questions. Like: Why am I (we) here? Are there other dimensions, and if so, what are they like? Can animals understand us, or do animals go to Heaven? Are there really ghosts? Where do we go when we die? Why are some people evils? Is there life on other planets? Where is Heaven? 	<ul style="list-style-type: none"> •Critical thinking exercises • Discussion • Journaling • Reading • Role plays • Art • Asking questions activities • Comparing and contrasting activities 	<ul style="list-style-type: none"> •Questionnaires •Surveys •Religious books •Puzzles

Table 11: Learners' Characteristics, Classroom Activities and Materials of the Existential Intelligence (Partially adapted from Armstrong, 1994 and Wheeler, 2013)

2.2.4.2. The Application of Multiple Intelligences in ELT Classrooms

Christison (1998) clarifies that “although Multiple Intelligences Theory was not created as a curriculum or model for schools, many educators base their teaching on the theory.” (10-11) Many educators agree that Multiple Intelligences Theory is a malleable approach that contributes to education pedagogies; and this is the reason why so many teachers have adapted it in their teaching process. In addition, they have started to learn

more about the theory and its application in teaching classrooms by taking specialised training courses.

The application of MI theory in ELT was firstly introduced by Michael Berman in his book "*A Multiple Intelligences Road to an ELT Classroom*". This book presents various activities that cater for eight intelligences and which are ready to be used by ELT teachers. According to Berman (1998) MI theory is beneficial for ELT/EFL teachers; since, it helps them discover the uniqueness of their learners and the multifarious ways of learning they use to perceive things. Berman (1998) said

Gardner's work on intelligence can profoundly affect the way we view our pupils. People are people and they have the same basic needs and potential talent regardless of their race, ethnic background or economic circumstances. The concept of multiple intelligences gives us the possibility of identifying and adapting both the classroom environment and the activities we make use of to cater for these needs and talents. The end result can be that people fall in love with learning instead of regarding the time they spent at school as nothing more than a black cloud that hung over their heads until they came to the end of their prison sentence! (195)

Therefore, MI theory raises ELT teachers' awareness of the fact that learners bring with them specific strengths, unique learning styles, and different learning potentials; and this leads them to examine and form their best teaching techniques and strategies in the light of human differences (Christison, 1998).

Moreover, MIT may help in expanding the teachers' current teaching repertoire to include a cocktail of techniques, materials and methods needed to reach an ever wider and various range of learners, and accommodate their diverse needs rather than teaching them through the preplanned curricular in lock steps . In Nicholson-Nilson words "[...] [MIT] did not change what I taught, but it did change how I taught. Learning about the different ways students can be smart made me realize that if I chose different ways of presenting information and lessons, more students might truly understand what I was teaching them." (1998:7) Thus, EFL teachers do more than only teaching, but also, they become facilitators, lesson designers, observers, curriculum developers and at the top orchestrators.

Putting the theory of Multiple Intelligences into practice in EFL classes depends on constructing 'rigorous' curricular through the elaboration of multiple learning activities and task in the lesson plans and the assessment policy (Gardner, 2005); which will result in learners' being "*college and lifelong ready learners*" as what Plato (cited in Shore,2001:1) said in his proverb "Do not then train youth to learning by force and harshness, but direct them to it by what amuses their minds so that you may be better able to discover with accuracy the peculiar bent of the genius of each."

Armstrong (2000) proposed the following seven-step procedure that can be used to create lesson plans or curriculum units using MI theory as an organizing framework:

1. Focus on a Specific Objective or Topic.
2. Ask Key MI Questions.
3. Consider the Possibilities.
4. Brainstorm.
5. Select Appropriate Activities.
6. Set Up a Sequential Plan.
7. Implement the Plan

2-2-4-3 Multiple Intelligences Based-Assessment

Teaching and assessment are two facets of the same coin; they are indivisible (Chao, 2000). Whilst, the great majority of education systems stresses the use of formal standardized tests as a useful and essential instrument of assessing learners' success at school, many educators believe that the emphasis on this type of assessment is unfair, since it requires learners to present their knowledge parochially on verbal or logical fields in predetermined manners.

As learners learn in idiosyncratic ways, they cannot be assessed in a uniform fashion; tests should be constructed to elicit their leaning differences. Teachers are required to weave their assessment into instruction and allow their learners to utilize evaluation skills as learning tasks (Chen, 2006); so that, assessment can be an enjoyable learning experience.

Multiple Intelligences Theory provided a multiple approach of assessment based on diversity, authenticity, and expansibility that helps teachers to assess learners' knowledge and performance from different perspectives through the use of authentic materials and context-based assessment. Rather than being assessed using traditional tests such as homework assignments, multiple choice questions, fill in the gaps and true/false activities; learners are put in a natural learning environment to accomplish a task or solve a problem with the aim of being assessed in the actual working context.

Besides, this view attracts the attention of many educators (Christison, 1998; Campbell, 2003; and Chen, 2006) and testing professionals (Darling-Hammond; Ancess and Falk, 1995) who welcomed and appreciated the application of *authentic assessment*. By this is meant, learners are from various perspectives through involving a variety of

assessing modes; that should be employed according to the class needs (learners' learning differences, topic or content and time allocation).

New assessment policies have been developed to incorporate Multiple Intelligences Theory into the teaching/learning process and curricular design. Lazear (2004) one of the leading figures in the field of Intelligence-fair assessment proposed an assessment policy based on multifarious rubrics and not just the logical and linguistic ones, as shown in figure 05.

Moreover, Campbell (2003) suggested some possible assessment rubrics aligned with MIT that can help rekindling diverse learning dimensions and promoting students' autonomy as portfolios, charts, posters, artworks, dramatic presentations, diagrams, composing songs, debates, self-assessments, interviews peer assessments, journals and photographic essays.

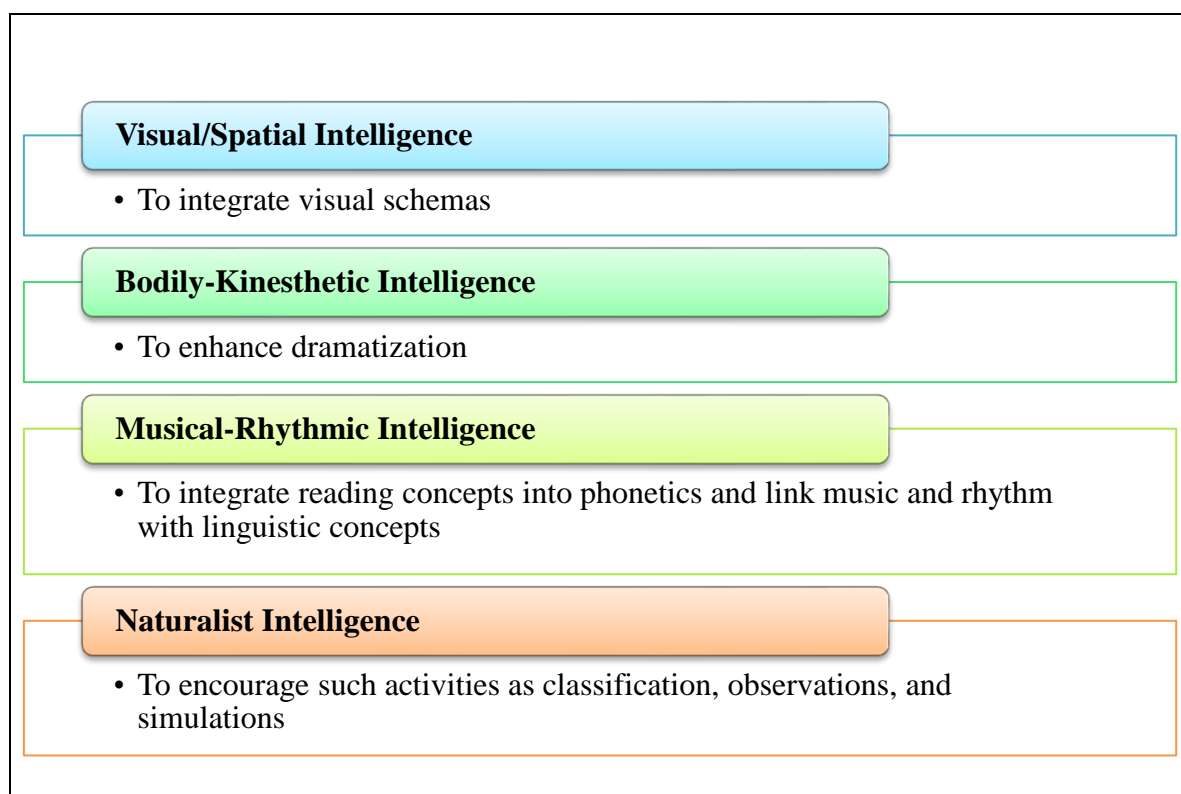


Figure 05: Some of Lazear Policy Assessment Rubrics (2004)

Conclusion

Until a conspicuous definition of intelligence can be formed and agreed upon, its perennial controversy remains its prevailing property, and theories will continue paving the way for alternative definitions and views to ravel out its nature. Yet, opposing the outdated belief about intelligence unitary and endurance, Gardner freed the concept from this static view and proposed his multidimensional view of intelligence through the theory of Multiple Intelligences.

In this chapter, several issues were discussed: Garner's theory of Multiple Intelligences and its status vis-à-vis general intelligence "g". Furthermore, due to the considerable attention gained by MIT in the realm of education –rather than in the corridors of psychological testing- a profound description of its chronicling numerous implementations was provided.

CHAPTER TREE

Learning Styles

Introduction

3.1. Definition of learning Styles

3.2. Learning Styles Modalities

3.2.1. Perceptual Learning Styles (Sensory)

3.2.1.1. Visual Learners

3.2.1.2. Auditory Learners

3.2.1.3. Kinesthetic (Tactile) Learners

3.2.2. Personality Types

3.2.2.1. Extroverted Versus Introverted Learners

3.2.2.1.1. Extroverted Learners

3.2.2.1.2. Introverted Learners

3.2.2.2. Sensing-Sequential Versus Intuitive Random
Learners

3.2.2.2.1. Sensing-sequential Learners

3.2.2.2.2. Intuitive Learners

3.2.3. Cognitive Learning Styles

3.2.3.1. Field-Independent/Field-Dependent Learners

3.2.3.1.1. Field Independent Learners

3.2.3.1.2. Field Dependent Learners

3.2.3.2. Reflective Versus Impulsive Learners

3.2.3.2.1. Reflective Learners

3.2.3.2.2. Impulsive Learners

3.2.4. Kolb's Experiential Model

3.2.4.1. The Experiential Learning Cycle

3.2.4.2. Kolb's Learning Styles Model

3.3. Teaching Styles

3.3.1. Definition

3.3.2. Teaching Styles Classifications

3.3.2.1 Jarvis' Teaching Styles

3.3.2.2 Grasha's Five Teaching Styles

3.4. Learning styles and Teaching Styles Compatibility

Conclusion

CHAPTER THREE

Learning Styles

Introduction

Recent research studies on the learning process have revealed that learners tend to perceive knowledge and process information in different ways. This foundation contrasted sharply the out-dated belief in which learners were viewed as identical empty vessels to be filled with a certain bulk of information (Freire, 1998). This paradigm shift towards individual differences gave birth to the Theory of Learning Styles. To be more precise, the development of individualities could be the platform of today's concept of Learning Styles.

A tremendous number of definitions of Learning Styles have been elaborated, and several approaches to raise learners' awareness about their importance have been proposed. In this chapter, we will try to shed some light on the literature pertinent to the concept. A wide range of learning styles modalities will be presented, with an emphasis on Perceptual Learning Styles that are mainly connected to our study.

We will attempt, also, to elucidate the compatible relationship between learning styles and teaching styles and their congruent impact on the learners' achievements in language classes.

3.1. Definition of learning Styles

Closely related to Multiple Intelligences Theory is that of Learning Styles which traced back its origins to the 1970s along with Kolb's (1976) Experiential Model of learning. Learning styles are "individual's natural, habitual and preferred way(s) of absorbing, processing, and retaining new information and skills" (Reid, 1995: viii). They are internal characteristics that can be cognitive, affective or social and learning preferences which people use unconsciously to receive, process, understand and retrieve

information (Felder and Silverman, 1988). In the same line of thoughts, Ellis (1985) describes learning styles as the learner's more or less consistent way in which he/she perceives, conceptualizes, organizes and recalls information. Thereby, they put emphasis on information processing. Broadly, Dun et al (1989) -based on their studies on different cultural groups and the influence of culture shaping their predominant learning styles- assert that learning styles involve a variety of emotional, sociological and environmental stimuli. The overwhelming submission of such a multifarious repertoire of dimensions while defining learning styles leads to an uncontrolled and fuzzy understanding of the concept. Therefore, in our research study we accept as a working definition the one provided by Reid (1995) cited previously.

Learning Styles Theory was used in many educational researches by a number of researchers, such as Kinsella (1995), Oxford (1995), and Reid (1995). The results of these researches played a major role in enhancing learners' performance and raising the teachers' awareness about their learners' differences, which led them to use a diverse range of classroom activities and teaching materials.

3.2. Learning Styles Modalities

Learning Styles tessellated classifications were the result of theorists' diverse perception of the learning process (Rasmussen, 1996). As a point of fact, Learning Styles are divided into three major categories: sensory or perceptual learning styles, cognitive leaning styles and personality learning styles. Cognitive learning styles include impulsive/reflective and field-independent/field-dependent learning styles. Personality learning styles also fall into the following sub-styles: intuitive random versus sensing sequential learning styles, and extroverted versus introverted learning styles .In her study, Reid (1995) divided perceptual/sensory learning styles as visual/auditory, group/individual

and tactile/kinesthetic and the most known ones are visual, auditory and kinesthetic learning styles (or the VAK) on which we based our research study.

3.2.1. Perceptual Learning Styles (Sensory)

Perceptual Learning Styles or sensory preferences refer to the physical sensory channels used by learners to perceive knowledge and understand the world around them (Oxford, 2001). These learning preferences originate from the work of Doctors Bandler, R. and Grinder, J. (1975) in the field of Neuro-Linguistic Programming (NLP). According to the NLP principles our five senses; seeing (eyes), hearing (ears), smelling (nose), touching (hands), and tasting (tongue) play a vital role in the way we communicate, perceive information and relate to others. NLP proponents claim that each person has a Primary Representational System (PRS) –referring to our five senses- which constructs his/her tendency to store, remember, and retain information in specific modes: Visual, Auditory, Kinesthetic, Olfactory or Gustatory (VAKG).

The VAK theory is nowadays the trendiest modality in different fields and utmost in the field of education. This modality is composed of three sensory receivers: Visual, Auditory and Kinesthetic (tactile) –sometimes are used interchangeably- based on perception and memory. Although, all learners possess a blend of the three modalities, one or two of these modalities is dominant and defines learners’ best way to learn and perceive new information; Ehrman and Oxford (1995) assert “naturally, not everyone fits neatly into one or another of these categories to the exclusion of the other, parallel categories (e.g. visual, auditory, and kinesthetic).”(69) In this sense, we cannot limit the individuals’ learning styles with only one type i.e. we cannot say that this learner has just a visual or auditory learning style.

3.2.1.1. Visual Learners



Learners with a dominant visual style have a preference for seen or observed things such as images, displays and visual illustrations. They tend to recall information (pictures or piece of text) by picturing them in their minds i.e. they remember what they seeing or read better than what they hear. Learners who fall into visual category can easily visualize objects, plans and outcomes in their mind's map. Oxford portrays that visual learners “obtain a great deal [of information] from visual stimulation” (2001:360) which raises their spatial sense and make them quite good map and graphs readers.

❖ Characteristics of Visual Learners

Learners with a highly developed visual learning style have the following characteristics:

- They Observe rather than talk or act.
- They need to see the teacher's body language and facial expression to understand the lesson.
- They like to read magazines, books and other types of reading materials, and take notes.
- They are quiet by nature, meticulous, and tidy.
- They tend to be fast talkers.
- They exhibit impatience and have a tendency to interrupt.
- They enjoy working in groups and learn through role plays and watching others perform or demonstrate a skill.

- They May have artistic ability, and an overreaction to sounds.
- They have good hand writing and excel in spelling activities.
- They prefer sitting in the front of the classroom.

In order to cope with their visual learners' needs, teachers have to design lessons which incorporate a variety of visual aids and demonstrations. The following figure illustrates some of the learning difficulties faced by visual learners during the lessons, and a number of tips that can help them in overcoming these difficulties. Also, it presents some teaching materials and phrases mostly used by this kind of learners, and a number of teaching materials and activities that can be used as cues for teachers to know their learners preferred ways of leaning through classroom observation and the daily contact with them.

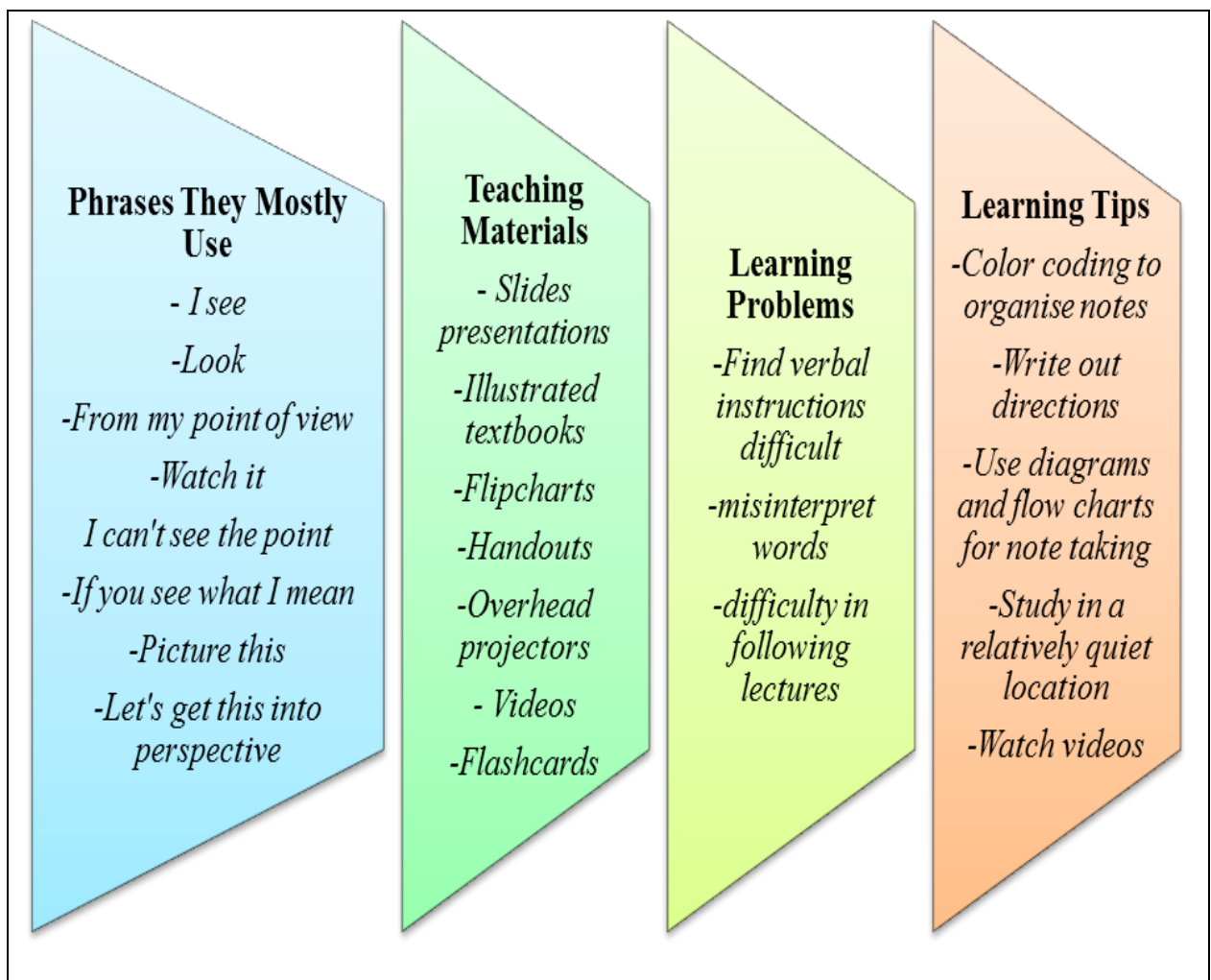


Figure06: Visual Learners' Learning Aids and Cues

3.2.1.2. Auditory Learners



Learning through hearing

Auditory or verbal learners are those who learn best through verbal lessons and discussions i.e. “[they] enjoy and profit from unembellished lectures, conversations, and oral instruction.” (Oxford, 2001:360) They commonly recall information in detail by hearing them in their minds, after it has been spoken rather than reading it. Also, they interpret the underlined meaning of speech by means of pitch, tone and speed of the voice.

❖ **Characteristics of Auditory Learners**

Learners with a highly developed auditory learning style have the following characteristics:

- They are talkative and learn from discussions.
- They whisper to themselves and move their lips when reading silently.
- They like to hear someone explain something and like to explain things to other people.
- They think in a linear manner.
- They are often good in learning foreign languages.
- They benefit from group/pair work activities.
- They need to understand small parts and the relationships between these parts to create the wider picture and a deeper understanding.
- They need time to think and reflect, they benefit from reviewing the topic at the end of a lesson.
- They prefer presenting oral reports rather than the written ones.

The following figure presents a list of teaching materials and the most used phrases by auditory learners that can be beneficial for teachers to distinguish their learners' preferences, and some of the learning difficulties and learning tips that can benefit auditory learners in the learning process.

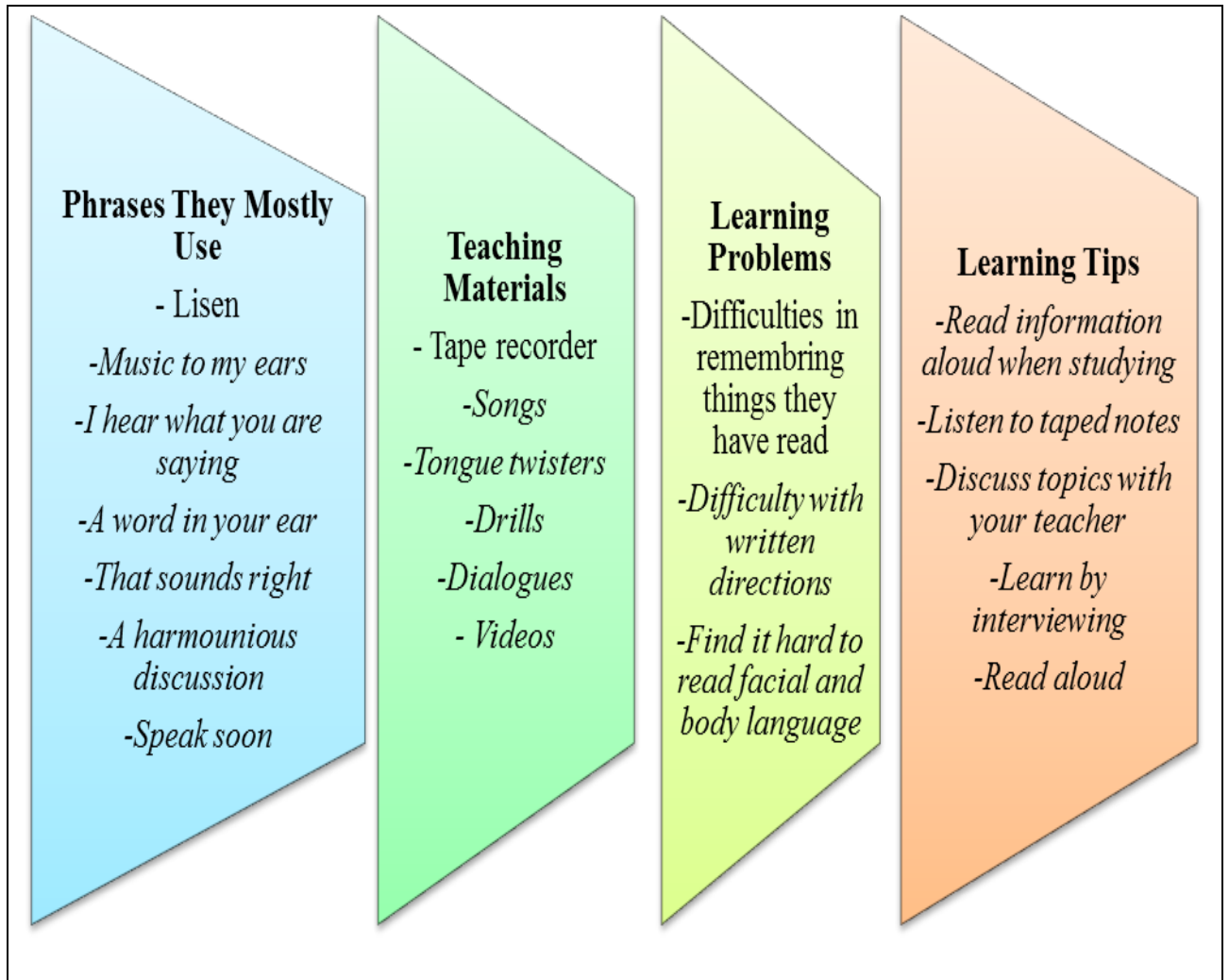


Figure07: Auditory Learners' Learning Aids and Cues

3.2.1.3. Kinesthetic (Tactile) Learners



Learning through doing

The term kinesthetic has been derived from the Greek word “*kinein*” which means “move”+ “*aesthesia*” or “*aesthesia*” meaning “sensation”. Thereby, kinesthetic “move-

sensation” refers to the stimulation of muscles, joints and tendons to perceive movement (Collins English Dictionary, 2009). The two terms tactile – learning with one’s hands - and kinesthetic are used interchangeably by some researchers.

Apparently, kinesthetic learners are those who process information through touching, feeling and experiencing the world around them. Because of their tendency to interact with others and take place in physical activities to perform or do something; they need frequent study breaks during lecturing sessions to avoid boredom. Precisely, sitting in class and listening to the teacher lecturing is repulsive, they fidget and can’t sit for a long time.

❖ **Characteristics of Kinesthetic learners**

Learners with a highly developed kinesthetic learning style have the following characteristics:

- They like to explore concepts through experimentation and learn through trial and error.
- They tap a pencil or foot while studying.
- They express emotions through physical means.
- They use hands while talking, and wear clothes for comfort.
- They can be very well coordinated and have athletic ability.
- They need few verbal or written instructions; they are confident to explore through hands on activities, touch and manipulation of objects and ideas.
- They have an outgoing personality.
- They like physical rewards and handling objects.
- They like to touch people when talking to them.
- They are able to master skills through practice or imitation.

The following figure presents a list of teaching materials and the most used phrases by kinesthetic learners that can be beneficial for the teachers to distinguish their learners' preferences, and some of the learning difficulties and learning tips that can benefit kinesthetic learners in the learning process.

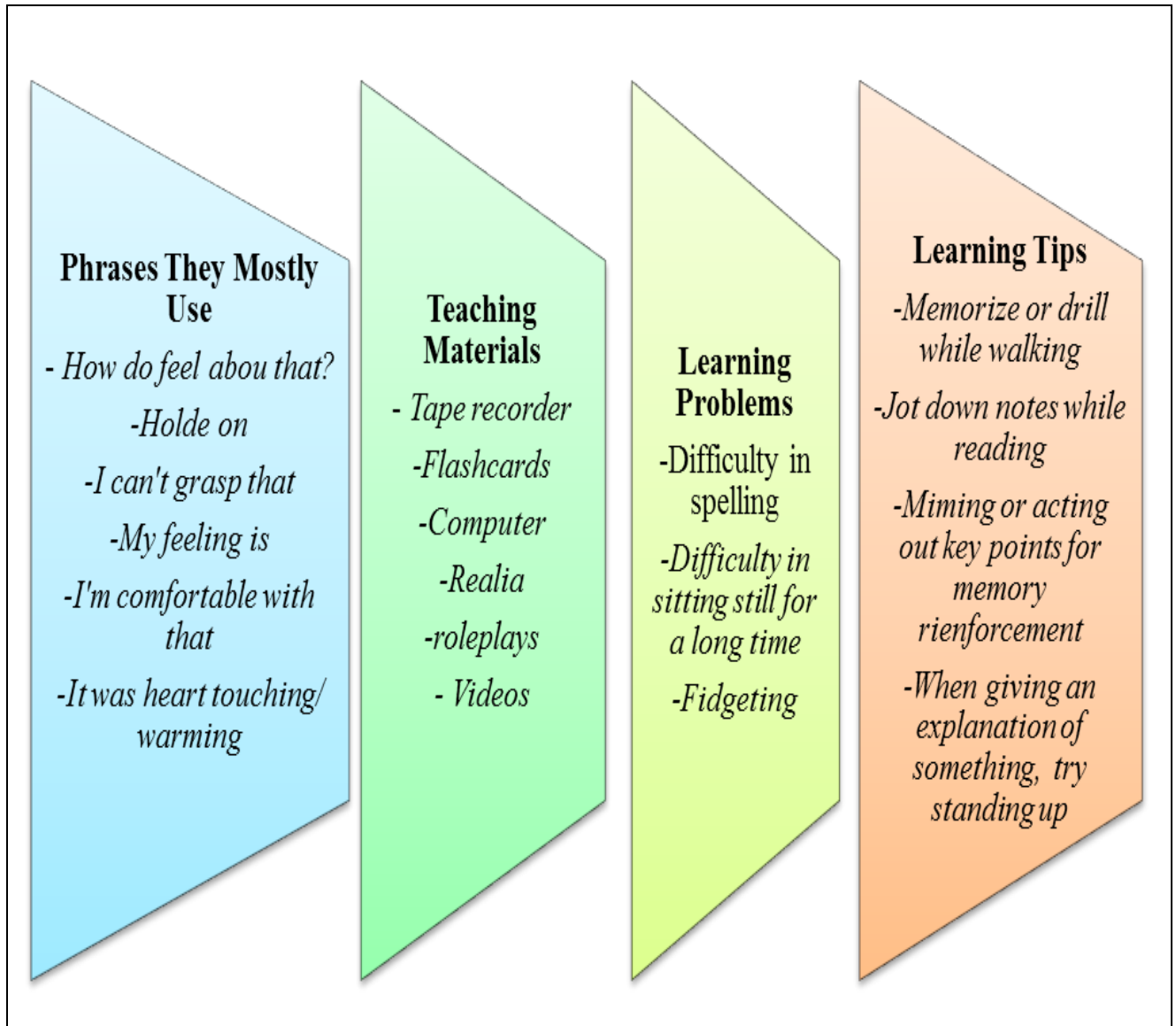


Figure08: Kinesthetic Learners' Learning Aids and Cues

3.2.2. Personality Types

Learner's personality is paramount in determining the way he/ she manipulates his/ her feelings and emotions during the learning process. Likewise, Leaver and Oxford (1996)

found numerous significant relationships between learners' personality type and their foreign language proficiency. Hence, Personality Type or as it is often called psychological type, refers to the learner's sensitivity and patterns of attitudes towards his/her character or behaviour in a learning situation (Oxford, 2003) that determines his/her way of perceiving knowledge.

3.2.2.1. Extroverted Versus Introverted Learners

3.2.2.1.1. Extroverted Learners

Extroversion is defined as “the attitude (orientation) that identifies the direction and flow of energy to the outer world” (Myers et al, 1998: 390) i.e. extroverted learners are those who feel energized when working in groups and interacting with their mates. They have the tendency to plunge up in concrete experiments, and learn best and thrive when they are involved in physical tasks which provides them with the opportunity to talk and work out their thoughts and ideas collaboratively. This type of learners is action-oriented. However, they feel frustrated and cannot settle down and listen to the teacher's explanation or read a text as they are solitary endeavors.

3.2.2.1.2. Introverted Learners

On the other hand, introversion is “the attitude (orientation) that identifies the direction and flow of energy to the inner world” (Myers et al, 1998: 390) i.e. introverted learners are those who gain energy from reflecting on their thoughts and contemplation to figure out the world. They learn best when they are involved in solitary activities as verbal reasoning, and need sufficient time for mental reflection and information processing. This type of learners excels in listening, reading and writing activities; especially, when they are allowed to work independently relying on their own pace and high self-efficacy.

3.2.2.2. Sensing-Sequential Versus Intuitive Random Learners

3.2.2.2.1. Sensing-Sequential Learners

Sensing learners rely on their five senses to accommodate real and tangible information rather than theories. They learn best through practical and factual ways in an organized and structured manner. Also, they enjoy working independently and go step by step in a systematic way to accomplish concrete experiments and apply knowledge they have learned through observation and repeated practices. Sensing learners are analytic in their thinking –methodical thinkers- i.e. they tend to overlook the general ideas and concentrate in understanding the details. This type of learners finds difficulties and cannot cope with the teacher who goes quickly when presenting the lesson, and jump around from one thought to another.

3.2.2.2.2. Intuitive Random Learners

According to Felder and Silverman intuitive learners are those “who prefer [...] to learn through theory and principles. They like to solve problems through innovative solutions.” (1988: 676) They rely heavily on their hunches and intuition –pretty much as skeptic- to conceptualize information and clarify theories. Learners who fall in this category tend to be holistic thinkers; they depend on their deep insights and imagination to grasp general meanings without diving into hard details; that is, to boil causalities into their essences. They have a keen sense of curiosity to learning new materials in a creative and innovative ways with bursts of energy. They easily feel restless and bored when the teacher belabors in explaining ideas because of their adeptness in grasping new ideas.

3.2.3. Cognitive Learning Styles

Cognitive Learning Styles refer to individuals' preferred mental ways in processing information. According to Reid (1995) Cognitive Styles consist of the following trends: impulsive/reflective, analytic/glob, and field-independent/field-dependent learning styles.

3.2.3.1. Field-Independent/Field-Dependent Learners

3.2.3.1.1. Field-Independent Learners (FI)

Field Independent modality emerged out of Witkin et al (1954) work on *Group Embedded Figures Test*. It is considered as the earliest cognitive style theory that attracted the attention of many educators in the field of foreign /second language teaching/learning (Naiman et al, 1978; Brown, 1977). Chapelle and Green defined it as “[the] cognitive style influencing people’s perception and processing of information, as well as their interaction with their environment” (1992:48)

Field Independent learners or analytic learners are the ones who have “the ability to perceive a particular, relevant factor or item in a field of distracting items” (Hamada, 2007:46) i.e. they have the capacity for analyzing information and extract particular elements in a specific field. In the same vein, Brown portrays that FI involve “analysis attention to details, and mastering of exercises, drills, and other focused activities.” (2000: 115) This type of learners have the tendency to focus on details and break down the learned information into pieces such as in learning a foreign language (field) FI learners analyze the reading text (context) into parts to grasp the meaning (language elements). In a nutshell, Field Independent learners are characterized by:

- Solving problems analytically.

- Perceiving patterns and not getting lost among omnipresent stimuli.
- Cognitive restructuring skills.
- Interpersonal competencies.
- The use of hypothesis testing.
- Autonomy and self-reliant modes of processing.
- The tendency to be self-confident and competitive.
- The ability to work independently of the external field manifests itself in certain intellectual tasks.
- They may also be perceived as cool, aloof, individualistic, and task-oriented learners. (Kamińska, 2014 :22)
- Intrinsically motivated with self-directed goals.
- Defining their own study strategies. (Cassidy,2004 :425)

3.2.3.1.2. Field-Dependent Learners (FD)

In contrast to Field Independent learners, Field Dependent learners or global learners have “the ability to perceive the overall organization of the surrounding field, and parts of the field are experienced as fused.”(Sims and Sims, 1995:51) This means that FD learners tend to focus on the whole picture of the learning material - understand the general structure- and ignore the details, so when they read a text, they read for gist to get the general idea. They have the tendency to be social learners and rely on external stimuli ; “extrinsically motivated [with] [...] performance goals” (Cassidy,2004:425). In sum, FD learners are characterized by:

- Holistic in perceiving the full picture in a given situation
- Sociable, empathetic and perceptive of others.
- The high ability to acquire communicative skills.
- Excelling in untutored learning. (Kamińska, 2014 :22)

3.2.3.2. Reflective Versus Impulsive Learners

3.2.3.2.1. Reflective Learners (RL) *Think First Do Later*

Reflectivity and impulsivity are two polar ends of a versatile spectrum in the domain of cognitive styles. They refer to individuals' tendency of postponing initial responses when answering questions or solving a problem. Studies related to these two human beings cognitive characteristics started in the early 1960s under the realm of intellectual development, by the American Psychologist Jerome Kagan who measured children's conceptual tempo in reading using the *Matching Familiar Figures Test*.

Thence, Reflective Learners are those who scrutinize the information and generate several alternatives before making decisions (Cassidy, 2004). It means that, they have the tendency to examine and manipulate information introspectively before answering a question or solving a problem. Based on Kagan's (1965) –and many researchers- research conclusions RL are relatively slow and highly accurate in their learning process; they commit fewer performance error. However, they find difficulties in class because of their delayed and slow response latencies i.e. they need long period of time to review all the alternatives before answering a question, and this results in their lack of participation in the different classroom activities, especially in group works. So, teachers need to be patient and do not overwhelm them with a barrage of information in a short period of time.

3.2.3.2.2. Impulsive Learners *Shoot From the Hip*

Impulsive Learners are characterized by giving the rapid answer than the right one. They have the tendency to respond faster and make more errors i.e. they take the risk to implement the first idea that has come in mind. Unfortunately, this uncontrolled

precipitation –sometimes- exposes them to the teachers’ scathing responses. Moreover, Kagan (1965) stated that “the impulsives reach decision and report them very quickly with little concern for accuracy.” (cited in Jamieson, 1992: 492) Thus, they face difficulties in coping with the rigorous rules in the classroom, and cannot focus on lessons for a long time because of their lapses in concentration. Thus, teachers are required to use quick paced and crisp activities that fit the mental makeup of such type of learners and do not judge their errors harshly (Hamada, 2007).

3.2.4. Kolb’s Experiential Model

One of the influential and well-known theories in the field of education is Kolb’s learning theory (1984) that has its roots stemmed from a range of multifarious theories in developmental psychology such as Piaget, Dewey and Lewin who emphasized the importance of experience in learning and learning as a lifelong and cyclical process. According to Zuber-Skerritt, Kolb’s cognitive theory “[is] a comprehensive theory which offers the foundation for an approach to education and learning as a lifelong process and which is soundly based [on] intellectual traditions of philosophy and cognitive and social psychology.” (1992: 98)

3.2.4.1. The Experiential Learning Cycle

David Kolb defines learning as “the process whereby knowledge is created through the transformation of experience;” (1984:38) by this is meant, learners perceive or understand information (*experience*) using concrete experiences such as feelings and the five senses or abstract thoughts (thinking), then convert the perceived information (*experience transformation*) into knowledge through applying complex mental processes (reflective or active ways of processing information) and this knowledge can be used flexibly in different contexts. Hence, Kolb’s theory of learning is a holistic perspective –

experience, perception, cognition and behaviour- based on measuring learners' internal cognitive processes and presents a cyclical model of learning which consists of four stages:

- ❖ **Concrete Experience:** (*doing*) Learners actively act out a new experience or activity or reinterpret an existing one.
- ❖ **Reflective Observation** (*Observing*) Learners consciously assimilate the experience through observation and reflection.
- ❖ **Abstract Conceptualization** (*thinking*) Learners attempt to conceptualize a theory (about the new experience) or develop a concept of what is observed through thinking (analysis).
- ❖ **Active Experimentation** (*Planning*) Learners plan to test the new experience by applying it in different situations, or plan for a forthcoming one (hypothesis testing) and move again towards the concrete experience to continue the cycle of learning. (see figure 09)

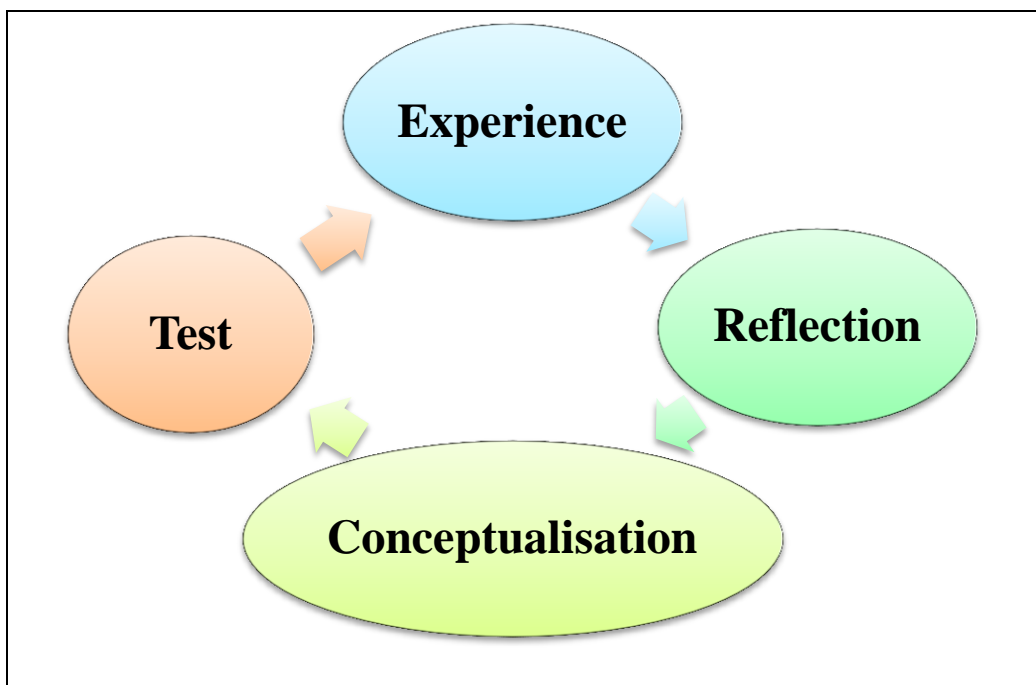


Figure09: Kolb's Learning Cycle (1984)

3.2.4.2. Kolb's Learning Styles Model

Learning is a monolithic and a cyclical process (Kolb, 1974) thereby; learners have to execute all the four stages in a sequence to learn effectively. Based on these four learning stages Kolb postulated four distinct learning styles: (see figure 10)

- **Accommodators** (*Activists*) are active learners and prefer to learn through hands-on experimentation (using concrete perception of information). They tend to be risk takers and solve problems through trial and error. Although, they are analytic they rely on intuition and other people's analysis rather than logic and searching themselves. This type of learners enjoys working in groups to achieve goals and adapt easily to the immediate circumstances.
- **Divergers** (*Reflectors*) are reflective and emotional learners. They enjoy gathering information and elaborating ideas objectively and place them in meaningful contexts. They tend to be imaginative and use multi-perspective ways in solving problems and generating ideas. Learners who fall in this category prefer working in groups in concrete experiences and watch their mates' demonstrations rather than doing themselves. They rely heavily on brainstorming and reflective observation.
- **Assimilators** (*Theorists*) tend to process information abstractly and excel in understanding formidable bulks of information and organizing them in concise and logic formats. They rely on inductive reasoning, abstract conceptualization and reflective observation to create theoretical models. They prefer learning through lectures, readings, examples and analogies.

- **Convergers** (*Pragmatists*) tend to be thinkers and doers at the same time; they use their theoretical knowledge and technical abilities to solve problems practically in real settings. They rely on deductive reasoning and simulations to carry out experiments and find practical solutions.

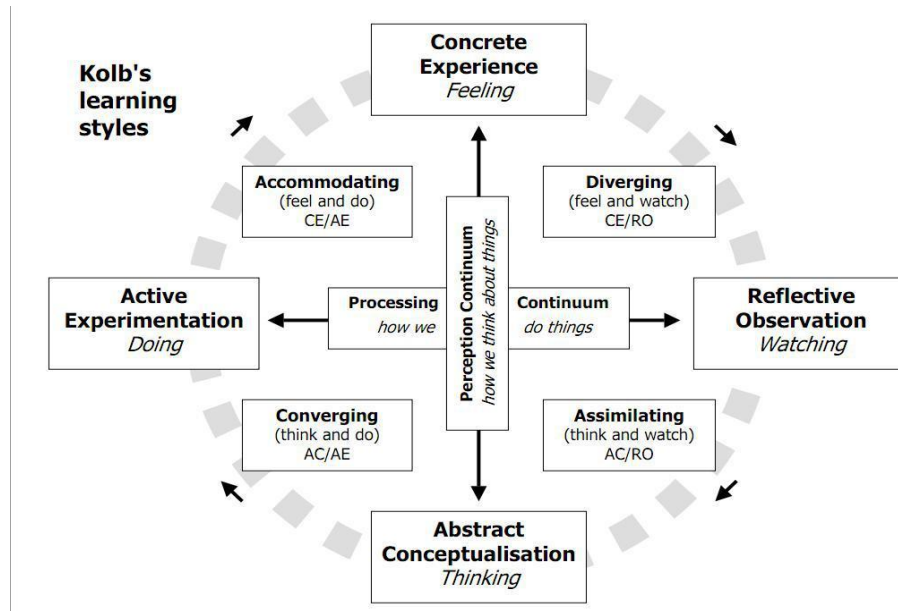


Figure10: Kolb’s Learning Styles (1984)

3.3. Teaching Styles

What I **hear**, I *forget*.
 What I hear and **see**, I *remember a little*.
 What I hear, see, and **ask questions about** or **discuss** with
 someone else, I begin to *understand*.
 What I hear, see, discuss, and **do**, I *acquire* knowledge and skill.
 What I **teach** to another, I *master*
 (Silberman, 1996:1)

3.3.1. Definition

Alike learners, teachers have the tendency to teach the subject matter in hand using their preferred style of teaching in which they feel more comfortable. The term teaching style refers to the teacher’s values and specific philosophy of education. Kaplan and Keis define teaching styles as “[the] teacher’s personal behaviours and media used to transmit

data to or receive it from the learner.” (1995:29) Similarly, Heimlich and Norland (1994) portray that teaching styles demonstrate the “product versatile facets” of the teacher’s life; that is to say, they reflect the teacher’s personal beliefs, background education, preferences, attitudes and even the cultural background. Furthermore, it is interesting to mention that teaching styles are associated with the teacher’s learning experience i.e. they are the mirror image of the teacher’s learning style and proclivities. Evidently, “research supports the concept that most teachers teach the way they learn;” (Stitt-Gohdes, 2001:136) this means that if a teacher is impulsive he/she may overwhelm the reflective learners with a barrage of information without paying attention to their slow response latencies and attention span, which may hinder their concentration in class.

Concerning foreign language teaching styles Cook defines them as “[a] loosely connected set of teaching techniques believed to share the same goals of language teaching and the same views of language teaching and the same views of language and of second language learning.” (2008:235) Likewise, Peacock (2001) defines second/ foreign language teaching styles as “natural, habitual and preferred ways of teaching new information and skills in the classroom.” In this respect, the majority of teachers demonstrates different and unique styles in their classroom management and possesses various beliefs and philosophies about their profession.

3.3.2. Teaching Styles Classifications

The substantial role of teaching styles in improving learners’ overall outcomes attracted the attention of many researchers (Black, 1993; Strange, 1998; Heimlich and Norland, 2002) in the field of education. Despite, the limited amount of research in identifying the different teachers’ teaching styles, a range of classifications of teaching styles flourished out of the researchers’ studies carried out in general psychology to identify the various teaching styles applied in the classrooms. The following are some of

the categories derived by a number of educational scholars in the field of psychology; yet, some are related to teaching in general and others are related to teaching Second/ Foreign Language in particular:

- ❖ **Galbraith and Sanders' (1987) Teaching Styles:** visual, kinesthetic, olfactory aural, interactive, print, and haptic teaching styles.
- ❖ **Cook's (2008) S/F Language Teaching Styles:** academic, audio-lingual, social communicative, and information communicative teaching styles, etc.
- ❖ **Peacock's (2001) S/F L Teaching Styles:** visual, auditory, kinesthetic, tactile individual, and group teaching styles.

3.3.2.1. Jarvis' Teaching Styles

- **Didactic teaching style** is a teacher-centered style based on lengthy lectures and one way interaction. The learners are passive receivers of knowledge “empty vessels” and the teacher is the pivot of the class “sage on the stage”, and “above all, the formal lecture provides almost limitless scope for boredom, and also for the irritation which many feel at being ‘lectured at’ in any situation in life.” (Griffin,2006 :73)
- **Socratic Teaching style** is, also, a teacher-centered style based on questioning; the teacher plays the role of guide for the learners, he/she guides them to find the needed information through asking questions, in the form of dialogues, to lead them to the correct knowledge.
- **Facilitative Teaching style** is a student-centered style, in which the teacher promotes self-learning, manages the classroom while the learners perform a given task. Moreover, the teacher provides the necessary feedback and helps the learners to develop critical thinking.

3.3.2.2. Grasha's Five Teaching Styles

In order to investigate the stylistic qualities possessed by the college teachers and their impact in enhancing the quality of the learning process, Grasha (1994,2009) elaborated a conceptual model of teaching styles composed of five different styles (expert, formal authority, personal model, facilitator and delegator) that define four clusters of teaching styles (Expert/Formal Authority, Personal Model/Expert/Formal Authority, Facilitator/ Personal Model/Expert, Delegator/Facilitator/Expert). For more details about the five teaching styles check table 12 below.

Style	Description	Advantage	Disadvantage
Expert	Possesses knowledge and expertise that students need. Strives to maintain status as an expert among students by displaying detailed knowledge and by challenging students to enhance their competence. Concerned with transmitting information and ensuring that students are well prepared	The information, knowledge, and skills such individuals possess.	If overused, the display of knowledge can be intimidating to inexperienced students. May not always show the underlying thought processes that produced answers.
Formal Authority	Possesses status among students because of knowledge and role as a faculty member. Concerned with providing positive and negative feedback, establishing learning goals, expectations, and rules of conduct for students. Concerned with the "correct, acceptable, and standard ways to do things."	The focus on clear expectations and acceptable ways of doing things.	Strong investment in this style can lead to rigid, standardized ways of managing students and their concerns.

Personal Model	Believes in "teaching by personal example" and establishes a prototype for how to think and behave. Oversees, guides, and directs by showing how to do things, and encouraging students to observe and then to emulate the instructor's approach.	The "hands on" nature of the approach. An emphasis on direct observation and following a role model.	Some teachers may believe their approach is "the best way," leading some students to feel inadequate if they cannot live up to such expectations and standards
Facilitator	Emphasizes the personal nature of teacher student interactions. Guides students by asking questions, exploring options, suggesting alternatives, and encouraging them to develop criteria to make informed choices. Overall goal is to develop in students the capacity for independent action and responsibility. Works with students on projects in a consultative fashion and provides much support and encouragement	The personal flexibility, the focus on students' needs and goals, and the willingness to explore options and alternative courses of action to achieve them	Style is often time consuming and can be ineffective when a more direct approach is needed. Can make students uncomfortable if it is not used in a positive and affirming manner
Delegator	Concerned with developing students' capacity to function autonomously. Students work independently on projects or as part of autonomous teams. The teacher is available at the request of students as a resource person.	Contributes to students perceiving themselves as independent learners	May misread students' readiness for independent work. Some students may become anxious when given autonomy.

Table12: Summary of Grasha's Five Teaching Styles (Adopted from Grasha, 1994:143)

After the identification of the five teaching styles, Grasha proclaimed that the classification of the teacher's teaching styles "into one of five boxes [...] is premature."

(1994:142) Hence, he developed four blends of clusters of teaching styles which reflect the teachers' possession of each of the five styles with different degrees.

- **Cluster one** *Expert/Formal Authority* the teacher tends to be subject-oriented, favours lecturing while the learners receive the correct information. This type of teachers prefers teacher-centered discussions and oral presentations and emphasises the dissemination of information to the maximum. Tests and grades are of a great value and play a potent role in determining the amount of knowledge the learners have acquired during the lessons.
- **Cluster two** *Personal Model/Expert/Formal Authority* the teacher tend to be a coach and a guide. This type of teachers prefers teaching through modeling –the learners emulate them- and illustrating alternatives; they enjoy sharing their personal viewpoints and thoughts to guide the learners' towards the right answers.
- **Cluster Three** *Facilitator/ Personal Model/Expert* the teacher emphasises collaborative learning and student-centered learning. This type of teachers prefers problem-based learning through the use of group/pair work tasks such as simulations and role plays.
- **Cluster Four** *Delegator/Facilitator/Expert* the teacher favours student-centered learning or self-discovery learning projects. This type of teachers tends to be a consoler and uses cooperative learning activities to place more responsibility on the learners; to take initiative to accomplish complex tasks and meet their learning needs.

3.4. Learning and Teaching Styles Compatibility

It is mostly evident that learners acquire and process information in different ways with variant paces; and their academic excellence is related to a great extent to the alignment of their learning styles and their teachers' teaching styles (Dunn, 1995; Felder, 2002; Collison, 2000). According to Oxford and Lavine "learners whose style preference is conspicuously different from teacher's [teaching styles] may be plagued by anxiety and respond negatively the teacher, the classroom, and the subject matter." (1992:38) In the same line of thoughts, Felder and Henriques (1995) claim that

How much a given student learns in a class is governed in part by that student's native ability and prior preparation but also by the compatibility of his or her characteristic approach to learning and the instructor's characteristic approach to teaching. (21)

Speaking personally, the same opinion is held as the previously stated educationists; because, in spite of, the great efforts that the majority of the teachers in the different levels (primary, intermediate, secondary and at the university) put forth to teach their students, most of the time, effective learning is not reached and the students fail to obtain knowledge or any needed skills; and this can be observed apparently "in the painful disparity between what we think we have effectively taught and what students indicate they have learned on the examination papers." (Fayombo, 2015:47)

In this sense, teachers and learners are called on to raise their awareness about their learning styles and try to harmonize them (Oxford, 1992). Furthermore, Ellis (2005) proclaims that the optimum type of teaching (Learner-Instruction Matching) is the one based on matching the learners' preferred ways of learning and the teacher's teaching styles. On the basis of this, teachers should take into account such learners' differences

when designing their lesson plans; by tailoring a wide range of activities and tasks that cater for diverse learning styles to address all the learners' needs. Besides, teachers can raise their learners' awareness about the variety and versatility of the learners' learning styles, and expand their repertoire about their multiplicity; which may result in attaining diligent learners who can take responsibility of their learning (Grasha, 1996).

Conclusion

A thorough examination of the aforementioned definitions and models of Learning Styles reveals its multiplicity and complex nature. Despite the fact that an exhaustive definition of Learning Styles has not evolved yet, there are convergent dimensions in the array of definition suggested by theorists in the field of study that can be used as a sound theoretical foundation in Learning Styles' examination and classification.

This chapter sat out the theoretical underpinnings for Learning Styles by examining the definitions, theoretical models and classifications drawn from the field of general psychology and psycho pedagogy.

Furthermore, the concept of teaching styles was discussed extensively by reviewing many scholars' definitions, classifications and its compatibility with learners' learning styles.

CHAPTER FOUR

Cooperative Learning

Introduction

- 4.1. Definition of Cooperative Learning**
- 4.2. Cooperative Learning versus Traditional Group Work**
- 4.3. Cooperative Learning versus Collaborative Learning**
- 4.4. The Five Elements (Pillars) of Cooperative Learning**
 - 4.4.1. Positive Interdependence**
 - 4.4.2. Individual Accountability**
 - 4.4.3. Positive Interaction**
 - 4.4.4. Social Skills**
 - 4.4.5. Group Processing**
- 4.5. Types of Cooperative Learning Groups**
 - 4.5.1. Formal Cooperative Groups**
 - 4.5.1.1. Formal Groups Characteristics**
 - 4.5.1.2. The Teacher's Role in Formal Groupings**
 - 4.5.2. Informal Cooperative Groups**
 - Informal Groupings Characteristics
 - 4.5.3. Cooperative Based Groups**
 - Base Groups Characteristics
- 4.6. Cooperative Learning Methods**
 - 4.6.1. Jigsaw Methods**

4.6.2. Learning Together

4.6.3. Student-Team Achievement Division

4.6.4. Team-Games-Tournaments

4.7. Cooperative Learning Benefits

4.7.1. Learners' Academic Achievement

4.7.2. Social Interaction

4.7.3. Psychological Adjustment

Conclusion

CHAPTER FOUR

Cooperative Learning

Introduction

Out of the need to pave the ground for teachers to enhance their learners' academic excellence -to be outstandingly successful lifelong learners and well-prepared workers- , myriads of educators and teachers accentuate the use of Cooperative Learning (CL) as a practical and lively teaching strategy that helps in promoting learners' critical thinking and communicative skills; by tapping into their teammates strengths as well as their own.

In this chapter we are going to spot light on the key concepts and the focal topics associated with CL. First, an overview of the wide range of definitions and distinctions from other relatively similar teaching concepts is provided. Further, CL five fundamental elements, types, and classroom methods, management and benefits are dealt with in some detail.

4.1. Definition of Cooperative Learning

Cooperative learning is a social skill that is used in our daily life, at work, in schools and even at home. According to Lin “humans learn best when they collaborate with others and actively process personally meaningful information” (2006:35). Cooperative learning is an essential systematic method in the educational environment; it involves learners to learn from each other in groups and work together to fulfill shared learning goals; which may alleviate the problem of large classes. Accordingly, this interaction between the learners helps to develop their intrapersonal intelligence (Casal, 2002). In the same vein, this socializing approach to learn in the classroom can also “foster the development of the [students'] social skills” (Crandall, 1999:226) by lowering their anxiety, shyness and their language ego in language classes,

“so that they can work together more effectively.”(Larsen-Freeman, 2007:164) Besides, CL revived the notion of learning and redefined its setting as follows “learning involves healthy noise! Help your partner solve it! Get up and look what others did! Verbalize to learn!” (Kagan, 1994:12)

4.2. Cooperative Learning versus Traditional Group Work

Cooperative Learning has been championed by many advocates (Johnson and Johnson, 1991; Slavin, 1995; Kagan, 1999) who valorized its potent role in improving learners’ productivity and achievement, especially in second/ foreign language classes. By using the CL strategies in teaching, learners’ work together in a structured manner for the sake of promoting their own learning outcomes as well as the learning outcomes of their peers (Johnson and Johnson, 1986); i.e. in CL group work learners depend upon one another for their personal, teammate, and group success in accomplishing a given task or creating a meaningful project in a variety of ways. Likewise, Johnson and Johnson (2009) maintain that CL is based on two major premises:

❖ **Positive Interdependence** *Sink or Swim together* all the group members team up to achieve their shared goals as well as each member’ s personal goals, which encourages mutual helpfulness and the positive participation of all the group members.

❖ **Individual Accountability** each member in the group have to pursue his/her individual goals, and should be assessed on the basis of his/her personal learning outcomes to prevent social loafing.

Conversely, in traditional group work or the teacher-centered model, learners work in unstructured small groups to complete an assigned task with the unequivocal absence of clearly set goals and designated tasks, i.e. learners are put to work together without further assistance, or careful structure from the side of the instructor. In addition, this type of

group work puts a great emphasis on the individualistic and competitive way in achieving individual academic goals.

To emend some of the teachers' mistaken views they hold about the interchangeability between CL and group work, Johnson and Johnson (1999) stated that there are five significant elements - (1) positive interdependence, (2) individual accountability, (3) quality group processing, (4) explicit teaching of small group skills, and (5) teaching of social skills- which define CL and distinguish it from traditional group work and without them CL groups are useless. In a nutshell, Woolfolk (2004) summarizes the crucial distinction between CL and traditional working groups as follows:

The term group learning and cooperative learning are often used as if they meant the same. Actually, group work is simply several students working together. They may or may not be cooperating. Cooperative learning is an arrangement in which students work in mixed ability groups and are rewarded on the basis of the success of the group (492).

4.3. Cooperative Learning versus Collaborative Learning

The 21st century teaching methods witnessed a remarkable shift from the emphasis on learners' individuality in the learning curve towards teaming up the learners together in small groups to achieve predetermined learning/teaching goals, and enhance their social skills; either collaboratively or cooperatively.

Collaborative learning and Cooperative learning can trace back their roots to the Socrates' Circle; in which he opposed the lecturing method in teaching all the learners and emphasised its ineffectiveness in reaching the teaching goals (Kenney, 2013). Besides,

Dewey’s (1916) philosophy of Progressive Education Movement that deemed learning as a social process; formed the notable point of departure of the two terms.

Although the two terms are used interchangeably as they reflect similar premises – mutual interaction, active learning, credence on heterogeneous groups, the fulfillment of common and clearly established goals, and setting up positive relationships among learners (Johnson, Johnson and Smith, 1991)- there exist a number of differences between the two notions which are clarified in the following table:

Cooperative Learning	Collaborative Learning
<ul style="list-style-type: none"> - Promotion of social and academic goals. - Grounded on structured group work. - Controlled by the teacher (manager and director and heavily involved in the group work). - Students submit their work at the end of class for evaluation. 	<ul style="list-style-type: none"> - Its promising goal is to create knowledge. - Grounded on unstructured group work. - Not controlled by the teacher (he just provides assistance). - Students retain drafts to complete further work.

Table 13: The Differences between Cooperative and Collaborative Learning (Brody, 1995: 133-143)

To put things differently, Collaborative learning is not just a teaching method, but it is a philosophy of social interaction and personal life style; this means that, this notion goes beyond the walls of the classroom to incorporate any group work -at work, school or even at home- in which people team up together in an unstructured way to complete an end product or achieve an objective (Panitz, 1996). Furthermore, Matthews et. al. state that “collaborative learning practitioners [...] assume students as responsible participants who already use social skills in undertaking and completing tasks” (1995:40); i. e in

collaborative leaning all the group members are deemed to possess the needed social skills which they will build upon to achieve their goals.

On the contrary, Cooperative learning is a teaching method in which learners work together in small groups to accomplish a structured task under the control of the teacher, i.e. cooperative learning is a specific type of collaborative learning that “tends to be more structured in its approach to small group instruction, to be more detailed in advice to practitioners, and to advocate more direct training of students to function in groups.” (Matthews et al, 1995: 40)

4.4. The Five Elements (Pillars) of Cooperative Learning

Allocating leaners into groups to complete a certain task does not reflect their cooperation or even ensure their own learning and the learning of all the group members (Johnson, Johnson, and Holubec, 1993). Hence, the involvement of cooperative learning in any classroom requires the implementation of five essential elements – the five pillars as shown in figure 11 - that are of a great importance in defining the effectiveness of any successful cooperative experience in the lesson.



Figure 11: Cooperative Learning’s Five Elements (Adapted from Foundation Coalition, 2008:1)

4.4.1. Positive Interdependence

When working cooperatively in small groups each member of the group has two main responsibilities: first, each member is responsible for grasping the assigned task, second, each member is responsible for the learning of the assigned task by all the group

members (Sharan,1980); this dual responsibility is , in fact, known as positive interdependence. In other words, positive interdependence reflects the learners' sense of caring about each other's learning and mastering of the targeted skills. In the same vein, Johnson et. al state that "positive interdependence exists when individuals perceive that they can reach their goals if and only if the other individuals with whom they are cooperatively linked also reach their goals and, therefore, promote each other's efforts to achieve the goals."(2007: 16)

This "sense of fate and mutual causation" (Chen, 2005:32) denotes the importance of each member's unique contribution and participation in accomplishing the given task i.e. the success of the group work depends upon the success of each member of the group; "swim together or sink together". To promote positive interdependence within learners the teacher may:

- Assign different roles to the group members.
- Use Jigsaw to establish specialized expertise within each group.
- Promote shared goals.
- Use common rewards (for the whole group).

4.4.2. Individual Accountability

Individual accountability takes place when each member of the team endures the burden of his/her learning and feels in charge to accomplish his/her part of the assigned task. Therefore, each learner contributes actively and pulls his/her weight to complete the group work and learn what has been targeted to be learned; which will result in enhancing his/her individual performance. As stated by Johnson and Johnson "individual accountability is the key to ensuring that all group members are, in fact, strengthened by learning cooperatively." (1994: 4) In simpler terms, individual accountability helps in avoiding "*social loafing*, or reduced individual effort resulting from too much dependence

on other group members.” (Onwuegbuzie et. Al, 2009: 272) This means that, this crucial pillar prevents the occurrence of *hitchhiking* or *freeloading* where only one learner ends up in doing all the work and the other members waste their time in gossiping or disturbing the other groups (Kagan, 1992).

4.4.3. Positive Interaction

In a cooperative learning setting having learners clustered together in a hermetic group and providing them with abundant verbal interaction is necessary to accomplish the assigned task and achieve the shared goal (McDonell, 1992). Accordingly, face to face interaction or promotive interaction is emphasized as it gives the learners the opportunity to express their ideas verbally (discussing, negotiating, arguing) and non-verbally (body gestures and facial expressions) and this ensures the commitment of all the group members in fulfilling the group work.

4.4.4. Social Skills

Social skills refer to the learners’ communicative, leadership, decision making, trust-building and conflict management skills that are necessary in raising the group members’ acquaintance with each other (Chen, 2005). As stated previously, unlike collaborative learning, cooperative learning does not assume students’ possession of the required social skills; thus, these collaborative skills must be taught explicitly while cooperative learning method is implemented.

Placing students in small groups and asking them to cooperate to accomplish a certain task does not ensure their ability to do so in an effective way (Johnson and Johnson, 1990). Hence, just like teachers set up learners’ academic skills; to gain knowledge and develop their cognitive abilities, for the effectiveness and success of Cooperative Learning

teachers, also, have to pattern the same dynamics and methods to teach learners the needed social skills (Opitz, 2008).

Moreover, most learners do not possess the required interpersonal and small group skills and even cannot deduce them when involved in cooperative learning settings which may result in the failure of this method; therefore, teachers must teach them accurately and purposefully like the academic skills.

4.4.5. Group Processing

Group processing refers to the group members' opportunity to reflect upon the quality of their end up product and the extent to which they achieved the joint objectives (Johnson, Johnson and Smith, 1991). In other words, learners are allowed to discuss and evaluate their performance and their synchronized efforts performance to attain their shared goal and work for their betterment. In the same vein, Johnson and Johnson (1990) point out that group processing has many advantages:

- It enables learning groups to focus on group maintenance.
- It facilitates the learning of social skills.
- It ensures [that] the members receive feedback on their participation.
- It reminds students to practise collaborative skills consistently. (28)

4.5. Types of Cooperative Learning Groups

The implementation of Cooperative Learning in any learning/teaching context requires from the teacher to be knowledgeable about the different types of grouping the learners in teams i.e. in terms of group's structure continuum. According to Johnson, Johnson, and Holubec (1998) there are three basic types of Cooperative Learning groupings that need to be used purposefully by the teacher: formal groups, informal groups and base groups.

4.5.1. Formal Cooperative Groups

Formal groups are the core of using CL in any classroom (Johnson, Johnson and Holubec, 1998) as it accommodates a sound foundation for most of the CL procedures. In this type of groupings, the learners are selected carefully taking into account the learners' heterogeneity such as gender, grade and personality to enhance their learning achievement.

In formal groups, the learners cooperate actively for one class period or several sessions to complete the assigned academic content and attain a joint aim. Hence, learners enrolled in these structured groups take responsibility of their own learning as well as their teammates' learning; especially, they work with each other for more than one session. Apparently, "Formal cooperative learning groups ensure that students are actively involved in the intellectual work of organizing material, explaining it, summarizing it, and integrating it into existing conceptual structures." (Johnson, Johnson and Holubec, 1998:7)

4.5.1.1. Formal Groupings' Characteristics

The following are some of characterizing features of formal cooperative groups:

- The group members are fixed.
- The duration of interaction between the team members is longer as the work may last for more than one session.
- This type of grouping is more structured and organized.
- Learners have a preplanned goal to accomplish. (Johnson, Johnson, and Holubec, 1998)

4.5.1.2. The Teacher's Role in Formal Groupings

In this type of groupings, the teacher or the instructor plays an active role in structuring, managing and evaluating the learners' final work. The following notes present a number of the teacher's roles:

- ✚ Defines the learning objectives of the assigned task.
- ✚ Arranges the room, chooses the learners and divides them into structured groups.
- ✚ Provides the needed materials and explains the instructions.
- ✚ Monitors and controls the groups functioning.
- ✚ Intervenes to teach the required social skill.
- ✚ Evaluates each learner's work as well as the one of the whole group and provides the necessary feedback.

4.5.2. Informal Cooperative Groups

The essence of informal cooperative groupings lies in the hazardous way of teaming up the learners together, and its major aim is to break the routine and help teachers in solving the problem of boredom during lectures which may result –most of the time- in that “the information passes from the notes of the professor to the notes of the student without passing through the mind of either one.” (Smith, 1996: 3)

Unlike formal groups, informal groups are unstructured and the group members are chosen randomly raising the slogan “the turn to your neighbour” (Rossetti et al, 1998: 67-76) to answer a particular question or respond to prompts about the learned material.

➤ Informal Groupings' Characteristics

The following are some of the essential features of this type of informal groupings:

- Temporary and last from few minutes up to the whole session.
- Unstructured and lack heterogeneity.
- Often ad hoc groups, formed randomly without any requirements.
- Used during lectures to attract the attention of the learners when they start to drift away.
- Creates a mood conducive to learn.

- Helps in building learners' expectations about what the lesson will deal with.
- Activates the learners' cognitive processes. (Johnson, Johnson, and Holubec, 1998)

4.5.3. Cooperative Based Groups

According to Johnson, Johnson, and Holubec cooperative based groups are “Long-term (lasting for at least a year), heterogeneous groups with stable membership whose primary purpose is for members to give each other the support, help, encouragement, and assistance each needs to progress academically. Base groups provide students with long-term, committed relationships.” (1998: 8)

This type of groupings is effective in building strong social interactional relationships among the group members who are chosen on the basis of different academic levels so as to help each other in their learning process. In addition, based grouping is more useful and workable in teaching complex subject matters; especially, in large classes.

➤ Cooperative Based Groups' Characteristics

The following are some of the essential features of this type of based groupings:

- Have a long duration; may last for a whole semester or many semesters.
- Structured and the learners are teamed up on specific bases.
- Group members are constant.
- Requires high planning concerning the groups' formation.
- Tasks and projects have to be personalized.
- The teacher must provide assistance and monitoring. (Johnson, Johnson, and Holubec, 1998)

The following table summarizes the main characteristics and the different uses of the above mentioned types of CL groupings:

Types of CL Groupings	Characteristics	Use
Formal Cooperative Groups	<ul style="list-style-type: none"> - Learners stay together until the task is done - More structured - Facilitates critical elements - Heterogeneous or homogeneous 	<ul style="list-style-type: none"> -Review homework -Work through a problem together -Review for a test -Perform a lab experiment -Write a report -Do a project
Informal Cooperative Groups	<ul style="list-style-type: none"> - short-term - less structured - Turn to your neighbour 	<ul style="list-style-type: none"> -Focus attention prior to lectures -to break up lecture - - Check for understanding – Review what was said -Summarize the main points
Cooperative Base Groups	<ul style="list-style-type: none"> - Long-term - peer support - heterogeneous 	<ul style="list-style-type: none"> -Academic support - Study for a test, make sure all are achieving -Routine tasks ; homework, attendance -Personal support - Sympathetic listening, - Trust-building -Cross-cultural relationship building

Table 14: Types of Cooperative Learning Groups (Smith, Johnson and Johnson 1992)

4.6. Cooperative Learning Methods

Cooperative Learning applicability in classroom contexts dated back to the early 1970s. An innumerable array of methods and models were flourished out of the research studies of many scholars (Jonson and Jonson, 1960s; Slavin 1970s; Kagan, 1990s), and proved its effectiveness when put into practice in different classroom settings. To clarify the suitability of CL Johnson et al (2003) proclaim that

Cooperative learning is actually a generic term that refers to numerous methods for organizing and conducting classroom instruction. Almost any teacher can find a way to use cooperative learning that is congruent with his or her philosophies and practices (3).

The following methods represent the focal ones applied successfully in the classroom; and it needs to be noted here, that each method has its own characteristics and premises that can be applicable to diverse curriculum areas and work in a harmony with the teachers' pedagogical creed.

4.6.1. Jigsaw

Jigsaw is a cooperative learning method that was designed by Aronson and her colleagues in 1978, and later on the original version was adapted and modified by Slavin in 1995. The underlying penning of the jigsaw is "*the team member expert*" by this is meant that, each member in the group becomes an expert in one piece of the assigned task – through reading and exchanging information with other members from other groups- and is responsible for instructing the gained knowledge to his/her teammates (Kagan, 1994).

The main goal of using this method is to ensure the learners' mastery of the learned material through interacting, discussing and sharing information with each other; because of the groups' diversity and heterogeneity. Thus, jigsaw is more suitable in content-based, narrative, and reading lessons.

4.6.2. Learning Together

In 1966 at the University of Minnesota, Johnson and Johnson developed the Learning Together Models to train the teachers how to apply the cooperative learning groups in their classrooms. This strategy is mainly based on the five pillars: positive interdependence, face-to-face interaction, individual accountability, social skills, and group processing to ensure the success and efficacy of cooperative learning method (Johnson and Johnson, 1989).

In Learning Together model, learners are assembled in heterogeneous groups of four or five to accomplish an assignment or a task. Each of the group members is assigned a certain role so as to ascertain the promotion of interdependency among the group members and instill the value of the *team spirit*; since, they receive rewards based on the work of the whole group.

Moreover, Johnson and Johnson identified the roles assigned to the group members as follows:

- **The leader** is the chairman of the discussion whose job is to make sure that everyone gets a fair turn to express different ideas and gives reasons for those ideas.
- **The recorder** takes the responsibility of writing down what is covered in the discussion. Then [,] the written report is handed in for scoring purpose.
- **The reporter** acts as his or her own group's representative, summarizes the group discussion and reports the conclusion verbally to the class.
- **The checker** monitors if everyone has finished his/her worksheet and answered all the questions.

- ***The timer*** makes sure that the discussion does not proceed for [a] too long [period of time] and reminds his/her group of completing the whole discussion within the limit-time.
- ***The material manager*** acts as the coordinator of the group.
- ***The cheerleader*** compliments members who make difficult, challenging, creative or constructive comments or statements. (Johnson and Johnson, 1989 cited in Chen, 2005 :40)

4.6.3. Student-team Achievement Divisions (STAD)

STAD is a current strategy in cooperative learning settings. It was devised by Slavin in the late 1970s to promote the learners' motivation and prepare them for tests; in the same line of thought, Stevens proclaims that "STAD is a cooperative learning method developed by Robert Slavin that is used in learning factual content (e.g., vocabulary, social studies or science information) as well as discrete skills (e.g., spelling, math computation, or language mechanics skills)." (2008:191) In addition, this model is composed of five essential elements:

Whole Class Presentation

The teacher introduces the targeted learning material to the whole class using visual or audio teaching aids.

Teams

The teacher assigns learners into heterogeneous groups of four or five to study interdependently the material presented previously; through discussing, asking and answering questions and explaining the misconceptions to each other; as they are working in groups to prepare themselves for the quizzes.

Quizzes

After finishing their group discussion each learner from the group takes an individual test to check his/her improvement in the targeted learning material; as pointed by Slavin “the learner's score obtained in the quiz is the foundation for determining his [/her] personal grade.” (1996: 2)

Individual Improvement Scores

The learners' obtained scores are compared to their scores in past performances and any progress in the learners' scores will improve the scores of the whole team.

Team Recognition

As a final step, the learners' scores are summed to get the score of the whole group; and if there is an improvement in the group's score, all the members receive a reward; in this regard, Slavin states that “[the learners'] points are added to form team scores, and the team that meets certain criteria may earn certificates or other rewards.” (1995:5)

4.6.4. Teams- games Tournaments

Teams-Games Tournaments is a cooperative strategy that was propounded by Devries, Edwards, and Slavin in the late 1970s. This strategy patterns the same steps of STAD; however, the individual quizzes are replaced by weekly games or tournaments. According to Slavin (1995) learners participate in academic games with members from other groups; whose past performance and learning abilities are similar to theirs, and gain points to their home groups. This means that, high achievers work together, while the average ones work together which will raise their chance of success.

4.7. Cooperative Learning Benefits

An enormous number of empirical studies have documented the profitable outcomes of CL as a prevalent form of active pedagogy since the 1980s (Johnson, Johnson and Smith, 2007). CL implementation proved positive effectiveness in bolstering up learners' social skills and achievement in a multitude of learning classrooms (Slavin, 1989; Johnson and Johnson, 1989; Cohen, 1984; and Nilson, 1998). CL various benefits can be associated with learners' academic achievement, positive social relationships, and psychological health as summerised in the following figure:



Figure 12: Cooperative Learning Outcomes (Johnson et al, 1991: 29)

4.7.1. Learners' Academic Achievement

Cooperative Learning significant impact and vital role in promoting learners' academic achievement have been proved by a wide array of research studies. Johnson and Johnson (1985) in their studies on Cooperative, Competitive, and individualistic learning; found that CL implementation resulted in higher significant levels of achievement and enhanced learners' interpersonal relationships. Moreover, Webb (1985) discovered that learners gain more information and understand better the assigned tasks, because they tap

on their teammates strengths along with their own. Also, in CL all the team members are disposed to understand and help in accomplishing any assigned task and achieve their joint goal, individual accountability, i.e. in CL settings the responsibility of the group's success and progress is placed on each of the group members equally (Johnson and Johnson, 1991); each member has a positive role and participates to have a good grade or get a reward – as mentioned previously, the group mark depends on each member's exertion and individual mark – as mentioned previously, As a consequence, learners' studiousness and autonomy will be improved, and they will be more self-controlled and take responsibility of their own learning as well as their classmates "interdependence", as pointed by Johnson and Johnson (1990)

In a cooperative learning [settings], student goal achievements are positively correlated [;] students perceive that they can reach learning goals if and only if the other students in the learning group also reach their goals. Thus, students seek outcomes that are beneficial to all those with whom they are cooperatively linked. (121)

Hence, CL implementation amends the transfer of knowledge, and provides more opportunities for all learners in the classroom to understand and participate in the lesson; through the involvement of low achieving learners with the high achieving ones. Vygotsky (1978) proclaimed that learners attain knowledge and develop their skills better when they are engaged in cooperative tasks than when they study alone.

4.7.2. Social Interaction

Johnson and Johnson descry that "cooperative learning promotes greater interpersonal attraction and more positive relationships among students than do

competitive and individualistic learning.” (1985: 112) In the same vein, Rushatz stated that “Cooperative learning strategies strive to create group situations that will foster support and feedback systems [...], and moreover, general social interaction skills” (1992: 5). This means that, CL has the quality of generating social support; when learners work in small groups to accomplish an assigned task and attain a shared goal in a friendly relaxed atmosphere, their social skills will be fostered through the interaction with their teammates - asking questions, exchanging ideas, listening to each other- as well as with the teacher who plays a vital role in maintaining and activating this type learners’ involvement in the lesson. Therefore, according to Brown (1988)

[interaction with other learners in the classroom] provide[s] more opportunities for student initiation, for face-to- face give and take, for practice [ing] negotiation of meaning, and for extended conversational exchanges, and for students’ adoption of roles that would otherwise be impossible (178) .

4.7.3. Psychological Adjustment

There is strong evidence that CL strategies “[...] have shown enormous potential to facilitate children’s psychological growth and development.” (Slavin et al, 2003: 179) CL techniques play a pivotal role in promoting learners’ self-esteem, motivation (Crandall, 1999), autonomy, and self-confidence. In a CL context, learners feel more comfortable to express themselves, participate, and strive to achieve their mutual goals; as they work in a social and anxiety-free context in which they are not anxious, aggressive, and afraid or even blamed for making errors (Stern,1992). This kind of affective support helps, especially, in raising learner’s self-esteem and self-confidence, because of the feeling of caring about each other and the chance to discover their competencies (Johnson and

Johnson, 1987), which will result, evidently, in elaborating the learner's autonomy and self-efficacy as claimed by Slavin "the most motivational outcome of cooperative learning is [its] effect on student[s'] self-esteem."(1995: 146-147)

Conclusion

Cooperative Learning is an enticement instructional method based on student-centered approach; -in which the learner plays an active role in the learning process- and seeks to provide all learners with similar opportunities to show their strengths and rehabilitate their weaknesses, and enhance their social skills as well.

Oposing the traditional teaching settings where the learners are enchained silently and quietly in their chairs, and keeping their eyes goggled on the papers or on the board so as the teacher can hear a pin drop; Cooperative learning method revived the notion of learning and redefined its setting. In addition, Cooperative Learning awakened the social skills of the learners and brought them to be alive in most of the classrooms.

Throughout this chapter, we tried to display a profound definition of cooperative learning along with the salient existing differences between the two facets of the same coin; collaborative learning and cooperative learning method, as well as, we tried to clarify the various differences between the later and the traditional group works. In addition, we attempted to explain in depth the five pillars of CL: positive interdependence, face-to-face interaction, individual accountability, social skills, and group processing. A detailed description of the wide array of CL types and methods was also provided.

CHAPTER FIVE

Research Design: Implementing Multiple Intelligences Theory, Cooperative Learning and Perceptual Learning Styles

Introduction

5.1. Overall Research Design

5.2. Research Questions

5.3. Research Hypotheses

5.4. Participants

5.4.1. The Pupils

5.4.2. The Teacher

5.5. The Experimental Design

5.6. Description of Variables

5.7. Rationale of the Study

5.8. Research Means and Instruments

5.8.1. The Reading Test

5.8.2. The Listening Test

5.8.3. The Writing Test

5.8.4. The First, Mid and Last Term Examinations

5.8.5. Other Data Collection Means

5.8.5.1. The Questionnaire

5.8.5.2. Multiple Intelligences Inventory

5.8.5.3. Learning Styles Inventory

5.8.5.4. Learners' Profiles

5.8.5.5. Textbook Profile

5.8.5.6. Learners' Portfolios

5.8.5.7. Lesson Plan

5.9. Teaching Methods for the Different Groups

5.9.1. The Control Groups

5.9.2. The Experimental Groups

5.9.1.1. Mixed Intelligences Groups

5.9.1.2. Similar Intelligences Groups

Conclusion

CHAPTER FIVE

Research Design: Implementing Multiple Intelligences Theory, Cooperative Learning and Perceptual Learning Styles

Introduction

To tackle the different English language learning problems, the pupils are facing in the Algerian secondary schools, raised in previous chapters and to find an effective solution for these problems, we suggested a strategy of teaching English as a foreign language based on Multiple Intelligences Theory, Cooperative Learning and Learners' Perceptual Learning Styles. To show the effectiveness of this suggested method an experimental teaching research was conducted and built upon a specific methodology.

In this chapter, methodological details of the study are presented. First, the overall research design is explained. This is followed by the research questions and hypotheses. After that, data sources, data collection instruments and data collection procedures are described in details.

5.1. Overall Research Design

The purpose of this research is to investigate the implementation of Cooperative Learning (CL) Activities, involving the insights given by Howard Gardner's Theory of Multiple Intelligences (MI) taking into account the pupils' Perceptual Learning Styles (PLS) in secondary school EFL classrooms, and its positive effectiveness on pupils' English language proficiency and attitude.

The present study took place at Atti Abdelhafid High School in Ouad Athmania in 2013/2014 academic- year, and was conducted with four classes, 2 classes from the scientific stream and 2 classes from the literary stream (First year classes between 16 and 19 years old). In this study, Multiple Intelligences and Learning Styles Inventories were

administered to 69 pupils (32, 85% of the whole population; which clarifies the representativeness of the studied sample) who were chosen randomly from a target population of 210 pupils, and their results were analysed and used in forming the learners' profiles and designing the lesson plans. A pre-test and a post-test were carried out at the beginning and at the end of the academic year. In addition, a teaching method based on CL, MI and PLS was used to teach 69 pupils (one pupil from the scientific stream was kicked out of school after two months and a half of studying) from two classes (1 scientific and 1 literary) .(c.f.p.133, for the time it took to implement the study).

5-2 Research Questions

Our study focused on the following research questions:

5-2-1 In what ways can the language learning environment be constructed in order to improve the English learning outcomes of secondary school pupils in Algeria?

5-2-2 Can cooperative learning enhance pupils' attitudes?

5-2-3 Can cooperative learning activities and multiple intelligences plus the pupils' perceptual learning styles insights used in conjunction improve the pupils' four language skills?

5-2-4 Do pupils' perceptual learning styles have a positive effect on pupils' self-directed learning?

5-3 Research Hypothesis

To gain more insight into the above research questions, a teaching experiment was designed. Essentially, four teaching groups were formed: Groups A and B (control groups) and groups C and D (experimental groups). The formation of these groups will be discussed later in this chapter. The teaching experiment aimed to test the following hypothesis: *If we implement Cooperative Learning (CL) Activities, incorporating the*

insights given by Howard Gardner's theory of Multiple Intelligences (MI), taking into account the pupils' perceptual learning styles in secondary school EFL classrooms, these activities and assessments would have a positive effect on pupils' English language proficiency and attitude.

In other words, if English language teachers, in the Algerian secondary schools, implement Multiple Intelligences Theory, Cooperative Learning, and Perceptual Learning Styles in their first year classes, they would bolster up their pupils' English language proficiency and attitude .i.e. the pupils' language skills: listening, speaking, reading, and writing would be enhanced along with the positive attitude they would elaborate towards the English language learning process. It is, therefore, worth to mention that, the research hypothesis is built upon two exploratory sub-hypotheses that can be checked through experimentation:

5-3-1 The two experimental groups C and D will score significantly better than the two control groups A and B on the English listening, reading and writing tests.

5-3-2 The two experimental groups C and D will score significantly better than the two control groups A and B on the first, mid and last-term achievement examinations.

5-4 Participants

5-4-1 The Pupils

This study was conducted with first year pupils attending Atti Abdelhafid High School in Ouad Athmania. Two classes from the scientific stream and two classes from the literary stream were selected; these classes were selected by the school administration. 138 pupils (65, 71% of the whole population) were chosen randomly (which clarifies the empirical assumption that samples have to be randomly chosen) from a target population

of 210 pupils, participated in the study. At the time of their study all of the pupils have already studied English for four years or more, the repetitive pupils, using the same approach (CBA) and textbook at the Intermediate School.

It is, therefore, assumed that the pupils who participated in our research study would provide - to a great extent- a homogenous sample, in terms of their convergent background knowledge i.e. their instruction input and language achievement. To have a clear idea about the pupils’ previous knowledge and achievements in the English language, we have checked their averages in the English language in their four years at the Intermediate School (see appendix 2 on CD 01 “learners’ profiles” to know more about the pupils’ marks in the Intermediate School), and the marks they got in the diagnostic test at the beginning of the school year.

As far as age is concerned, the overall age of the participated pupils, for both males and females ranges from about sixteen to nineteen years old. However, the teaching groups were unequally divided as far as sized age-groups. Information about the pupils are presented in the following table:

Streams	Male	Female	Total
Scientific Stream	44	34	78
Literary Stream	24	36	60
Total	68	70	138

Table15: Distribution of the Participants by Streams and Gender

From the participants’ information presented in the table above, we notice that boys (56, 41%) outnumber girls (43, 59%) in the scientific stream; but, it is the opposite in the literary stream (girls 60%, boys40%). For that matter, it is worth to mention that, in our investigation we do not have the intention to study any differences between girls and boys in their language proficiency, or even, their age differences; it is out of our concern, in the

two streams, and concerning our piece of research, we do not think that these differences in sex inside the groups pose any doubt of bias.

5.4.2. The Teacher

The teacher has a Master Degree in the English language (didactics), and has worked for more than eight years in teaching English as a foreign language in the Algerian secondary school. She has had an experience in teaching different levels of learners (Intermediate school and Secondary School pupils as well as University students).

Though it may have been better to have an alternative teacher to complete the teaching experiment, such an appointment was impossible. Undeniably, there were palpable positives for the researcher to also be the teacher. As noted above, the researcher had her Master in didactics; thus, she had already the necessary bulk of knowledge about the various teaching approaches, methods and techniques applied in teaching English as a foreign language in the different stages. Besides, the researcher readiness to accomplish the teaching experiment played a vital role in raising her confidence to embark in this research study.

A notable point of departure is the teacher's teaching profile. It is far-famed that our childhood influences -to a certain extent- the way we teach (Stitt-Gohdes, 2001). So, we need to have a clear view of our own learning styles to learn more about ourselves as teachers. In the light of this belief, the teacher adapted Christison's (1998) Multiple Intelligences Inventory for EF/SL Teachers (see appendix A) and Barsch Learning Styles Inventory (1980) (see appendix B) to raise her awareness about her learning and teaching styles; to get a clear picture of the preferred ways she applies in tailoring her classroom activities and lesson plans. (see figure 13)

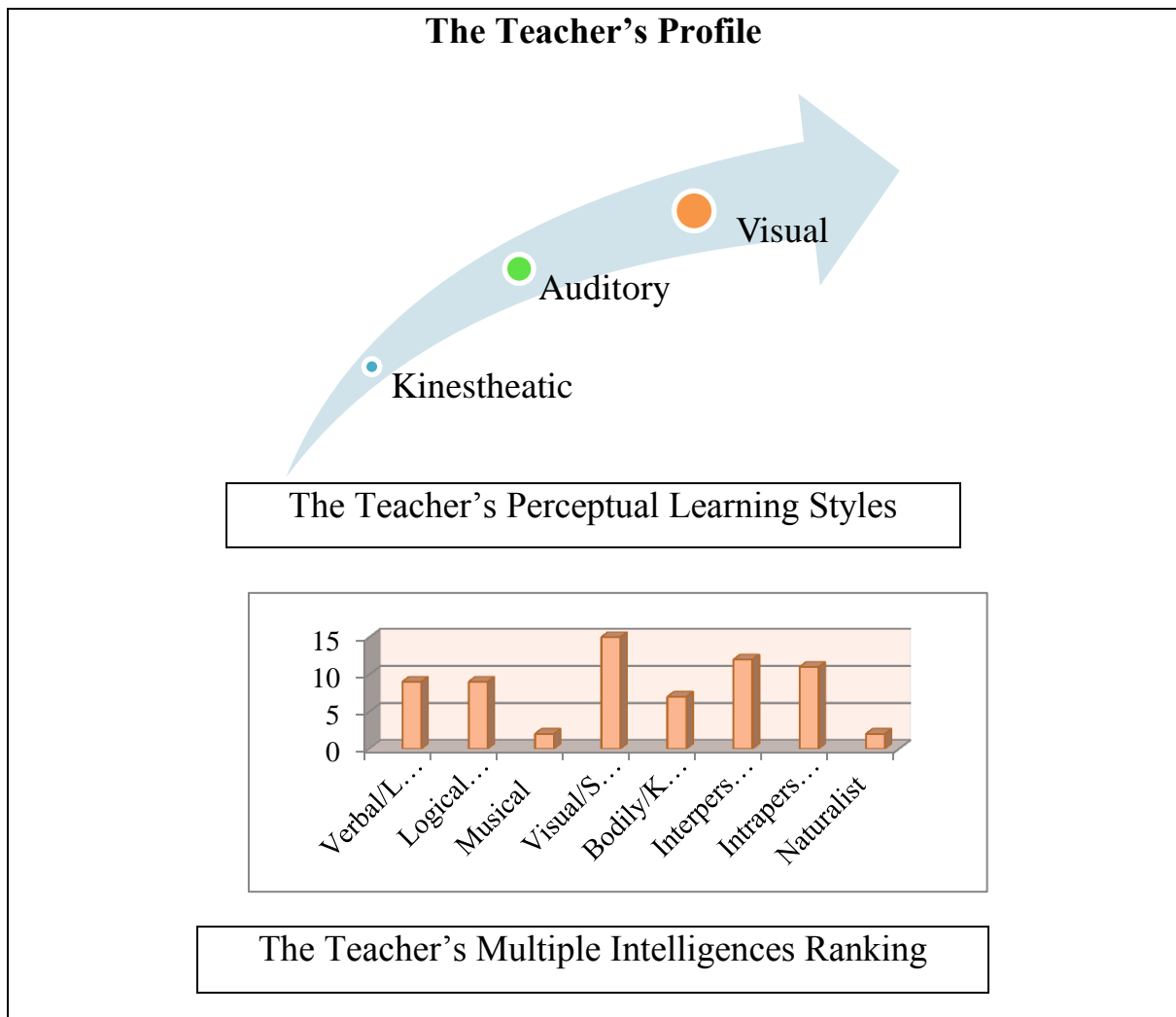


Figure13: The Teacher's Profile

A fleeting look through figure 13, one can grasp that the teacher's preferred teaching way is based on the visual teaching style where she uses visual illustrations, graphs, pictures, etc. Taking into account the pupils' different ways of learning, the teacher worked on modifying her way of teaching to cope with the various needs of all her pupils.

5.5. The Experimental Design

Based on the quantitative methodology, this piece of research adopted the quasi-experimental design of unequal groups. The following teaching experiment, treatment, that will be described in the coming lines is devised to check the significance and the potent effect of MI, CL, and PLS implementation ,in first year secondary school classes, in

bolstering up the pupils' English language proficiency and attitude (through enhancing their four language skills: listening ,speaking, reading and writing).

In our research, we have used two experimental groups (C and D) and two control groups (A and B). The experimental groups (69 pupils) have received the multidimensional teaching method; the regular textbook, cooperative and multiple intelligences activities and tasks were carried out, and the lesson plans were elaborated based on their perceptual learning styles (the main variables of the current investigation). On the other side, the control groups (69 pupils) were taught using the teaching method enjoined by the Algerian Curricular Designers (Competency-Based Approach) and only the textbook.

The pupils in the four groups have first undergone a pre-test, after that, pupils in the two experimental groups have received the treatment .i.e. ML, CL and PLS base lessons were introduced. The teaching experiment, treatment, takes place at Atti Abdelhafid High School in Ouad Athmania, and stretched from the second week of September 2013 to the first week of May 2014 .i.e. it lasted eight months (the whole academic year). Precisely, the two experimental groups had a total of 71 hours, for the scientific stream, and 108 hours, for the literary stream, of experimental teaching within 23 weeks, i.e. 3 hours (the scientific stream) and 4 hours (the literary stream) per week of studying English. Also, the same hours were allotted for the two control groups respectively. After the treatment (the implementation of MI, CL, and PLS), we have assessed the pupils' improvement and progress in the three language skills (reading, writing and listening) by means of a post-test. As any scientific experiment, the pupils' pre-test scores (before the treatment) and their post-test scores (after the treatment) are calculated and compared to check the pupils' propulsion. The experiment design pattern is shown in the following table.

Groups	Pre-Test	Experiment Treatment	Post-Test
Experimental Groups	2O ₁	M1	2 O ₂
Control Groups	2O ₁	M2	2O ₂

M1 and **M2**: Two different teaching methods

Table16: The Experiment Design Pattern

From the table above, we can see that 2O₁ is pre-test data, 2O₂ is post-test data, and M₁ and M₂ are two different teaching methods. It is worth to mention that, all the four groups were not taught by the same teacher because of some severe administrative regulations; for this reason, the two experimental groups were taught by the teacher who did the research and the two control groups were taught by another teacher of the English language from the same secondary school. Although the four groups were taught by two different teachers, the pupils received the same English topics, homework and assignments during this experiment; which were presented and proposed in two instruction different methods. The two control groups A and B were taught using the Competency-based Approach. On the contrary, the two experimental groups C and D were instructed using the suggested teaching method based on Cooperative Learning, Multiple Intelligences and the pupils' Perceptual Learning Styles. Table 17 shows the different methods used to teach the four groups (the control groups A and B, and the experimental groups C and D):

	Treatment or Teaching Methods	Group/ Pair Work	Assessment
Control Groups A and B	Competency Based Approach	None	First, mid and last-term exams. The general proficiency tests
Experimental Groups C and D	Cooperative learning, multiple intelligences activities and the pupils' perceptual learning styles	Grouping by multiple intelligences and learning styles	First, mid and last-term exams. The general proficiency tests

Table17: Learners' Teaching Methods, Groupings and Ways of Assessment

5.6. Description of Variables

The participants' proficiency in the English language and their attitudes towards studying this language are the dependent variables, and the suggested teaching method based on Cooperative Learning, Multiple Intelligences activities and pupils' Perceptual Learning Styles is the independent variable. Figure 14 introduces in some details the relation between the independent and dependent variables, in the control and experimental groups, throughout the presentation of the various teaching materials and assessment tools used in the teaching experiment or the research treatment.

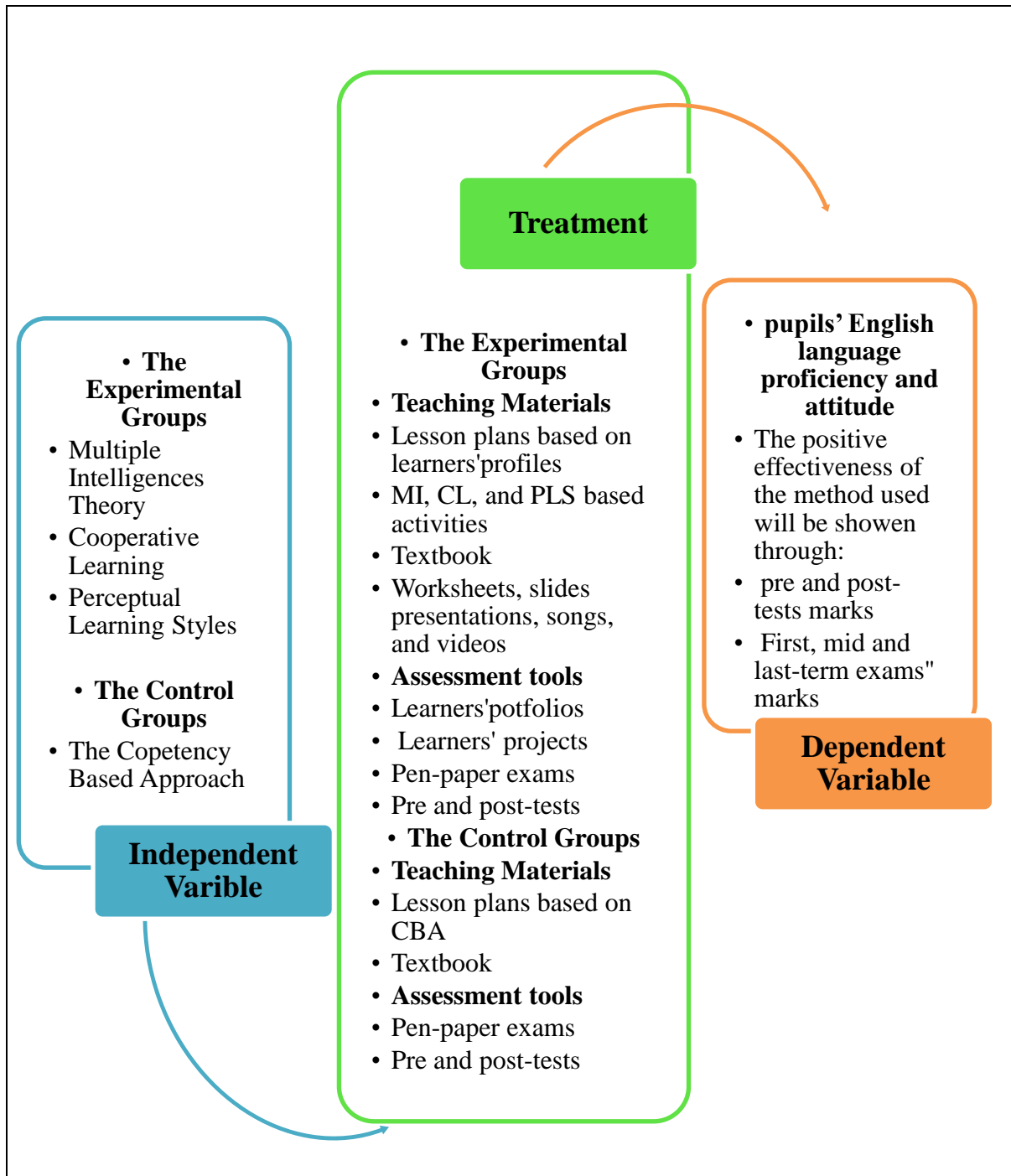


Figure14: Research Study Dependent and Independent Variables

5.7. Rationale of the Study

All the pupils participated in our research had studied English for more than four years in the Intermediate School. English was taught for an average of three hours per week. Furthermore, there were no differences between the pupils in the textbook and the

course density; and this is the first reason for choosing to work with first year pupils who got acquainted with the English language through receiving the same lessons and during the same period of time.

The other reason behind choosing first year pupils to fulfill our research is that, the researcher taught in the Intermediate School for a whole year (she taught third and second year pupils). She noticed that pupils' motivation in learning English was very low and they had a very high language ego (in fact, they developed this negative feeling after the mysterious learning experience that the majority of the Algerian pupils face, while learning the French language in the primary school) as most of them have created a sense of defensiveness, fragility and a raised inhibition. Additionally, this type of negative sensitiveness is raised from the pupils' lack of vocabularies and structures needed to communicate in English, as a consequence, they did not participate in class and feel afraid of making errors; they are struggling in learning the English language. The researcher felt frustrated and could not put up with the pupils' learning attitudes in class.

As a way of changing their passive attitudes and enhancing their English language proficiency, this research was conducted using a teaching method that provides an affective support for the pupils, through group and pair work, and raises their self-confidence and their dwindling motivation, through raising their awareness about their dominant intelligence type, and the preferred learning style they use in class. To put it differently, the proposed method is assumed to creatively leverage success in learning the English language, by utilizing a variety of pupils' strengths rather than "hammering their weaknesses." (Chen et al, 1998)

It is mostly known that, research studies, in general and experimental studies, in particular might fall prey to experimental ¹bias, which renders any research findings

meaningless. In this respect, it is very important in any research study, quantitative or qualitative, to take into consideration the unwanted variables that might intervene and threaten the experiment validity (*external validity* refers to the research generalizability, and *internal validity* which refers to the irrelevant things that might take place before and during the experiment and need to be controlled by the experimenter) and reliability (the experiment consistency .i.e. the research study is reliable if it gives similar findings when repeated under the same conditions).

According to h Maxwell the major threats of validity in any experimental study are “addressed in an anonymous, generic fashion by prior design features such as randomization and controls.” (1992: 296) For that purpose, the participants in our research were selected fairly based on “*random selected samples*”; where all the pupils of the whole population had an equal chance to be chosen by the researcher. By doing so, we wanted to ensure the experimental sample representativeness and avoid any selection bias.

However, some of the irrelevant variables might occur during the running of the research experiment such as the pupils’ frames of mind (lack of concentration, boredom, stress and anxiety); especially that, the experiment lasted for a long period of time (8 months). These unwanted variables might intervene and affect the research findings and this can be extracted through the error bias that might accompany our results. To limit, to a great extent, the influence of such variables, we attempted to carry out a wide array of diverse tasks and activities that were built on MI, CL and PLS in a motivating, relaxed atmosphere; to ensure the pupils’ involvement and participation in the learning process

¹**Bias** is any inclination that might occur in a research study and renders any obtained results meaningless

atmosphere; to ensure the pupils' involvement and participation in the learning process and not just overloading their minds with information.

5.8. Research Means and Instruments

Our research includes the following instruments:

5.8.1. The Reading Test

The reading test was used for both the pretest and the posttest; it tests the pupils' comprehension of the reading passages and also their grammar and vocabularies. The reading test used in our research was adapted from Sheridan English Proficiency Information booklet (2008), and it is composed of two parts: part one is a reading passage, and part two is a cloze passage activity. The pupils needed 50 minutes to finish answering this test (see appendix C).

5.8.2. The Listening Test

The listening test was used for the pre-test and the post-test. We have adapted this listening test from Sheridan English Proficiency Information Booklet (2008) and it IS composed of one part which was a dialogue. For this test, the dialogue and the questions were recorded in a tape. The pupils listened to the tape and, then, tick the best answer in the dialogue answer sheet they had. The test needed 30 minutes to be completed by the pupils (see appendix D).

5.8.3. The Writing Test

The writing test was also used for both the pre-test and the post-test. This test was designed by the researcher. The test is composed of one topic in which the pupils had to write a short composition in 50 minutes. The criteria used for assessing the pupils' writings were the writing form and content (see appendix E).

Note

The pupils' speaking skill was not tested owing to the absence of language laboratories and time constraints; it was nearly impossible to test 69 pupils and each one alone for at least 10 minutes.

5.8.4. The First, Mid and Last Term Examinations

These were the usual achievement examinations taken by all the school pupils, and they were elaborated by all the teachers of the English language in the secondary school based on a specific exam building setting (see appendix 01 on CD 01). These examinations or tests were used to check the pupils' achievements in the English language after each trimester (see appendix F).

5.8.5. Other Data Collection Means

5.8.5.1. The Questionnaire

Cohen et. al argue that “questionnaires are useful instruments for survey information, providing structured, often numerical data [...] and often being comparatively straightforward to analyse. Questionnaires allow us to quantify people's observations, interpretations and attitudes.” (2005: 24) Based on their view, a questionnaire was adapted to explore the pupils' motivation and attitude vis-à-vis learning English as a foreign language after the changes in the teaching method and materials during this academic year.

The questionnaire consists of seventeen (17) questions designed to investigate the pupils' motivation towards learning English in general, teaching materials and textbook; classroom activities and assessment based on Multiple Intelligences Theory, Cooperative Learning and the pupils' Perceptual Learning Styles. Namely, the questionnaire tries to probe the pupils' attitudes and reactions towards the suggested teaching method and materials used to teach them.

The questionnaire was handed out to the pupils of the two experimental groups C and D (N=69) in one hour after the end of the teaching experiment, nearly at the end of the academic year, and it was translated carefully, by a teacher of translation, into Arabic –the pupils’ first language- along with a range of uniform instructions on how to complete a questionnaire that were presented to the pupils, to ensure their understanding of all the questionnaire’s items and way of completion.

Eventually, to keep the pupils’ answers more personal, to a great extent, and grantee their confidentiality, the researcher did not allow them to talk to one another, or even, to look at each other’s answering sheets. This took place, after informing the pupils about its nature as a scientific investigation tool and not a marked test or exam. Moreover, being anonymous when answering the questions helps the pupils to be more frank and avoid any kind of bias which would lead -with no doubt- to vague or wrong conclusions (see appendix G).

5.8.5.2. Multiple Intelligences Inventory

Multiple Intelligences Inventory was adapted from the one of Christison (1996) and Berman (1998). The inventory or the survey was designed to assess individuals’ different types of intelligences. It is composed of eight sections. Each section contains six questions. The pupils had to rank each statement 0, 1 or 2 and, then, place them into the scoring rubric to know their dominant intelligence. The Inventory was administered to the pupils of the two experimental groups C and D at the beginning of the school year; and the researcher used them to construct the pupils’ profiles that were needed in designing the lesson plans (the items of the Inventory were translated into Arabic by a teacher of translation, because the pupils were not lash into strong English language). (see appendix H)

5.8.5.3. Learning Styles Inventory

Perceptual Learning Styles Inventory was adapted from Barsch Learning Styles Inventory (1980) and was used to identify the pupils' Perceptual Learning Styles (VAK). It consists of three parts: Learning Styles Survey with 24 questions, and the second part Learning Styles Assessment Test which is composed of three sections, each section with ten questions. The pupils' had to tick and rank the statements, and then place them in the scoring rubric. Learning Styles Scoring Rubric contains two parts: Learning Styles Scoring Table in which the pupils enter their scores obtained from the Learning Styles Survey; and the second part Learning Styles Assessment Scores which provides the pupils with the necessary information needed for scoring the data obtained from Learning Styles Assessment Test.

Learners' results were very useful means in raising the teacher's as well as the pupils' awareness about their different Learning Styles. Also, the obtained results were used in designing the lesson plans (the items of this Inventory were also translated into Arabic). Eventually, Barsch's Inventory was chosen because of score's accessibility and the provision of the Scoring Rubric. (see appendix B)

5.8.5.4. Learners' Profiles

A learner profile is a means that is used to compile deep and detailed information about the learner's learning styles, strengths, multiple intelligences ranking, and needs. Moreover, it is a planning tool that helps the teacher to design effective classroom activities and implement various ways of assessment which accommodate with the learners' preferences, leaning process and outcomes. Hence, it is considered as "the basis for a 'gap analysis' to determine where the [learner's] achievement is relative to the expectations of the curriculum for a particular grade or course." (Learning for All, 2011: 45)

In our research work, we used the term learners' profiles in its broad meaning that encompasses: learners' learning styles, different types of intelligences, personal interests, goals, social and emotional needs, and favourite learning modules. It means we have globed Gardner's type of Multiple Intelligences Profile –which consists of a combination of relative strengths and weaknesses among the different intelligences (Gardner, 2006) - within the new type of profile that we built to fulfill our teaching experiment expectations.

In order to gather the needed information about the pupils in our experimental groups (69 pupils), that we used to construct their learning profiles, we went through an intensive research and we called for more varied information sources such as:

- Learners' Multiple Intelligences combination of strengths and weaknesses.
- Learners' Perceptual Learning Styles.
- Learners' goals in life.
- Learners' personal interests and the extra-activities they pursue outside the school.
- Learners' favourite school subjects or modules.
- Previous and current levels of achievement and progress, especially in the English language.
- Learners' emotional and social needs.

To reach our goal in gathering the necessary bulk of information needed in elaborating our pupils' profiles, we used a variety of instruments and asked different kinds of people within the schools staff such as:

- Multiple Intelligences Inventory.
- Learning Styles Inventory.
- Current and previous teachers (teachers in the secondary school and teachers in 5 intermediate schools).

- The secondary and intermediate school teams.
- Pupils' Exam marks during the four years of the intermediate school and the ones of the high school.
- Classroom observation.

The following are two examples of two pupils' profiles, one from the scientific stream and another from the literary stream. The rest of the learners' profiles are available in appendix 02 on CD 01; however, the part of "Emotional and Social Needs" is not mentioned because it contains learners' personal information.

Example One

Name: Kais

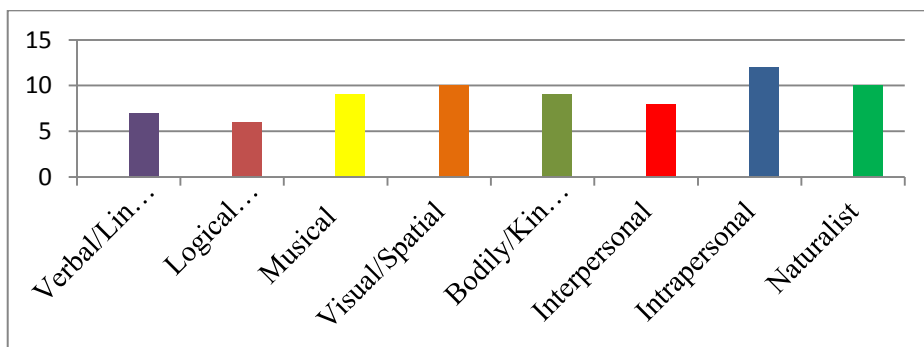


Stream: 1st year, Literary Stream

(RED =Female, BLUE =Male)

<u>Learning Styles</u>	Visual	Auditory	Tactile
	2	1	3

<p>Goal</p> <p>I want to be the best in the English language and also I want to be a very famous</p>	<p>Personal Interests</p> <p>Helping other people, and taking care of animals</p>	<p>Favourite Subjects</p> <p>English</p> <p>Arabic</p> <p>Sport</p>
---	--	--



Multiple Intelligences Ranking

The School Years	English Exam Marks
<i>First year</i>	19; 17; 18
<i>Second year</i>	20; 19; 20
<i>Third year</i>	18; 16; 18
<i>Fourth year</i>	19; 19; 20; 18

Emotional and Social Needs
Kais is a very shy boy; he rarely talks with his classmates inside or outside the classroom. He had repeated one year in the intermediate school when his father died, so he is an orphan.

Example Two

Name: Khadija



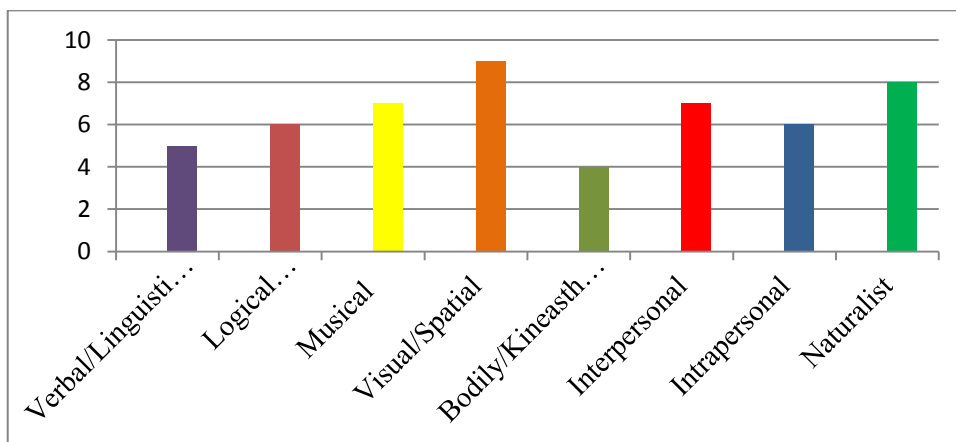
Stream: 1st year, Scientific Stream (RED =Female, BLUE =Male)

<u>Learning Styles</u>	Visual 1	Auditory 2	Tactile 3
------------------------	-------------	---------------	--------------

Goal
My goal in life is to be a teacher of science like my dear father

Personal Interests
Listening to music, watching TV and playing on the computer

Favourite Subjects
Science
English
Mathematics



Multiple Intelligences Ranking

The School Years	English Exam Marks
<i>First year</i>	16; 16; 14
<i>Second year</i>	12; 14; 17
<i>Third year</i>	17; 16; 18
<i>Fourth year</i>	13; 13; 15; 17

Emotional and Social Needs
Khadija is a very calm and serious girl; she never raises her voice when talking inside or outside the classroom. She always does her homework and assignments and she is one of the high achievers in her studies.

5.8.5.5. Textbook Profile

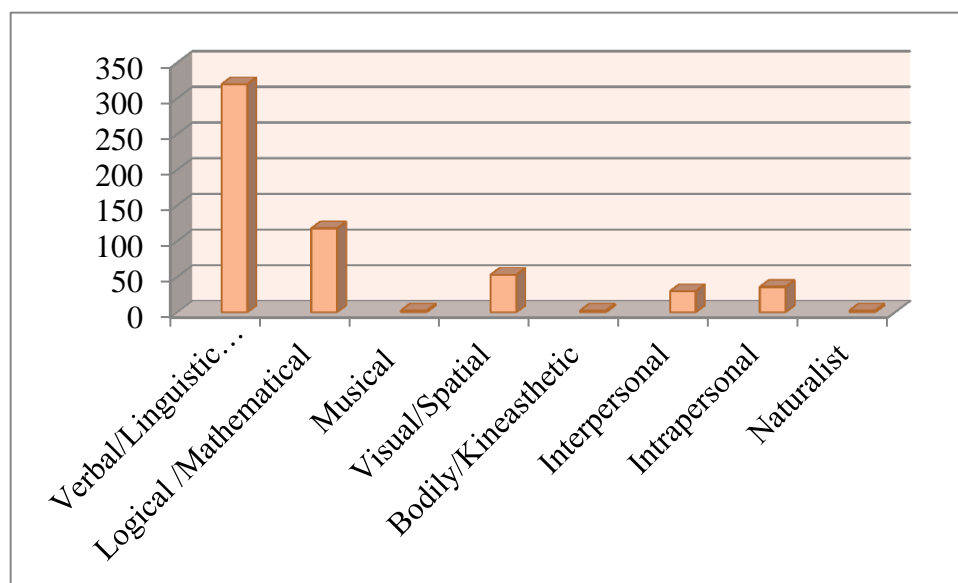
Textbooks are the gamut of tools at a teacher's disposal, and "represent the visible heart of any ELT program."(Sheldon, 1988:237) The importance of textbooks in language teaching/learning was studied by many researchers, namely Hutchinson and Torres (1994) who emphasized textbooks' potent role in providing the core materials in any classroom course, and their applicability in transferring curriculum, already set, objectives.

In the light of MIT, the researcher analysed "*At the Cross Roads*" the textbook currently used in first year secondary schools in Algeria (see appendix 03 on CD 01); to identify the different intelligence types embedded in its activities. The textbook is composed of five units and each unit is divided into sequences that are named respectively: Listening and Speaking, Reading and Writing, Developing Skills, Stop and Consider and the last one Consolidation and Extension. Each of the previously stated sequences comprises a certain number of activities and exercises that stands for the Algerian Official Syllabus.

A check list incorporating eight types of intelligences has been designed by referring to different sources (Berman, 1998; Christison, 1996; Campbell and Dickinson, 1996; and Plamberg, 2001) (see appendix I). 360 activities were analysed and categorized according to the intelligence type they addressed. It is essential to mention that, some activities cater for more than one intelligence type, whereas, others cater just for a single type of intelligence. The frequencies and the percentage of occurrence of all the intelligences were tabulated and summarised in table 18.

Number of Units	Number of Activities	Ling I	Math I	VI	BI	MI	Intra I	Inter I	Na I
Unit 01	84	64	34	07	01	07	09	00	00
Unit 02	68	72	17	14	00	11	08	00	00
Unit 03	66	52	21	09	03	05	06	00	01
Unit 04	67	63	22	12	00	08	03	03	00
Unit 05	75	69	24	11	00	05	04	00	02
Total	360	320	118	53	03	36	30	03	03

Table18: Textbook Intelligence Types Distribution



Multiple Intelligences Ranking

Figure15: The Textbook Intelligence Profile

From the results presented in figure 15, one can grasp that the distribution of the intelligence types in the textbook studied is unbalanced and the Verbal/Linguistic (89%) and Logical/Mathematical Intelligences (33%) are represented predominantly i.e. they favour the linguistic and analytic aspects of language learning and fails to tap the multidimensionality of learners' potentials. The latter are the intelligence types that are "most often associated with academic accomplishment." (Shearer, 2004: 4)

5.8.5.6. Learners' Portfolios

A learner portfolio is a compilation of selected works, activities, assignments, homework and projects that the learner has accomplished during a unit or a semester. Abrami and Barrett describe the portfolio as “a container [that is] capable of storing visual and auditory content including text, images, video, and sound” (2005:2). So, portfolios are used as a mirror for the teacher to know and understand what his/her learner can do rather than focusing his/her attention on what he/she cannot do i.e., they suggest the scope and quality of the learner’s achievements and progress over time, and what are the learning weak areas that need scaffolding.

Furthermore, portfolios are considered as the platform of a big shift in assessment and self-reflection for EFL learning. It is high time, that teachers exceeded the traditional method of paper-pencil tests for assessment, which is a bottleneck in many learners pathway of learning, by new tools and methods of assessment (Jones and Shelton, 2006); that may help in building a new bridge of interaction between the teacher and his/her learners.

Portfolio assessment ignites a new spark for the learners by enhancing their self-confidence through freeing them from paper-pencil tests’ assessments slavery, and fostering a social interaction between the learners who cooperate and work together in a social context under the guidance of their teacher. Vygotsky (1978; as cited in Jones and Shelton, 2006: 9) said that, “The construction of knowledge always exists within the context of past and present social relationships,” and as Stefanakis (2002) said that

Ongoing classroom assessment is an art. Through systematically looking at each [learner's] daily work, and listening to what they say, a teacher can learn more about the individual and what he or she really knows and can do. (29)

In this experimental research, we adapted the method of portfolios assessment as a way of raising our pupils' awareness about the diverse ways of learning they apply when learning the English language ,and that their instruction assessment will be in an ongoing way and will go beyond the narrow walls of the classroom (see figure 16). To fulfill our goal about this novel way of assessment, in Algeria, which our teachers and our pupils are unfamiliar with, we tried “to bring learning alive by listening to the interests of individuals in the classroom” (Stefanakis, 2002:27) to know them better and help them in elaborating their portfolios; which consist of their classroom activities, assignments and projects accomplished at the end of each unit. Some of the pupils' portfolios are available in appendix 04 on CD 1(literary stream) and CD 2 (scientific stream).

Note: Since our pupils are unfamiliar with portfolios' assessment, we tried to simplify this idea as much as we could, and we did not ask them to document everything they did inside or outside the classroom, except, the assignments and the projects they worked on in pairs or groups formed under the teacher guidance; while the teacher through classroom observation documented and assessed their classroom works.

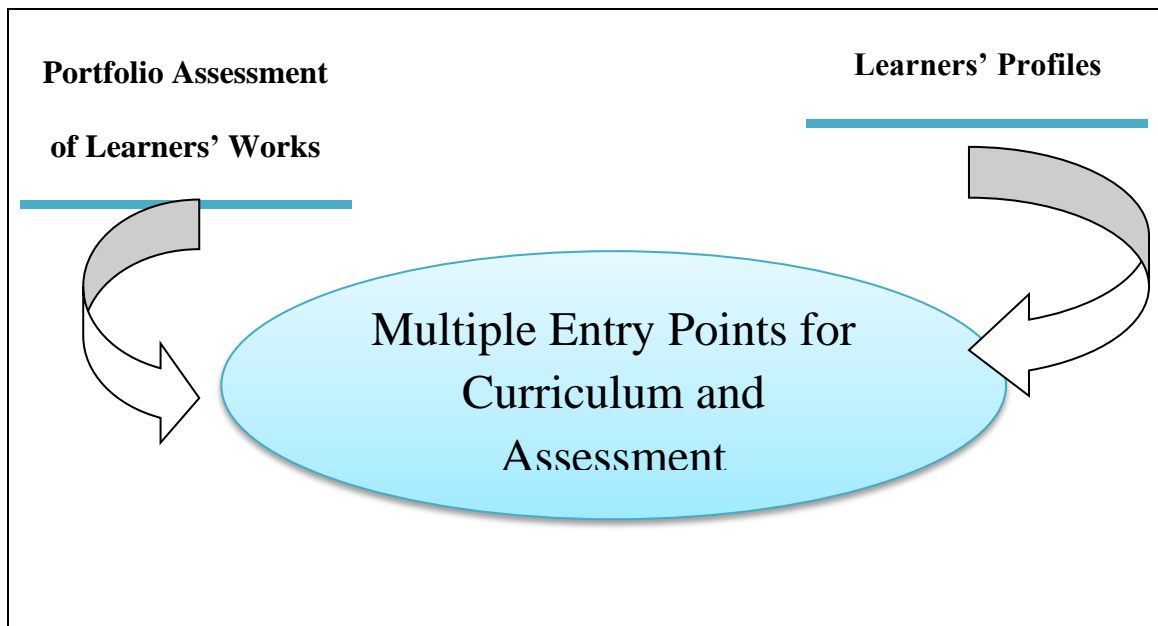


Figure 16: Curriculum Design and Assessment Based on Learners' Profiles and Portfolios (Adapted from Stefanakis, 2002:26)

5.8.5.7. Lesson Plan

“All good teachers have some type of plan when they walk into their classrooms.”(Jensen, 2001:403) These lesson plans are used as maps that the teacher uses to know “what to teach, in what order, and for how much time [needed to be taught].” (Jensen, 2001:403) This lesson plan has specific characteristics that the teacher has to take into account which are:

- ❖ Students' background about the subject matter.
- ❖ The long-term and short-term objectives of the lesson.
- ❖ The skills to be taught during the lesson.
- ❖ The various types of classroom activities.
- ❖ The needed materials.
- ❖ The period of time during which the lesson needs to be completed.
- ❖ The connection between the lessons, the previous, the present and the future ones. (Jensen, 2001)

Based on these ideas, the researcher designed a range of lesson plans (50 lesson plans) that were used to investigate the pupils' academic achievement and attitudes toward learning English as a foreign language. The lesson plans used in our investigation were designed based on the first year secondary school textbook "*At the Crossroads*." A variety of classroom activities and tasks were elaborated; some of which were adopted from the textbook, while others were innovative in nature to invoke the pupils' Perceptual Learning Styles and Multiple Intelligences. The researcher selected the teaching activities that suit the learners' intelligences and learning styles, and many times she rejected some of the textbook activities, and supplemented them by others adapted from different resources, without neglecting the three principles of a good lesson planning:

- ❖ **Flexibility** (changeable) this means that, the teacher can change any part of the lesson depending on the learners' needs and the classroom situation.
- ❖ **Variety** (out of learners' interests) by this is meant; the lesson is built on topics that are related to the learners' interests.
- ❖ **Coherence** (objectives' and activities or tasks homogeneity) it means, the lesson has to target clear objectives; which can be reached through carrying out a range of diverse tasks and activities that cope with the learners' needs (Jensen, 2001).

When designing the lesson plans used in our teaching experiment, we bared in mind that our lessons must incorporate a variety of teaching strategies, activities and teaching materials that are built upon the three different language learning/teaching theories, Multiple Intelligences Theory, Cooperative Learning and Learners' Learning Styles.

There are 50 lesson plans in our research experiment divided unequally up 4 units as follows:

Syllabus Units	Unit 01: Getting Through	Unit 02: Our Findings Show	Unit 03: Back to Nature	Unit 04: Eureka
Number of Lessons	15	11	12	12

Table19: Textbook Units and the Number of Lessons in each of Them

To elaborate our lesson plans based on Multiple Intelligences Theory and raise our pupils' awareness about their idiosyncratic ways of learning, we went through the following steps as stated by Armstrong (2000):

- ✓ Stating the lesson's objective (s).
- ✓ Asking key questions for each intelligence type and learning style.
- ✓ Considering the possibilities by revising the Multiple Intelligences and learning styles techniques and teaching materials and choose the most appropriate ones.
- ✓ Brainstorming: we listed everything that comes to our mind.
- ✓ Selection of the appropriate activities and tasks.
- ✓ Setting up a sequential plan; we considered the logical sequence, development flow and elements of lesson design.

The following figure illustrates the Multiple Intelligences lesson plan and the key questions related to each intelligence type, that the teacher needs to ask when preparing his/her lessons.

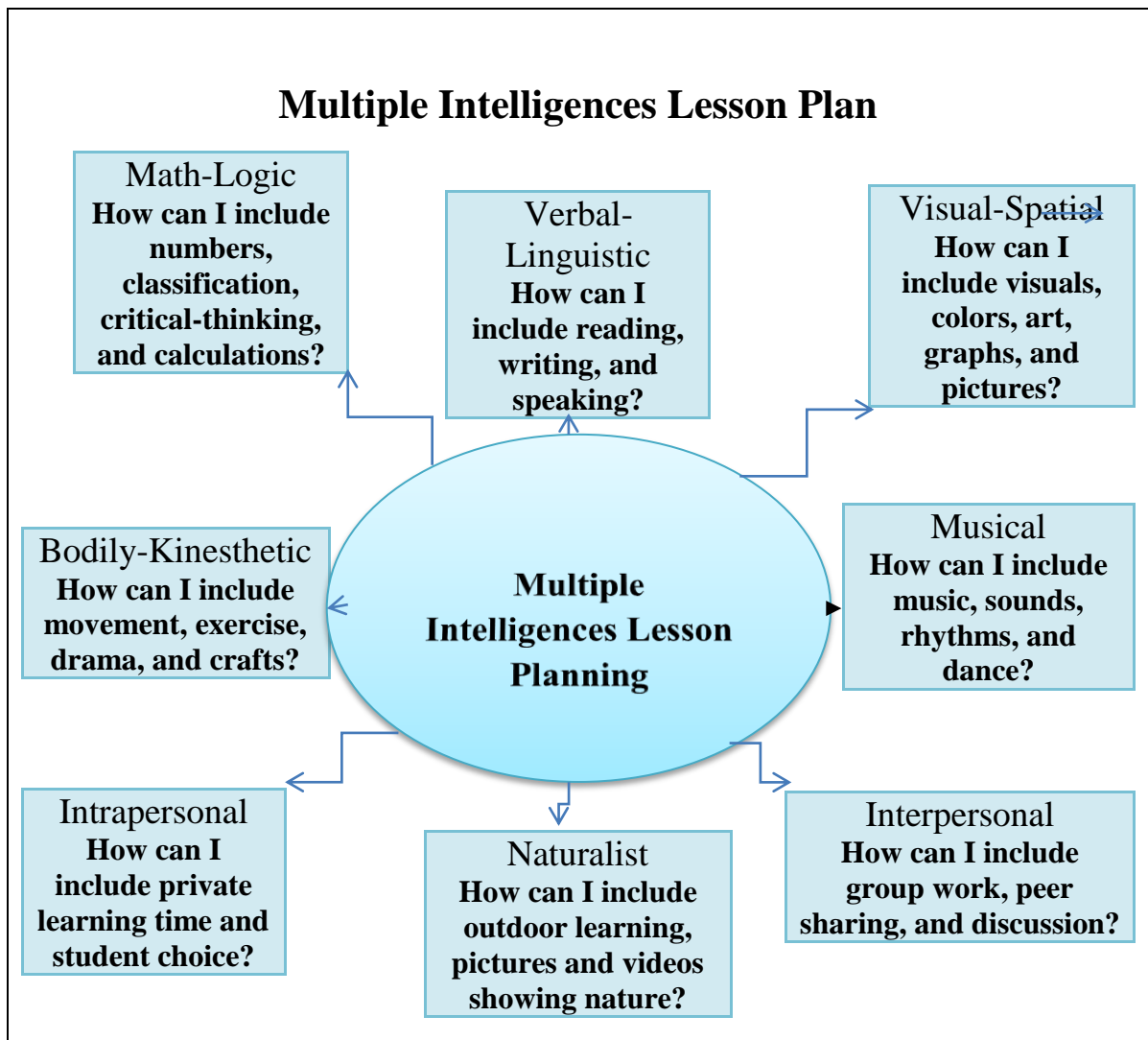


Figure16: Multiple Intelligences Lesson Plan (Adapted from Nicholson-Nilson, 1998)

In order to implement the notion of cooperative lessons and activities, we adapted tasks that require collaborative work in small groups (4 pupils in each group) and sometimes in pairs; this way helped the pupils to learn from each other and take responsibility for their learning.

In constructing our lessons, we tried, also to relate them to Bloom’s Taxonomy “to ensure [that they] have higher level of thinking and reasoning skills” (Nicholson-Nilson, 1998:39). We adapted the following list to cope with all our pupils’ intelligences and cognitive abilities.

Bloom's Verbs Multiple Intelligences	Knowledge	Comprehension	Application	Analysis	synthesis	Evaluation
Verbal-Linguistic	define, memorize, record, list	clarify, discuss, restate, describe, explain, review	interview, dramatize, express, show, publish	interpret, compare, inquire, investigate, organize, survey, question, test	compose, create, imagine, predict, invent	evaluate, revise, deduce, infer, predict, correct, edit
Logical-Mathematical	recall, collect, label, specify, record, enumerate, recount	describe, name, identify, locate, review, group	test, solve, calculate, demonstrate, show, experiment	analyze, interpret, scrutinize, investigate, discover, inquire, organize, examine, question, measure, divide	invent, formulate, hypothesize, set up, systematize	rate, value, evaluate, revise, select, measure, assess, estimate, score
Visual-spatial	observe, label, redraw, rewrite, copy, draw	illustrate, express, explain with pictures, demonstrate, draft	dramatize, demonstrate, illustrate, show, prove, build	scrutinize, arrange, diagram, compare and contrast, graph	compose, produce, arrange, design, plan, assemble, build, create, construct, imagine, originate, produce, concoct	value, select, choose, judge, appraise, recommend, order
Musical	memorize, repeat, copy, recall, name	recognize, express, describe, translate into music	practice, demonstrate, dramatize, show, teach, perform	interpret, analyze, group, arrange, organize, differentiate	compose, arrange, construct, create, order, produce	appraise, judge, value, recommend, assess, order
Bodily-Kinesthetic	repeat all action, tell in actions, copy, follow along	discuss, express, locate, play	exhibit, use, simulate, operate, show, experiment	sort, inspect, arrange, discover, group, organize, dissect, diagram, classify	produce, arrange, set up, invent, build	measure, decide, estimate, choose, recommend
Interpersonal	repeat, define, recall, name,	describe, explain, discuss, express, report, retell	simulate, interview, employ,	organize, survey, investigate	set up, formulate, arrange,	decide, judge, appraise,

	collect, tell		dramatize, practice	te, inquire, question, sort	plan, propose	conclude, infer, criticize, recommend
Intrapersonal	name, repeat, memorize, study	explain, translate, restate, express, review	dramatize alone, visualize, solve, plan	probe, compare, contrast, investigate, dissect, question	plan, design, compose, assemble, hypothesize, imagine, create, arrange	infer, assess, value, judge, endorse

Table20: Bloom’s Taxonomy Verbs and Multiple Intelligences

Some examples of the lesson plans that we designed for our experiment are available in the coming pages with a table that clarifies the abbreviations used (for the rest of the lesson plans see appendix J, and the lessons’ attachments are available in appendix 05 on CD 1).

Note: The researcher must respect the units’ organization and the topics [Telecommunication, the press, science and technology, the environment and storytelling (the last unit is determined just for the literary classes; however, in our teaching experiment we could not cope with it because of time constraints “teachers’ strikes”)] chosen and decided to be taught by the Algerian Curriculum Designers, without forgetting the 60 minutes or to be more precise the 50 minutes allocated for each lesson. Also, some of the lessons where omitted from the syllabus (a ministerial decision), and the slim down of the lessons of the each unit is available in appendix 06 on CD 1.

Abbreviation	Clarification
T	Teacher
Pp (s)	Pupil, Pupils
V	Visual-Spatial Intelligence
B	Bodily-Kinesthetic Intelligence
Math	Mathematical-Logical Intelligence
Inter	Interpersonal Intelligence
Intra	Intrapersonal Intelligence
Ling	Linguistic-verbal Intelligence
Na	Naturaliste Intelligence
M	Musical Intelligence
Sc	Scientific Stream
L	Literary Stream

Table21: Lesson Plans Abbreviations

Lesson Plan 01




Teacher	Ms. Imene CHEBRI	Class level	First Year Scientific and Literary Streams
Observer	Mr. ACHOURI	Source	At the Cross Roads
School year	2013/2014	Unit	Getting Through
Room	03/08	Sequence	Listening and Speaking
Expected no. of pupils	30/ 39	Rubric	Anticipate, Listen and Check


Context	Telecommunication
Teaching aids/materials	Data Shaw, whiteboard and hand outs, slides , tape recorder
Target Intelligences	V, Math, ling, B, Na, Inter and Intra
Target skills	Listening, speaking and writing

Learners' objective (s): by the end of the lesson learners will be to be able to	-Label the different parts of the computer and describe their functions. -Write a short paragraph o how to access an email using time sequencers: first, then, next, after that and finally.
Time	55 mns

Aspects of Language to be taught	Imperatives and time sequencers
Aspects of Culture	/
Assessment	Tasks 01, 02, 03, act 01 p 17, act 02 p 17
SARS	Teacher adapted some activities and tasks

Abbreviations	T: Teacher Pps: Pupils mns: minutes S:select, A: adapt, R: reject, S: supplement
----------------------	---

Phase	Rationale	Intelligences	Interaction pattern	Procedures	Time
Warm up	Brainstorming To introduce the unit theme and anticipate the unit content	V+ Ling+ Math	T- Pps T- Pps	<ul style="list-style-type: none"> ➤ T presents a picture using the data show.  <ul style="list-style-type: none"> ➤ What are these people doing in this place? ➤ T writes the pps' answers on the board. ➤ T presents two pictures and asks the pps to identify the different types of the computer.  	5mns
Presentation	To train Pps identify the different parts of the computer Recycling the pps' previous knowledge and to get	V+ ling+ math+ inter Intra+ B+ V V+ B+ inter+ Math	T- Pps Pps- Pps T- Pps Pps- Pps	<p>Anticipate:</p> <p>Task one: I am Mr. Computer</p> <ul style="list-style-type: none"> ➤ T uses a slides presentation to introduce the different parts of the computer. ➤ Pps match words with the parts of the computer (a slides presentation). <p>Task two:</p> <ul style="list-style-type: none"> ➤ T divides the class into three groups and gives the first group pictures of the computer parts, the second group the labels of these parts, and the third group their definitions, each time the teacher asks a pp from group1 to come in front of his classmates and show them the picture he has, then the pp from group2 who has the name of this part say it loudly, and the pp from group3 	10mns 5mns

Practice	new vocabularies			<p>who has the right definition read it loudly in front of the class. The winner will have a reward.</p> <ul style="list-style-type: none"> ➤ Pps work cooperatively and participate to accomplish the task. <p>Task three:</p> <ul style="list-style-type: none"> ➤ T introduces a picture of an email. <div style="text-align: center;">  </div> <ul style="list-style-type: none"> ➤ What is an email? What does the “e” stand for? ➤ E—electronic mail—letter ➤ Do you have an email? Say it loudly to your classmates? 	5mns	
	To know how to ask for and give information related to email addresses	V+ intra+ ling+ inter	T- Pps	Pps- Pps	<p>Listen and Check:</p> <p>Task one:</p> <ul style="list-style-type: none"> ➤ T uses a tape record to introduce a conversation between to friends about the different steps we need to follow to access an email account. ➤ Pps listen and take notes. ➤ T uses a slides presentation to introduce the steps to access an email account. <p>Activity 01page 17:</p> <ul style="list-style-type: none"> ➤ Reorder the sentences to get coherent instructions for access an email. <p>a- Select an ISP (Internet Service Provider) from the menu.</p> <p>b- Switch on the computer.</p> <p>c- Click on email.</p>	10mns
	To train the Pps to listen for gist and take notes	V+ intra	T- Pps		<p>Accessing an email using specific instructions</p> <p style="text-align: center;">Ling+ math+ Na</p> <p style="text-align: center;">Pps-Pps</p>	5mns

<p>Production</p>	<p>Writing instructions using time sequencers</p>	<p>Inter+ ling + B</p>	<p>T- Pps Pps- Pps T - Pps</p>	<p>d- Sign in. e- Click on “read” or “send” to check or write your message. f- Enter your ID and password. g- Wait for the connection to your email (in-box).</p> <p>Key:</p> <table border="1" data-bbox="1137 451 1680 544"> <tr> <td>NUMBERS</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> <td>7</td> </tr> <tr> <td>LETTERS</td> <td>b</td> <td>a</td> <td>c</td> <td>f</td> <td>d</td> <td>g</td> <td>e</td> </tr> </table> <p>Activity 02 page 17: Group Work:</p> <ul style="list-style-type: none"> ➤ T divides the class into groups of 4 each group has to rewrite the instructions using these sequencers: first, then, next, after that and finally. ➤ Pps write their paragraphs and choose a representative to present it in front of the whole class. ➤ T gives the feedback. <p>Key:</p> <p>In order to access an email you need to go through the following steps: first, you have to switch on your computer, and then, you need to select an ISP. Next, click on e-mail. After that, you have to enter your ID and password and sign in. Then, you need to wait for the connection to your email in box. Finally, you click on read or send to check your messages.</p>	NUMBERS	1	2	3	4	5	6	7	LETTERS	b	a	c	f	d	g	e	<p>10mns</p>
NUMBERS	1	2	3	4	5	6	7														
LETTERS	b	a	c	f	d	g	e														

Lesson Plan 02


Teacher	Ms. Imene CHEBRI	Class level	First Year Scientific and Literary Streams
Observer	Mr. ACHOURI	Source	At the Cross Roads
School year	2013/2014	Unit	Getting Through
Room	03/08	Sequence	Consolidation and Extension
Expected no. of pupils	30/ 39	Rubric	Write it Out

Context	Formal Letters / Application Letter
Teaching aids/materials	Data Shaw, whiteboard and hand outs, slides , tape recorder
Target Intelligences	V, Math, Ling, B, Na, Inter and Intra
Target skills	Reading (Skimming and scanning) and writing

Learners' objective (s): by the end of the lesson learners will be to be able to	<ul style="list-style-type: none"> - Write an Application Letter - Write their own Curriculum Vitae (CV)
Time	55 mns + 55 mns two sessions

Aspects of Language to be taught	Modals
Aspects of Culture	/
Assessment	Tasks 01, 02, 03, act 01 p 17, act 02 p 17
SARS	Teacher adapted some activities and tasks

Abbreviations	T: Teacher Pps: Pupils mns: minutes S:select, A: adapt, R: reject, S: supplement
----------------------	--

Phase	Rationale	Intelligences	Interaction pattern	Procedures	Time
Warm up	To introduce the topic of the lesson	V+ Ling + Inter	T- Pps	<ul style="list-style-type: none"> ➤ T presents some jobs' adverts from different newspapers (slide presentation) and asks some questions. 	5mns
Presentation	To make Pps understand what do we mean by a Help Wanted	Ling+ math+ intra	T- Pps	<ul style="list-style-type: none"> ➤ T directs the pps' attention to the advert and helps them interpret the text. ➤ Questions : <ul style="list-style-type: none"> ✓ What is the text about? ✓ What is it? ✓ Where is it taken from? ✓ Who can be interested in reading it? ➤ Pps give their answers. 	5mns
	To revise and consolidate the use of modals (expressing	Intra+ Ling	Pps- Pps	<ul style="list-style-type: none"> ➤ T asks the Pps to read the help wanted in page 35 and write 4 sentences with must and have to to say what characteristics potential candidates are required to have. ➤ Pps think and give their answers. 	10mns
				T- Pps	

Practice	obligation)		Pps- Pps	Key:	
	To show the form (layout) of a formal letter	Ling+ intra+ Math	T- Pps Pps – Pps T- Pps	<ul style="list-style-type: none"> ✓ The applicant must deal with children. ✓ The applicant has to organize and participate in daily activities such as swimming and dancing. ✓ The applicant must be tolerant and patient. <ul style="list-style-type: none"> ➤ T asks Pps to read the letter of application page 35 and decide whether the applicant has a chance or not to be a camp leader. ➤ Pps read the letter silently and answer. ➤ T discusses with the Pps their answers and the layout of this formal letter. 	10mns
	To make the Pps to internalise the form of a formal letter	B+ Math+ Ling+ inter + Na	T- Pps Pps- Pps	Key	
	To consolidate the Pps'		T- Pps	<ul style="list-style-type: none"> ✓ Yes she has a chance to be a camp leader because she says in the letter: <ul style="list-style-type: none"> • I often volunteer to work in an infant hospital. • When my mother and father are out, I often look after my brothers and sisters. <p>Task 01 Group Work</p> <ul style="list-style-type: none"> ➤ T divides the pupils into groups of four and gives each group a set of cards (a jumbled letter of application) to order and get a coherent letter. ➤ T circulates during the task to provide any assistance required. <p>Task02 Pair Work</p> <ul style="list-style-type: none"> ➤ T divides the Pps into pairs and provides them with 	15mns

Production	internalisation of the application letter layout	V+ intra + Ling + Math	T- Pps	<p>work sheets which contain a letter of application with deliberate mistakes and asks them to find these mistakes.</p> <ul style="list-style-type: none"> ➤ T gives the feedback. ➤ T uses a slides presentation to introduce the different CVs and asks them some questions. ➤ T asks Pps to copy and fill in the Resume on page 36 with information from Joy’s letter of application. 	15mns			
	To introduce the form of a CV		T- Pps		15mns			
			Pps-Pps	<p>Key</p> <div style="border: 1px solid black; padding: 10px;"> <p style="text-align: center;">Résumé</p> <p>Name:...Joy..... I.....Parfit.....</p> <table style="width: 100%; border: none;"> <tr> <td style="text-align: center; width: 33%;">First</td> <td style="text-align: center; width: 33%;">Middle</td> <td style="text-align: center; width: 33%;">last</td> </tr> </table> <p>Address :...46, Regent Street , Madison, Winconsin.....</p> <p>Date and Place of Birth:...Columbus...</p> <p>Age:...16 years old.....</p> <p>Education:...Junior at Thomas Jefferson High School</p> <p>Languages:.....English.....</p> <p>Previous Work Experience:.....Volunteer in an infant hospital</p> <p>Interests:.....photography and music.....</p> <p>References: Letters from Mr John Clarck and Miss Emma Smithson</p> </div>	First	Middle	last	
First	Middle	last						

	<p>To consolidate the CV writing</p>	<p>Ling+ Math+ Intra</p>	<p>T- Pps Pps- Pps</p>	<ul style="list-style-type: none"> ➤ T gives work sheets and asks them to write their own Resume. ➤ Pps do the task. ➤ T checks and guides. <p>Task 03 Pair Work</p> <ul style="list-style-type: none"> ➤ T asks the Pps to work in pairs and write an application letter using the information from the previous advert on page 35. ➤ Pps do the task and write their first draft. ➤ T guides them. ➤ Peer correction ➤ Pps read their letters loudly. ➤ T chooses one and writes it on the board for the feedback. <p>Key:</p> <div style="border: 1px solid black; padding: 5px;"> <p style="text-align: right;">Oued Athmania –Mila- December 5th, 2013</p> <p>Mr. Michael Armstrong Haryton, bay summer camp 2187 Mountain Street N.w, Florida 60306 Re: Camp Leader Dear Mr. Armstrong,</p> <p style="text-align: center;">I have seen you advertisement for a Camp Leader in</p> </div>	<p>10mns</p> <p>25mns</p>
	<p>To write a Letter of Application</p>	<p>Inter+ Ling + B</p>	<p>T – Pps Pps – Pps T- Pps</p>		

			<p>USA Today and I would like to apply for the job.</p> <p>I am pupil at Atti Abdelhfid High School in Oued Athemania with good grades in philosophy and English. I am a member of the handball sport's club. I enjoy reading and meeting people. I had worked in a camp before. So, I think that I am suitable for the job.</p> <p>I was born in Oued Athmania and I am sixteen years old. I will turn seventeen next March. I often look after my sisters and brothers when my parents are at work. Hence, I think that I have a quite experience in dealing with children.</p> <p>I am ready to start work at the end of June, when the school summer holidays begin.</p> <p>I have asked two of my teachers Mr Mounib Mehamedi and Miss Hanene Nemour to send you letters of reference for me.</p> <p style="text-align: right;">Yours sincerely, Rached B Zillel</p>	
--	--	--	---	--

Lesson Plan 03

Teacher	Ms. Imene CHEBRI	Class level	First Year Scientific and Literary Streams
Observer	Mr. ACHOURI	Source	At the Cross Roads
School year	2013/2014	Unit	Our Findings Shaw
Room	03/08	Sequence	Listening and Speaking
Expected no. of pupils	30/ 39	Rubric	Say it Loud and Clear

Context	The Press
Teaching aids/materials	The textbook, data show, whiteboard , hand outs, flashcards, slides, and work sheets
Target Intelligences	V, Ling, Math, Inter, Na, Intra
Target skills	Listening , speaking, interacting

Learners' objective (s): by the end of the lesson learners will be to be able to	<ul style="list-style-type: none"> - Form compound words and mark stress on them - To identify stress shift (noun → adjective)
Time	55 mns

Aspects of Language to be Taught	Phonetics: stress shift
Aspects of Culture	/
Assessment	Tasks 01, 02 and 03
SARS	Teacher adapts some tasks

Abbreviations	T: Teacher Pps: Pupils mns: minutes, , S:select, A: adapt, R: reject, S: supplement
----------------------	--

Phase	Rationale	Intelligences	Interaction pattern	Procedures	Time
Warm up	To introduce the theme of the lesson	Inter+ Ling+ Math	T- Pps	<ul style="list-style-type: none"> ➤ T writes the word newspaper on the board after recycling with the Pps the previous lesson. ➤ Can we divide the word newspaper into two parts? ➤ Pps answer yes. News and paper ➤ How do we call this type of words? ➤ Pps compound/complex words. 	5mns
Presentation	Brainstorming other compound words		Pps- Pps	<ul style="list-style-type: none"> ➤ T helps Pps to brainstorm other examples of compound words by asking them some questions. 	5mns
			T- Pps	<ul style="list-style-type: none"> ✓ Did anyone brush their teeth this morning? What did you use? Toothbrush and toothpaste are both compound words! ✓ Did anyone (another compound word!) have breakfast this morning? You all ate a compound word today! Breakfast. ✓ Did anyone eat lunch this afternoon? Another compound word! Afternoon. 	
Practice	To consolidate the Pps' understanding	V+ Ling+ math+ inter +B+ intra	T - Pps	<p>Task 01: Group work</p> <ul style="list-style-type: none"> ➤ T passes out attached <u>word cards</u>, one per pp and instructs the Pps to read their word and check in the dictionary to find a compound word they can form using the word in the card, then move around the room to see if they can find the word to add to their word to create a 	15mns
			Pps- Pps		

Production	To identify stress pattern in compound words		Pps- Pps	<p>compound word that makes sense. Once a match has been made, those two Pps will stand together in the room.</p> <ul style="list-style-type: none"> ➤ T checks to make sure their word is correct. ➤ Pps share their word and give a definition and the stressed part of the word they created to the class. <div style="border: 1px solid black; border-radius: 15px; background-color: #e0f0e0; padding: 10px; margin: 10px 0;"> <p style="text-align: center;">If the compound word is a noun stress falls on the first part</p> <p style="text-align: center;">If the compound word is a verb or an adjective stress falls on the second part</p> </div>	15mns										
	To deal with stress shift	ling+ B+ inter+ Math	T- Pps	<p>Task 02: Pair Work</p> <ul style="list-style-type: none"> ➤ T asks Pps to work in pairs to find the stressed syllables in a list of words and identify their word category using dictionaries. ➤ Pps do the task <p>Key:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">00</th> <th style="text-align: center;">o0o</th> </tr> </thead> <tbody> <tr> <td>Atom /'ætəm/</td> <td>Atomic /ə'tɒmɪk/</td> </tr> <tr> <td>Civil /'sɪvl/</td> <td>Civilian /sɪ'vi:lɪən/</td> </tr> <tr> <td>Drama /'dræmə/</td> <td>Dramatic/drə'mæɪtɪk/</td> </tr> <tr> <td>Grammar/'græmə/</td> <td>Grammarian /grə'meəriən/</td> </tr> <tr> <td>Proverb /'prɒvɜ:b/</td> <td>Proverbial /prə'vɜ:biəl/</td> </tr> </tbody> </table>		00	o0o	Atom /'ætəm/	Atomic /ə'tɒmɪk/	Civil /'sɪvl/	Civilian /sɪ'vi:lɪən/	Drama /'dræmə/	Dramatic/drə'mæɪtɪk/	Grammar/'græmə/	Grammarian /grə'meəriən/
00	o0o														
Atom /'ætəm/	Atomic /ə'tɒmɪk/														
Civil /'sɪvl/	Civilian /sɪ'vi:lɪən/														
Drama /'dræmə/	Dramatic/drə'mæɪtɪk/														
Grammar/'græmə/	Grammarian /grə'meəriən/														
Proverb /'prɒvɜ:b/	Proverbial /prə'vɜ:biəl/														

				<table border="1"> <thead> <tr> <th>000</th> <th>o0o</th> </tr> </thead> <tbody> <tr> <td>Colony /'kɒləni/ Comedy /'kɒmədi/ Curious /'kjʊəriəs/ Strategy /'strætədʒi/ Operate /'ɒpəreit/</td> <td>Colonial /kə'ləʊniəl/ Comedian/kə'mi:drən/ Curiosity/kjʊəri'ɒsəti/ Strategic /stræ'ti:dʒɪk/ Operation /ɒp'reɪʃn/</td> </tr> </tbody> </table>	000	o0o	Colony /'kɒləni/ Comedy /'kɒmədi/ Curious /'kjʊəriəs/ Strategy /'strætədʒi/ Operate /'ɒpəreit/	Colonial /kə'ləʊniəl/ Comedian/kə'mi:drən/ Curiosity/kjʊəri'ɒsəti/ Strategic /stræ'ti:dʒɪk/ Operation /ɒp'reɪʃn/
000	o0o							
Colony /'kɒləni/ Comedy /'kɒmədi/ Curious /'kjʊəriəs/ Strategy /'strætədʒi/ Operate /'ɒpəreit/	Colonial /kə'ləʊniəl/ Comedian/kə'mi:drən/ Curiosity/kjʊəri'ɒsəti/ Strategic /stræ'ti:dʒɪk/ Operation /ɒp'reɪʃn/							
			Pps- Pps					
			T- Pps	<p style="text-align: center;">Rules of Word Stress</p> <ul style="list-style-type: none"> - A noun of two syllables has stress on the first syllable. E.g. 'En/glish and 'Fa/ther . - An adjective of two syllables has stress on the first syllable. E.g. 'Hap/py and 'Stu/pid. -A word that ends (finishes) with one of these five (5) endings takes stress on the second syllable from end. The endings are (-ic(s), -sion(s), -tion(s), -ive, -ant) E:g. 'Graph/ic – 'Ma/gic – Me/'chan/ic – 'Pan/ic – 'Pub/lic. 'Vi/sion – Di/'vi/sion – Con/'clu/sion – Tel/e/'vi/sion or 'Tel/e/vi/sion -A word that ends (finishes) with one of these thirteen (13) endings takes stress on the third syllable from end. (Words of 3 syllables or more.) The endings are (-cy, -ty, -phy, -gy, -al, -er, --ful, -less, -ous, -fy, -ible, -able, -ist, -ness, -ize, etc...) E.g. U/ni/'ver/si/ty, Phi / 'lɒ/sɒ/phi, Re/'al/i/ty 				
			Pps-Pps					

	To decipher a message	Math+ intra+ ling	T- Pps Pps- Pps T - Pps	<p>Task 03:</p> <p style="text-align: center;">The Hidden Message</p> <ul style="list-style-type: none"> ➤ T asks Pps to decipher the message below and use the letters of the alphabet to write it. ➤ Pps do the task <p>Key:</p> <ul style="list-style-type: none"> ✓ / 'tæblɔɪdz 'ju:zəli ri'pɔɪt 'skændlz ənd ju:z sen'seɪʃənl 'læŋgwɪdʒ / ✓ Tabloids usually report scandals and use sensational language. 	10mns
--	-----------------------	----------------------	---------------------------------------	--	-------

Lesson Plan 04

Teacher	Ms. Imene CHEBRI	Class level	First Year Scientific and Literary Streams
Observer	Mr. ACHOURI	Source	At the Cross Roads
School year	2013/2014	Unit	Back to Nature
Room	03/08	Sequence	Stop and Consider
Expected no. of pupils	30/ 39	Rubric	/

Context	Nature and Natural Disasters
Teaching aids/materials	Data Shaw, whiteboard and hand outs, flashcards, slides, work sheets
Target Intelligences	V, Ling, Math, Inter, Na, Intra
Target skills	Listening , speaking, interacting and writing

Learners' objective (s): by the end of the lesson learners will be to be able to	- To construct sentences in which the express conditional type 0, 1 and 2.
Time	55mns

Aspects of Language to be taught	Conditionals type 0, 1, and 2
Aspects of Culture	/
Assessment	Tasks 01, 02, 03, 04
SARS	The teacher rejected all the activities in the textbook and supplemented them by new ones

Abbreviations	T: Teacher , Pps: Pupils , mns: minutes, S:select, A: adapt, R: reject, S: supplement
----------------------	---

Phase	Rationale	Intelligences	Interaction pattern	Procedures	Time
Warm up	Recycling previous knowledge		T- Pps	T: Presents some pictures (a slides presentation) and asks the pupils the following questions: <ul style="list-style-type: none"> ➤ What will happen if we pollute the sea? ➤ What happens if we heat water at 100°C? ➤ What would you do if you had a million dollars? 	5mns
Presentation	Explaining the use of conditional	V+ ling+ inter	Pps- Pps	Pps: Give their answers which the teacher writes some of them on the board. T: Explains the different uses of conditionals types 0, 1, and 2.	10mns
			T- Pps	Conditional Type 0: If (whenever) + Present Simple; Present simple Use: to talk about facts and scientific truths. Conditional Type 01: If (when) + Present Simple ; Present Simple Imperative E.g.: if you do not like coffee, do not drink it. Modals E.g.: if you are ill, you have to see the doctor. Use: to talk about possible actions (possibility). Conditional Type 02: If + Past Simple ; Would/ Would not + Stem Use: to talk about something imaginative or unreal.	
Practice	Pupils form	Ling + intra	T- Pps	Task 01: <ul style="list-style-type: none"> ➤ Reorder the following flash cards to get coherent 	5mns

Production	coherent sentences	+ Na + math +V	Pps- Pps	sentences.	10mns
	Pupils use the right form and the right tenses	Inter + ling Math	Pps- Pps	<p>Task 02:</p> <ul style="list-style-type: none"> ➤ Indicate which sentences are correct and which are incorrect and rewrite the incorrect ones. a. If metal gets hot, it expands. b. The car stopped, if it runs out of petrol. c. I will call you right away if I find your keys. d. I will be on time, if I would hurry. e. If I was rich, I will travel all over the world. 	
	The pupils interview each other using the second conditional	Inter + ling	T- Pps	<p>Task03: Pair work</p> <p style="text-align: center;">What Would You do if.....?</p> <p>T: Asks the pupils,</p> <ul style="list-style-type: none"> ➤ What would you do if tomorrow's lesson is cancelled? <p>PPs: Give their answers.</p> <p>T: Tells the pupils to ask each other what they would do in various hypothetical situations.</p> <ul style="list-style-type: none"> ➤ The teacher gives them sheets of papers which contain different situations. 	5mns
The pupils make real and unreal sentences	Inter + ling	Pps- Pps	<p>Task 04: Group work</p> <p style="text-align: center;">Conditional Chain Game</p> <ul style="list-style-type: none"> ➤ In this game students make real and unreal sentences in a chain format. The conclusion of one conditional sentence is made the condition of a new sentence. 	10mns	

Lesson Plan 05





Teacher	Ms. Imene CHEBRI	Class level	First Year Scientific and Literary Streams
Observer	Mr. ACHOURI	Source	At the Cross Roads
School year	2013/2014	Unit	Eureka
Room	03/08	Sequence	Reading and Writing
Expected no. of pupils	30/ 39	Rubric	/

Context	Inventions and inventors
Teaching aids/materials	The textbook, data show, whiteboard , hand outs, flashcards, slides, and work sheets
Target Intelligences	V, Ling, Math, Inter, Na, Intra
Target skills	Observing, reading(skimming and scanning) and writing

Learners' objective (s): by the end of the lesson learners will be to be able to	<ul style="list-style-type: none"> - Interpret pictures orally. - Write a short summary about the development of communication
Time	55 mns

Aspects of Language to be Taught	Tenses past, present and future
Aspects of Culture	/
Assessment	Tasks 01 and 02
SARS	Teacher adapts some tasks, rejects a textbook activity and supplemented it by another one

Abbreviations	T: Teacher Pps: Pupils mns: minutes, , S:select, A: adapt, R: reject, S: supplement
----------------------	---

Phase	Rationale	Intelligences	Interaction pattern	Procedures	Time
Warm up	To introduce the theme of the lesson	V+ Ling+ Math + Inter	T- Pps Pps- Pps	<ul style="list-style-type: none"> ➤ T presents a video and asks the Pps to watch it. https://www.youtube.com/watch?v=3DxFCC_FD4 ➤ Pps watch the video and take notes ➤ T what was the video about? ➤ Pps it was about how people use to communicate and how they are communicating now. 	10mns
Presentation	To match pictures of inventions with their names	V+ Ling+ math+ intra	T- Pps Pps- Pps	<p>Pre Reading Anticipate</p> <ul style="list-style-type: none"> ➤ Sticks some pictures with their names up on the board. <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  </div> <div style="text-align: center;">  </div> <div style="text-align: center;">  </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 20px;"> <div style="border: 1px solid gray; border-radius: 10px; padding: 5px; background-color: #e0e0e0;">Drum</div> <div style="border: 1px solid gray; border-radius: 10px; padding: 5px; background-color: #e0e0e0;">Telegraph</div> </div> <div style="display: flex; justify-content: space-around; margin-top: 20px;"> <div style="text-align: center;">  </div> <div style="border: 1px solid gray; border-radius: 10px; padding: 5px; background-color: #e0e0e0;">Satellite</div> <div style="border: 1px solid gray; border-radius: 10px; padding: 5px; background-color: #e0e0e0;">Telephone</div> </div> <ul style="list-style-type: none"> ➤ T asks Pps to match each name of the inventions with their corresponding picture. 	5mns

Practice	To introduce the topic of the text by interpreting pictures	Intra+ Ling	T- Pps Pps- Pps T- Pps Pps- Pps	<p>➤ Pps do the task.</p> <p>Key:</p> <p>a- Drum b- Telegraph c- Telephone d- Satellite</p> <p>➤ T asks the Pps: do these pictures represent....?</p> <p>a- The development of the radio b- The development of telecommunication c- The start of telecommunication d- The development of the satellite system</p> <p>✓ The answer is: b- The development of telecommunication</p> <p>➤ T can you guess when each of these items was invented?</p> <p>➤ Pps give their answers.</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Name of Item</th> <th>Date/Time Period</th> </tr> </thead> <tbody> <tr> <td>drum</td> <td>Ancient times</td> </tr> <tr> <td>telegraph</td> <td>1876</td> </tr> <tr> <td>Telephone</td> <td>1890s</td> </tr> <tr> <td>Satellite</td> <td>Mid-twentieth century</td> </tr> </tbody> </table>	Name of Item	Date/Time Period	drum	Ancient times	telegraph	1876	Telephone	1890s	Satellite	Mid-twentieth century	5 mns
	Name of Item	Date/Time Period													
drum	Ancient times														
telegraph	1876														
Telephone	1890s														
Satellite	Mid-twentieth century														
	Hypothesis testing	Ling+ intra+ Math	T- Pps Pps - Pps	<p>While Reading</p> <p>➤ T asks the Pps to skim through the text and give the general idea of the text page 115.</p> <p>✓ The answer is: The development of telecommunication from the ancient</p>	10mns										
	To check the Pps'	Intra+ Ling	T – Pps												

Production	hypotheses correctness	Ling+ intra	T- Pps	<p>times till the present.</p> <ul style="list-style-type: none"> ➤ Read the information in bold type in the text and tick the most suitable title for it. <ul style="list-style-type: none"> a- Telecommunications and Satellites b- Graham Bell's Invention c- Telecommunication: Past, Present, and Future ✓ The answer is: <ul style="list-style-type: none"> c- Telecommunication: Past, Present, and Future <p>Task One: Group Work</p> <p style="text-align: center;">Question and Answer Game</p>	5mns
	To check Pps comprehension of the text	Inter +Ling+ math+ B	T- Pps	<ul style="list-style-type: none"> ➤ T divides the Pps into groups of four and asks them to work together to write comprehension questions about the text. Only questions which can be answered by the text are allowed. Opinion questions are not allowed. After groups finish writing their questions, they ask their questions to another group which must answer within a specified amount of time (the teacher decides the time according the class level). If the answer is correct and given within the time period, the answering team receives a point. If the answer is incorrect or not found within the time period, the questioning group receives a point, but they must inform the other group of the answer. Each group takes turns asking and answering questions. 	20mns
			Pps – Pps	<ul style="list-style-type: none"> ➤ Pps do the task enthusiastically. 	

	To sum up the text	Inter+ Ling + B+ Math+ Na	T- Pps Pps – Pps	<p>Examples of the Pps’ questions</p> <ul style="list-style-type: none"> ✓ When Alexander Graham Bell was invented the telephone? ✓ How many conversations can be carried out by the latest satellites? <p>Post Reading</p> <p>Task Two: Pair Work</p> <p>➤ Reorder the following sentences so that you get a coherent summary of the text.</p> <p>a- In 1945, Arthur C Clarke, suggested a system of communication satellites in an orbit.</p> <p>b- Nowadays, communication is easier, it is done through them.</p> <p>c- In 1899, Guglielmo Marconi came with another invention, it was the wireless telegraph.</p> <p>d- In 1876, Alexander Graham Bell invented the first telephone to enable voice communication over long distances.</p> <p>e- People had to communicate with each other, they did so using drums. However, communication through drums was not satisfactory.</p> <p>f- But, there was still a problem with long-distance voice communication; the system of transmission was impractical.</p> <p>Key</p> <table border="1" data-bbox="1048 1268 1877 1399"> <tr> <td>Order</td> <td>01</td> <td>02</td> <td>03</td> <td>04</td> <td>05</td> <td>06</td> </tr> <tr> <td>Sentences</td> <td>E</td> <td>C</td> <td>B</td> <td>D</td> <td>A</td> <td>F</td> </tr> </table>	Order	01	02	03	04	05	06	Sentences	E	C	B	D	A	F	10mns
Order	01	02	03	04	05	06													
Sentences	E	C	B	D	A	F													

5.9. Teaching Methods for the Different Groups

On the terrain, two different teaching methods were used to teach the pupils from both the two control groups and the two experimental groups. Yet, it is essential to mention that, pupils from the literary and scientific streams received the same English lessons and there were no differences in the bulk of information they learnt during the whole academic year. Although, in the syllabus design of the first year secondary school in Algeria, there is a slight difference between both streams in the number of units to be taught, and not the content of each one (4 units for the scientific stream and 5 units for the literary stream), because of time constraints and some unwanted variables “teachers’ strike” that took place during the experimental period, the researcher could not reach the last unit which was presumed to be taught to the pupils of the literary stream.

5.9.1. The Control Groups

In the two control groups A and B the pupils were taught using the Competency-Based Approach which is the teaching method that accompanies first year secondary school textbook “*At the Crossroads*” set down by the Algerian Ministry of Education. This teaching method is used “to consolidate and extend the competencies acquired at the Middle School Level,” (1st year Teachers’ Book, 2005: 4) the competences that the teacher needs to tackle in his/her lessons are according to the syllabus:

- ✚ Interacting orally in English.
- ✚ Interpreting oral and written texts.
- ✚ Producing oral and written texts. (1st year Teachers’ Book, 2005: 4) (a copy of this book is available in appendix 07 CD 01)

Since, Competency-Based Approach focuses on the outcomes .i.e. what the learners can do rather than what to learn; the learners are intended to learn how to use

language for communication in various social contexts and the teachers are considered as lessons' facilitators and organizers. However, the majority of the English language teachers in both the intermediate and the secondary schools in Algeria seem to ignore their chief role in the classroom and tend towards the commitment of the teacher-centered method of the past years. This results, in providing lecture-based classes full of stereotyped lessons and "parrot repetitions" (Labeled, 2007: 37). Moreover, this type of lessons ignores the pupils' diverse ways of learning, and prevent them from exceling their full potentials. Putting all together, this is the way the two control groups were taught, lectures, no pair /group work or project works and no videos or role plays.

5.9.2. The Experimental Groups

The two experimental groups were taught using lesson plans based on Multiple Intelligences Theory, Cooperative Learning and pupils' Perceptual Learning Styles as stated before. The notion of cooperation was realized in our experimental classrooms through the use of group and pair work.

Group work organization was conceived around the idea of forming mixed intelligences groups and similar intelligences groups.

5.9.2.1. Mixed Intelligences Groups

In this type of grouping, the pupils are divided into groups of four and each pupil in the group has a dominant type of intelligence that is different from the other group members. As an example, we may have a group which incorporates a pupil who has a highly developed linguistic intelligence, one with a highly developed visual intelligence, another who strong in the musical intelligence and the last one has a highly developed interpersonal intelligence. Yet, the researcher

did this without telling the pupils that she was doing so. Moreover, this kind of mixed grouping of intelligences and skills presents a mosaic of diversified pupils' capacities, and shows a visible betterment in the pupils' performance in the class; since, it gave them the opportunity to operate as a social unit; especially, in the accomplishment of project works and their ways of oral presentation. (Nicholson-Nilson, 1998)

5.9.2.2. Similar Intelligences Groups

In this kind of groupings, the pupils are divided into small groups that incorporate pupils from the same intelligence; for example, one group may have the four pupils who are highly developed in a specific type of intelligences like the mathematical intelligence. This type of grouping gave the pupils the opportunity to work with other pupils who have the same interests. (Nicholson-Nilson, 1998)

Conclusion

This piece of research seeks to examine the cause/effect relationship, positive effectiveness, between the implementation of MIT, CL and PLS as a teaching method in first year secondary school classes, and the pupils' English language proficiency and attitude. This kind of cause/effect experimental methods is assumed to be the most effective ones in exploring the human behaviours if the researchers succeed in controlling any irrelevant variables that might intervene and bias the research findings.

This chapter is consecrated to the description of our research methodology by dealing with the different steps that we followed to accomplish our teaching experiment, and the various experimental instruments and tools that were used in realizing the goals behind this research work.

CHAPTER SIX

Results and Discussion

Introduction

6.1. Research Questions

6.2. Research Hypotheses

6.3. Data Analysis

6.3.1. Results of Pupils' Pre-test, Post-test of the Three Language Skills and the First, Mid and Last-term Examinations

6.3.2. Cohen's Effect Size

6.3.3. Results of the Pupils' Motivation and Attitudes Questionnaire

6.4. Comprehensive Discussion

Conclusion

CHAPTER SIX

Results and Discussion

Introduction

As stated in the previous chapters, our research study was set up to inspect the positive effectiveness of implementing Cooperative Learning (CL) Activities, incorporating the insights given by Howard Gardner's theory of Multiple Intelligences (MI) taking into account the pupils' Perceptual Learning Styles in secondary school EFL classrooms in enhancing pupils' English language proficiency and attitude, as measured by the pre- and post-tests and the pupils' achievement examinations during the academic year. In order to realize the above aim an experimental research was conducted on 69 first year pupils from both the scientific and the literary streams.

This chapter presents the data analyses of the results obtained from the various research experimental instruments (pre- and post-tests, first, mid and last term examinations and the pupils' motivation and attitude questionnaire).

Quantitative analyses were applied in analyzing the previous research tools, followed by a general comprehensive discussion for all the results gained.

Note: Being a researcher and at the same time the teacher who conducts the research experiment seems somehow tricky, because it is to a certain extent difficult to separate the two personalities from each other and this might result in decreasing the level of objectivity. Yet, as a researcher I have to declare that I tried to do my best to obtain authentic and real research findings by stepping back and treating the data objectively.

However, my personal point of views may appear through my enthusiasm in presenting the results.

6.1. Research Questions

Since we are dealing with the data analyses it is worth to repeat our research questions:

6.1.1. In what ways can the language learning environment be constructed in order to improve the English learning outcomes of secondary school pupils in Algeria?

6.1.2 How can cooperative learning enhance pupils' attitudes?

6.1.3. To what extent can cooperative learning activities and multiple intelligences plus the pupils' perceptual learning styles insights used in conjunction improve the pupils' four language skills?

6.1.4. Do pupils' perceptual learning styles have a positive effect on pupils' self-directed learning?

6.2. Research Hypotheses

It is also helpful to repeat the research hypotheses the teaching experiment aimed to test:

❖ The research hypothesis:

If we implement Cooperative Learning (CL) Activities, incorporating the insights given by Howard Gardner's theory of Multiple Intelligences (MI), taking into account the pupils' perceptual learning styles in secondary school EFL classrooms, these activities and

assessments would have a positive effect on pupils' English language proficiency and attitude.

❖ Sub-hypotheses (working hypotheses):

6.2.1. The experimental groups C and D will score significantly better than the control groups A and B on the English listening, reading and writing tests.

6.2.2. The experimental groups C and D will score significantly better than the control groups A and B on the first and mid-term achievement examinations.

6.3. Data Analysis

The data obtained from the pre-test, the post-test, the first, mid and last-term examinations, and also, the ones obtained from the pupils' questionnaire were collected, analyzed and interpreted. The data were calculated and tabulated using the Statistical Package for Social Sciences (SPSS 17.0). A t-test for independent samples ($\alpha \leq .05$) was run to determine the pupils' improvement in learning English as a foreign language. Paired sample t-tests were performed to determine the pupils' improvement within the same group. Since we expected the impact would be in one direction .i.e. an improvement in the pupils' English language proficiency and attitude would appear after receiving the treatment (the teaching method based on MIT, CL and PLS) the tests used were one tailed. Furthermore, Cohen's effect size [Murphy and Myors define it as "a measurement of impact an independent variable has on a dependent variable." (1998:12)] was used to demonstrate the practical significance of our treatment, rather than simply the statistical significance.

6-3-1 Results of Pupils' Pre-test, Post-test of the Three Language Skills and the First, Mid and Last-term Examinations

From a deep examination of the descriptive statistics of the pre-test and the post-test of the three language skills (Listening, Reading and Writing) we noticed the differences that appeared in all the groups. Also, these differences took place in the first, mid and last-term examinations; which were very crucial tests for all the pupils in the secondary school to pass to the second year. (See tables 23 and 24)

Language Skills	Control Group A Scientific Stream		Experimental Group C Scientific Stream	
	Mean	Std deviation	Mean	Std deviation
Reading a	4,87	2,66	4,43	2,68
Reading b	4,14	2,34	5,36	2,05
Listening a	3,53	3,14	6,23	3,39
Listening b	4,69	2,73	7,61	2,74
Writing a	1,17	1,32	2,32	1,53
Writing b	1,28	1,46	2,99	1,47
1st term Exam	6,39	4,60	8,89	3,90
2nd term Exam	5,74	3,72	9,06	4,31
3rd term Exam	7,16	5,14	10,94	4,10

(**Reading a** means reading pre-test. **Reading b** means reading post-test)

Table23: Descriptive Statistics for the Pre-test and Post-test of the Three Language Skills and the First, Mid and Last-term Examinations of the Control Group (A) and the Experimental Group (C)
(Scientific Stream)

Language Skills	Control Group B		Experimental Group D	
	Mean	Std deviation	Mean	Std deviation
Reading a	4,85	3,04	4,78	2,29
Reading b	4,91	2,80	6,81	2,35
Listening a	6,20	3,77	6,23	2,87
Listening b	6,30	3,88	8,30	3,31
Writing a	0,93	1,28	1,10	1,33
Writing b	1,01	1,35	2,91	1,56
1st term Exam	6,71	3,79	7,66	3,59
2nd term Exam	6,98	2,93	8,86	4,01
3rd term Exam	8,41	2,82	12	4,31

(**Reading a** means reading pre-test. **Reading b** means reading post-test)

Table24: Descriptive Statistics for the Pre-test and Posttest of the Three Language Skills and the First, Mid and Last-term Examinations of the Control Group (B) and the Experimental Group (D)
(Literary Stream)

It is important to mention that the pupils' scores in the experimental groups C (N=39) and D (N=30) in the three term examinations were higher than the pupils' scores in the control groups A (N=39) and B (N=30), especially in the last-term (the means C \bar{X} =10,94 and D \bar{X} =12, while A \bar{X} =7,61 and B \bar{X} =8,41) examination. Such result realizes our expectations about the third hypothesis of our research which said that: "The experimental groups C and D will score significantly better than the control groups A and B on the first, mid and last-term achievement examinations."

The differences between the pupils' post-test scores in the three language skills of the experimental groups C and D and the control groups A and B were analysed through t-test for independent samples. In our analysis of the research results we have taken into

account the pupils' streams, which mean that our samples were divided as follows: groups C and A represent the scientific stream, groups D and B represent the literary stream and the t-test for independent samples was used for each stream separately.

The results of the independent t-test between the experimental group C and the control group A, which represent the scientific stream, revealed that the accounted t-values for the three proficiency tests are $t_{(77)}=2,44$ in the reading test, $t_{(77)}=4,71$ in the listening test and $t_{(77)}=5,14$ in the writing test. The obtained t-values are greater than the required value of $t_{(77)}=1,67$ at a level of significance $\alpha \leq .05$ and a degree of freedom $df=77$. The pupils in the experimental group C (the means of the three language skills are: $\bar{X}_r=5,36$ $\bar{X}_l=7,71$ $\bar{X}_w=2,99$) showed a significant development in their English learning proficiency in the three language skills compared to the pupils in the control group A (the means of the three language skills are: $\bar{X}_r=4,14$ $\bar{X}_l=4,69$ $\bar{X}_w=1,28$). From these results we can say that there is a statistically significant difference between the post-test scores of the two groups C and A at $\alpha \leq .05$ level of significance and $df=77$ degree of freedom. (See table 25)

	t	df	Sig (1-tailed)
Reading	2,44	77	0,017*
Listening	4,71	77	0,000*
Writing	5,14	77	0,000*

$\alpha \leq .05$

Table25: Independent Sample Test for the Pupils' Development of the Three Language Skills between the Control Group A and the Experimental Group C

The results of the independent t-test between the experimental group D and the control group B, which represent the literary stream, revealed that the accounted t-values for the three proficiency tests are $t_{(59)}=2,84$ in the reading test, $t_{(59)}=2,14$ in the listening

test and $t_{(59)}=5,02$ in the writing test. The obtained t-values are greater than the required value of $t_{(59)}=1,68$ at a level of significance $\alpha \leq .05$ and a degree of freedom $df=59$. The pupils in the experimental group D (the means of the three language skills are: $\bar{X}_r=6,81$ $\bar{X}_l=8,30$ $\bar{X}_w=2,91$) showed a significant development in their English learning proficiency in the three language skills compared to the pupils in the control group B (the means of the three language skills are: $\bar{X}_r=4,91$ $\bar{X}_l=6,30$ $\bar{X}_w=1,01$). From these results we can say that there is a statistically significant difference between the post-test scores of the two groups D and B at $\alpha \leq .05$ level of significance and $df=59$ degree of freedom. (See table 26)

	t	df	Sig (1-tailed)
Reading	2,84	59	0,006*
Listening	2,14	59	0,036*
Writing	5,02	59	0,000*

$\alpha \leq .05$

Table26: Independent Sample Test for the Pupils' Development of the Three Language Skills between Control group B and Experimental group D

Note:

- \bar{X}_r mean of the reading skill.
- \bar{X}_l mean of the listening skill.
- \bar{X}_w mean of the writing skill.
- df the degree of freedom of the groups.
- α presents the level of significance in one-tailed test.

In order to probe the positive effect of the teaching method that we used in our experiment within the groups, paired-sample tests were conducted.

Pairs	Groups	Paired difference		t	Sig (1-tailed)	df
		Mean of Difference	Std deviation			
Reading a – Reading b	Group A	0,73	1,83	2,49	0,000*	38
	Group C	0,92	2,63	2,19	0,017*	38
	Group B	0,06	3,25	0,11	0,456*	29
	Group D	2,03	2,64	4,21	0,000*	29
Listening a – Listening b	Group A	1,15	2,80	2,56	0,007*	38
	Group C	1,39	3,76	2,30	0,013*	38
	Group B	0,10	3,38	0,16	0,436*	29
	Group D	2,06	4,46	2,53	0,000*	29
Writing a – Writing b	Group A	0,10	0,72	0,89	0,192*	38
	Group C	0,67	1,07	3,90	0,000*	38
	Group B	0,08	1,08	0,42	0,000*	29
	Group D	1,80	1,67	5,91	0,337*	29

$\alpha \leq .05$

Table27: Paired (related) Sample Tests of the Three Language Skills (Reading, Listening and Writing) for the Experimental Groups C and D and the Control Groups A and B

The results presented in Table 27 show that there was a significant difference between the pupils' pre-test and post-test scores in the three language skills, at the level of significance $\alpha \leq .05$ in the two experimental groups C and D and the two control groups A and B. The t-values obtained are greater than the critical value of $t_{(38)}=1,69$ for groups A and C and $t_{(29)}=1,70$ for groups B and D (see Table 27). However, in the control group A we notice that there is no significant difference between the pupils' pre-test and post-test scores in writing, the obtained t-value $t_{(29)}=0,89$ was less than the required value of $t_{(38)}=1,69$ at a level of significance $\alpha \leq .05$ and a degree of freedom $df= 29$. (See Table 28)

Groups	Paired difference		t	Sig (1-tailed)	df
	Mean of Difference	Std deviation			
Group A	0,10	0,72	0,89	0,192*	38

$\alpha \leq .05$

Table28: Paired (related) Sample Test of the Writing Skill for Group A
Writing a – Writing b

Also, the results reveal that there was no significant difference between the pupils' pre-test and post-test scores in the three language skills at the level of significance $\alpha \leq .05$ in the control group B. The calculated t-values obtained in the three language skills tests are less than the critical value of $t_{(29)} =1, 70$ at a level of significance $\alpha \leq .05$ and a degree of freedom $df= 29$ (See Table 29).

Control Group B (Literary Stream)	Paired difference		t	Sig (1- tailed)	df
	Mean of Difference	Std deviation			
Reading a – Reading b	0,06	3,25	0,11	0,456*	29
Listening a – Listening b	0,10	3,38	0,16	0,436*	29
Writing a – Writing b	0,08	1,08	0,42	0,000*	29

$\alpha \leq .05$

Table29: Paired (related) Sample Tests of the Three Language Skills (Reading, Listening and Writing) for the Control Group B

6.3.2. Cohen's Effect Size

To guarantee the level of the substantial significance (practical differences) rather than just the statistical significance (statistical differences) in our research study; Cohen's (1969) effect size was used to gauge the magnitude of the treatment effect. In other words, we measured the strength of the effect of the independent variable (teaching method based on MIT, CL, and PLS) on the dependent variable (pupils' language proficiency and attitude) regardless the sample size.

Despite the wide array of formulas used to measure the effect size, Cohen's *d* is the most used measure, because of the quite influential role of Jacob Cohen in the field of effect size through his book "Statistical Power and Analysis for the Behavioural Sciences" in 1969.

The effect size index d is used with t-tests to compare two means of two groups (t-tests for independent variables) or two means of the same group before and after the treatment (t-test for paired samples). Expressed differently, d is the difference in two groups' means or the mean of difference in paired samples divided by the average of their standard deviation as shown in the following formula:

$$d = (X_{\text{group c}} - X_{\text{group a}}) / (SD_{\text{pooled}})$$

$$SD_{\text{pooled}} = \sqrt{(SD^2_{\text{group c}} + SD^2_{\text{group a}}) / 2}$$

Even more, Cohen (1988) provided the following recommendations on the interpretation of the effect size for behavioural and psychological studies:

- ❖ $d = 0,2$ presents a small effect
- ❖ $d = 0,5$ presents a medium effect
- ❖ $d = 0,8$ presents a large effect

However, it is very important to mention that in our research study; Cohen's effect size was used to measure the practical significance of the t-test of paired samples i.e. we calculated the index d using the means of the pre-test and the post- test scores of the three language skills (Reading, Listening, and Writing) within the groups to extract the impact of the two methods (CBA and MIT, CL, and PLS) used to teach the control groups A and B; and the experimental groups C and D respectively. Tables 30 and 31, present the results of measuring the index d for the literary and scientific streams.

Language Skills	Group B	Group D
Reading	0,0	0,9
Listening	0,0	0,7
Writing	0,1	1,2

Table30: Cohen's Effect Size for Groups B and D (Literary Stream)

As it can be seen in table 30 , the effect size in group B ($X r= 0,06$ $\bar{X}l=0,10$ $\bar{X}w=0,08$ and $SDr=3,25$ $SDl=3,38$ $SDw=1,08$) was trivial since the obtained values of the index d are less than 0,2 in the three language skills (Reading $d = 0,0$ Listening $d = 0,0$ and Writing $d = 0,1$) and this supports and reaffirms the results obtained in the paired sample test within group B; which revealed the absence of the statistical significance ($t_r(29) = 0,11$ $t_l(29) = 0,16$ $t_w(29) = 0,42$ at a level of significance $\alpha \leq .05$ and a degree of freedom $df= 29$). This means that the teaching method (CBA) used to teach the control group B did not demonstrate any statistical or practical difference in the pupils' language proficiency and attitude.

In the contrary, within the experimental group D ($X r= 2,03$ $\bar{X}l=2,06$ $\bar{X}w=1,80$ and $SDr=2,64$ $SDl=4,46$ $SDw=1,67$) the obtained values of d were more than 0, 2 in the three language skills. In Reading $d = 0, 9$ and Writing $d = 1, 2$ which revealed a large effect size, while in Listening $d = 0, 7$ which is equivalent to a medium effect size. Eventually, this analysis supports and reaffirms the results obtained in the paired sample test within the experimental group D which revealed a high statistical significance ($t_r(29) = 4,21$ $t_l(29) = 2,53$ $t_w(29) = 5,91$ at a level of significance $\alpha \leq .05$ and a degree of freedom $df= 29$) in the three language skills . The noticeable large values of d told us that the teaching method (MIT, CL, and PLS) used to teach the experimental group D (literary stream) demonstrated a statistical and practical or meaningful difference in the pupils'

language proficiency and attitude. Besides, this difference within group D is large and consistent enough to be really substantial and can be seen with the naked eye.

Note

- ✚ \bar{X}_r stands for the mean difference of the reading skill.
- ✚ \bar{X}_l stands for the mean difference of the listening skill.
- ✚ \bar{X}_w stands for the mean difference of the writing skill.
- ✚ SD_r stands for the standard deviation of the reading skill.
- ✚ SD_l stands for the standard deviation of the listening skill.
- ✚ SD_w stands for the standard deviation of the writing skill.

Language Skills	Group A	Group C
Reading	0,0	0,4
Listening	0,4	0,5
Writing	0,1	0,5

Table31: Cohen’s Effect Size for Groups A and C (Scientific Stream)

Concerning the calculated values of d presented in table 31 , we noticed that in the control group A ($\bar{X}_r = 0,73$ $\bar{X}_l = 1,15$ $\bar{X}_w = 0,10$ and $SD_r = 1,83$ $SD_l = 2,80$ $SD_w = 0,72$) the effect size was trivial in two language skills (Reading $d = 0,0$ and Writing $d = 0,1$) with a small effect in the Listening skill $d = 0,4$. In spite of the statistical significance ($t_{r(38)} = 2,49$ $t_{l(38)} = 2,56$ $t_{w(38)} = 0,89$ at a level of significance $\alpha \leq .05$ and a degree of freedom $df = 38$) revealed in the t-test for paired samples within the control group A, the results of the effect size informed us that the teaching method (CBA) used to teach the control group A did not demonstrate any practical or meaningful difference in the pupils’ language proficiency and attitude, except a little difference in the listening skill.

Furthermore, within the experimental group C ($X_r = 0,92$ $\bar{X}_l = 1,39$ $\bar{X}_w = 0,67$ and $SD_r = 2,63$ $SD_l = 3,76$ $SD_w = 1,07$) the obtained values of d were a little bit more than 0, 2 in the three language skills. In Listening $d = 0, 5$ and Writing $d = 0, 5$ which revealed a medium effect size, while, in Reading $d = 0, 4$ this is equivalent to a small effect size; this supports and reaffirms the results obtained in the paired sample test within the experimental group C which revealed a statistical significance ($t_{r(38)} = 2,19$ $t_{l(38)} = 2,30$ $t_{w(38)} = 3,90$ at a level of significance $\alpha \leq .05$ and a degree of freedom $df = 38$) in the three language skills . The medium and small effect sizes told us that the teaching method based on MIT, CL, and PLS used to teach the experimental group C demonstrated a practical and meaningful difference in the pupils' language proficiency and attitude; but, this difference can only be seen through careful studies.

In spite of the highly statistical significance reached by the experimental group C (scientific stream) in the three language skills (reading, writing and listening); the results of the substantial significance –the effect size- were less than the ones obtained by the experimental group D (literary stream). One can extract that, the teaching method based on MIT, CL, and PLS used in our research study was more influential for the literary stream pupils (who are believed to be the weakest pupils in the Algerian secondary schools, because of the unfair orientation criteria followed by the Ministry of Education) rather than the pupils in the scientific stream who are assumed to be “*the intelligentia*” in the Algerian Education System from the primary school to the university.

6.3.3. Results of the Pupils' Motivation and Attitudes Questionnaire

In order to elicit the pupils' reflection on the effectiveness of the teaching method based on Cooperative Learning, Multiple Intelligences and Perceptual Learning Styles implemented in the teaching experiment, and its impact on their learning motivation and attitudes towards the English language learning, a likert-scale (point 05) questionnaire was devised and administered after the experiment . The pupils were asked to choose one of five alternatives as follows: 1 stands for strongly disagree, 2 stands for disagree, 3 stands for neutral, 4 stands for agree and 5 stands for strongly agree. The pupils' questionnaire was administered at the end of our research experiment (approximately the end of the academic year) to ensure that our pupils got acquainted with the new way of teaching and the place of studying; since, they have just climbed a stair from the intermediate school to the secondary school.

Before tabulating the results obtained from the questionnaire, we have classified the items that composed it into seven categories as follows, to facilitate the analysis and make it clearer:

1. Interest in learning English.
2. The importance of the English language at work.
3. The English language teacher.
4. Teaching materials and classroom activities.
5. Cooperative learning and group work.
6. Multiple intelligences activities and assessment.
7. Group work, multiple intelligences and learning styles.

➤ **Category 01**

Interest in Learning English
Item01: I really enjoy learning English, because the English class is interesting.
Item04: I feel it is not difficult to learn English well.

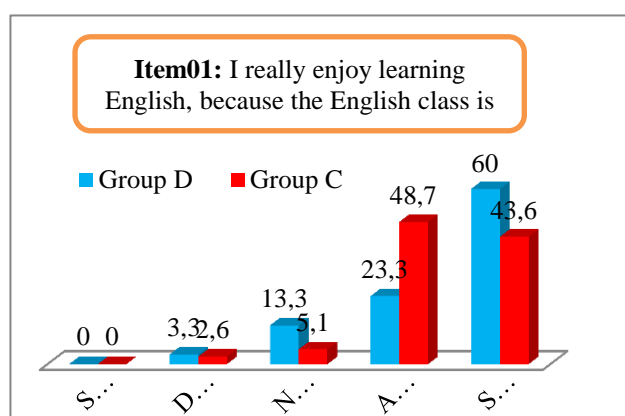
Item06: I hate English, but I don't have any choice, I just have to sit in class.

Item07: I study English because I 'am interested in it, not for the sake of passing the test or the examinations.

Pupils' responses to the items related to their interest in learning English indicate that the majority of the pupils in the two experimental groups (91% in group C and 83% in group D) enjoyed leaning English because they found that this year the English class is more interesting and played a big role in changing their attitudes and increasing their motivation towards learning the English language. The teaching method based on Cooperative Learning, Multiple Intelligences, and the pupils' Perceptual Learning Styles with the great diversity in the teaching materials and the classroom activities played an important role in facilitating English learning for most of the pupils and gave them new ideas on how to learn and what to learn. It changed also their attitudes and sparked a deeper interest towards learning English by making them not studying for the sake of passing tests and exams, but for the sake of learning the language itself. (see Tables 32, 33 ,34 and 35)

Table32: Pupils' responses to item 01

	Group D	Group C
Strongly disagree	00	00
Disagree	3,30	2,6
Neutral	13,3	5,1
Agree	23,3	48,7
Strongly agree	60	43,6



	Group D	Group C
--	----------------	----------------

Strongly disagree	3	00
Disagree	5	2,6
Not decided	10	15,4
Agree	40	53,8
Strongly agree	42	28,2

Table33: Pupils' responses to item 04

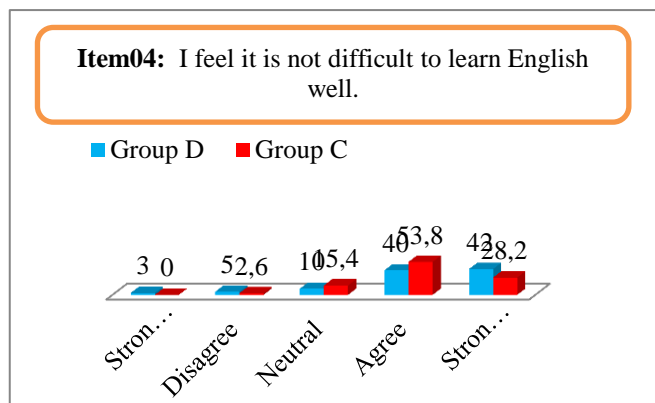


Table34: Pupils' responses to item 06

	Group D	Group C
Strongly disagree	43,3	43,6
Disagree	20	35,9
Not decided	10	10,3
Agree	13,3	10,3
Strongly agree	13,3	00

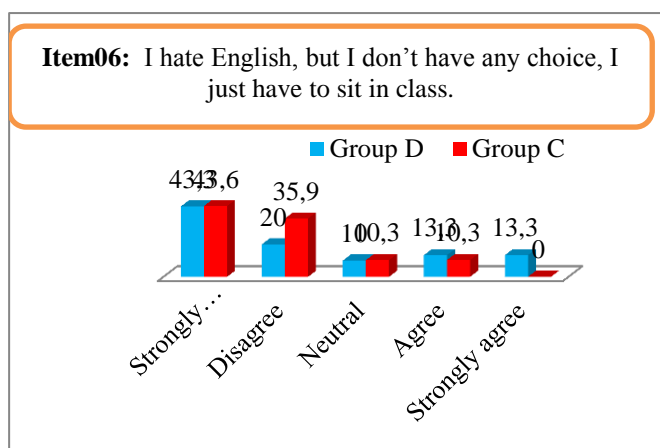
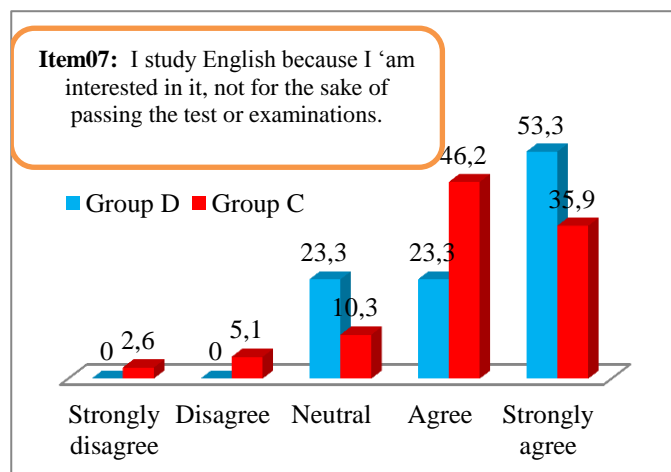


Table35: Pupils' responses to item 07

	Group D	Group C
Strongly disagree	00	2,6
Disagree	00	5,1
Not decided	23,3	10,3
Agree	23,3	46,2
Strongly agree	53,3	35,9



➤ **Category 02**

The Importance of the English Language at Work
Item03: I feel English is important to find a good job.

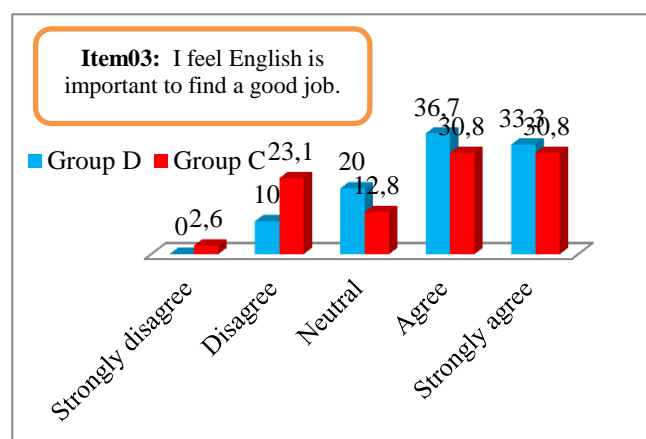
In order for teachers to determine their learners' rate and success of FL attainment, they have to be aware about the pertinent role of motivation in the betterment of FL achievements, because without this inner drive and will to achieve a certain goal even learners with remarkable learning abilities cannot accomplish the long and tedious learning process. As stated by Slavin motivation is “what gets you going, keeps you going and determines where you're trying to go.” (2003:329)

Yet, to investigate the inevitable effect of motivation on FL learners' achievements, we should take into account the two basic orientations of motivation; integrative (the learner wants to be a member of the target community) and instrumental (to get a good job) motivations.

An inspection of table 36 demonstrates that pupils' interest goes toward the instrumental motivation in learning English. The results revealed that most of the pupils believe that English is important to find a good job; which is an instrumental goal rather than integrative. (see Table 36)

Table36: Pupils' responses to item 03

	Group D	Group C
Strongly disagree	00	2,6
Disagree	10	23,1
Not decided	20	12,8
Agree	36,7	30,8
Strongly agree	33,3	30,8



➤ **Category 03**

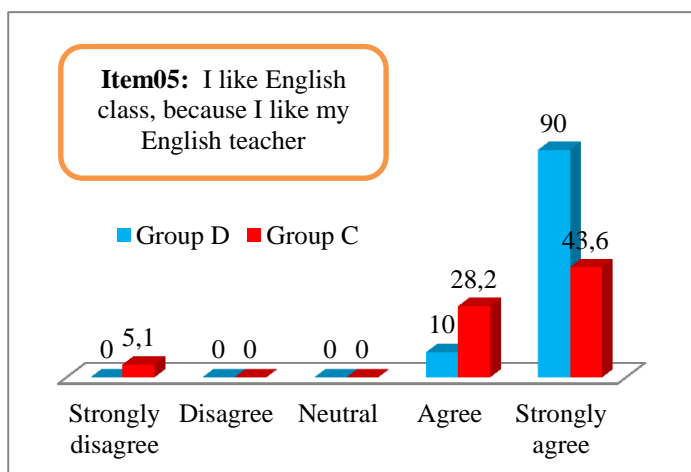
The English Language Teacher
Item05: I like English class, because I like my English teacher.

The teacher plays a vital role in sustaining and increasing pupils' motivation towards learning, in general and learning a foreign language, in particular; as described by Crow(1977) “ To all, the teacher is a mirror that shows not only the self but the path and its choices, the task and its demands- the difficulties, the joys. To all and from all, the teacher is a learner, a person- and a prism through which the ordinary continuously reveals itself to be miraculous. ” (cited in Van Rossum and Hamer, 2010: 2)

Results (94, 9% in group C and 100% in group D) depicted that the teacher has had a big impact on most of her pupils in the two experimental groups C and D, because the pupils do not separate between the teacher and the subject matter he/she teaches; it means if they like the teacher, they surely like the subject and enjoy studying it and vice versa. With the relaxing and free classroom atmosphere that the teacher created she had more opportunities to cope with her pupils' different needs. (see Table 37)

Table37: Pupils' responses to item 05

	Group D	Group C
Strongly disagree	00	5,1
Disagree	00	00
Not decided	00	00
Agree	10	28,2
Strongly agree	90	66,7



➤ **Category 04**

Teaching Materials and Classroom Activities
Item08: The textbook or the teaching materials are more practical and useful this year.
Item09: Classroom activities like storytelling, drama, role plays, songs, picture creating

and so on can motivate my interest in learning English.

From the results obtained (94, 8% in group C and 79, 9% in group D), the majority of the pupils in the two experimental groups showed a positive attitude towards the teaching materials and the classroom activities that were used during this year. The researcher used a variety of teaching materials and classroom activities which motivated the pupils to work happily with their teacher in most of the lessons that were presented.

The use of music and songs in class helped the pupils with a developed musical intelligence in memorizing more English vocabularies, and corrected their pronunciation; since, the songs used were authentic, and also, it increased their listening and speaking skills.

Drama and role-plays gave the majority of the pupils the chance to use the English language in a real-like environment, and awakened their hidden talents in using their bodies, gestures and even their voices when acting. (see Tables 38 and 39)

Furthermore, the use of the data show in presenting lessons (slides, videos, pictures, etc.) helped both the teacher and the pupils to gain time for more language practices; especially, when presenting grammar points.

Table38: Pupils' responses to item 08

	Group D	Group C
Strongly disagree	10	00
Disagree	10	00
Not decided	00	5,1
Agree	36,6	53,8
Strongly agree	43,3	41

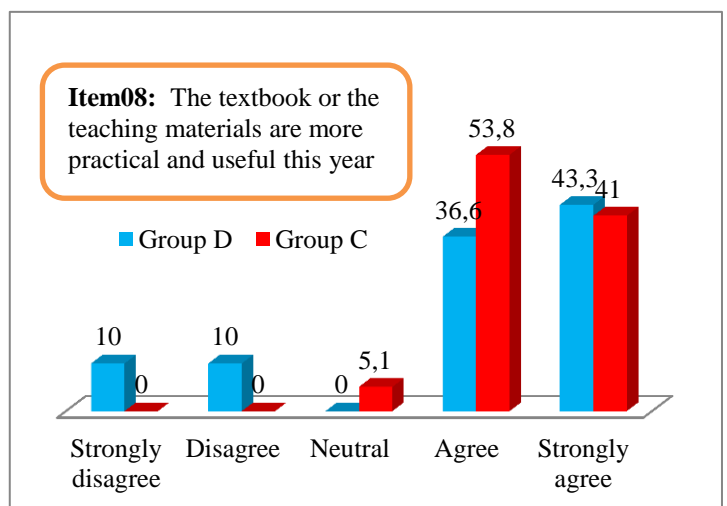
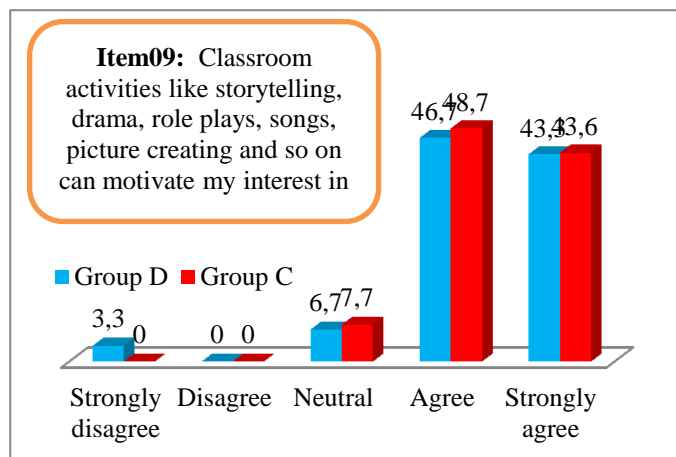


Table39: Pupils' responses to item 09

	Group D	Group C
Strongly disagree	3,3	00
Disagree	00	00
Not decided	6,7	7,7
Agree	46,7	48,7
Strongly agree	43,3	43,6



➤ **Category 05**

Cooperative Learning and Group Work
Item10: I like small group work in the classroom; it can lower my anxiety and fear about learning English.
Item11: I feel cooperative learning in group work it can improve interpersonal relationships among classmates.
Item02: I like to speak English in class.

At the beginning of the school year, it was difficult for the teacher to conduct group work activities, because of the pupils' wrong perception of the value of peer interaction and working together, which was based on their previous experiences; or to be more precise the previous teachers' clarity in explaining the purpose of group work. The majority of the pupils were not acquainted with the use of group work activities in class; it was and still it is not part of their culture (most of the Algerian teachers do not use group work in their classes in all the stages from the primary to the secondary school, and if they use it, this means "it is time to have a rest" and forget their roles as councilors and guides and do it in hazardous ways) and group work for them was the best time to gossip and take

a rest, but through time the teacher changed their ideas about the real value of group work learning and how to work collaboratively to achieve shared goals .

The majority (89, 8% in group C and 86, 7% in group D) of the pupils affirmed that cooperative leaning and small group work lowered their anxiety and fear and helped them to use the English language freely in the classroom with a feeling of comfort and enjoyment. Teamwork activities gave the shy pupils more opportunities to speak English in small groups with the help of their teammates and raised their feeling of being more responsible because every group member was assigned a role to accomplish any given task as stated by Gardner (2003) collaboration provides the learners with the opportunity to tapping into their teammates strengths as well as into their own which will enhance their learning. Furthermore, cooperative learning gave the pupils with highly developed Bodily-Kinesthetic Intelligence the opportunity to move around the classroom (for traditional teachers this is not an academic environment) and not just sit with boredom and listen to the teacher’s lecture for 50 minutes. (see Tables 40,41 and 42)

Table40: Pupils’ responses to item 10

	Group D	Group C
Strongly disagree	13,3	00
Disagree	00	7,7
Not decided	00	12,8
Agree	40	41
Strongly agree	46,7	38,5

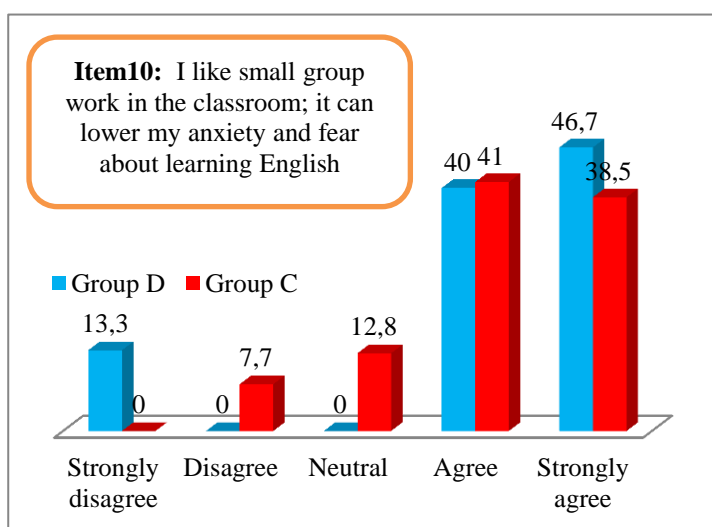


Table41: Pupils' responses to item 11

	Group D	Group C
Strongly disagree	00	00
Disagree	00	00
Not decided	10	10,3
Agree	50	51,3
Strongly agree	40	38,5

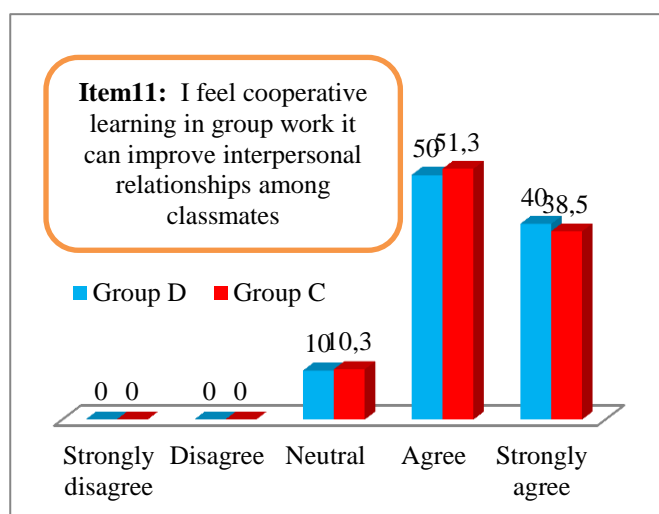
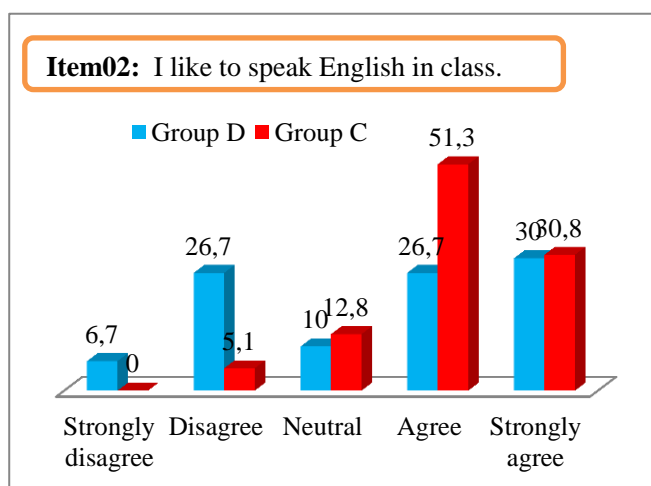


Table42: Pupils' responses to item 02

	Group D	Group C
Strongly disagree	6,7	00
Disagree	26,7	5,1
Not decided	10	12,8
Agree	26,7	51,3
Strongly agree	30	30,8



➤ **Category 06**

Multiple Intelligences Activities and Assessment
Item12: I feel that multiple Intelligences based activities can improve my four language skills.
Item13: I feel the multiple Intelligences based assessment can give me more confidence and lower my anxiety in learning English.

Multiple intelligences-based activities and assessment had a positive effect on the pupils' achievement, and this is shown in the results obtained (82, 1% in group C and 90%

in group D). Most of the pupils in the two experimental groups liked the use of new activities that are related to their different types of intelligences such as role plays, songs. In addition, they liked more the new ways of assessment, which were based on their portfolios and not just the standardized tests. This type of assessment gave them more chances to show their strengths in learning English, and clearly raised their self-confidence in the learning process as a whole; as they used the slogan “yes I can do it in a way or another”. (see Tables 43 and 44)

Table43: Pupils’ responses to item 12

	Group D	Group C
Strongly disagree	3,3	2,6
Disagree	0	2,6
Not decided	6,7	23,1
Agree	56,7	51,3
Strongly agree	33,3	20,5

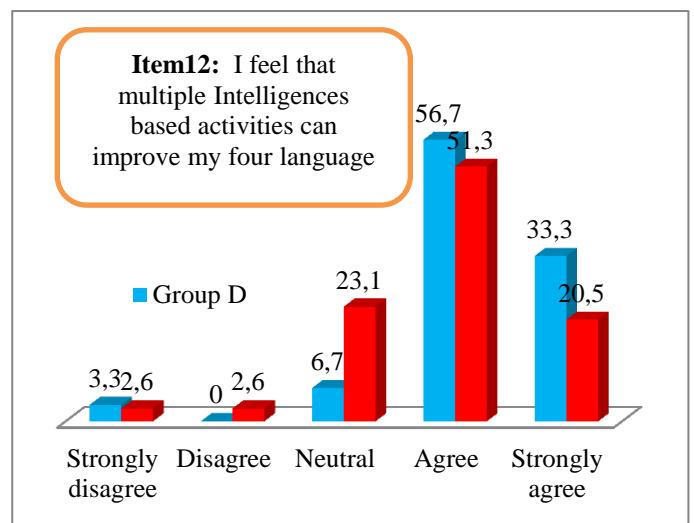
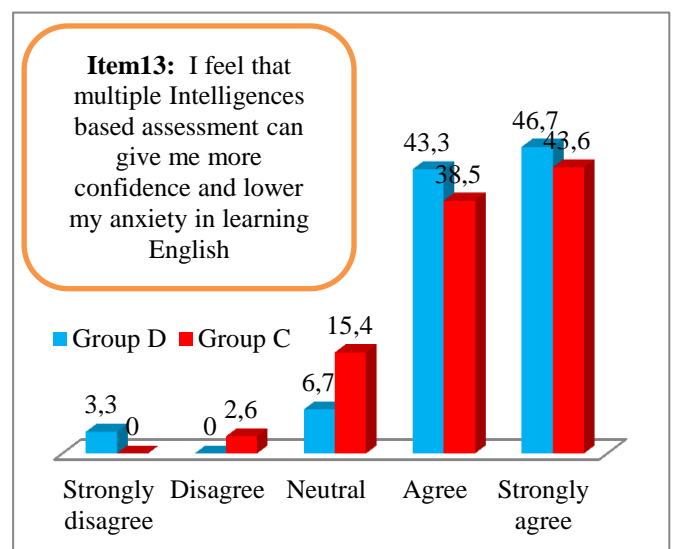


Table44: Pupils’ responses to item 13

	Group D	Group C
Strongly disagree	3,3	00
Disagree	00	2,6
Not decided	6,7	15,4
Agree	43,3	38,5
Strongly agree	46,7	43,6



➤ **Category 07**

Group work, multiple intelligences and learning styles

Item14: When in group work, I like to work with classmates that have the same type of intelligence.

Item15: When in group work, I like to work with my classmates that have the different types of intelligences.

Item16: After fill in the blanks in the Multiple Intelligences inventory for EFL young adults, I agree that it can match my learning and Intelligence type.

Item17: After fill in blanks in the learning styles inventory, I agree that it can match my way of learning.

Pupils' responses (95% in group C and 97% in group D) to the items related to group work, Multiple Intelligences and Learning Styles show that the use of Multiple Intelligences Inventory and Perceptual Learning Style Inventory had raised the pupils' awareness about their different intelligences profiles and the preferred learning styles they apply during the learning process. (see Tables 45, 46 ,47 and 48)

Table45: Pupils' responses to item 14

	Group D	Group C
Strongly disagree	23,3	20,5
Disagree	6,7	15,4
Not decided	3,3	17,9
Agree	10	20,5
Strongly agree	56,7	25,6

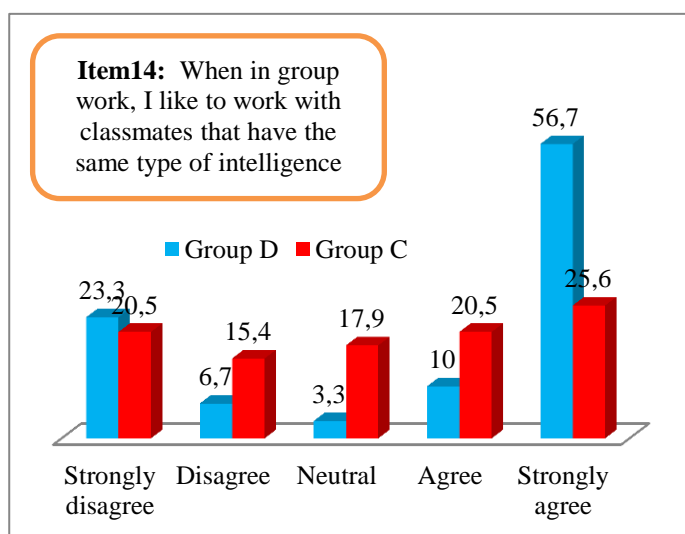


Table46: Pupils' responses to item 15

	Group D	Group C
Strongly disagree	20	15,4
Disagree	33	25,6
Not decided	13,3	7,7
Agree	10	25,6
Strongly agree	23,3	25,6

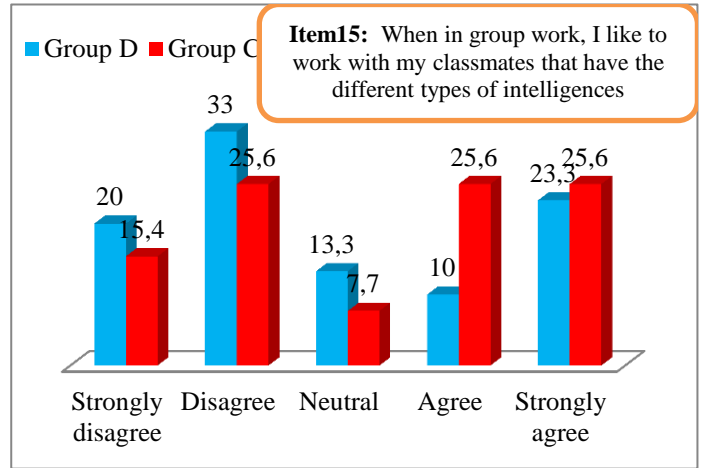


Table47: Pupils' responses to item 16

	Group D	Group C
Strongly disagree	00	00
Disagree	00	00
Not decided	00	00
Agree	63,3	64,1
Strongly agree	36,7	35,9

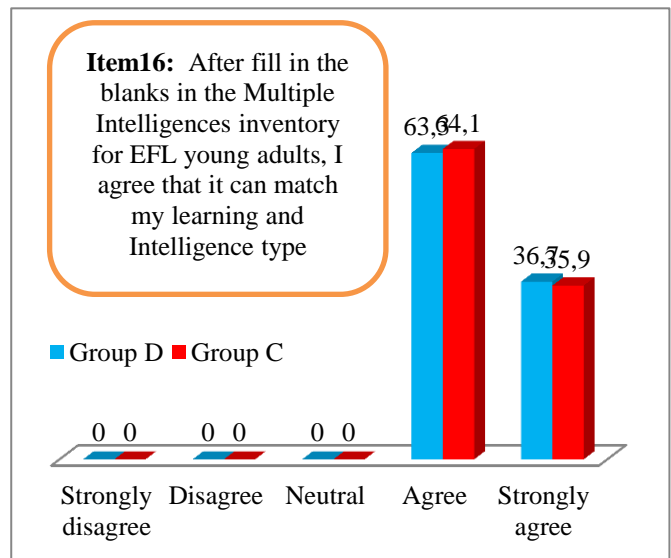
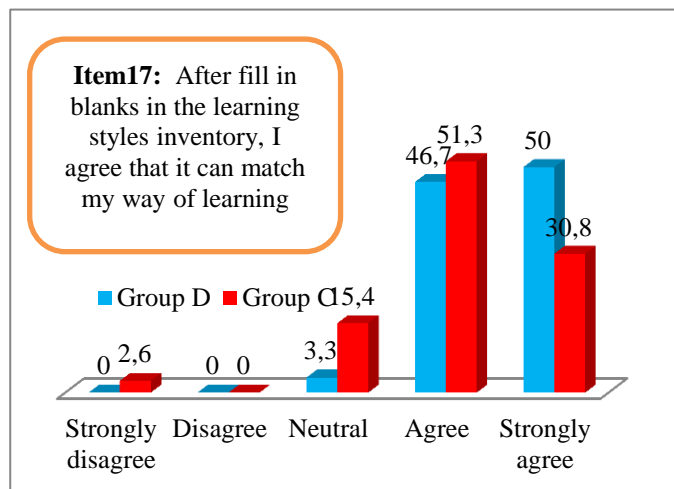


Table48: Pupils' responses to item 17

	Group D	Group C
Strongly disagree	00	2,6
Disagree	00	00
Not decided	3,3	15,4
Agree	46,7	51,3
Strongly agree	50	30,8



6.4. Comprehensive Discussion

In order to inspect the positive effectiveness of the implementation of cooperative learning (CL) activities, involving the insights given by Howard Gardner's theory of Multiple Intelligences (MI), taking into account the pupils' perceptual learning styles (PLS) in secondary school EFL classrooms on pupils' English language proficiency and attitude, we opted to conduct a t-test for dependent and independent variables based on the pupils' pre and post-test scores to deduce statistical analysis of the obtained results, so as to pinpoint the significance effect of the suggested teaching method.

After tabulating and analyzing the pre and post-tests scores using the t-test, the obtained values of t in the three language skills (within the two experimental groups) have been found higher (**group C** $t_{(77)}=2,44$ in the reading test, $t_{(77)}=4,71$ in the listening test and $t_{(77)}=5,14$ in the writing test; **group D** $t_{(59)}=2,84$ in the reading test, $t_{(59)}=2,14$ in the listening test and $t_{(59)}=5,02$ in the writing test) than the critical value of t ($t_{(77)}=1,67$ and $t_{(59)}=1,68$ respectively) and this clarifies the significance of the obtained results .Hence, the null hypothesis (H_0) predicting that the implementation of Cooperative Learning (CL) activities, involving the insights given by Gardner's Theory of Multiple Intelligences (MI) taking into account the pupils' Perceptual Learning Styles (PLS) in secondary school EFL classrooms, would have no significant effect on pupils' English proficiency and attitudes and if there is an effect, it would be due to pure chance, was rejected, and the veracity and authenticity the hypothesis (H_1) is confirmed .i.e. if we implemented MIT, CL and PLS in secondary school classes, we would have a positive effect on the pupils' English language proficiency and attitude . Also, the results demonstrated that the two experimental groups C and D outperformed the two control groups A and B in the three proficiency tests (Reading, writing and listening) and this go in the same direction of our research sub-hypothesis one. Moreover, they showed that the two experimental groups C and D

performed better than the two control groups A and B in the three achievement examinations (first, mid and final examinations) and this confirms our second sub-hypothesis.

Throughout the estimation of the data descriptive statistics, it has become clear that, the independent t-test and paired sample tests indicate that the teaching method based on Cooperative Learning, Multiple Intelligences and Perceptual Learning Styles contributed positively to the improvement of pupils' English learning proficiency and attitudes. Besides, with respect to the pupils' responses to the questionnaire's questions, a great number of the answers reveal the pupils' positive attitude towards the implementation of the teaching method based on MI, CL, and PLS and this strengthen our reflections. As a matter of fact, it is primordial to say that the questionnaire's analysed data elucidate a strong concord between the pupils' responses and what we have stated before as research questions and hypothesis.

Moreover, the results of this study revealed that the implementation of cooperative learning and group work in the classroom played a vital role in lowering pupils' anxiety and shyness, and helped in creating a warm, relaxed and more comfortable learning atmosphere which led the pupils to take responsibility of their activities elaboration. Additionally, the pupils became more creative when they work in teams; these findings are similar with the earlier findings of Lacey (1991) which showed that when using cooperative learning, students seemed to participate more and generate creative ideas when they work together.

In addition, the findings of this research suggest that the use of classroom activities and assessments based on Multiple Intelligences theory enhanced the pupils' participation in the English class. After filling Multiple Intelligences and Learning Styles inventories; the pupils became more aware of their dominant intelligences and their different

preferences to learn. They were excited when the teacher stuck their profiles on the wall. Pupils' awareness about their profiles raised the teacher's awareness about their learning differences, and this helped her to be more creative in managing the classroom, and cope with individual pupils' needs. The present findings are in line with Hall Haley's (2004) research; which showed that most students who participated in his experimental work expressed positive feelings about teachers using a variety of instrumental strategies as well as assessment practices based on multiple intelligences theory.

Last but not least, EFL teachers will have more opportunities to be creative and effective teachers if they challenge their teaching experiences by adapting Multiple Intelligences Theory, Cooperative Learning and Perceptual Learning Styles approach in their classes, and help their pupils in becoming outstanding learners and not merely study to succeed.

Conclusion

Throughout the scrupulousness of the obtained results, it has become clear that teaching English in secondary school classes using the insights of MIT, CL, and PLS has an intelligible impact in enhancing pupils' language proficiency and attitude. Therefore, we can construe with some relief that pupils' awareness vis-à-vis the significance of intelligence profiles, learning styles and the usual implementation of group/pair work activities inside the narrow walls of English language classrooms plays a major role in transfiguring their negative preconceived picture of what language learning is.

This chapter was devoted to the presentation of the results of the present research study. More specifically, the t-test for independent and paired samples calculations, and the questionnaire results have been scrutinized and explained.

General Conclusion

1- Summary and Conclusion

Learners' academic excellence is the main agenda of any debate in the field of education, in general and Second/Foreign language teaching, in particular. A plethora of research studies emerged focusing on language learners' different characteristics and learning preferences, as well as, their deep impact on the learners' language proficiency and achievement.

Throughout this thesis, we attempted to inspect whether or not the implementation of Multiple Intelligences Theory (MIT), Cooperative Learning (CL) and Perceptual Learning Styles (PLS) (independent variables) in teaching first year secondary school pupils have a significant impact on their language learning proficiency and attitude (dependent variable). Aiming to enhance secondary school pupils' English language proficiency and attitude to be "college and career" ready. Therefore, the current study has covered the issue of how the use of Cooperative Learning activities, the insights of Howard Gardner' s Multiple Intelligences Theory , taking into account the pupils' Perceptual Learning Styles , which in turn, would influence their English language proficiency and attitude. Accordingly, our research study is mainly concerned with investigating and testing in a real English classroom setting whether or not this teaching method rightly impact the pupils' English language proficiency and attitude.

The territory we traversed in elaborating this dissertation – six chapters- ranged from a detailed review of literature –four chapters- regarding the pivotal variables underpinning the research study to a couple of chapters that are tailored to elucidate the research tools, and scrutinize the findings of the empirical endeavours undertaken to assign the outcomes of the treatment on the targeted variable . A vast array of *Teaching*

Methods have been described in some detail in chapter one. In chapter two, the concept of *Intelligence* was defined in depth and breadth, with a comprehensive view of *Gardner's Multiple Intelligences Theory* and its potent role in the field of language teaching. Learners' myriad of possible ways in processing information, their multifarious profiles of *Learning Styles* and their unequivocal role in promoting learners' language learning success have been highlighted in chapter three. *Cooperative Learning* and its sound theoretical frameworks as well as its prominent position in educational pedagogy have been discussed extensively in chapter four. In chapter five the *research methodology* and the *overall experimental design* have been described in details. Chapter six was devoted to the presentation of the essence -practical perspective- of this research study; the main empirical findings: the *research results* and their *analysis* and *discussion* have been substantiated extensively. The *fruit of the current study* and *an epitome of the thesis* have been accumulated in the general conclusion.

To realize the prior expectation about the strong link between the pupils' language proficiency and the application of Multiple Intelligences Theory, Cooperative Learning, and Perceptual Learning Styles in a real classroom setting, an experiment was conducted at Atti Abdelhafid High School in Ouad Athmania in 2013/2014 academic- year, on a sample of 138 first year pupils (2 classes from the scientific stream and 2 classes from the literary stream) who were drawn randomly from a target population of 210 pupils. In this study, Multiple Intelligences and Learning Styles Inventories were administered to 69 pupils (experimental groups) and their results were analysed and used in forming the learners' profiles and designing the lesson plans. A pre-test and a post-test were carried out at the beginning and at the end of the academic year. In addition, a teaching method based on Cooperative Learning, Multiple Intelligences Theory and Perceptual Learning Styles was

used to teach the pupils in the two experimental groups (one scientific group and the other one literary group).

The results of the current study consolidate the robust link between the implementation of Multiple Intelligences Theory, Cooperative Learning, and Perceptual Learning Styles and the pupils' language proficiency. Likewise, they validate the utilization of these multidimensional teaching methods and strategies to bolster up secondary school pupils' English learning proficiency and achievement. As a point of fact, our findings shed a little more light on their significance, to apparently contribute for EFL pupils' English successful proficiency and attitude; hence, our research hypothesis is confirmed. To be more precise, the obtained results of our study vindicate the contention of the researcher as they are in the same direction of our previously set hypothesis –and the other related hypotheses- , that is when we implement Cooperative Learning activities, the insights given by Gardner's theory of Multiple Intelligences and taking into account the pupils' Perceptual Learning Styles in secondary school EFL classrooms, we would promote a positive effect on pupils' English language proficiency and attitude.

In the light of the elucidated findings, it should be quite explicit that this dissertation corroborates what is already known about the significance of Multiple Intelligences Theory, Cooperative Learning, and Perceptual Learning Styles in enhancing pupils' foreign language proficiency and attitude.

2- Pedagogical Implications

Based on the research findings presented above, various pedagogical implications have been raised:

❖ The majority of novice teachers, especially in Foreign Language classes frequently complain about the pupils' heterogeneous learning levels, as they found teaching in such contexts a demanding challenge. Apparently, such heterogeneity might not be a matter of

“capacities’ *high or low level*” but “capacities’ *diversified levels*”. In view of that, teachers have to be aware of their pupils’ idiosyncratic ways of learning and try to identify their different profiles of intelligence types and unique learning styles through the use of valid inventories. By doing so, the teachers’ raise their pupils’ awareness about “[the] variety of ways in which they can tackle a particular task[...] [as a result] they [will] begin to unravel for themselves that there are different ways to learning than just having a load of content forced into them” (Hopper, 2000:29).

❖ Pupils today are not the ones we taught ten years ago; they are more technologically ingenious, and more active because of their unlimited use of the electronic games, they are raising the slogan “*we could take the tedium no more.*” By this is meant, they cannot study in “*a monotonous*” learning classroom environment; where, they are enchained by severe regulations and utmost is being silent most of the time just as stated by Slavin “There was [and still there is] once a time when it was taken for granted that a quiet class was a learning class, when [teachers] walked down the hall expecting to be able to hear a pin drop.”(1991:71) Hence, teachers are called on to break the routine and create “*a rigorous*” learning environment by incorporating the insights of Multiple Intelligences Theory in classroom activities, and give the pupils the opportunity to take responsibility of their learning through the implementation of Cooperative Learning groups/pairs where pupils with various learning styles and intelligences work together in a harmony to achieve shared goals.

❖ Schools are deficit drivers, as they bound the pupils’ academic achievement to their excellence in the verbal/ linguistic and logical/mathematical tasks (Hearn and Stone, 1995) and devalue the other types of intelligences; and this results in high dropout rate of secondary and even intermediate school pupils. The accusing finger is pointed towards teachers and the teaching methods used in schools; this opinion is meant to be true to a

certain extent because a great number of teachers are textbook (which is based just on verbal/ linguistic and logical/mathematical tasks and activities) slaves and tend to teach using the “*chalk and talk*” mode and build their courses on the “*plug and chug lessons*”, ignoring their pupils’ individual differences, which plays havoc with many pupils’ self-esteem. However, when teachers take into account Multiple Intelligences Theory in tailoring their classroom activities, they might improve their teaching process by addressing different intelligences in balance and encourage the pupils and give them the opportunity to excel in the type of tasks in which they are dexterous. “Theory of Multiple Intelligences implies that educators should recognize and teach to a broader range of talents and skills.” (Fogarty, 2005: 13) Furthermore, teachers should use the textbooks “*judiciously*” and not to rely heavily on them in constructing their lesson plans; which are just like a piece of furniture that may need many tools in its construction and not just the textbook.

❖ It is highly imperative to rekindle the majority of Algerian teachers’ interests and change their antiquated views about implementing Cooperative Learning in their classes where they believe that this type of methods is a fad and prevents them from investing their teaching time and energy because of the noise disturbance and the pupils’ moves that may take place while forming the groups. Hence, teachers have to be involved in training workshops so as to bolster up their knowledge and raise their awareness about the various Cooperative Learning strategies and how to manage the class to avoid any challenging and disturbing circumstances.

Improving pupils’ social skills that can be estimable in their whole life and at the same time enhancing their scholastic achievements, in general and their foreign language achievement, in particular can be to a great extent contingent on creating a healthy and relaxing environment. To put it differently, this type of friendly teaching/learning

environment; where pupils with the same type of intelligence or with different types of intelligences cooperate to attain a joint goal provides the low achieving pupils with the opportunity to express their ideas freely and lower their anxiety, language ego and shyness.

❖ In spite of the new methods of assessment that have been put forward in the field of teaching/learning such as “*authentic assessment*” (Darling-Hammond; Ancess and Falk, 1995) ,as stated earlier in chapter two, in which learners are assessed from various perspectives and not just from the linguistic and logical mathematical perspectives, the Algerian education system is still bridled by the quantitative assessment tools that are based on standardized tests and teacher made tests “*paper-pen tests*”. Based on this type of assessment, teachers are hindering their learners’ understanding and instill in their heads the principle of memorizing their lessons blindly and most of the time cheat to void what they have stored “*temporarily*” in their short-term memories or cheating scraps on the test or exam papers.

Thus, teachers should use a variety of assessment instruments “*qualitative assessment*”¹, like portfolios that we used in our research, and construct multiple mode tests which reflect the learners’ diversity and help them in showing their strengths accurately and perform appropriately (Gardner, 1993).

3- Limitations of the study

Despite all the effort put forth in the current research study to reveal and control any extraneous variables, certain limitations have been encountered which need to be considered; especially, that quasi-experimental study was carried out in a regular secondary school.

¹**Qualitative Assessment** is a way of assessment that is based on the teacher’s observations, interviews and daily questions as well as the learners’ reflections

Firstly, we start with the sample composition, which is considered as one of the most frequently, cited threats to external validity. This study was confined to two first year classes (1Literary and 1Scientific) from one secondary school; the limited number of pupils (69) may affect the generalizability of the research findings. Hence, the findings of the study may not be generalized to represent all secondary school pupils in Algeria.

Secondly, because of the severe administrative regulations boys (56, 41%) outnumbered girls (43, 59%) in the scientific stream. It was the opposite in the literary stream (girls 60%, boys40%); hence, we could not control the gender composition of the two classes. However, the impact of this gender imbalance on pupils' interaction was not overlooked during pair/group tasks.

Thirdly, some practical obstacles took place while we are implementing the study in the real classrooms settings. As an example, the two classrooms were not spacious enough to form organized groups; and it was difficult -to a certain degree- to prevent noise disturbance for the other classes.

Fourthly, the involvement of the researcher as a teacher may lead to a certain loss of objectivity, as her personal point of views and the great enthusiasm to embark on this study may affect the analysis of the results.

The last limitation, time constraints; the teacher was under the pressure to cover all the lessons within the long preamble syllabus by the mid of May 2014, and this could be one of the factors affecting the obtained results.

Yet, in spite of the above mentioned limitations, the current study can be considered as an important endeavour to implement multidimensional teaching methods and strategies which took into consideration the pupils' individual differences and nudge the pupils as well as the teachers out of any teaching/learning groove.

4- Recommendations for Future Research

Drawing on the research findings, implications, and limitations, a number of recommendations for future research studies are listed as follows:

- The scope of this research study was limited to Atti Abdelhafid High school in Ouad Athmania and the samples of the participated pupils were restricted to only four first year classes and two streams -2 Literary and 2 Scientific streams- and this raises the issues of reliability, validity (external and internal), and generalizability. For future replications, research should be expanded to include larger population of pupils from other secondary schools, or even pupils from intermediate schools in order to generate the effectiveness of implementing Multiple Intelligences Theory, Cooperative Learning, and Perceptual Learning Styles in teaching English as a foreign language and to ascertain significant findings that would be appreciated.
- Due to the lack of research studies in the Algerian context, further longitudinal researches are highly required to check the effectiveness of Multiple Intelligences Theory in comparison with other teaching methods not just in the secondary schools but also the intermediate and primary ones. Besides, experiments should be carried out to check and raise the pupils' awareness about their different intelligence profiles and learning styles and how to apply them in enhancing the learning/teaching process.

Last but not least, teaching is a noble profession, and teachers have to be aware of and enjoy their hard and at the same time delightful profession. Enlightened teachers valorize the creative and practical skills of their learners, and have a special potency to involve them in the learning/teaching environment, and do not stuck in presenting the same lesson in the same way, for ten years or more, to different kinds of learners. This type of innovative teachers work using multidimensional methods based on the premise of “*Let*

hundred flowers bloom” begin slowly, find what works for you and your [pupils], and then stand back and breathe in the fragrance of your beautiful flowers” (Nicolson-Nilson, 1998:10)

References

- Abrami, P. C., and Barrett, H. (2005). "Directions for Research and Development on Electronic Portfolios". *Canadian Journal of Learning and Technology*, 31(3), 1-15
- Ancess, J, Darling-Hammond, L and Falk, B. (1995). *Authentic Assessment in Action: Studies of Schools and Students at Work*. New York: Teacher College Press, Columbia University
- Anthony, E. M. (1963). Approach, Method and Technique. *English Language Teaching*, 17: 63-7
- Armstrong, T. (1994). *Multiple Intelligences in the Classroom*. Alexandria, VA: Association for Supervision and Curriculum Development
- Armstrong, T. (2000, 2001). *Multiple Intelligences in the Classroom*. (2nd Ed). Alexandria, VA: Association for Supervision and Curriculum Development, 9
- Auerbach. E.R. (1986). "Competency-based ESL: One Step Forward or Two Steps Back" *TESOL Quarterly* Vol.20, No. 3 , 411-429 Retrieved, March 4th , 2013. From <http://dx.doi.org/10.2307/3586292>
- Bandler, R. and Grinder, J. (1975). *The Structure of Magic: a Book about Language and Therapy, vol. 1*, Palo Alto, California: Science and Behaviour Books.
- Barsch, J. (1980). *Barsch Learning Style Inventory*. 20 Commercial Blvd., Novato: Academic Therapy Publications, 246-5-B
- Berman, M. (1998). *A Multiple Intelligences Road to an ELT Classroom*. Bencyfelin: Crown House, 195
- Brody, C.M. (1995). "Collaboration or Cooperative Learning? Complimentary Practices for Instructional Reform." *The Journal of Staff, Program and Organizational Development*, 12(3), 133-143
- Brown, J.D. (1988). *Understanding Research in Second Language Learning: a Teacher's Guide to Statistics and Research Design*. Cambridge: C.U.P, 178
- Brown, H. D. (1 997). *English Language Teaching in the Post-Method Area: Toward Better Diagnosis, Treatment, and Assessment*. PASAA (Bangkok) 27, 1 - 10

- Brown, H.D. (2000). *Principles of Language Learning and Teaching*. (4th Ed) Longman, 115
- Brown, H. D. (2001) *Teaching by Principles: An Interactive Approach to Language Pedagogy*. San Francisco: Pearson Education , 22
- Bruner, J. (1983). *Child's Talk: Learning to Use Language*. Oxford: Oxford University Press
- Campbell, B. (2003). "Multiple Intelligences in the Classroom : Of the Seven Different Ways we Learn, Schools Focus on only Two. Add the other Five, and you Increase the Chances of Success" Retrieved on December 5th , 2016 from [http// www. Context.org/ iclib/ ic27/ Campbell](http://www.Context.org/iclib/ic27/Campbell)
- Campbell, L., Campbell, B., and Dickenson, D. (2004). *Teaching and Learning Through Multiple Intelligences*, Boston, Pearson, 32
- Carroll, J. B. (1993). *Human Cognitive Abilities: A Survey of Factor Analytic Studies*. New York: Cambridge University Press.
- Casal Madinabeitia, S. (2002). "El Desarrollo de la Inteligencia Interpersonal Mediante las Técnicas del Aprendizaje Cooperativo." In M.C. Fonseca (Ed), *Inteligencias Múltiples, Múltiples Formas de Enseñar Inglés* . Sevilla: Mergablum
- Cassidy, S. (2004). Learning Styles: An Overview of Theories, Models and Measures. *Educational Psychology*, 24(4), 419-444
- Celce-Murcia, M. (1979). *Teaching English as a Second or Foreign Language*. Boston, Mass: Heinle and Heinles, 2 – 5
- Celce-Marcia, M. (2001). *Teaching English as a Second or Foreign Language*, (3rd Ed.). Dewey Publishing Services: NY, 7 – 8
- Chao, T.C. (2000). "Authentic Assessment in the EFL School Context: AMI- based Model." In Ko, S, N (Ed), *The Proceedings of the Seventeenth Conference on English Teaching and Learning*. Taipei: the Crane Publishing Co, 486-496
- Chapelle, C, and Green, P. (1992). "Field Independence/Dependence in Second Language Acquisition Research". *Language Learning*, 42, 47-83
- Chen, H., et al . (1998). "An Analysis of Personal Financial Literacy among College Students" . *Financial Services Review*, 7(2), 107–128

- Chen, J-Q, and Gardner, H. (2005). "Assessment Based on Multiple Intelligences Theory." In D. P. Flanagan (Ed.), *Contemporary Intellectual Assessment: Theories, Tests, and Issues*. New York: Guilford Press, 77-102
- Chen. S. F (2005). *Cooperative Learning, Multiple Intelligences and Proficiency: Application in College English Language Teaching and Learning*. Doctoral Thesis, Australian Catholic University , 32-40
- Chen. Y. (2006). EFL Instruction and Assessment with Portfolios: A Case Study in Taiwan. *The Asian EFL Journal Quarterly*, 8 (1) 36-51
- Christison, M.A. (1996, Autumn). "Teaching and Learning Languages Through Multiple Intelligences." *TESOL Journal*, 10-14
- Christison, M. A. (1998). *Applying Multiple Intelligences Theory in Preservice and In service TEFL Education Programs*. Forum, Vol 36 No 2,10-11 Retrieved on December 22nd, 2013 from <http://exchanges.state.gov/forum/vols/vol36/no2/p2.htm>
- Christison, M.A. and Kennedy, D. (1999). *Multiple Intelligences: Theory and Practice in Adult ESL*. University of Utah: Key resources
- Cohen, L., Manion, L. and Morrison, K. (2000). *Research Methods in Education*. (5th Ed.). London: Routledge
- Collins English Dictionary* (10th Ed). (2009). William Collins Sons and Co. Ltd: Harper Collins Publishers
- Crandall, J. (1999). "Cooperative Language Learning and Affective Factors." In J. Arnold (Ed.) *Affect in Language Learning* . Cambridge: Cambridge University Press, 226-245
- Cohen, J. (1965). "Some Statistical Issues in Psychological Research". In B. B. Wolman (Ed), *Handbook of Clinical Psychology*. New York, NY: McGraw-Hill, 95–121
- Cohen, L., Manion, L and Morrison, K. (2005). *Research Methods in Education* (5th Ed). London: Routledge Palmer 24
- Cook, V.J. (2008). *Second Language Learning and Language Teaching*, Arnold, (4thEd)
- Dewy, J. (1916). *Democracy in Education*. New York: Macmillan

- Dixon, J and Tuldhar, S. (1996). “Whole Language: An Integrated Approach to Reading and Writing”. *Action-Learning Manual A Guide for Literacy Practitioners*. Center for International Education, University of Massachusetts – Amherst ScholarWorks@UMass Amherst , 10
- Dunn, R., and Brunner, C. (1997). International Misconceptions about Learning: Where Did they Begin? *International Education*, 24(1), 9-11
- Dunn, R. R. and Dunn, K. (1978). *Teaching Students through their Individual Learning Styles: A Practical Approach*. Reston, VA: Reston Publishing Company
- Dunn, R, Dunn, K, and Price, G.E . (1989). *Learning Styles Inventory*. Lawrence, KS: Price Systems
- Ellis, R. (2005). *The Study of Second Language Acquisition*. Shanghai: Shanghai Foreign Education Press
- Fadel, M.R. (2016). *Implementing Competency Based Education in Initial Teacher Training in Algeria*. Unpublished Doctoral Thesis, University Constantine 1, 9
- Fayombo, G. (2015). “Learning Styles, Teaching Strategies and Academic Achievement among some Psychology Undergraduates in Barbados”. *Caribbean Educational Research Journal* .Vol. 3, No. 2, 46-61 Retrieved on July28th, 2016 from <http://www.cavehill.uwi.edu/fhe/hum/publications/EducationCERJ.htm>
- Felder, R. M., and Silverman, L. K. (1988). “Learning and Teaching Styles in Engineering Education” [Electronic version]. *Engineering Education*, 78(7)
- Felder, R. M., and Henriques, E. R. (1995). *Learning and Teaching Styles in Foreign and Second Language Education*. Foreign Language Annuals, 21
- Felder, R. & Silverman, L. (1988). “Learning and Teaching Styles in Engineering Education” . *Engineering Education*, 78 (7), 674-681
- Findley. C.A. and Nathan. L.A. (1980). “Functional Language Objectives in a Competency -based ESL Curriculum”. *TESOL QUARTERLY* Vol.14 No.2, 221-231
- First Year Teacher’s Book; At the Crossroads*. Secondary Education, Year One / English: The National Authority for School Publications, Algeria, 112-139

- Fogarty, G. (1999). *Intelligence: Theories and Issues*. University of Southern Queensland Toowoomba, QLD, 4350 Retrieved on February 3rd, 2016 from <https://www.researchgate.net/publication/279474502>
- Fogarty, R. (2005). “Understanding the Theory of Multiple Intelligences”. *Early Childhood Today*, Retrieved on February 3rd, 2015, from Academic Search Premier Database, 13
- Fogarty, R., and Stoehr, J. (2008). *Integrating Curricula with Multiple Intelligences: Teams, Themes, and Threads*. Thousand Oaks, CA: Corwin Press
- Foundation Coalition. (2008). *Positive Interdependence, Individual Accountability, Promotive Interaction: Three Pillars of Cooperative Learning*. Retrieved May 7th, 2016. From http://www.foundationcoalition.org/publications/brochures/acl_piiapi.pdf
- Freeman, Y.S, and Freeman, D.E. (1988). *Whole Language Content Lessons for ESL Students* (Eric Document Reproduction services No ED 295368)
- Freire, P. (1998). “Pedagogy of the Oppressed”. In A. M. Araujo-Freire, and D. P. Macedo (Eds.), *The Paulo Freire Reader*. New York: Continuum Press,45–79
- Gardner, H. (1983). *Frames of Mind. The Theory of Multiple Intelligences*. New York: Basic Books
- Gardner, H. (1985). *The Mind's New Science. The History of the Cognitive Revolution*. New York: Basic Books
- Gardner, H. (1993). *Multiple Intelligences. The Theory in Practice*. New York: Basic Books
- Gardner, H. (1999). *Intelligence Reframed: Multiple Intelligences for the 21st Century*. New York: Basic Books
- Gardner, H. (2003): “Multiple Intelligences After Twenty Years”, *Paper Presented at the American Educational Research Association, Chicago, IL, April 21, 2003*, www.pz.harvard.edu
- Gardner, H. (2005). “Multiple Lenses on the Mind”. Bogota Colombia, *Paper presented at the Exposition Conference*
- Gardner, H (2006). *Multiple Intelligences New Horizons*. New York, New York: Basic Books
- Goodman, k. (1986). *What’s Whole in Whole Language?* Potsmouth, N.H: Heineman

- Grasha, A.F. (1994). "A Matter of Style: The Teacher as Expert, Formal Authority, Personal Model, Facilitator, and Delegator". *College Teaching*, 42, 142-14
- Grasha, A. F. (1996). *Teaching with Style: A Practical Guide to Enhancing Learning by Understanding Teaching and Learning Styles*. Pittsburgh, PA: Alliance
- Griffin, C. (2006). "Didacticism: Lectures and Lecturing." In I.P. Jarvis (Ed), *The Theory and Practice of Teaching*. London and New York: Routledge, 73
- Hall Haley, M. (2004). "Learner-Centered Instruction and the Theory of Multiple Intelligences with Second Language Learners." *Teachers College Record*. Vol. 106, No. 1, 163-180
- Hamada, H. (2007). *The Impact of Information Processing Strategies and Discourse Functions on Materials Design*. Unpublished Doctoral Thesis, University Constantine 1, 46- 129
- Heimlich, J. E. and Norland, E. (2002). "Teaching Style: Where Are We Now?" *New Directions for Adult and Continuing Education*, no. 93, 17-25
- Hopper, B. (2000). *Learning the MI Way: the Effects on Students' Learning of Using the Theory of Multiple Intelligences*. *Pastoral Care*, 26-32. Retrieved April 23rd, 2013, from EBSCO Host Database, 29
- Hutchinson, T. and Torres, E. (1994). "The Textbook as Agent of Change". *ELT Journal*, Vol.4(48)
- Jamieson. J. (1992). "The Cognitive Styles of Reflection/Impulsivity and Field Independence and ESL Success". *Modern Language Journal*. 76', 491-501
- Jensen, L. (2001). "Designing Lesson Plans" In. M .Celce-Murcia (Ed.) *Teaching English as a Second or Foreign Language* . USA: Heinle &Heinle publishers, 403
- Johnson, R. T. And Johnson. D. W. (1985). "Relationships between Black and White Students in Intergroup Cooperation and Competition". *The Journal of Social Psychology*, 125 (4), 421-428
- Johnson, R. T., and Johnson, D. W. (1986). "Action Research: Cooperative Learning in the Science Classroom". *Science and Children*, 24, 31-32
- Johnson, R. T., and Johnson, D. W. (1987). *Joining Together: Group Theory and Group Skills*. Englewood Cliffs, NJ: Prentice Hall

- Johnson, D.W. and Johnson, R. (1989). *Cooperation and Competition: Theory and Research*. Edina, MN: Interaction Book Company
- Johnson, R. T., and Johnson, D. W. (1990). "Using Cooperative Learning in Math". In N. Davidson (Ed.). *Cooperative Learning in Mathematics*, Menlo Park, CA: Addison Wesley Publishers, 28- 121
- Johnson, D. W., and Johnson, R. T. (1991). *Learning Together and Alone* (3rd Ed.). Englewood Cliffs, NJ: Prentice-Hall, Inc.
- Johnson, D.W., Johnson, R.T. (1994). "An Overview of Cooperative Learning." In Thousand, J., Villa A. and Nevin A. (Eds). *Creativity and Collaborative Learning*. Baltimore, MD: Brookes Press.
- Johnson, D. W., and Johnson, R. T. (1999). *Learning Together and Alone: Cooperative, Competitive and individualistic Learning*. Boston: Allyn and Bacon.
- Johnson, D. W., et al. (2003). *Cooperative Learning: Increasing College Faculty Instructional Productivity*, 3 <http://www.ntlf.com/html/lib/bib/92-2dig.htm>
- Johnson, D.W., and Johnson, F. (2009). *Joining Together: Group Theory and Group Skills* (10th Ed.). Boston: Allyn & Bacon,
- Johnson, D. W., Johnson, R. T., and Holubec, E. J. (1993). *Cooperation in the Classroom* (6th Ed.). Edina, MN: Interaction Book Company
- Johnson, D., Johnson, R. and Holubec, E. (1998). *Cooperation in the classroom*. Boston: Allyn and Bacon, 7-8
- Johnson, D.W., Johnson, R.T., and Smith, K.A. (1991). *Active Learning: Cooperation in the College Classroom*. Edina, MN: Interaction, 29
- Johnson, D. W., Johnson, R.T. and Smith, K. (2007). "The State of Cooperative Learning in Postsecondary and Professional Settings" . *Educational Psychology Review*, 19, 15-29
- Kagan, J.(1965). "Reflection-Impulsivity and Reading Ability in Primary Grade Children". *Child Development*, 36, 609-628
- Kagan, S. (1992). *Cooperative Learning* (8th Ed.). San Juan Capistrano, CA: Kagan Cooperative Learning

- Kagan, S. (1994). *We Can Talk-Cooperative Learning in the Elementary ESL Classroom*. Washington, DC, 12
- Kaminska, P. M. (2014). *Learning Styles and Second Language Education*. Cambridge, England: Cambridge University Press, 22
- Kaplan, E.J. and Kies, D.A. (1995). "Teaching and Learning Styles: Which came first?" *Journal of Instructional Psychology*, 22(1), 29-33
- Kaufman ,J. C, Kaufman ,S. B. and Plucker, J. (2012). "Contemporary Theories of Intelligence" In *OUP UNCORRECTED PROOF – FIRSTPROOFS, Sat Oct 13 2012, NEWGEN*, 3
- Kenney, J. (2013). *Fostering Critical Thinking Skills: Strategies for Use with Intermediate Gifted Readers*. Illinois Reading Counsel , 41 (2)
- Kinsella, K. (1995). "Understanding and Empowering Diverse Learners in ESL Classroom." In Reid (Ed.), *Learning Styles in the ESL/EFL Classroom*. Boston: Heinle and Heinle Publishers
- Kolb, D. (1976). *Learning Style Inventory*. Boston: McBer
- Kolb, D. A. (1984). *Experiential Learning: Experience as the Source of Learning and Development*. Prentice-Hall, Inc., Englewood Cliffs, N.J
- Krashen, S. D., and Terrell, T. D. (1983). *The Natural Approach: Language Acquisition in the Classroom*. Oxford: Pergamon Retrieved May 20th, 2015. From http://www.academia.edu/3380901/Cooperative_learning_Theory_principles_and_techniques
- Krechevsky, M., and Seidel, S. (1998). "Minds at Work: Applying Multiple Intelligences in the Classroom. In R. J. Sternberg and W. Williams (Eds.), *Intelligence, Instruction, and Assessment*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc
- Lacey, A. and Walker, W.J. (1991). "Using Small Group Work to Motivate English Students." *ERIC Document Reproduction Service*. No, ED 332- 224
- Larsen-Freeman, D. (2000) (2002). *Techniques and Principles in Language Teaching*. Oxford University Press, 23- 144

- Larsen-Freeman, D. (2007). *Techniques and Principles of Language Teaching*. (2nd Ed.). Oxford: Oxford University Press
- Lazear, D. (1993). *Seven Pathways of Learning: Teaching Students and Parents about Multiple Intelligences*. Tucson, AZ: Zephyr Press, 15- 18
- Lazear, D. (2004). *Multiple Intelligence Approaches to Assessment Solving the Assessment Conundrum*. UK paperback edition published by: Crown House Publishing Ltd
- Learning for All: A Guide to Effective Assessment and Instruction for All Students, Kindergarten to Grade 12*. (2011), Ontario
- Lin, E. (2006). “Cooperative Learning in the Science Classroom.” *Science Teach*, 73(5): 35
- Lozanov, G. (1979). *Suggestology and Outlines of Suggestopedya*. New York: Gordon and Beach Science Publishers
- Matthews, R., Cooper, J., Davidson, N., and Hawkes, P. (1995). “Building Bridges Between Cooperative and Collaborative Learning”. *Change*, 27(4), 35-40
- Maxwell, J. (1992). “Understanding and Validity in Qualitative Research”. *Harvard Educational Review*, 62, 279-300
- McCombs, B. L., and Whisler, J. S. (1997). *The Learner-Centred Classroom and School: Strategies for Increasing Student Motivation and Achievement*. San Francisco: Jossey-Bass
- McDonell, W. (1992). *Language and Cognitive Development Through Cooperative Group Work*. New Jersey, Englewood Cliffs, NJ: Prentice Hall 51-46
- Muluh Nkwetisama, C. (2012). “The Competency- based Approach to English Language Education and the Walls between the Classroom and the Society in Cameroon: Pulling Down the Walls”. *Theory and Practice in Language Studies*, Vol. 2, No. 3, 516-523
- Murphy, K.R., and Myers, B. (1998). *Statistical Power Analysis—A Simple and General Model for Traditional and Modern Hypothesis Tests*. Mahwah, N.J., Lawrence Erlbaum Associates, Inc, 12
- Mursel , J. L. (1950). *Psychological Testing*. Longmans Green and Co: New York ,78
- Myers, I. B., McCaulley, M. H., Quenk, N. L., & Hammer, A. L. (1998). *MBTI Manual: A*

- Guide to the Development and Use of the Myers-Briggs Type Indicator* (3rd Ed.).
Palo Alto, CA: Consulting Psychologist , 390
- Myers, I. B. and Myers P. B. (1995). *Gifts Differing: Understanding Personality Type*.
Palo Alto, CA: Davies-Black.
- Labeled , N. (2007). *Learning to Learn and Learning to Think: Investigating Compensation
System 2 Years' Learning Capacities at the University of Constantine*. Unpublished
Doctoral Thesis, University Constantine 1, 37
- Naiman, N., Frohlich, M., Stern, H.. and Todesco, A. (1978). *The Good Language
Learner* Toronto: Ontario Institute for Studies in Education. (Reprinted by
Multilingual Matters, Clevedon, UK)
- National Council of Educational Research, (2014). *Basics in Education Textbook for B, Ed
Course*. Delhi 110 016 , Publication Division: Karan Press
- Nicholson-Nelson, K. (1998). *Developing Students' Multiple Intelligences*. New York:
Scholastic Professional Books, 7- 39
- Nisbett, R. E. et al. (2012). "New Findings and Theoretical Development". *American
Psychologist Journal* Vol. 67, No. 2, 130–159
- Nunan, D. (1991). *Language Teaching Methodology: a Textbook for Teachers*. New York:
Prentice-Hall
- Nunan, D. (2004). *Task-based Language Teaching*. Cambridge: Cambridge University
Press, 4 Retrieved September 6th 2016. From
<http://dx.doi.org/10.1017/CBO9780511667336>
- Nunan, D., & Lamb, C. (2001). Managing the Learning Process. In D. Hall and A.
Hewings (Eds.), *Innovation in English Language Teaching* . London:
Routledge, 27-45
- Onwuegbuzie, A. J., Collins, K. M. T. and Jiao, Q. G. (2009). "Performance of
Cooperative Learning Groups in a Postgraduate Education Research
Methodology Course" . *Active Learning in Higher Education*, 10(3), 265-277
- Opitz, C. (2008). *SEL Overall Plan*. Retrieved on May 14th , 2016 from
http://www.edutopia.org/pdfs/coop_math_bowman/bowman_sel_overall_plan.pdf

- Oxford, R. L. (1992). "Who Are our Students? A Synthesis of Foreign and Second Language Research on Individual Differences with Implications for Instructional Practice". *TESL Canada Journal/Revue TESL DU Canada*, 9(2), 30-48
- Oxford, R.L. (1995). "Gender Differences in Language Learning Styles: What do they Mean?" In Reid (Ed.), *Learning Styles in the ESL/EFL Classroom*. Boston: Heinle and Heinle Publishers, 69
- Oxford, R. L. (2001). "Language Learning Styles and Strategies" In M. Celce-Murcia (Ed.) *Teaching English as a Second or Foreign Language* . Boston: Heinle, 359- 366
- Oxford, R. L. (2003). "Language Learning Styles and Strategies: Concepts and Relationships" . *International Review of Applied Linguistics in Language Teaching*, 41, 271-277
- Oxford, R.L. and Leaver, B.L. (1996). "A Synthesis of Strategy Instruction for Language Learners". In R. Oxford (Ed.), *Language Learning Strategies Around the World: Cross-cultural Perspectives*. Manoa: University of Hawaii Press, 227-246
- Palmer, H.E. (1922/1966). *The Principles of Language Study*. London: Oxford University Press, 17-18
- Panitz, T. (1996). *A Definition of Collaborative versus Cooperative learning*
Retrieved on April 26th , 2015, from
<http://home.capecod.net/~tpanitz/tedsarticles/coopdefinition.htm>
- Peacock, M. (2001). "Match or Mismatch? Learning styles and Teaching styles in EFL". *International Journal of Applied Linguistics*, 11(1), 1-20
- Pellegrino, J. W. and Kail, R. (1985). *Human Intelligence*. New York: Freeman
- Posner, M. I. (2004). Neural Systems and Individual Differences. *Teachers College Record*, 106(1), 24-30
- Rasmussen, K. (1996). *Learning Styles and Adult Intellectual Development: An Investigation of their Influence on Learning in a Hypertext Environment*.
Doctoral Dissertation, University of South Alabama, Mobile Press
- Reid, J. (Ed). (1995). *Learning Styles in the ESL/EFL Classroom*. Boston: Heinle and Heinle Publishers, viii
- Richards, J. C. (1985). *The Context of Language Teaching*. Cambridge, UK: Cambridge

University Press, 154

Richards, J. C. (2001). *Curriculum Development in Language Teaching*. New York, Cambridge University Press , 2

Richards, J. C. (2013). “Curriculum Approaches in Language Teaching: Forward, Central, and Backward Design”. *RELC Journal*, 44(1), 5-33 Retrieved September 6th 2016
From < <http://dx.doi.org/10.1177/0033688210372953>>

Richards, J. and T. Rodgers. (1986). *Approaches and Methods in Language Teaching: A Description and Analysis*. Cambridge, UK: Cambridge University Press, 4-5

Richards, J. C. and Rodgers, T. S. (1987). *Approaches and Methods in Language Teaching: A Description and Analysis*. New York: Cambridge University Press, 16- 18

Richards, J. and T. Rodgers. (2001). *Approaches and Methods in Language Teaching*. Cambridge: Cambridge University Press, 9-141

Rogers, C. (1980). *A Way of Being*. Boston: Houghton Mifflin

Rossum, E. V, and Hamer, R. (2010). *The Meaning of Learning and Knowing*. Rotterdam /Boston/Taipei : Sense Publishers

Rossetti, M. D. and Black, N. H. (1998). *Using Cooperative Learning to Activate your Simulation Classroom*. Winter Simulation Conference, 67-76

Rushatz, T. A. (1992). *Cooperative Learning: An Examination of Attitudes toward Cooperative Learning and its Effectiveness*. B.S. Thesis. State College, PA: The Pennsylvania State University

Sharan, S. (1980). “Cooperative Learning in Small Groups: Recent Methods and Effects on Achievement, Attitudes and Ethic Relations”. *Review of Educational Research*, 50, 241 – 271

Shearer, B. (2004). *Multiple Intelligences Theory after 20 Years*. Teachers college record, 106, 2-16. Retrieved on November 6th , 2014, from EBSCO Host Database, 4

Sheldon, L. (1988). “Evaluating ELT Textbooks and Materials” . *ELT Journal*, 42(4), 237-246

Shelton, M. and Jones, M. (2006). *Developing Your Portfolio: Enhancing Your Learning and Showing Your Stuff. A Guide to the Early Childhood Student or*

Professional. Oxford; Routledge, Taylor and Francis Group, 9

Sheridan Assessment College, (2008). *Sheriden English Proficiency Assessment* Retrieved From < <http://assessment.sheridaninstitute.ca>>

Shore, J. R. (2001). *An Investigation of Multiple Intelligences and Self-efficacy in the University English as a Secondary Language Classroom*. Unpublished Ed. Doctoral Dissertation, George Washington University, 1

Silberman, M. (1996). *Active Learning: 101 Strategies to Teach any Subject*. Boston: Allyn and Bacon, 1

Skehan, P. (1996). "A Framework for the Implementation of Task-based Instruction." *Applied Linguistics*, 17, 38-62

Slavin, R.E. (1991). "Are Cooperative Learning and Untracking Harmful to the Gifted?" *Educational Leadership*, 48(6), 68-71

Slavin, R. (1995). *Cooperative Learning: Theory, Research, and Practice*. (2nd Ed) Allyn & Bacon: A Simon and Schuster Company. Needham Heights, Massachusetts, 5-146-147

Slavin, R. E. (1996). *Cooperative Learning in Middle and Secondary Schools* (Vol. 69). ERIC Clearing House, 2

Slavin, R. E. (2003). *Educational Psychology: Theory and Practice*. Boston: Pearson Education, Inc, 329

Slavin, R. E., Hurley, E. A., and Chamberlain, A. M. (2003). *Cooperative Learning and Achievement: Theory and Research*. In *Handbook of psychology: Educational*, 179

Smith, Johnson and Johnson (1992). *Collaborative Learning*. NCTLA

Smith, K. A. (1996). *Cooperative Learning: Lessons from Practice and Emerging Issues*. *New Directions for Teaching and Learning*, 67-71-82

Snider, D. P (2001). *Multiple Intelligences Theory and Foreign Teacher*. Unpublished Doctoral Thesis, University of Utah

Stefanakis, E. H (2002). *Multiple Intelligences and Portfolios: A Window into the Learner's Mind*. Portsmouth: Heinemann, 6- 29

Stern, H.H. (1983). *Fundamental Concepts of Language Teaching*. Oxford: OUP, 453

Stern, H.H. (1992). *Issues and Options in Language Teaching*. Oxford: OUP. Shanghai:

Shanghai Foreign Language Education Press

- Sternberg, R.J. (1984). "Toward a Triarchic Theory of Human Intelligence". *The Behavioural and Brain Sciences*, 7, 269- 315
- Sternberg, J. R. (1985). *Beyond IQ: A Triarchic Theory of Human Intelligence*. Cambridge: CUP, 34
- Sternberg, R. J. (1995). *In Search of the Human Mind*. Orlando, FL: Harcourt Brace
- Sternberg, R. J. (1997). *Thinking Styles*. Cambridge, UK: Cambridge University Press, 296-297
- Sternberg, R.J., & Kaufman, J.C. (1998). "Human Abilities". *Annual Review of Psychology*, 49, 479-502
- Stevens, R. (2008). "Cooperative Learning: Encyclopedia of Educational Psychology". In N.J. Salkind (Ed.). USA: SAGE Publications, Inc.187-193
- Stitt-Gohdes, W. L. (2001). "Business Education Students. Preferred Learning Styles and their Teachers. Preferred Instructional Styles: Do They Match?" *Delta Pi Epsilon Journal*, vol. 43, no. 3, 136-151
- Vygotsky, L. S.(1978). *Mind in Society: The Development of Higher Psychological Processes*. Cambridge: Harvard University Press, 86
- Webb, N. (1985). "Student Interaction and Learning in Small Groups: A Research Summary" . *Learning to Cooperate, Cooperating to Learn*, 148-172
- Wheeler, J. (2013). "Multiple Intelligences in the Classroom." Utah State University, julie.wheeler@aggiemail.usu.edu
- White, R.V. (1988). *The ELT Curriculum: Design, Innovation and Management*. Oxford: Blackwell , 3
- Williams, M. and R. Burden. (1997). *Psychology for Language Teachers*. Cambridge: Cambridge University Press, 18
- Woolfolk, A. (2004). *Educational Psychology*. Pearson Education, Inc , 492
- Zainuddin et al, (2011). "Methods/Approaches of Teaching ESOL: A Historical Overview" In . *Fundamentals of Teaching English to Speakers of Other Languages in K-12 Mainstream Classrooms*, (3rd Ed). Kendall Hunt Publishing Co , 65-72

www.kendallhunt.com/ariza

Zuber-Skerritt, O. (1992) . *Action Research in Higher Education: Examples and Reflections*. London: Kogan Page, 98

Web Sites

- https://www.uen.org/.../Summer-Child_Wheeler_MultipleIntelligen...
- https://www.youtube.com/watch?v=3DxFCC_FD4
- <https://www.youtube.com/watch?v=tduAxOQPbY>
- https://www.youtube.com/watch?v=N_uWaHAHv2s
- <https://dictionary.cambridge.org/dictionary/english/intonation>

Appendices

Appendix A: Multiple Intelligences Inventory for ESL Teachers

Directions: Rank each statement below 0, 1, or 2. Write 0 next to the number if the statement is not true. Write 2 in the blank if you strongly agree with the statement. A score of 1 places you somewhere in between. Compare your scores in different intelligences. What is your multiple intelligence profile? Where did you score highest? Lowest?

Verbal/Linguistic Intelligence (V/Ling)

1. I write and publish articles.
2. I read something almost every day that isn't related to my work.
3. I pay attention to billboards and advertisements.
4. I often listen to the radio and cassette tapes of lectures and books.
5. I enjoy doing crossword puzzles.
6. I use the blackboard, the overhead projector, or charts and posters when I teach.
7. I consider myself a good letter writer.
8. If I hear a song a few times, I can usually remember the words.
9. I often ask my students to read and write in my classes.
10. I have written something that I like.

Musical Intelligence (Mu)

1. I have no trouble identifying or following a beat.
2. When I hear a piece of music, I can easily harmonize with it.
3. I can tell if someone is singing off-key.
4. I have a very expressive voice that varies in intensity, pitch, and emphasis.
5. I often use chants and music in my lessons.
6. I play a musical instrument.
7. I listen to music frequently in the car, at work, or at home.
8. I know the tunes to many songs.
9. I often hum or whistle a tune when I am alone or in an environment where I feel comfortable.
10. Listening to music I like makes me feel better.

Logical/Mathematical Intelligence (L/Math)

1. I feel more comfortable believing an answer is correct if it can be measured or calculated.
2. I can calculate numbers easily in my head.
3. I like playing card games such as hearts, gin rummy, and bridge.
4. I enjoyed math classes in school.
5. I believe that most things are logical and rational.
6. I like brain-teaser games.
7. I am interested in new developments in science.
8. When I cook, I measure things exactly.

9. I use problem-solving activities in my classes.
10. My classes are very consistent; my students know what to expect.

Visual/Spatial Intelligence (V/Spa)

1. I pay attention to the colors I wear.
2. I take lots of photographs.
3. I like to draw.
4. I especially like to read articles and books with many pictures.
5. I am partial to textbooks with illustrations, graphs, and charts.
6. It is easy for me to find my way around in unfamiliar cities.
7. I use slides and pictures frequently in my lessons.
8. I enjoy doing puzzles and mazes.
9. I was good at geometry in school.
10. When I enter a classroom, I notice whether the positioning of the students and teacher supports the learning process.

Bodily-Kinesthetic Intelligence (Bk)

1. I like to go for long walks.
2. I like to dance.
3. I engage in at least one sport.
4. I like to do things with my hands such as carve, sew, weave, build models, or knit.
5. I find it helpful to practice a new skill rather than read about it.
6. I often get my best ideas when I am jogging, walking, vacuuming, or doing something physical.
7. I love doing things in the outdoors.
8. I find it hard to sit for long periods of time.
9. I often do activities in my classes that require the students to move about.
10. Most of my hobbies involve a physical activity of some sort.

Intrapersonal Intelligence (Intra)

1. I regularly spend time meditating.
2. I consider myself independent.
3. I keep a journal and record my thoughts.
4. I would rather create my own lessons than use material directly from the book.
5. I frequently create new activities and materials for my classes.
6. When I get hurt or disappointed, I bounce back quickly.
7. I articulate the main values that govern my life and describe the activities that I regularly participate in that are consistent with these values.
8. I have hobbies or interests that I enjoy doing on my own.
9. I frequently choose activities in the classroom for my students to work on alone or independently.

10. I encourage quiet time and time to reflect in my classes.

Intrapersonal Intelligence (Inter)

1. I prefer going to a party rather than staying home alone.
2. When I have problems, I like to discuss them with friends.
3. People often come to me with their problems.
4. I am involved in social activities several nights a week.
5. I like to entertain friends and have parties.
6. I consider myself a leader and often assume leadership roles.
7. I love to teach and show someone how to do something.
8. I have more than one close friend.
9. I am comfortable in a crowd or at a party with many people I don't know.
10. My students help decide on the content and learning process in my classes.

Naturalist Intelligence (Na)

1. I am good at recognizing different types of birds.
2. I am good at recognizing different types of plants.
3. I like to garden.
4. I enjoy having pets.
5. It's easy for me to tell the make and year of most cars.
6. I often look at the sky and can tell you the different types of clouds and what kind of weather they bring.
7. It's easy for me to tell the weeds from the plants.
8. I like to spend time in the outdoors.
9. I enjoy learning about rocks.
10. I have plants in my home and office.

Scoring: Add your total scores in each area. The higher your total score; the stronger that intelligence. Here is your intelligence profile:

V/Ling	L/Math	V/Spa	Na	Mu	Bk	Intra	Inter

Adapted from Christison (1998)

Appendix B: Learning Styles Inventory

To better understand how you prefer to learn and process information, place a check in the appropriate space after each statement below, and then use the scoring directions at the bottom of the page to evaluate your responses. Use what you learn from your scores to better develop learning strategies that are best suited to your particular learning style. This 24- item survey is not timed. Respond to each statement as honestly as you can.

Statements	Often	Sometimes	Seldom
1. I can remember best about a subject by listening to a lecture that includes information, explanations and discussions.			
2. I prefer to see information written on the board and supplemented by visual aids and assigned readings.			
3. I like to write things down or to take notes for visual review.			
4. I prefer to use posters, models, or actual practice and other activities in class.			
5. I require explanations of diagrams, graphs, or visual directions.			
6. I enjoy working with my hands or making things.			
7. I am skillful with and enjoy developing and making graphs and charts.			
8. I can tell if sounds match when presented with pairs of sounds.			
9. I can remember best by writing things down.			
10. I can easily understand and follow directions on a map.			
11. I do best in academic subjects by listening to lectures and tapes.			
12. I play with coins or keys in my pocket.			
13. I learn to spell better by repeating words out loud than by writing the words on paper.			
14. I can understand a news article better by reading about it in a newspaper than by listening to a report about it on the radio.			
15. I chew gum, smoke or snack while studying.			
16. I think the best way to remember something is to picture it in your head.			
17. I learn the spelling of words by "finger spelling" them.			
18. I would rather listen to a good lecture or speech than read about the same material in a textbook.			
19. I am good at working and solving jigsaw puzzles and mazes.			
20. I grip objects in my hands during learning periods.			
21. I prefer listening to the news on the radio rather than reading the newspaper.			
22. I prefer obtaining information about an interesting subject by reading about it.			
23. I feel very comfortable touching others, hugging, handshaking, etc.			
24. I follow oral directions better than written ones.			

Learning Styles Assessment

Read each statement and select the appropriate number response as it applies to you

Often(3)

Sometimes (2)

Seldom/Never (1)

Visual Modality

- _____ I remember information better if I write it down.
- _____ Looking at the person helps keep me focused.
- _____ I need a quiet place to get my work done.
- _____ When I take a test, I can see the textbook page in my head.
- _____ I need to write down directions, not just take them verbally.
- _____ Music or background noise distracts my attention from the task at hand.
- _____ I don't always get the meaning of a joke.
- _____ I doodle and draw pictures on the margins of my notebook pages.
- _____ I have trouble following lectures.
- _____ I react very strongly to colors.
- _____ **Total**

Auditory Modality

- _____ My papers and notebooks always seem messy.
- _____ When I read, I need to use my index finger to track my place on the line.
- _____ I do not follow written directions well.
- _____ If I hear something, I will remember it.
- _____ Writing has always been difficult for me.
- _____ I often misread words from the text-(i.e., "them" for "then").
- _____ I would rather listen and learn than read and learn.
- _____ I'm not very good at interpreting an individual's body language.
- _____ Pages with small print or poor quality copies are difficult for me to read.
- _____ My eyes tire quickly, even though my vision check-up is always fine.
- _____ **Total**

Kinesthetic/Tactile Modality

- _____ I start a project before reading the directions.
- _____ I hate to sit at a desk for long periods of time.
- _____ I prefer first to see something done and then to do it myself.
- _____ I use the trial and error approach to problem-solving.
- _____ I like to read my textbook while riding an exercise bike.
- _____ I take frequent study breaks.
- _____ I have a difficult time giving step-by-step instructions.
- _____ I enjoy sports and do well at several different types of sports.
- _____ I use my hands when describing things.
- _____ I have to rewrite or type my class notes to reinforce the material.
- _____ **Total**

Learning Styles Scoring Procedures

Directions: Place the point value on the line next to the corresponding item below. Add the points in each column to obtain the preference score under each heading.

OFTEN = 5 points SOMETIMES = 3 points SELDOM = 1 points

VISUAL		AUDITORY		TACTILE	
No	Pts	No	Pts	No	Pts
2		1		4	
3		5		6	
7		8		9	
10		11		12	
14		13		15	
16		18		17	
19		21		20	
22		24		23	
VPS =		APS =		KPS=	
VPS = Visual Preference		APS = Audio Preference		KPS = Tactile Preference	

Learning Styles Assessment Scores:

Total the score for each section. A score of 21 points or more in a modality indicates a strength in that area. The highest of the 3 scores indicates the most efficient method of information intake. The second highest score indicates the modality which boosts the primary strength. For example, a score of 23 in visual modality indicates a strong visual learner. Such a learner benefits from the text, from filmstrips, charts, graphs, etc. If the second highest score is auditory, then the individual would benefit from audio tapes, lectures, etc. If you are strong kinesthetically, then taking notes and rewriting class notes will reinforce information.

Appendix C: Reading Proficiency Test

Reading Comprehension:

Read the text carefully and answer the following questions

Vitamin C is the word for today and a popular subject of discussion everywhere. Of course we have to start with the word vitamin. Biochemists gradually realized that some diseases weren't caused by germs or micro-organisms but were caused because there was something missing in the diet. They found that if you didn't include certain foods in the diet, you would get diseases like scurvy or beri beri, and if you included the foods, the disease would disappear. It was as though there were some substances which the body couldn't make for itself, but for which it had to depend on a food supply, and it needed those substances only in traces. This was first actually stated just about the time of nineteen hundred and one or thereabouts. A Polish-born American, biochemist Casimir Funk, suggested that these substances, required in very small quantities, be called vitamins because the first substances located looked as though they had a certain group in the molecule, called the amine group. And "vita" is from the Latin word for "life", so they became life amines. Well, then, this was all very well except that as researchers learned more and more about these vitamins, it turned out that in some of them, there was no amine group, so they dropped the "e" and it became "vitamins." A vitamin is a substance, needed by the body for life, – in small quantities – which the body cannot make for itself.

Well, as we discovered the various vitamins, we had to name each one, and first we couldn't name them because we didn't know what they were chemically, so we didn't commit ourselves. We spoke about vitamin A, vitamin B, vitamin C, and so on. It was much later before the term "ascorbic acid" was introduced. Vitamin C itself turned out to be the vitamin that prevented scurvy. If vitamin C were absent from the diet, you got scurvy. If you restored it to the diet, you cured scurvy. Scurvy takes place only when you're on a very monotonous diet that doesn't include fruits, vegetables, and things like that. If you eat nothing but dried biscuits and dried beef you'll eventually get scurvy because these foods don't contain vitamin C.

Activity01: underline the appropriate answer

1. Around the year 1900, biochemists began to realize that some diseases were caused by
 - a) Certain foods in the diet.
 - b) Certain substances in food.
 - c) Micro-organisms found in food.
 - d) Something missing in the diet.
2. Why was the "e" dropped from the original word "vitamines"?
 - a) The word "vitamin" is easier to pronounce.
 - b) Not all vitamins have the amine group.
 - c) People had forgotten the origin of the term.
 - d) Scientists had located more real vitamins.
3. The vitamins were named "A", "B", "C", etc., because
 - a) They were discovered one at a time.
 - b) They were very elementary substances.
 - c) Their chemical composition was not known.
 - d) Their function was not fully determined.

Activity 02: fill in the gaps with the appropriate words

The Conversation Class

The majority of students learning English are primarily interested in speaking the language. Unfortunately, in most English courses, far more _____ (1) is paid to the skill of writing _____ (2) to speech. Yet, in the end, a _____ (3) knowledge of English will be judged _____ (4) the world at large not on his _____ (5) to write the language but _____ (6) speak it. As far as the teacher _____ (7) concerned, part of the difficulty comes _____ (8) the fact that conversation lessons are _____ (9) at all easy to conduct. Each _____ (10) must be carefully prepared, otherwise the _____ (11) will obtain little or no response _____ (12) his class. No teacher would expect _____ (13) students to attempt written composition before _____ (14) had mastered a large number _____ (15) basic sentence patterns and learned _____ (16) write simple, compound and complex sentences. _____ (17), many teachers will try to start _____ (18) discussion with a group of students _____ (19) providing the students with any preparation _____ (20) all. During most classes of this _____ (21), the student has to struggle to _____ (22) complex ideas in English. The teacher may _____ (23) hesitant to correct him because this _____ (24) interrupt the flow of conversation. Even _____ (25) he does correct him, the student will learn very little. Sometimes the whole class breaks down and the teacher ends up doing all the talking.

Cloze Test Answer Choices

1. a) attention b) importance c) interest d) time	6. a) capacity b) how c) they d) to	11. a) conversation b) result c) student d) teacher	16. a) and b) can c) how d) to	21. a) course b) discussion c) kind d) session
2. a) instead b) or c) than d) then	7. a) be b) has c) is d) was	12. a) about b) for c) from d) in	17. a) Consequently b) Not c) Therefore d) Still	22. a) express b) have c) learn d) many
3. a) bilingual b) overall c) student d) student's	8. a) after b) by c) from d) with	13. a) every b) from c) his d) their	18. a) a b) by c) some d) the	23. a) be b) not c) often d) to
4. a) around b) by c) over d) to	9. a) also b) becoming c) most d) not	14. a) have b) having c) be d) they	19. a) and b) are c) by d) without	24. a) correction b) have c) might d) student
5. a) ability b) method c) skill d) way	10. a) course b) lesson c) question d) students	15. a) many b) of c) on d) the	20. a) at b) before c) in d) of	25. a) if b) that c) then d) it

--	--	--	--	--

Appendix D: Listening Proficiency Test

The dialogue and the questions:

Man: Hey, Margaret, do you know where Don is? I haven't seen him all day and he has some lab reports I need in a big hurry.

Woman: Oh, hi Jack. Didn't you hear? Don is off sick. I was hoping to see him myself, as a matter of fact, to talk about that new project we're both working on.

Man: Well I don't know what to do. He must have those reports at home. I wonder if I should drive over to his house and get them. What do you think?

Woman: Oh, I don't think that's such a good idea. If he's sick, he shouldn't be disturbed. Can't you wait at least one more day?

Man: I suppose you're right. But, if we haven't heard anything by tomorrow, at lunch time, I'm going to give him a call, at least.

Woman: Look, Don's a pretty responsible person. I'm sure he'll find a way to get those reports to you on time. Don't worry.

Man: Okay, okay. Talk to you later.

Now here are the questions:

1. Why does the man want to see Don?
2. The man wants to know if the woman thinks he should ...
3. What does the woman say about Don?
4. What does the man decide in the end?

Listening Test Dialogue Answer Sheet

Put a tick (✓) in front of the right answer:

1. a) To find out how sick he is.
b) To obtain some lab reports.
c) To start work on a new project.

2. a) go over to Don's house.
b) telephone don right away.
c) complete Don's reports.

3. a) He doesn't have the reports.
b) He has sent in the reports.
c) He shouldn't be disturbed.

4. a) To wait until the next day.
b) To call Don before lunch.
c) To visit Don after lunch.

Appendix E: Pupils' Writing Proficiency Test

Topic

You received a letter from your friend. He/she told you about the stream he/she will register if he/she succeeds in the BEM Exam and what he/she hopes to be in the future

- He/she would like to know about you.
- Write him/her a letter in which you. Write about.....
 - ❖ The stream: scientific/ literary
 - ❖ What do you want to study at the university?
 - ❖ The job you want to apply for/ why....?

Assessment Criteria

Content and originality of the ideas.

Coherence: logical structuring of ideas.

Cohesion: use of markers.

Accuracy/ language correctness: spelling, punctuation and capitalization.

Format relevance to the topic.

Grammar and vocabulary.

Appendix F: First, mid and Last Term Examinations

Ati Abdelhafid High School, Oued Athmania
 First Year all Streams

Name:.....
 Class:.....

The First Term Exam of English

Part One: Reading
A/ Comprehension

Dear Windy,

As soon as I saw your name on the Internet and I noticed that you are from Australia, I felt strongly interested to write and exchange information about each other.

My name is Alan. I am English and I am 17 years old, I am a secondary school student and this year I have an important exam to take. I have to succeed in it to enter the University. I live with my family in the Central part of London. Not very far from Hyde Park where I often do some jogging with my school mates. I have two sisters and a brother and I am the eldest. My father is a cook and he is very successful in his job while my mother is a nurse but she has decided to give up working temporarily because she has to take care of my little sister, Caren who is still a baby.

During the week, I am very busy with my studies. So, I always prepare my school work and do my exercises. I rarely go out but on weekends I sometimes join friends and together we organize parties. I enjoy music and I am strongly interested in discovering foreign countries and learn about their people and their customs.

Next time, let me know more about you and your country and make me dream about its wonderful aspects and its splendid nature. I feel attracted by your nation that I hope to be able to visit one day.

I am looking forward to hearing from you soon.

Yours faithfully Alan

Adapted from www.eltalgeria.webs.com

Activity 01: Answer the questions according to the message (03pts)

1- What is the message about?

.....

2- Is the message an e-mail or a snail mail? Justify your answer from the text.

.....

3- Who are Windy and Alan?

.....

Activity 02: Complete the table below (02pts)

Sender's name	.....
Town	.....
Nationality	.....
Mother's job	.....
Father's job	.....
Age	.....
Regular activities	..... ..... .....

--	-------

B/ Text Exploration:

Activity 01: Read the words then fill in the table below (3,5pts)

Long - switch off – close – brief – receiver - more – fast – sign out – switch on – less – sender – open – expensive- sign in – cheap.

Word	Opposite
Close	.....
Cheap	.....
Switch off	.....
.....	Less
.....	Brief
Sign out	.....
Receiver	.....

Activity 02: Underline the right meaning of each word on bold (1,5pts)

- 1- **To check** an e-mail means to: **a-** sign in **b-** read **c-** send
- 2- **To create** an e-mail account means to : **a-**sign out **b-** open **c-** make
- 3- **To close** an e-mail in box means to: **a-** sign out **b-** sign up **c-** check

Activity 03: Put the verbs in brackets in the right form . Pay attention to the position of the frequency adverb (03pts)

- A- My father(**use/ always**)..... the computer at work.
- B- My uncle (**work**)..... as a computer programmer.
- C- I(**often/ navigate**)..... on the net to make key pals.

Activity 04: Write the following words using letters (02pts)

/ rɪmʊ:v/..... /tskeɪp/..... /kənekt/..... /kɜ:sə/.....

Part Two: Written Expression (05pts)

Do you prefer snail mail or e-mail? Give your reasons using time sequencers.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

Good luck

Peoples' Republic of Algeria	
Ati Abdelhafid High School	Level : 1stYear L + Sc Time: 2hours
Second English Exam	
Name:.....	

Part One: Reading

Read the text carefully then do the activities blow.

Air pollution is made up of many kinds of gases and particles that reduce the quality of the air in both the city and the countryside.

In the city, cars, buses and airplanes, as well as factories cause pollution. They swallow oxygen from the air, rivers and seas, and poison the air we breathe with Carbone dioxide (CO₂). Air pollution can irritate the eyes, throat and lungs. Burning eyes, cough, skin cancer and chest tightness are common with exposure to high levels of air pollution.

In the countryside dust from tractors ploughing fields, fertilizers which contain phosphorus and nitrogen, smoke from wood and crop fires cause pollution as well as most pesticides, which are toxic, and are used on food crops.

People react very differently to pollution. Some people may notice chest tightness or cough, while others may not notice any effect. Children probably feel the effects of lower levels of pollution than adults.

A/ Comprehension:

1- Say whether the following statements true or false according to the text:

- a- Only cities can be polluted.
- b- Air pollution is as dangerous as pollution of water and the soil.
- c- People react in the same way to pollution.
- d- Children are more sensitive to pollution than adults.

2- Answer the following questions according to the text:

a- How do vehicles and factories poison the environment and cause pollution?

.....

b- What are the main diseases caused by urban pollution?

.....

3- What / who do the underlined words refer to in the text?

- a- That (§1)=.....
- b- Which (§3)=.....

B/ Text Exploration:

1- a. Find in the text words or expressions closest in meaning to the following:

- a- Compose of (§1)=.....
- b- Dangerous (§3)=.....

b. Find in the text words or expressions that are opposite in meaning with the following:

a- Increase (§1)=..... **b-** Low (§2)=.....

2- Rewrite sentence b so that it means the same as sentence a:

a- She asked: “Where do you buy your clothes?”

b-.....

a- “Go out and don’t make noise.” The teacher told her students.

b-

3- Put the verbs between brackets in the correct tense:

a- If I (to be).....you, I would apologize.

b- If we reduce excessive use of fuel, we (to have)..... less pollution.

4- Put the stress on the right syllable:

Destruction - preserve - contaminate – deforestation

5- Circle the silent letters:

Bought – column- write- half

Part Two: Written Expression

Choose one of the following topics:

Topic 01: Use the cues below to write a paragraph of about 10 lines to say what will happen if we continue to pollute our environment.

- Danger of pollution/ grow/ rapidly
- If / continue/ pollute/ air/ the climate/ change
- If/ climate/ get /warmer/ greenhouse effect/ diseases/ natural disasters

Topic 02: Write a short paragraph of about 10 lines about the different types of pollution.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

Good Luck

School: Ati Abdelhafid High
Level: 1st year L + Sc



School Year: 2013/2014
Duration: 02 hours.

The Third Exam

Part one: Reading (15pts)

Read the text carefully then do the activities.

The invention of the laser can be dated to 1958 with the publication of the scientific paper, Infrared and Optical Masers, by Arthur L. Schawlow and Charles H. Towns. **This paper** launched a new scientific field.

The word LASER is an acronym for **light amplification by stimulation emission of radiation**. A laser is a device **that** creates and amplifies a narrow, intense beam of light.

Lasers are widely used in industry for cutting and boring metals and other materials, in medicine for surgery, and in communications, scientific research and holography. They are a part of such familiar devices as bar-code scanners used in supermarkets, scanners, laser printers and compact disc players.

The potential for lasers developed faster in the field of medicine after Kumar Patel invented the carbon dioxide laser in 1964. This permitted surgeons to perform highly intricate surgery using photons rather than scalpels, to both operate on and cauterize wounds. Lasers today can be inserted inside the body, performing operations that a few years ago were almost impossible to perform at little risk or discomfort to the patients.

1/ Underline the right answer. (02pts)

A/ The text is:

- a) a biography b) a scientific report c) an opinion article

B/ The text is:

- a) narrative b) argumentative c) expository

2/ Are the following statements true or false? (03pts)

- a) The laser was invented in the mid twentieth century.
- b) The letters L A S E R stand for the names of the inventors of the device.
- c) The CO₂ Laser allows surgeons to do complicated surgeries easily.

3/ Answer the following questions according to the text. (03pts)

a) The word LASER is an abbreviation; what is its full form?

.....

b) What is the laser used for?

.....

.....

4/ Who/What do the underlined words refer to in the text? (02pts)

a) this paper (§1) → b) that (§2) →

5/ Match words and their definitions (02pts)

Words	Definitions
a) device	1) Object or machine which has been invented for a particular purpose.
b) surgery	2) Manufacture or production of goods from raw materials.
c) industry	3) Energy from the sun, a lamp, etc. that allows us to see things.
d) light	4) Medical treatment of injuries and diseases by cutting open the body.

6/ Combine each pair of sentences using the link word between brackets:

{ a- Alexander Graham Bell was happy with his first invention.
b- His curiosity drove him always to learn and create. (**however**)

.....

{ a- The car is very useful.
b- Almost every family has one. (**so....that**)

.....

{ a- The airplane allows us to travel over long distances in a short time.
b- It can crash and cause death to passengers. (**although**)

.....

7/ Put the stress on the right syllable:

Psychology - phonology - chemical - rhetorical

Part Two: Written Expression

Choose **one** of the following topics:

Either Topic One: Use the notes in the table below to write a short presentation of the car.

A	B
1) Introduction	The importance of the car...
2) Problem	People had to travel long distances...
3) Original solution	Use of animals (camels, horses...)
4) Problems with the solution	Slow / uncomfortable
5) Invention	Nicolas J. Cugnot invented a three wheeled car

8) Conclusion

Nowadays millions of people use it in their everyday movements and travels

Or Topic Two: Write a short biography about any inventor of your choice.

.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....

GOOD LUCK

<p>First name:..... Family name:..... Class:.....</p>	<p>Mark</p>
--	--------------------

Appendix G: The Pupils' Questionnaire

Please respond to the following statements about learning English according to the scale after each statement. You may also write comments. You don't have to write your name on this questionnaire.

1 - 2 - 3 - 4 - 5

Strongly disagree - disagree - the same - agree -strongly agree

1/ I really enjoy learning English, because it is interesting.

1 - 2 - 3 - 4 - 5

2/ I like to speak English in class.

1 - 2 - 3 - 4 - 5

3/ I feel English is important to find a good job.

1 - 2 - 3 - 4 - 5

4/ I feel it is not difficult to learn English well.

1 - 2 - 3 - 4 - 5

5/ I like English class, because I like my English teacher.

1 - 2 - 3 - 4 - 5

6/ I hate English, but I don't have any choice, I just have to sit in class.

1 - 2 - 3 - 4 - 5

7/ I study English because I 'am interested in it, not for the sake of passing the test or examinations.

1 - 2 - 3 - 4 - 5

8/ The textbook or the teaching materials are more practical and useful this year.

1 - 2 - 3 - 4 - 5

9/ Classroom activities like storytelling, drama, role plays, songs, picture creating and so on can motivate my interest in learning English.

1 - 2 - 3 - 4 - 5

10/ I like small group work in the classroom; it can lower my anxiety and fear about learning English.

1 - 2 - 3 - 4 - 5

11/ I feel cooperative learning in group work , can improve interpersonal relationships among classmates.

1 - 2 - 3 - 4 - 5

12/ I feel that multiple Intelligences based activities can improve my four language skills.

1 - 2 - 3 - 4 - 5

13/ I feel the multiple Intelligences based assessment can give me more confidence and lower my anxiety in learning English.

1 - 2 - 3 - 4 - 5

14/ When in group work, I like to work with classmates that have the same type of intelligence.

1 - 2 - 3 - 4 - 5

15/ When in group work, I like to work with my classmates that have the different types of intelligences.

1 - 2 - 3 - 4 - 5

16/ After fill in the blanks in the Multiple Intelligences inventory for EFL young adults, I agree that it can match my learning and Intelligence type.

1 - 2 - 3 - 4 - 5

17/ After fill in blanks in the learning styles inventory, I agree that it can match my way of learning.

1 - 2 - 3 - 4 - 5

THANK YOU FOR YOUR PARTICIPATION

Appendix H: Multiple Intelligences Inventory

Directions:

Rank each statement 0, 1, or 2. Write 0 if you disagree with the statement and write 2 if you strongly agree. Write 1 if you are somewhere in between.

1/ Verbal/ Linguistic Intelligence: (word smart/ language smart)

- a- I like to read books, magazines, newspapers, e-mails and/or WebPages.
- b- I like to tell jokes and stories, and I enjoy word games or tongue twisters.
- c- I have a good vocabulary in my native language.
- d- I can remember the names of people and/or places easily.
- e- I think I am a good reader.
- f- I like to talk to people at parties or talk to my friends on the phone.

2/ Logical Mathematical Intelligence: (logic smart/number smart)

- a- I often do calculations in my head.
- b- I like to play number games and games that require logical thinking.
- c- Mathematics and science are my best subjects in school.
- d- I am very interested in computers.
- e- I am good at chess.
- f- I ask many questions about how things work.

3/ Musical Intelligence: (music smart/ rhythm smart)

- a- I am a good singer and I have a pleasant voice.
- b- I play a musical instrument or sing in a choir.
- c- I often tap rhythmically on the table or the desk.
- d- I often hear music in my head.
- e- I can tell when music sounds off-key.
- f- I can hum tones to many songs.

4/ Visual/ Spatial Intelligence: (space smart/ picture smart)

- a- I can read maps easily and translate their information into reality.
- b- I enjoy activities such as drawing and painting.
- c- I love books and magazines with pictures.
- d- Movies, slides and videos really help me to learn new information.
- e- I enjoy putting puzzles together.
- f- I enjoy arranging things in my house or room.

5/ Bodily/ Kinaesthetic Intelligence: (body smart/ movement smart)

- a- It is difficult for me to sit still and quietly for long periods of time.
- b- I am good at sports, and enjoy running and jumping and other physical activities.
- c- It is easy for me to copy what other people do.
- d- I speak with my hands or other body gestures.
- e- I am good at sewing, woodworking, building, or mechanics.
- f- In order to learn a new skill, I have to practise it to learn it, rather than reading about it or see it in a video.

6/ Interpersonal Intelligence: (people smart)

- a- I am often the leader in activities.
- b- I enjoy talking with all kinds of people.
- c- I often help my friends.
- d- I have got a lot of friends.
- e- My friends talk to me about their problems.
- f- I am a member of several clubs.

7/ Intrapersonal Intelligence: (self- smart)

- a- I like studying alone better than working in groups.
- b- I learn from my mistakes.
- c- My friends find some of my actions strange sometimes.
- d- I prefer spending time by myself than with many people around me.
- e- I am good at planning what I will do and getting things done.
- f- I can tell you some things I am good at doing.

8/ Naturalist Intelligence: (nature smart)

- a- I enjoy working in the garden, or bugs, flowers, leaves, or other natural things to show to others.
- b- I am good at shopping and cooking.
- c- I spend a lot of time outdoor.
- d- I know the names of many plants, birds and/or animals.
- e- I am good at taking care of children, sick and/or old people.
- f- I always notice the weather and/or the seasons.

Appendix I: The Check List

Intelligences	Classroom Activities
Bidily- Kinesthetic	Hands-on activities, field trips, role-plays, pantomime, Total Physical Response, field experiences, creating a movement or a sequence of movements to explain, making task or puzzle cards, building or constructing, art forms, movements, drama, sports, manipulatives , object coordination, dancing, crafts, miming, circle dancing, brain gym, relaxation exercises, craftwork, using computers, acting, classroom games, mingling in the classroom, simulations, find someone who... game, circulating round the classroom, tracing intonational contours with arms and fingers while saying a given utterance, outcome balls and cards.
Intrapersonal	Tasks with self-evaluation component, interest centers, options for homework, personal journal keeping, dialogue journals, learning logs, choice in assignments, describing qualities you possess, setting and pursuing a goal to, describing one of your personal values about, writing a journal entry on, assessing your own work, individualized instruction, independent study, reflective practices and activities, teaching for achievement and success, introspective and metacognitive tasks, project work, learner diaries, self-study, personal goal setting, discussion about what is important and of value in life, reflecting on the personal importance of what is being learned, reacting to the qualities, values, and actions of those featured in stories or poems, expressing feelings and emotions, evaluating web sites.
Interpersonal	Pair work or peer teaching, board games, group brainstorming, group problem solving, project work, pen pals, writing group stories, playing vocabulary games, peer editing, intercultural awareness, conducting a meeting, using social skills to learn about, participating in a service project, teaching someone about, practice giving and receiving feedback on, using technology to, tutoring, cooperative learning, role playing, collective writing, information-gap activities, conducting a class survey, teamwork games/exercises, peer feedback.
Verbal/Linguistic	Note-taking, listening to lectures/stories, reading books/response journals, reading with a partner, sustained silent reading, storytelling, debates, tape recording, teacher reading to students, translating, presenting materials orally, writing a poem, myth, legend, short play, news article, creating a talk show radio program, conducting an interview, composition, literature, word games, poetry, writing, speaking, using language in games, puzzles and creative activities, group discussions, completing worksheets, giving presentations, word building games, memorizing, exercising four skills, completing worksheets, yes/no questions, asking questions, identifying various themes, round table discussion, answering comprehension questions

Logical/Mathematical	Crossword, ordering, matching, categorizing and classifying, science demonstration and experiments, logic puzzles and games, story problems with numbers, logical/sequential presentation of subject matter, summarizing, analyzing grammar, solving word problems, creating categories for spelling/vocabulary, organizing information with Venn diagrams, determining cause and effect, sequencing events in a story, designing and conducting an experiment, making up syllogisms to demonstrate, making up analogies to explain, describing the patterns or symmetry, number games, critical thinking, science combinations, mental calculations, guided discovery, syllogisms, comparing, phrasal verb grids, sequencing/ordering, predicting, identifying errors, inferring, giving reasons and defending them, testing hypothesis, examining pairs to choose the correct answer (grammar/ vocabulary exercises), identifying main ideas/ components/ attributes, describing patterns of the causally related event sequences in stories.
Musical	Singing, playing recorded music, playing live music (piano, guitar), jazz chants, reciting poetry, associating music to story mood/story plot, writing song lyrics, using rhythm to learn/present intonation patterns, giving presentation with appropriate musical accompaniment, explaining, sound differentiation, musical games, background music, responding emotionally to music, welcoming students with music, writing words to simple well-known melody, songs, background music to shape focus, calm down, energize and relax, record of a burst of applause.
Visual/Spatial	Using charts and grids, clusters, videos, slide, movies, using art, graphic organizers, illustrating stories, using sentence strips, using drawings to express ideas and feelings, making maps, charts, sequencing sentences to form a coherent story, creating a slideshow, videotape or photo album, inventing a board or card game to demonstrate, illustrate, sketch and sculpt, art activities, imagination games, geometric figures, visualization, problem solving, communicating visually, enjoying creative puzzles, maps, designs, 3-D models and graphic representations, mind maps, visualizations, diagrams, TV, interpreting visual information, photographs, art work, drawing, creating visual summary, painting, flow charts, card games, visual outlines
Naturalist	Creating observation notebooks , describing changes in the local or global environment, caring for pets, wildlife, gardens, parks, using binoculars, telescopes, microscopes or magnifiers, drawing or taking pictures of natural objects, outdoor activities, natural and environmental materials and concepts, noticing relationships, making collocations, changing words in brackets into correct forms, classifying and categorizing activities, background music in the form of sounds created in the natural world.



Pedagogical Regulations
and Annual Progression

23 weeks: 50 Lessons

+

8 weeks: Assessment + 4 Projects

School: Atti Abd-Elhafid Secondary School

Teacher: Mrs. CHEBRI Imene

School Year: 2013/2014

Level: 1st Year Scientific/ Literary Streams

Yearly Distribution

Unit One: Intercultural Exchanges / Getting Through

Month	Week	Content	Hour	
September	1	Inscriptions		
	2	Diagnostic Evaluation	3	
October	3	Unit One: Getting Through Project Announcement: Help Wanted Sequence One: Listening and Speaking *Anticipate + Listen and Check *Say it Clear: Intonation in polite requests + Stress in two- syllable words	3	
	4	*It' s Your Turn + Say it in Writing: Writing about advantages and drawbacks of the Internet Sequence Two: Reading and Writing *Anticipate + Read and Check	3	
	5	*Discover the Language *Write it Right Sequence Tree: Developing Skills *Making a Phone Conversation	3	
	6	*Formal/ Informal Language: Writing massages using formal or informal language *Enquiry Letter: recognising the layout / writng an enquiry letter Stop and Consider *Expressing Purpose: the use of in order to, to and so as to *Expressing Obligation, Absence of Obligation and Prohibition: the use of must, have to , don't need to and must not	3	
	7	*The Use of Articles *Correlative Conjunctios: either..or, neither...nor and both...and Consolidation and Extension	3	
	8	*Write it Out / Work it Out *Application Letter: recognising the layout / writng an application letter	3	
			Project Presentation + Feedback	

Unit Two: The Press / Our Findings Show

	Week	Content	Hour
	1	<i>Unit Two: Our Findings Show</i>	
Month November	2	Project Announcement: Conducting a Survey <i>Sequence One: Listening and Speaking</i> *Anticipate + Listen and Check	3
	3	*Say it Clear: Forming compound nouns+ stress shift in these nouns *It' s Your Turn + Say it in Writing: <i>Sequence Two: Reading and Writing</i>	3
Month December	4	*Anticipate + Read and Check *Discover the Language *Write it Right	3
	5	November Vaccation+Firest Term Exams <i>Sequence Tree: Developing Skills</i> *Summarising dialogues choosing the appropriate reporting verb	3
	6	*Sequel of developing skills Winter Holiday <i>Stop and Consider</i> *Reported Speech	3
Month January	7	*Adverbs of manner *Adjectives with fui and less <i>Consolidation and Extension</i> *Write it Out / Work it Out	3
	8	*Writing a newspaper article Project Presentation + Feedback	3

Unit Three: Environment / Back to Nature

Month	Week	Content	Hour
January	1	<p>Unit Three: Back to Nature Project Announcement: Making a Consumer Guide Sequence One: Listening and Speaking *Anticipate + Listen and Check *Say it Clear: Intonation in yes/no and wh questions+ Stress shift</p>	3
	2	<p>*It' s Your Turn + Say it in Writing: Writing a SOS message</p>	3
	3	<p>Sequence Two: Reading and Writing *Anticipate + Read and Check *Discover the Language *Write it Right</p>	3
February	4	<p>Sequence Tree: Developing Skills *Recognising / responding to an advert/ writing aa green advert *Sequel of developing skills</p>	3
	5	<p>Stop and Consider * Conditionals type 0, 01, and 02 * Dividing adjectives using suffixes * Deriving opposites using prefixes * Quantifiers</p>	3
	6	<p><i>Second Term Examinations</i></p>	3
March	7	<p>Consolidation and Extension *Write it Out /</p>	
	8	<p>*Work it Out I * Work it Out II</p>	3
	9	<p>Project Presentation + Feedback Spring Holidays Spring Holidays</p>	

Unit Three: Environment / Back to Nature

Month	Week	Content	Hour
January	1	<p><i>Unit Three: Back to Nature</i> Project Announcement: Making a Consumer Guide <i>Sequence One: Listening and Speaking</i></p>	3
	2	<p>*Anticipate + Listen and Check *Say it Clear: Intonation in yes/no and wh questions+ Stress shift</p>	3
	3	<p>*It' s Your Turn + Say it in Writing: Writing a SOS message <i>Sequence Two: Reading and Writing</i></p>	3
February	4	<p>*Anticipate + Read and Check *Discover the Language *Write it Right <i>Sequence Tree: Developing Skills</i></p>	3
	5	<p>*Recognising / responding to an advert/ writing aa green advert *Sequel of developing skills</p>	3
	6	<p><i>Stop and Consider</i> * Conditionals type 0, 01, and 02 * Dividing adjectives using suffixes * Deriving opposites using prefixes * Quantifiers</p>	3
March	7	<p align="center"><i>Second Term Examinations</i></p> <p><i>Consolidation and Extension</i></p>	
	8	<p>*Write it Out / *Work it Out I * Work it Out II Project Presentation + Feedback</p>	3
	9	<p>Spring Holidays Spring Holidays</p>	

Unit Four: Inventions and Technology / Eureka

	Week	Content	Hour
Month April	1	Unit Four: Eureka Project Announcement: Making a Profile of an Invention	3
	2	Sequence One: Listening and Speaking *Anticipate + Listen and Check *Say it Clear: Intonation in indirect questions + Stress in names of sciences and adjectives derived from them *It' s Your Turn *Say it in Writing	3
	3	Sequence Two: Reading and Writing *Anticipate + Read and Check *Discover the Language *Write it Right	3
	4	Sequence Three: Developing Skills *Respond to a newspaper article from an opinion page * Respond in writing to opinions about technology	3
Month May	5	Stop and Consider *The use of definite /indefinite articles *Expressing result using so...that * Describing an object: shape, colour, etc	3
	6	*The use of the future perfect	3
	7	Consolidation and Extension *Write it Out / Work it Out i *Work it Out II	3
	8	Project Presentation + Feedback Third Term Examinations Summer Holidays	3

Unit Plan

Unit One	Getting Through (pp : 14 – 39)			
	Skills	Functions	Language Forms	Phonology
Sequence One	-Listening to instructions and confirming understanding - Stating a point of view and justifying it	- Instructions - Comparing - Expressing preferences - Describing a process - Expressing purpose	-The imperative -Sequencers: first, next , etc. -Comparatives of adjectives and adverbs -Prefer something to something else, etc. -In order to/so as to, etc	-intonation in formal and informal requests. -Stress in two syllable words
Sequence Two	-Reading and interpreting and e-mail. -Writing an e-mail message	-Describing people’s regular activities -Describing a place	-Frequency Adverbs : rarely/seldom, etc. -Degree Adverbs: very, quite, etc. -Reflexive pronouns : my-self...	
Sequence Three	-Listening and responding to telephone messages -Reading and responding to short written messages -Writing a letter of enquiry	-Expressing obligation Inviting/accepting and refusing invitations -Apologising	-Modals :have to/had to - Preposition of time and place : In/in the north .../on/at	
Sequence Four			-Link words : to/in order to...neither... nor/either ... or -Definite and indefinite articles -Have to/had to... From... to / untill	
Sequence Five	-Reading and responding to and advert -Filing a from and writing a letter of application -Dealing with telephone conversation problems	-Expressing obligation		

Project

Making a job application booklet. -A Help Wanted
Further information is included on page 39

Sequence Plan

Level	First year Classes Literary and Scientific Streams
Source	At the Cross Roads
Unit One	Getting through (pp : 14-39)
Sequence One	Listening and speaking (pp : 16-19)
Pedagogical Materials	The textbook, the whiteboard , data show, work sheets, tape recorder
Objectives	<p>By the end of this sequence, pupils should be able to :</p> <ul style="list-style-type: none">➡ Listen, respond to, and give instructions using sequencers: first, next, etc.➡ Express and justify a point of view.➡ Express preferences and purpose.➡ Make formal and informal requests with appropriate intonation.➡ Recognize stress in two-syllable words.➡ Use the comparative forms of adverbs.➡ Use the comparative form of adjectives and adverbs.

Lesson Plan 01

Teacher	Ms. Imene CHEBRI	Class level	First Year Scientific and Literary Streams
Observer	Mr. ACHOURI	Source	At the Cross Roads
School year	2013/2014	Unit	Getting Through
Room	03/08	Sequence	Listening and Speaking
Expected no. of pupils	30/ 39	Rubric	Say it Loud and Clear

Context	Telecommunication
Teaching aids/materials	Data Shaw, whiteboard and hand outs, slides , tape recorder
Target Intelligences	V, Math, ling, B, Na, Inter and Intra
Target skills	Listening and speaking

Learners' objective (s): by the end of the lesson learners will be to be able to	-Form formal and informal requests and mark intonation on both of them. - Mark stress on two words syllables.
Time	55 mns

Aspects of Language to be taught	Stress and intonation in request
Aspects of Culture	/
Assessment	Tasks 01, 02, 03, act 01 p 17, act 02 p 17
SARS	Teacher adapted some activities and tasks

Abbreviations	T: Teacher Pps: Pupils mns: minutes S:select, A: adapt, R: reject, S: supplement
----------------------	---

Phase	Rationale	Intelligences	Interaction pattern	Procedures	Time
Warm up	Reviewing the Pps' previous knowledge	V+ Ling+ Math	T- Pps	<ul style="list-style-type: none"> ➤ T presents a video about forming requests in English. 	5mns
	To introduce the theme of the lesson	V+ ling+ math+ inter+ M	T- Pps Pps – Pps	<ul style="list-style-type: none"> ➤ Pps listen and take notes ➤ T what is the video about? ➤ Pps it is about formal and informal request. ➤ T asks the Pps to give examples ➤ T presents another video about intonation 	
	To mark intonation on requests	Inter+ Ling + M	T- Pps Pps- Pps	<p>https://www.youtube.com/watch?v=tduAxOQPbkY</p> <p>https://www.youtube.com/watch?v=N_uWaHAHv2s</p> <div style="border: 1px solid black; border-radius: 15px; padding: 10px; text-align: center;"> <p>Intonation is the sound changes produced by the rise and fall of the voice when speaking, especially when this has an effect on the meaning of what is said</p> <p><i>In requests</i> intonation is always up formal or informal</p> </div> <p>https://dictionary.cambridge.org/dictionary/english/intonation</p> <ul style="list-style-type: none"> ➤ T pronounces some requests and asks Pps to mark stress on them orally. ➤ Pps do the task. <p>Key:</p> <ul style="list-style-type: none"> ✓ Could you speak more slowly please? (↗) ✓ Can you speak louder please? (↗) ✓ Can you say that more clearly please? (↗) ✓ Could you go less quickly please? (↘) 	

Practice	To consolidate the Pps' understanding	Inter+ Ling+ intra+ Math	T- Pps Pps- Pps	<p>Activity 02 page 18</p> <ul style="list-style-type: none"> ➤ Transform the statements below into requests and say them with the right intonation <p>Key:</p> <ol style="list-style-type: none"> Could / can you type more /less slowly, please? Could / can you press the key more / less smoothly, please? Could / can you drive more / less rapidly, please? Could / can you use the computer more / less frequently, please? Could / can you arrive earlier, please? Could / can you jump higher, please? Could / can you work harder, please? 	10mns
	Recycling the pps' previous knowledge	M+ intra+ ling+ inter	T- Pps	<ul style="list-style-type: none"> ➤ T uses a tape record to present vowel, consonant and diphthong sounds (authenticity) with the right pronunciation. 	5mns
	To know how to divide words into syllables and	M+ intra + Ling + Math Ling + Intra	Pps- Pps T- Pps	<p>Task 01</p> <ul style="list-style-type: none"> ➤ Match the sound with the right phonetic symbols. ➤ Pps answer and write their answers on the board ➤ T explains how do we form syllables and the use of stress in English 	10mns

<p>Production</p>	<p>the use of stress</p>	<p>Ling+ math+ Na</p>	<p>Pps-Pps</p>	<div style="border: 1px solid orange; border-radius: 15px; padding: 10px; background-color: #fff9c4;"> <p><i>Phonetics</i> is the scientific study of human speech sounds</p> <p><i>Syllable</i> is a unit of pronunciation having one vowel sound, with or without surrounding consonants, forming the whole or a part of a word; for example, there are two syllables in water and three in inferno.</p> </div> <p>https://en.oxforddictionaries.com/definition/syllable</p> <p>Task 02: Pair Work</p> <ul style="list-style-type: none"> ➤ T divides the Pps into pairs and gives them a list of words to transcribe and mark stress on the right syllable (Pps are allowed to use dictionaries to help themselves) the first pair who finishes will have a reward. ➤ Pps do the task, and then pronounce the words loudly in front of their classmates. ➤ T controls and guides them. 	<p>10mns</p>																																		
	<p>To train the Pps on the use of stress</p>	<p>Inter+ ling + B+ Math</p>	<p>T- Pps Pps- Pps</p>																																				
			<p>T – Pps</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;"></th> <th style="width: 25%; text-align: center;">A </th> <th style="width: 5%;"></th> <th style="width: 20%; text-align: center;">B </th> </tr> </thead> <tbody> <tr> <td>Browser</td> <td>/ 'braʊzə /</td> <td></td> <td>Connect / kə'nekt /</td> </tr> <tr> <td>Floppy</td> <td>/ 'flɒpi /</td> <td></td> <td>Protect / prə'tekt /</td> </tr> <tr> <td>Cursor</td> <td>/ 'kɜːsə /</td> <td></td> <td>Remove / rɪ'muːv /</td> </tr> <tr> <td>Pointer</td> <td>/ 'pɔɪntə /</td> <td></td> <td>Erase / ɪ'reɪz /</td> </tr> <tr> <td>Window</td> <td>/ 'wɪndəʊ /</td> <td></td> <td>Escape / ɪs'keɪp /</td> </tr> <tr> <td>Icon</td> <td>/ 'aɪkɒn /</td> <td></td> <td>Display / dɪs'pleɪ /</td> </tr> <tr> <td>Keyboard</td> <td>/ 'kiːbɔːd /</td> <td></td> <td></td> </tr> <tr> <td>Modem</td> <td>/ 'mɒdem /</td> <td></td> <td></td> </tr> </tbody> </table>			A		B	Browser	/ 'braʊzə /		Connect / kə'nekt /	Floppy	/ 'flɒpi /		Protect / prə'tekt /	Cursor	/ 'kɜːsə /		Remove / rɪ'muːv /	Pointer	/ 'pɔɪntə /		Erase / ɪ'reɪz /	Window	/ 'wɪndəʊ /		Escape / ɪs'keɪp /	Icon	/ 'aɪkɒn /		Display / dɪs'pleɪ /	Keyboard	/ 'kiːbɔːd /			Modem	/ 'mɒdem /
	A		B																																				
Browser	/ 'braʊzə /		Connect / kə'nekt /																																				
Floppy	/ 'flɒpi /		Protect / prə'tekt /																																				
Cursor	/ 'kɜːsə /		Remove / rɪ'muːv /																																				
Pointer	/ 'pɔɪntə /		Erase / ɪ'reɪz /																																				
Window	/ 'wɪndəʊ /		Escape / ɪs'keɪp /																																				
Icon	/ 'aɪkɒn /		Display / dɪs'pleɪ /																																				
Keyboard	/ 'kiːbɔːd /																																						
Modem	/ 'mɒdem /																																						

	<p>Demonstrate Pps' ability to transcribe words phonetically</p>	<p>Ling + Math + Intra</p>	<p>T – Pps Pps - Pps</p>	<div data-bbox="1256 213 1740 523" style="border: 1px solid orange; border-radius: 15px; padding: 10px; text-align: center;"> <p>In two syllable words, stress usually falls on the second syllable when the word is a verb, but it is placed on the first syllable when the word is a noun</p> </div> <p>Task 03:</p> <p style="text-align: center;">The Hidden Message</p> <p>➤ The message below is written in phonetic script. Rewrite it using the letters of the alphabet</p> <p>Key: / ʃɔː 'flɒpɪ dɪsk kənt'eɪnz ə 'vaɪərəs rɪ'muːv ɪt frəm maɪ kəm'pjʊtə /</p> <p>Your floppy disk contains a virus; remove it from my computer.</p>	<p>5mns</p>
--	--	------------------------------------	-----------------------------------	---	-------------

Sequence Plan

Level	First year Classes Literary and Scientific Streams
Source	At the Cross Roads
Unit One	Getting Through (pp : 14-39)
Sequence Two	Reading and Writing (pp : 20-23)
Pedagogical Materials	The textbook, the whiteboard , data show, work sheets
Objectives	<p>By the end of this sequence, pupils should be able to :</p> <ul style="list-style-type: none">➡ Read and respond to an e-mail➡ Write an e-mail.➡ Describe a place.➡ Describe people's daily activities.➡ Use the simple present tense +frequency adverbs: rarely, seldom, etc.➡ Use degree adverbs and reflexive pronouns (myself, yourself, etc.)➡ Use prepositions of place: in the east, in the north, etc.

Lesson Plan 02

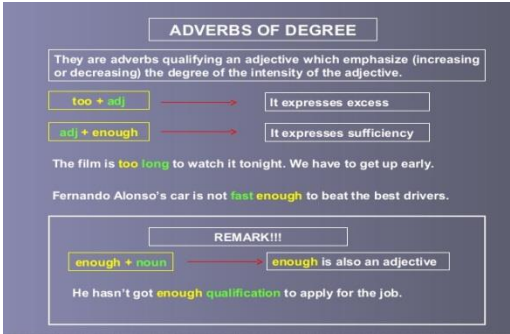
Teacher	Ms. Imene CHEBRI	Class level	First Year Scientific and Literary Streams
Observer	Mr. ACHOURI	Source	At the Cross Roads
School year	2013/2014	Unit	Getting Through
Room	03/08	Sequence	Reading and Writing
Expected no. of pupils	30/ 39	Rubric	Discover the Language

Context	Telecommunication
Teaching aids/materials	The textbook, data show, whiteboard , hand outs, slides , work sheets, and tape recorder
Target Intelligences	V, Math, ling, B, Na, M, Inter and Intra
Target skills	Reading and writing

Learners' objective (s): by the end of the lesson learners will be to be able to	- Use degree adverbs in coherent sentences
Time	55 mns

Aspects of Language to be taught	Degree adverbs
Aspects of Culture	/
Assessment	Tasks 01, 02, 03, and act 08 p 23
SARS	Teacher adapted some activities and tasks and rejected some of the textbook activities and supplemented the by new ones

Abbreviations	T: Teacher Pps: Pupils mns: minutes S:select, A: adapt, R: reject, S: supplement
----------------------	--

Practice	To refresh the Pps' memory	V + Ling+ Intra	T- Pps	<p>➤ T presents a chart of degree adverbs and explains their use and their placement.</p>	5mns
			Pps- Pps	<p>0% Not at all Not very A bit Rather Quite Very Extremely 100%</p> 	
		Inter+ B+ Ling	T- Pps	<p>➤ T asks Pps to give examples. ➤ Pps give their examples: too, enough, much, quite, almost, hardly, absolutely, fully, etc.</p>	
To know the position of degree adverbs in the sentence	N+ Math + Ling	Pps-Pps	<p>Activity 08 page 23:</p> <p>➤ Pick out from the email 4 ordinary adjectives with degree adverbs. Order the adverbs from the highest to the lowest.</p> <p>Key:</p> <ul style="list-style-type: none"> ✓ A little bit far ✓ Rather small ✓ Quite a common ✓ Very nice ✓ Extremely harsh 	5mns	

Production	To check the Pps' understanding	Inter +Ling +B+ Math	T- Pps Pps- Pps	<p>Task01: Pair Work</p> <ul style="list-style-type: none"> ➤ Complete the sentences with adverbs of degree. Get your answers from the word bank. ➤ Pps do the task (they are allowed to use dictionaries to check the meaning of the difficult words). 	10mns																					
	To consolidate the use of degree adverbs	Inter+ Ling+ Math+ Na	T – Pps Pps – Pps	<p>Task02: Pair Work</p> <ul style="list-style-type: none"> ➤ Pick out all the adverbs of degree and the words they modify and classify them in the following table. <p>Key:</p> <table border="0"> <thead> <tr> <th>Degree Adverbs</th> <th>Words they modify</th> </tr> </thead> <tbody> <tr><td>1. somewhat</td><td>1. magical</td></tr> <tr><td>2. very</td><td>2. handsome</td></tr> <tr><td>3. rather</td><td>3. interested</td></tr> <tr><td>4. equally</td><td>4. loved</td></tr> <tr><td>5. highly</td><td>5. interesting</td></tr> <tr><td>6. very</td><td>6. closely</td></tr> <tr><td>7. extremely</td><td>7. astonished</td></tr> <tr><td>8. completely</td><td>8. engrossed</td></tr> <tr><td>9. soon</td><td>9. realized</td></tr> <tr><td>10. totally</td><td>10. enchanted</td></tr> </tbody> </table>	Degree Adverbs	Words they modify	1. somewhat	1. magical	2. very	2. handsome	3. rather	3. interested	4. equally	4. loved	5. highly	5. interesting	6. very	6. closely	7. extremely	7. astonished	8. completely	8. engrossed	9. soon	9. realized	10. totally	10. enchanted
Degree Adverbs	Words they modify																									
1. somewhat	1. magical																									
2. very	2. handsome																									
3. rather	3. interested																									
4. equally	4. loved																									
5. highly	5. interesting																									
6. very	6. closely																									
7. extremely	7. astonished																									
8. completely	8. engrossed																									
9. soon	9. realized																									
10. totally	10. enchanted																									

	To check the Pps' understanding	Inter + B + Math + Ling	T – Pps Pps – Pps	Task03: Dice game Group Work ➤ Pupils take turns rolling the dice. They must make a sentence using the word the dice lands on to win the points shown on the dice. The students with the most points at the end are the winners.	15mins
--	---------------------------------	-------------------------------	--------------------------	--	--------

Sequence Plan

Level	First year Classes Literary and Scientific Streams
Source	At the Cross Roads
Unit One	Getting through (pp : 14-39)
Sequence Three	Developing Skills (pp : 24-28)
Pedagogical Materials	The textbook, the whiteboard , data show, work sheets
Objectives	<p>By the end of this sequence, pupils should be able to :</p> <ul style="list-style-type: none">➤ Listen, respond to telephone messages.➤ Read and respond to short messages.➤ Write a letter of enquiry.➤ Express obligation and necessity.➤ Write short notes (invitations, apologies, etc).

Lesson Plan 03


Teacher	Ms. Imene CHEBRI	Class level	First Year Scientific and Literary Streams
Observer	Mr. ACHOURI	Source	At the Cross Roads
School year	2013/2014	Unit	Getting Through
Room	03/08	Sequence	Developing Skills
Expected no. of pupils	30/ 39	Rubric	/

Context	Telecommunication
Teaching aids/materials	Data Shaw, whiteboard and hand outs, slides , tape recorder
Target Intelligences	V, Math, ling, B, Na, Inter and Intra
Target skills	Listening and speaking

Learners' objective (s): by the end of the lesson learners will be to be able to	<ul style="list-style-type: none"> - Write an invitation letter - Write a letter of apology
Time	55 mns

Aspects of Language to be taught	The use of formal language
Aspects of Culture	/
Assessment	Tasks 01 and 02
SARS	Teacher rejected the activities of the textbook and supplemented them by new ones

Abbreviations	T: Teacher Pps: Pupils mns: minutes S:select, A: adapt, R: reject, S: supplement
----------------------	--

Phase	Rationale	Intelligences	Interaction pattern	Procedures	Time
Warm up	To introduce the theme of the lesson	V+ Ling+ Inter	T- Pps Pps- Pps	<ul style="list-style-type: none"> ➤ T presents a series of cards and asks Pps: What are these cards used for? ➤ Pps: they are invitation cards; people use them to invite their friends and relatives for a birthday or a wedding. <div style="text-align: center;">  </div>	5mns
Presentation	To Know the form of a formal and informal letters of invitation and apology	V+ Ling+ inter Intra+ B+ V	T- Pps Pps- Pps	<ul style="list-style-type: none"> ➤ T displays a large invitation and leads the Pps in a discussion with the following questions about the invitation card. <ul style="list-style-type: none"> ✓ Who created this invitation card? ✓ What type of events is this invitation for? ✓ When does the event take place? ✓ Where does the event take place? ✓ How can you tell the person whether you are attending the event or not? ➤ Pps participate in the discussion and give different answers. 	5mns

	To show the form of a formal and informal letter	Ling+ intra+ Math	T- Pps Pps- Pps	<ul style="list-style-type: none"> ➤ T presents the different forms of invitations (formal and informal) along with the refusal or acceptance notes. ➤ T explains the different parts of the invitation and points out the differences between formal and informal ones. <div style="border: 1px solid orange; border-radius: 15px; padding: 10px; margin: 10px 0;"> <p>A formal note contains formal language (titles of respect, complete, sentences, polite forms)</p> <p>An informal note has simple informal language (contractions, abbreviations)</p> </div> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;">Informal invitation</th> <th style="text-align: center;">Formal invitation</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Form</td> <td>Simple/straightforward</td> <td>Well organized</td> </tr> <tr> <td style="text-align: center;">Content</td> <td>Simple/straightforward requests. No R.S.V</td> <td>Polite respect (R.S.V) Répondre s' il vous plait</td> </tr> <tr> <td style="text-align: center;">Situations</td> <td>Home /friend</td> <td>School, distraction</td> </tr> </tbody> </table>		Informal invitation	Formal invitation	Form	Simple/straightforward	Well organized	Content	Simple/straightforward requests. No R.S.V	Polite respect (R.S.V) Répondre s' il vous plait	Situations	Home /friend	School, distraction	10mns
	Informal invitation	Formal invitation															
Form	Simple/straightforward	Well organized															
Content	Simple/straightforward requests. No R.S.V	Polite respect (R.S.V) Répondre s' il vous plait															
Situations	Home /friend	School, distraction															

<p>Practice</p>	<p>To consolidate the Pps' understanding</p>	<p>V+ Math+ ling+ inter + B</p>	<p>T- Pps Pps- Pps</p>	<p>Task01 : Pair Work</p> <p><i>Step One</i></p> <ul style="list-style-type: none"> ➤ T divides the Pps into pairs and provides them with work sheets which contain formal and informal invitations and the acceptance and refusal, and asks them to identify their types (they have to justify their answers). ➤ Pps do the task ➤ T helps and guides them. <p><i>Step Two</i></p> <ul style="list-style-type: none"> ➤ T gives the Pps work sheets which contain formal and informal notes of apology and asks them to identify their types (they have to justify their answers). ➤ Pps do the task and present it to their classmates. ➤ T provides feedback. 	<p>15mns</p>
<p>Production</p>	<p>To write an informal letter of invitation</p>	<p>V+ Inter + B + Math + Ling</p>	<p>T- Pps Pps- Pps</p>	<p>Task 02: Pair Work</p> <ul style="list-style-type: none"> ➤ T divides the pupils into pairs and asks them to write invitation cards to their mates. ➤ Pps do the task then exchange their cards for peer correction. ➤ T provides feedback. ➤ Each of the pairs writes a thank you note. ➤ T takes them for the final assessment. 	<p>20mns</p>

Sequence Plan

Level	First year Classes Literary and Scientific Streams
Source	At the Cross Roads
Unit One	Getting through (pp : 14-39)
Sequence Four	Stop and Consider (pp : 29-34)
Pedagogical Materials	The textbook, the whiteboard , data show, work sheets
Objectives	<p>By the end of this sequence, pupils should be able to :</p> <ul style="list-style-type: none">➡ Use link words: to, in order to, and so as to.➡ Use articles: definite, indefinite and zero articles.➡ Use: both... and, either ... or ... and neither ... nor.➡ Use models: must, have to, and had to.➡ Use reflexive pronouns: myself, yourself, etc.

Sequence Plan

Level	First year Classes Literary and Scientific Streams
Source	At the Cross Roads
Unit One	Getting Through (pp : 14-39)
Sequence Five	Consolidation an Extension (pp : 35-38)
Pedagogical Materials	The textbook, the whiteboard , data show, work sheets
Objectives	By the end of this sequence, pupils should be able to : <ul style="list-style-type: none">➔ Fill in a form and write a letter of application.➔ Write a Curriculum Vita.➔ Recognize problem consonants (/f/, /v/...).

Unit Plan

Unit Two	Our Findings Show (pp : 76 – 100)			
	Skills	Functions	Language Forms	Phonology
Sequence One	-Listening and responding to an interview -Reporting orally what the horoscope says	-Expressing like and dislikes -Expressing a point of view/opinion	-Adjectives ending in ‘-ly’ -Degree adverbs: quite/ absolutely, etc.	-intonation in formal and informal requests. -Stress in two syllable words
Sequence Two	-Reading a graph/report -interpreting survey results -Writing a report	-Reporting Questions -Asking for and giving information	-Direct/reported speech :s/he asked if/where/when/what, etc.	-Pronunciation of /h/in stressed and unstressed syllables
Sequence Three	-Filling a questionnaire -Conducting an interview -interpreting survey results -Writing a report/diary	-Giving advice -Inviting -Expressing order, requests, advice and suggestion.	-Question marks -reporting verbs : suggested /ordered... etc. -Direct/reported speech : orders requests...etc	-Problem consonants :silent letters and pronunciation of final ‘-s’ in words
Sequence Four			-Direct/reported speech transformations -Adverbs of Manner -Suffixes ‘-ful’/ ‘-less’	-Pronunciation of suffixes ‘-ful’ and ‘-less’
Sequence Five	-Writing an article to report about an accident -Writing a memo to report about health problems.	-Making suggestions/ recommendations -Narrating -Expressing a point of view	-Punctuation and capitalisation -Adverbs of manner	-Pronunciation of final ‘-s’ and ‘-es’

Project

Conducting a survey
Further information are included on page 100

Sequence Plan

Level	First year Classes Literary and Scientific Streams
Source	At the Cross Roads
Unit Two	Our Findings Show (pp : 76-100)
Sequence One	Listening and Speaking (pp : 78-81)
Pedagogical Materials	The textbook , the whiteboard ,handout, videos, data show, work sheets
Objectives	<p>By the end of this sequence, pupils should be able to :</p> <ul style="list-style-type: none">➡ Listen, respond to an interview.➡ Mark stress in compound nouns and shift stress from noun to adjective.➡ Read what horoscopes say about one's personality and report orally and in writing what the stars say.

Sequence Plan

Level	First year Classes Literary and Scientific Streams
Source	At the Cross Roads
Unit Two	Our Findings Show (pp : 76-100)
Sequence Two	Reading and Writing (pp : 82- 85)
Pedagogical Materials	The textbook , the whiteboard ,handout, videos, data show, work sheets
Objectives	<p>By the end of this sequence, pupils should be able to :</p> <ul style="list-style-type: none">➡ Read and interpret a graphic display.➡ Report questions.➡ Pronounce the sound « h » in unstressed syllables.➡ Use direct and reported speeches.

Sequence Plan

Level	First year Classes Literary and Scientific Streams
Source	At the Cross Roads
Unit Two	Our Findings Show (pp : 76-100)
Sequence Three	Developing Skills (pp : 86-91)
Pedagogical Materials	The textbook , the whiteboard ,handout, videos, data show, work sheets
Objectives	<p>By the end of this sequence, pupils should be able to :</p> <ul style="list-style-type: none">➔ Conduct an interview➔ Read and interpret a newspaper article.➔ Summaries what people say: orders, requests, greetings, etc.

Sequence Plan

Level	First year Classes Literary and Scientific Streams
Source	At the Cross Roads
Unit Two	Our Findings Show (pp : 76-100)
Sequence Four	Stop and Consider (pp : 92-95)
Pedagogical Materials	The textbook , the whiteboard ,handout, videos, data show, work sheets
Objectives	<p>By the end of this sequence, pupils should be able to :</p> <ul style="list-style-type: none">➡ To transform direct into indirect speech➡ Use reported speech with statements and question.➡ Use adverbs of manner.➡ Form and pronounce adjectives ending in ‘-ful’ an ‘-less’.

Sequence Plan

Level	First year Classes Literary and Scientific Streams
Source	At the Cross Roads
Unit Two	Our Findings Show (pp : 76-100)
Sequence Five	Consolidation and Extension (pp : 96-99)
Pedagogical Materials	The textbook , the whiteboard ,handout, videos, data show, work sheets
Objectives	<p>By the end of this sequence, pupils should be able to :</p> <ul style="list-style-type: none">➡ Write a report.➡ Identify silent letters.➡ Pronounce final ‘-s’ and ‘-es’ in different words.

Unit Plan

Unit Three	Back to Nature (pp : 139 – 161)			
	Skills	Functions	Language Forms	Phonology
Sequence One	<ul style="list-style-type: none"> -Listening to a radio interview about pollution -Writing an SOS about pollution 	<ul style="list-style-type: none"> -Expressing opinion -Expressing feelings -Expressing condition 	<ul style="list-style-type: none"> -If conditional (1) 	<ul style="list-style-type: none"> -Intonation in yes/no questions and complex sentences Stress in words ending in ‘-tion’
Sequence Two	<ul style="list-style-type: none"> -Reading and responding to a magazine article -Categorizing 	<ul style="list-style-type: none"> -Expressing cause and effect -Describing a 	<ul style="list-style-type: none"> -Link words : as a result, consequently -Sequencers : firstly, secondly, etc. 	
Sequence Three	<ul style="list-style-type: none"> -Conducting a meeting -Writing minutes of a meeting -Reading and interpreting and advert -Writing an advert 	<ul style="list-style-type: none"> -Expressing suggestion -Expressing opinions -Agreeing and disagreeing -Arguing for and against -Polite requests/interrupting 	<ul style="list-style-type: none"> -I think ... -I agree/disagree -You are right... -In my opinion, could/can I... ? 	
Sequence Four			<ul style="list-style-type: none"> -Conditional/types 0,1 and 2 -Suffixes: --able/-al, etc. -Quantifiers: All, some, a few, etc. 	<ul style="list-style-type: none"> -Stress in words starting with prefixes
Sequence Five	<ul style="list-style-type: none"> -Reading articles about recycling and renewable energies -Writing a letter of complaint -Writing a memo 	<ul style="list-style-type: none"> -Describing -Suggesting -Arguing 	<ul style="list-style-type: none"> -Prefixes : il-, ir-, dis-, etc. 	

Project

Designing a consumer's guide
Further information is included on page 161

Sequence Plan

Level	First year Classes Literary and Scientific Streams
Source	At the Cross Roads
Unit Tree	Back to Nature (pp : 139-161)
Sequence One	Listening and Speaking (pp : 140-143)
Pedagogical Materials	The textbook, the whiteboard , data show, videos , pictures, work sheets
Objectives	<p>By the end of this sequence, pupils should be able to :</p> <ul style="list-style-type: none">➔ Listen and respond to a radio interview➔ Write a SOS about pollution.➔ Express feelings, opinions, and suppositions.➔ Mark stress in words ending in ‘-tion’, and ‘-ssion’.➔ Recognize and mark intonation in yes/no questions and complex sentences.➔ Express condition using « if ».

Sequence Plan

Level	First year Classes Literary and Scientific Streams
Source	At the Cross Roads
Unit Three	Back to Nature (pp : 139-161)
Sequence Two	Reading and Writing (pp : 144-147)
Pedagogical Materials	The textbook, the whiteboard , data show, videos , pictures, work sheets
Objectives	<p>By the end of this sequence, pupils should be able to :</p> <ul style="list-style-type: none">➤ Read and respond to a newspaper article about pollution➤ Deduce the meaning of words from context.➤ Express cause and effect.➤ Write and expository paragraph about pollution

Sequence Plan

Level	First year Classes Literary and Scientific Streams
Source	At the Cross Roads
Unit Tree	Back to Nature (pp : 139-161)
Sequence Four	Stop and Consider (pp : 152 - 155)
Pedagogical Materials	The textbook, the whiteboard , data show, videos , pictures, work sheets
Objectives	<p>By the end of this sequence, pupils should be able to :</p> <ul style="list-style-type: none">➤ Identify conditional sentences type 0, 1 and 2➤ Form adjective by adding suffixes –able, -ible, -ous, etc.➤ Use quantity words: most, all, etc.

Sequence Plan

Level	First year Classes Literary and Scientific Streams
Source	At the Cross Roads
Unit Tree	Back to Nature (pp : 139-161)
Sequence Five	Consolidation and Extension (pp : 156-160)
Pedagogical Materials	The textbook, the whiteboard , data show, videos , pictures, work sheets
Objectives	<p>By the end of this sequence, pupils should be able to :</p> <ul style="list-style-type: none">➤ Read article about renewable energies➤ Read article about recycling.➤ Read for details➤ Suggesting solutions➤ Argue a point of view➤ Writing a memo

Sequence Plan

Level	First year Classes Literary and Scientific Streams
Source	At the Cross Roads
Unit Three	Back to Nature (pp : 139-161)
Sequence Three	Developing Skills (pp : 148-151)
Pedagogical materials	The textbook, the whiteboard , data show, videos , pictures, work sheets
Objectives	<p>By the end of this sequence, pupils should be able to :</p> <ul style="list-style-type: none">➤ Conduct a meeting.➤ Read and respond to an advertisement.➤ Write an advertisement.➤ Recognise and mark intonation in yes-no and wh-questions.➤ Write the minutes of a meeting.

Unit Plan

Unit Four	Eureka ! (pp : 108 – 131)			
	Skills	Functions	Language Forms	Phonology
Sequence One	-Listening to a presentation of an invention -Note taking -Speaking from notes	-Describing an object -Questioning	-Have you got any idea who ... ?/ Can you tell me who... ?	-Intonation in indirect questions -Stress shift (noun-adjective)
Sequence Two	-Reading an article about the evolution of telecommunication -Writing from a flow chart	-Narrating Expressing concession	-Link words : however, though, even though, etc.	
Sequence Three	-Listening and making a product presentation -Writing a business letter from product specifications -Reading and interpreting an advert -Writing an advert	-Describing an object -Comparing -Contrasting -Expressing opinion	-What is its height/width... ?How wide/deep is... ?	
Sequence Four			-Prepositions :in, with, -Articles : the, a, etc -So+ adj+ that -Future perfect -Relative pronoun :who , whom and which -The imperative -Modal auxiliaries : should , shouldn't, etc	-Stress in words starting with prefixes
Sequence Five	-Drawing /writing a conclusion -Summarizing -Reading a warning notice -Taking sides in a debate	-Narrating -Expressing opinion and reporting facts -Asking for and giving advice		-Problem consonant : /n/, /ŋ/, etc

Project

Making a profile of an invention
Further information is included on page 131

Sequence Plan

Level	First year Classes Literary and Scientific Streams
Source	At the Cross Roads
Unit Four	Eureka (pp : 108-131)
Sequence One	Listening and Speaking (pp : 110-113)
Pedagogical Materials	The textbook, the whiteboard , data show, videos , pictures, work sheets
Objectives	<p>By the end of this sequence, pupils should be able to :</p> <ul style="list-style-type: none">➤ Listen and respond to a presentation of an invention➤ Mark intonation in indirect questions➤ Mark stress in names of sciences and adjectives derived from them➤ Speak about inventions, discoveries and developments in technology➤ Write a short paragraph about an invention.

Sequence Plan

Level	First year Classes Literary and Scientific Streams
Source	At the Cross Roads
Unit Four	Eureka (pp : 108-131)
Sequence Two	Reading and Writing (pp : 114-117)
Pedagogical Materials	The textbook, the whiteboard , data show, videos , pictures, work sheets
Objectives	<p>By the end of this sequence, pupils should be able to :</p> <ul style="list-style-type: none">➤ Read and respond to a text about the development of telecommunication➤ Express concession using link words: however, although, though, even though, etc.➤ Write a paragraph out of a flow chart : write a profile about the evolution of an invention

Sequence Plan

Level	First year Classes Literary and Scientific Streams
Source	At the Cross Roads
Unit Four	Eureka (pp : 108-131)
Sequence Three	Developing Skills (pp : 118-121)
Pedagogical Materials	The textbook, the whiteboard , data show, videos , pictures, work sheets
Objectives	<p>By the end of this sequence, pupils should be able to :</p> <ul style="list-style-type: none">➔ Listen and respond orally to the presentation of a product.➔ Read and respond in writing to the presentation of a product.➔ Read a newspaper article from an opinion page.➔ Respond in writing to opinions about technology.

Sequence Plan

Level	First year Classes Literary and Scientific Streams
Source	At the Cross Roads
Unit Four	Eureka (pp : 108-131)
Sequence Four	Stop and Consider (pp: 122- 125)
Pedagogical Materials	The textbook, the whiteboard , data show, videos , pictures, work sheets
Objectives	<p>By the end of this sequence, pupils should be able to :</p> <ul style="list-style-type: none">➡ Use definite and indefinite articles.➡ Express result using so + adjective + that.➡ Describe an object.➡ Use the future perfect to predict completed actions in the future.

Sequence Plan

Level	First year Classes Literary and Scientific Streams
Source	At the Cross Roads
Unit Four	Eureka (pp : 108-131)
Sequence Five	Consolidation and Extension (pp : 126- 130)
Pedagogical Materials	The textbook, the whiteboard , data show, videos , pictures, work sheets
Objectives	<p>By the end of this sequence, pupils should be able to :</p> <ul style="list-style-type: none">➤ Write a paragraph out of a flow chart about an invention.➤ Write an inventor’s biography.➤ Identify problems related to video-games.➤ Identify problem sounds: /n/ and /ŋ/

Résumé

Cette étude visera à dénaturer l'influence du travail de groupe (collectif) et les activités préparées sur les théories cognitives d'intelligences multiples, on prend en considération les différentes méthodologies d'apprentissage chez les apprenants, sur l'acquisition scientifique de la langue anglaise des apprenants dans les classes de la première année secondaire. Et pour effectuer cette étude nous avons pris deux échantillons, l'un d'une classe scientifique et l'autre on le second d'une classe littéraire, nous avons enseigné ces deux classes en appliquant cette méthode proposée durant toute une année, en exerçant dans tout cela un nombre considérable d'exercices programmés dans le manuel scolaire et qui ont été aménagés suivant la théorie des intelligences multiples de Howard Gardner. En plus, la prise en compte des systèmes du travail de groupe ou collectif, en prendra en considération les différentes méthodes de l'apprentissage chez l'élève. Et on a affirmé (approuvé) par les résultats obtenus de cette étude, l'efficacité de cette méthode dans le développement du niveau d'apprentissage chez les élèves de la première année secondaire dans la langue anglaise.

Mots-clés: Les Intelligences Multiples, Travail de Groupe (Collectif), les différentes méthodologies d'apprentissage, L'Approche par Compétences

ملخص

يهدف هذا البحث على تقصي حقيقة التأثير الإيجابي لتطبيق التعليم الجماعي (CL) وذلك من خلال الأفكار المستمدة من نظرية هوارد غاردنر في الذكاءات المتعددة (MI)، وأساليب التعليم الإدراكية (PLS) عند ريد على اتقان التلاميذ للغة الإنجليزية في الطور الثانوي. للتأكد من صحة النظرية المطروحة تجرى دراسة ميدانية على عينة من 138 تلميذ للسنة الأولى ثانوي (قسمين من الشعبة العلمية وقسمين من الشعبة الأدبية)، وذلك من مجموع 210 تلميذ ممتدرس بثانوية عاتي عبد الحفيظ بوادي العثمانية ولاية ميلة خلال السنة الدراسية 2013-2014. بالإعتماد على الأنشطة التعليمية التي تم تكييفها من الكتاب المدرسي للسنة الأولى ثانوي (At the crossroads)، واستنادا إلى نظرية غاردنر في الذكاءات المتعددة ومنهج العمل الجماعي مع الأخذ بأنماط التعلم الإدراكية للتلاميذ في بناء خطط الدرس يتم جمع المعطيات بالدراسة من مصدرين: الأول: اختبارات المهارات اللغوية الثلاثة (الكتابة، القراءة، السمع) وكذا الإمتحانات الفصلية الثلاثة والثاني: استبيان مقدم للتلاميذ لمعرفة مدى تغيير مواقفهم ودوافعهم من دراسة اللغة الإنجليزية بعد تطبيق المنهج التعليمي المبني على نظرية غاردنر المنهج الجماعي وكذا أنماط التعلم المختلفة للتلاميذ، وأظهرت نتائج الدراسة أن العينة التجريبية التي يتم تدريسها باستخدام الطريقة التعليمية المبنية على نظرية غاردنر هوارد ومنهج التعلم الجماعي والأنماط التعليمية المختلفة تفوقت على العينة التي تم تدريسها على طريقة المقاربة بالكفاءات في جميع الإختبارات (اختبارات المهارة والفصلية) استنادا إلى نتائج هذه الدراسة يمكننا القول أن اعتماد النظرية المطروحة في تدريس التلاميذ السنة الأولى ثانوي يؤثر بشكل إيجابي في تحسين مهاراتهم في اللغة الإنجليزية.

الكلمات المفتاحية: الذكاءات المتعددة , العمل الجماعي , طرق التعلم الإدراكية و المقاربة بالكفاءات