

People's Democratic Republic of Algeria Ministry of Higher Education and Scientific Research Mohamed Khider University of Biskra **Faculty of Letters and Languages Department of Foreign Languages Section of English**



The Effect of Design Thinking as a Pre-Writing Strategy on Students' Paragraphs

Case Study: Second Year LMD Students at Mohamed Kheider University-Biskra

Dissertation Submitted in partial fulfillment for the requirements of the master degree in Sciences of Language

Presented by: Fatima-Zohra RAHMANI Supervised by: Dr. Saliha CHELLI

Board of Examiners

President: Mrs. Iméne GUETTAL University of Biskra Supervisor: Dr. Saliha CHELLI University of Biskra **Examiner: Mr. Walid OUNALI**

University of Biskra

Dedication

In the Name of Allah, the Most Merciful, the Most Compassionate

All praise be to Allah, the Lord of the worlds; and prayers and peace be upon Mohamed

His servant and messenger.

A special feeling of gratitude to **my loving parents**, the most precious persons to my heart.

May Allah bless them.

They believed in me and prayed for my success.

This work is dedicated:

To my mother **Salima** who remain unmatched in her incomparable sacrifices, deepest love, boundless patience and chiefly greatest encouragement

To my father **Cherif** for his confidence in me, never-ending encouragement and love and for the financial support of the research

To my only brother Seif eddine and my two sisters Sabrina and Ismahen, their husbands,

KHIREDDINE Nedjib and DJOUDI Ali, sons Mohamed Ayoub and Nael and daughters

Rihem and Sara

I owe much to my dear husband **NECHE Mohamed** for his understanding, patience and help to accomplish this. I am truly thankful for having you in my life.

To my second family **Neche**: my father in law **Abd El Kader**, my mother in law **Naima**, my sisters and my brothers in law.

To my extended family and my relatives for their constant support

To my faithful, dearest and closest friends friends and all those who supported me along my studies especially SID Lamia, CHABII Sihem and Amira.

Acknowledgment

All my gratitude goes to my supervisor **Dr. Saliha CHELLI** whose sound advice and intellectual guidance demonstrated confidence in me and contributed largely to the elaboration and completion of this task. She has been always generous during all phases of the research, and I highly appreciate the efforts expended by her.

I am utterly grateful to the examining members of the jury Mrs. Iméne GUETTAL and Mr. Walid AOUNALI whose valuable remarks will surely help me to polish this work.

My special thanks go to Mrs. Djamila LADJALI for allowing me the opportunity to make my experiment during her courses.

My profound thanks to the second year LMD students (Group 1 and 2) for being completely collaborative during the experiment.

Sincere gratitude is hereby extended to **my parents** who have always loved me unconditionally and whose good examples have taught me to work hard for the things that I aspire to achieve to pursue my interests.

Abstract

Because writing is one of the highly complicated and difficult processes, the majority of learners of English as a foreign language at Biskra University find it difficult to master all its aspects and produce adequate written productions. Therefore, EFL teachers are in constant search of appropriate strategies that can assist their learners to develop their writing skill and achieve effective communication. Teachers' awareness of using appropriate strategies, various techniques and procedures could enhance learners' writing level. This research work attempted to investigate the effect of design thinking as a pre-writing strategy on second -year students' paragraphs at Biskra University, section of English. In order to confirm or reject the hypothesis that the implementation of such a pre-writing strategy would bring on positive results, two intact groups: a control group (N =17) and an experimental group (N=17) were randomly selected for a quasi - experimental study. This investigation was carried out by comparing the pre and post experiment writing tests to show the effects of the treatment. The t-test value (3.17), being greater than the critical value (1.69) of a = 0, 05 degrees of freedom, revealed that the participants achieved greater levels in terms of content and organization. Accordingly, due to the significant role that the design thinking technique had on students' writing level, reconsideration of the importance of pre-writing strategies in writing in English should be taken into account.

List of Abbreviations

Cg: Control Group

Eg: Experimental Group

LMD: License, Master, Doctorate

DT: Design thinking

EFL: English as a Foreign Language

List of Tables

Table 2.1: Selective Overview of Relevant Definitions for the Term Design Thinking42
Table 2.2: Characteristics of Design Thinkers
Table 2.3: Comparison of Several Design Thinking Process Models. 49
Table 3.4: Scoring Criteria82
Table 3.5: The Control Group Pre-test scores. 83
Table 3.6: The Control Group Pre-test scores and Their Frequencies
Table 3.7: The Control Group Overview of Means Scores of Paragraph Writing84
Table 3.8: The Experimental Group Pre-test scores. 85
Table 3.9: The Experimental Group Pre-test scores and Their Frequencies
Table 3.10: The Experimental Group Overview of Means Scores of Paragraph Writing87
Table 3.11: The Experimental Group Overall Treatment Scores
Table 3.12: The Experimental Group Overall Treatment Results. 89
Table 3.13: The Experimental Group Overall Treatment Means Scores90
Table 3.14: The Control Group Post-test scores. 90
Table 3.15: The Control Group Post-test scores and Their Frequencies. 91
Table 3.16: The Control Group Overview of Means Scores of Paragraph Writing92
Table 3.17: The Experimental Group Post-test scores. 93
Table 3.18: The Experimental Group Post-test scores and Their Frequencies93
Table 3.19: The Experimental Group Overview of Means Scores of Paragraph Writing94
Table 3.20: Overall Pre- test/Post-test Differences of Control Group 95
Table 3.21: Overall Pre- test/Post-test Differences of Experimental Group96
Table 3.22: The Control Group Pre-Test Results
Table 3.23: The Control Group Post-Test Results 98

Table 3.24: The Experimental Group Pre-Test Results.	99
Table 3.25: The Experimental Group Post-Test Results.	.99
Table 3.26: The Experimental Group and the Control Group Scores Differences in	
Paragraph Writing	99
Table 3.27: The Experimental Group T-test value Results.	.101

List of Figures

Figure 1.1: The Writing Process	25
Figure 1.2: Application of the Process Genre Approach	29
Figure 2.3: The Clustering Technique Example.	33
Figure 2.4: How to write Great Essay, Sample Concept Map	34
Figure 2.5: The Design Thinking Process	46
Figure 3.6: Pre- test and Post-test of Control Group and Experimental Group Design	55
Figure 3.7: The Control Group Pre-Test Results	85
Figure 3.8: The Experimental Group Pre-Test Results	87
Figure 3.9: The Control Group Post-Test Results	92
Figure 3.10: The Experimental Group Post-Test Results	94

Contents

Dedication	II
Acknowledgement	III
Abstract	IV
List of abbreviations.	V
List of tables	VI
List of figures	IX
General Introduction	
1. Statement of the Problem	1
2. Significance of the study	2
3. Aims of the Study	3
4. Research Questions	3
5. Research Hypothesis	3
6. Research Methodology	4
6.1. Population and sample	4
6.2. Data gathering tool	4
7. Structure of the Dissertation	4
Chapter One: The Writing Skill and the process	approach
Introduction	6
1.1. The writing skill	6
1.1.1. What is writing	6
1.1.2. Purpose of learning writing	9
1.1.3. Writing in a foreign language	11
1.1.4. Writing forms	12

1.1.4.1. Paragraph writing	12
1.1.4.1.1. What is a paragraph	12
1.1.4.1.2. Paragraph structure /organization	13
1.1.4.1.3. Types of paragraphs	14
1.2. Writing Instruction	18
1.2.1. Teaching writing in the EFL classroom	18
1.2.2. Approaches to teaching writing	19
1.2.2.1. The product approach	20
1.2.2.2. The creative approach	21
1.2.2.3. The cooperative approach	22
1.2.2.4. The process approach	23
1.2.2.4.1. Definition of the process approach	23
1.2.2.4.2. Stages of the process approach	25
1.2.2.5. The genre approach	28
1.2.2.6. The process genre approach	28
Conclusion	31
Chapter Two: Design Thinking as a Pre- Writing Strategy	
Introduction	32
2.1. Pre-writing strategies	32
2.2. The design thinking strategy	
2.2.1. The origin of the design thinking strategy	
2.2.2. Definition of the design thinking process	
2.2.3 Characteristics of the design thinking strategy	43

2.2.4. The design thinking procedure	45
2.2.5. Design Thinking in the Classroom	50
Conclusion	53
Chapter Three: Implementation of the Experiment and Analysis of	
Findings	
Introduction.	54
3.1 Aim of the Experiment	54
3.2 The Population and Sample	54
3.3 Experimental Procedure	55
3.3.1 The Pre-test.	55
3.3.2 The treatment	56
3.3.3 The Post-test.	56
3.4. Content of the Experiment	57
3.4.1 First Course: Process Paragraph.	57
3.4.2 Second Course: Cause and effect Paragraph	61
3.4.3 Third course: Comparison and contrast Paragraph	67
3.4.4 Fourth Course: Argumentative Paragraph	73
3.4.5 Fifth Course: Classification Paragraph	77
3.5. The scoring Criteria.	81
3.6. Quantitative Results of the Control Group (Descriptive)	82
3.6.1 Pre-test Achievement	82
3.7. Quantitative Results the Experimental Group (Descriptive)	85
3.7. Quantitative Results the Experimental Group (Descriptive)	85
3.7.1 Pre-test Achievement	85

3.8. The Experimental Group Overall Treatment Scores
3.9. The Experimental Group Overall Treatment Results
3.10. The Control Group Achievement90
3.10.1 Post-test Achievement90
3.11. The Experimental Group Achievement
3.11.1 Post-test Achievement92
3.12. Comparative Evaluation of Achievement95
3.12.1. Comparison of Pre-test /Post-test Achievement of Control Group
3.12.2 Comparison of Pre-test/Post-test Achievement of Experimental Group
3.13. Hypothesis Testing96
Conclusion
General Conclusion
Appendix 1: Sample of narrative paragraph
Appendix 2: Sample of Descriptive paragraph
Appendix 3: Sample of Expository paragraph
Appendix 4: Sample of Process paragraph
Appendix 5: Sample of Examples paragraph
Appendix 6: Sample of Definition paragraph
Appendix 7: Sample of Cause and Effect paragraph
Appendix 8: Sample of Comparison and Contrast paragraph
Appendix 9: Sample of Classification paragraph
Appendix 10: Table of Critical Values of the T- distribution: One-Tailed
Appendix 12: Student n° 1 pre-test paragraph
Appendix 13: Student n° 2 pre-test paragraph
Appendix 14: Student n° 3 pre-test paragraph

Appendix 15: Student n° 4 pre-test paragraph

Appendix 16: Student n° 1 post-test paragraph

Appendix 17: Student n° 2 post-test paragraph

Appendix 18: Student n° 3 post-test paragraph

Appendix 19: Student n° 4 post-test paragraph

Summary/ Résumé

General Introduction

1. Statement of the Problem	1
2. Significance of the Study	2
3. Aim of the Study	3
4. Research Questions	3
5. Research Hypothesis	3
6. Research Methodology	4
6.1. Population and sample	∠
6.2. Data gathering tool	4
7. Structure of the Dissertation	4

General introduction

1. Statement of the problem

In the foreign language class, writing is considered one of the most difficult macro skills to be acquired or taught, it is a private work but the writer is never alone since it stands for communication with others (Bazerman, 2010, p. 2). Although writing has been given a great deal of interest and has been taught for a long period of time, students still have problems and fail to reach the university level which emphasises self-motivation, practice and learners' responsibility to ask questions and seek assistance when things are not clear. This problem is due to the fact that students of English at Biskra University lack either the appropriate strategies or they misuse use them; consequently they produce incorrect texts. Thus, teaching this productive skill has been approached differently throughout the history of language teaching.

There are a number of different approaches to the practice of writing skills. Teachers' choice depends on whether they want students to focus more on the process than its product to study different writing genres or encourage creative writing individually or cooperatively. Many researchers as Karol (2001) and Zamel (1983) have dealt with the process approach. According to Williams (2003, p: 106), "The process model proposes that a finished paper is the result of the complex interaction of activities—that include several—stages of development" which means that writing is not a matter of writing down what a learner has as thoughts, but it is a matter of brainstorming ideas, selecting, outlining, thesis, introduction and body. The process this approach concentrates on writing as a recursive process in which writers—have—the opportunity to—plan, write, revise—and—edit—their work.

Since effective writing emphasises the writing product as well as the different stages the learner pass through, pre-writing is the initial stage of the writing process where the learner discovers and explores ideas about the topic and most learners' writing obstacles appear during this phase. This is the case of Algerians students in general and second year LMD EFL learners at Mohamed Kheider University of Biskra specifically. Different writing methods have been used by a variety of researchers with different participants (learners) at multiple settings to evaluate the efficacy of these techniques on learners' compositions. Although satisfactory results have been achieved, what works for one student does not fit the others. Many L2 writing teachers teach the writing methods as a part of the process

approach to teaching writing, but they lukewarm to practise these techniques because of many factors that result from negative reported ones. Although, learning to write well needs the help of another person who is proficient playing the role of a model on the one hand (Servati, 2012, p:7) on the other hand it requires much practice and patience, the more you practise the more you become perfect .

Among the writing methods and techniques available for use, this research examined a new pre-writing method called "the design thinking method" which was used to generate ideas. Because this method served as a reminder of what learners were supposed to think about during the writing process, a primary step was to understand the relationship between the design thinking technique and writing efficiency. Therefore, this study investigated the effect of the design thinking as a pre-writing technique on students' paragraphs.

2. Significance of the Study

Writing compared to the other skills: Reading, listening and speaking is considered as the most sophisticated. This research is significant for the fact that learning to write is a fundamental goal of schooling and a major part of curricula. EFL learners learning to writing instruction is the most important in language learning which is in need of strategies in order to reach a good level of a written text whatever it is a paragraph or any other type.

As a result, teachers and researchers started looking for methods to enhance learners' writing. One of the ways that may have a significant effect on teaching writing process is the design thinking strategy. This provides teachers and students with a technique to overcome the writing difficulties and to facilitate the writing process. Furthermore, it may raise EFL learners' awareness about the crucial benefits that they can gain from the prewriting strategies to develop their compositions because it saves time and effort; the more students make effort during this stage the more they will feel at ease at the rest of the process stages.

The benefits of this study are not only limited to the student but it includes teachers and researchers of this field. On the one hand, it is beneficial for the student since it provides a new technique to develop his/ her compositions in terms of ideas, organization and even length during a satisfactory period of time. It also gives them a picture about what their writings will include before they begin drafting. On the other hand, Teachers will be

equipped with an additional strategy that might well overcome the pitfalls encountered by many students during the writing class. Furthermore, this research will have a contribution in teaching writing beside the other studies in the field as well as researchers will have an experience about the teaching writing.

3. Aim of the Study

The present study aimed to investigate the effectiveness of the design thinking as a pre- writing strategy on students' paragraphs at Mohamed Kheider University. In this research, we tried to explore the differences between EFL students who were taught with the design thinking technique and those who were not.

4. Research Questions

This research aimed to answer the following questions:

1/ What is the design thinking method?

2/ Does the design thinking method affect students' paragraphs in terms of content and organization?

3/ Are there any significant differences in students' writing between the experimental group and the control group?

5. Research Hypothesis

While teaching written expression module at the university it was clearly observable that writing is a difficult subject that students should deal with because it allows them to express their ideas in different ways that make them participants in their classrooms. Their lack of writing proficiency may be due to the ignorance of pre-writing strategies. Hence, we hypothesised that:

If EFL students are taught using the design thinking method, their paragraphs will be developed in terms of content and organization.

6. Research Methodology

This study was conducted by using the quasi-experimental research. To collect data two groups (experimental and control group) were used. The design thinking method was taught and used with the experimental group, but the control one was taught without this method. Both groups were tested before and after the treatment so that to test the efficiency of the treatment.

6.1. Population and Sample

Participants of this study were second year students at Department of foreign Languages, English section at Biskra University. Since it was difficult to deal with the whole population (449 learners), the sample was two groups which was chosen randomly among the existing ones: the first one was the experimental group and it received the treatment and the other one was the control group with no treatment.

6.2. Data Gathering Tools

To answer the research questions an experiment was conducted in the classroom to help the researcher collect data about the knowledge students have about the pre-writing strategies and the problem they encounter in writing.

In order to determine the students' level in writing in relation with the pre-writing strategy the design thinking method" a pre- test was used prior to the study to know the actual level of the students in writing paragraphs. The treatment included the experimental group that was taught to brainstorm through this pre-writing strategy and how it was used to increase their writing proficiency. At the end, both groups passed through a post -test in order to determine whether the design thinking strategy affected students' paragraphs or not.

7. Structure of the Dissertation

The present research is basically divided into three main chapters. Chapters One and Two were devoted to literature survey and Chapter Three was about the analysis of quantitative results obtained from experiment.

The first chapter is devoted to the skill of writing. It comprise a description of what writing is about; the reasons for teaching writing. We will also try to shed light on the different writing form basically paragraph writing with its different paragraph types. In this chapter, we will also try to explore the writing instruction including teaching writing in the EFL classroom and the various approaches to teaching writing, a special focus on the process approach and the different steps the learner goes through to produce a piece of because it serves the nature of the research problem.

The main focus of the second chapter is the pre- writing strategies as a very important stage of the process of writing which help learners to discover what is important or true for them about any subject at any time. In this chapter the researcher had dealt with the most known pre-writing techniques: brainstorming listing, mind mapping, clustering and mainly design thinking the main concern of the present research. Moreover, its history, definition, stages, characteristics and application to education had been presented.

The third chapter sheds light on data analysis. It contains a detailed analysis of the experiment design and the students' t-test. a description of the experiment, the target population, the sample and the materials used was given then the results the obtained in the experiment was reported and the conclusion stated was on the grounds of what the student t-test reveals after analyzing the findings.

CHAPTER ONE

Writing and the Process Approach

Chapter One

Introduction	6
1.1. The writing skill.	6
1.1.1. What is writing	6
1.1.2. Purpose of learning writing	9
1.1.3. Writing in a foreign language	11
1.1.4. Writing forms	12
1.1.4.1. Paragraph writing	12
1.1.4.1.1. What is a paragraph	12
1.1.4.1.2. Paragraph structure /organization	13
1.1.4.1.3. Types of paragraphs	14
1.2. Writing Instruction	18
1.2.1. Teaching writing in the EFL classroom	18
1.2.2. Approaches to teaching writing	19
1.2.2.1. The product approach	20
1.2.2.2. The creative approach	21
1.2.2.3. The cooperative approach	22
1.2.2.4. The process approach	23
1.2.2.4.1. Definition of the process approach	23
1.2.2.4.2. Stages of the process approach	25
1.2.2.5. The genre approach	28
1.2.2.6. The process genre approach	28
Conclusion	31

Introduction

Writing has a great value in both language teaching and learning, thus learners are obliged to make greater effort to reach an adequate level of writing proficiency. A general overview of the writing skill including some important points about writing: its definition, the purpose of learning writing, writing in a second language, its forms, teaching writing in an EFL classroom and approaches to teaching writing will be presented in this chapter.

1.1. The Writing Skill

Within each community, writing is the major mean of communication as it expresses oneself, ideas and feelings. Writing obeys certain procedure for the sake of organization. Moreover, it needs time and consistent practice.

1.1.1. What is Writing?

Writing to communicate dates back to thousands of years. It started as symbols on a cave wall and after years, people began to use alphabets. Although it has been used for thousands of years, it is more important nowadays than ever. Although millions of people are still unable to write and read, humanity relies on writing to a great extent .That is why, it is still not the domain of the well educated people only; but today it has become an important tool of all walks of life. It allows different individuals from different cultures to communicate as well as plays a vital role not only to convey information but also in transforming knowledge.

Writing is the fourth skill in English language learning. For the majority of learners, it is more than the task of writing down on a white sheet of paper what the learner has in his mind, or a speech written in another sense. Mari and Gordon (2000, p. 433) note, "writing is potentially a powerful means of developing one's own understanding of the topic about which one is writing". This means that through writing individuals will be able to enrich their knowledge about the subject matters they will be discussing. Because writing is an important part of the language, Irvin, 2010 sees that:

When we speak, we inhabit the communication situation bodily in three dimensions, but in writing we are confined within the two dimensional setting of the flat page (though writing for the web—or multimodal writing—is changing all that). Writing resembles having a blindfold over

our eyes and our hands tied behind our backs: we cannot see exactly whom we are talking to or where we are. Separated from our audience in place and time, we imaginatively have to create this context. Our words on the page are silent, so we must use punctuation and word choice to communicate our tone. We also cannot see our audience to gauge how our communication is being received or if there will be some kind of response (p.6).

The research of Irvin is based on the assumption that writing is a tool that makes one's meaning clear for oneself on the one hand and for the others in the other hand, but in a fully explicit way for readers distant in time and space. Therefore, writing is a complex productive skill that requires different students' abilities and involves better organization of meaning and more accuracy of form.

Writing is a skill that is used to communicate indirectly without having face to face with other people. According to Bazerman, writing involves other people because you write for other people to read (2010, p.1). Writing was among the earliest forms of communication and has become the most extensive diverse means of communication at a distance (2013, p. 13). Harmer (2007, p.112) claimed that writing can be used as an aid memory that helps students practice the language they have been studying. It is a tool of thinking, feeling, identity, commitment and action (Bazerman, 2013, p.3). For that he, 2013, p.9 stated that: "Writing—the making of texts—is a form of work aimed at transforming the thought and behaviour of others, and thus coordinating relations in the material world, through inscribed language, transmittable through time and space".

Writing is not just effortful but also complex, conscious and involves mental processes which include sub-skills like drafting, editing, revising and organizing (Rijlaarsdan et al, 2015, p.132). Similarly referring to the complexity of writing, Yan Yi notes that learners are in need to use lexical, syntactic, discourse and rhetorical means to achieve certain objectives (2010, p.29). In the same context Richards claims that teaching writing through the emphasis of language structure as a basis is typically a four stage process: familiarization, controlled writing, guided writing and free writing when he said: Writing is viewed as a method based on habit formation and testing learners' capacity to create framed sentences for strengthening language patterns on the one hand and on the other hand the written work is a complicated structure learned through owing the capacity to control lexis and punctuation (2003, p. 3).

Writing is a learned activity that requires both physical and mental activity on the part of the writer. It is used to show how he is related to the material world that helps the learner to transform meanings, relations and identities. According to Bazerman writing, similarly is as every activity in life. To write means people are acting, doing purposeful things, things that change themselves, their connection to everyone and their relations with the material globe. Purposes behind asking for composing are to see a thing needed to be done, how it will be done in a better way as well as assisting others to acquire how to do and how to learn things. Composing is a skilled, invented, learned sociocultural activity—not instinctual, neither programmed straightforwardly under genes nor hormones stimuli-released (2013, p.7).

Writing from its beginning relied on human invention. People are still learning to carry out new activities and work with more deeply; that is why, Creme and Lear (2008, p.4) consider writing as just one way of using language and the learners' other language experiences might well affect how they write. Therefore, the idea we draw from the previous definition is that writing is the activity that is influenced by other language activities thus, Graham and Perin (2007, p.7) point out that "writing is sometimes seem as the flip side of reading" which means that good readers are in almost time proficient writers too.

"Writing is encoding of a message," claims Bachani (nd, p.1). It is a form of graphic symbols that need to be arranged properly to form words and sentences in order to communicate our ideas and translate our thoughts. Torance (2007, p. 18) sees language as the visual representation of the spoken language. It is a process that involves the creation of a permanent and extended text which adapt to the needs of the absent reader and the goals of the writer. Consequently, writing is not just a speech written down, but it is an objective to be designed. This makes of writing a unique individual skill through which the same individual may use different ways of combination and arrangement to express himself that leads him /her to drafting, revising (Kamehameha Schools, 2007, p.2). Based on what has been dealt with before, it can be concluded that writing is a difficult skill that present challenges to the EFL learners. It is the process of inventing and thinking about ideas, how to organize and arrange them properly to express a fully homogeneous piece of writing. The writing products are the result of steps: thinking, drafting and revising this is why writing words is more difficult than writing it.

1.1.2. Purpose of Writing

If we consider why students are asked to write, we may find a variety of reasons. The purpose of writing mainly has to do with writing objectives. Kamehameha Schools note that the act of writing is deeply embedded in students professional lives and todays' societies in general in all the fields since it shapes the human interaction (2007, p1). Writing is a specialized device that translates, thoughts, and sentiments into language at any time and at any place. Being able to write means having the capacity to communicate language with the members of the society through a realistic representation of thoughts. Furthermore, it is a social movement of correspondence and an essential skill for language learners and native speakers. Written work is specifically connected to individuals' roles in the society on the grounds that to be denied of the chance to figure out how to write intends to be barred from a wide range of social roles.

The importance of writing cannot be overestimated. It lies at the basis of other crucial skills as reading. Reading speed and reading comprehension can be both improved through practising writing. Although students may read to gather information, but it is through writing their thoughts became visible for that writing is "a faithful representation of speech" according to Coulmas (2003, p .16). Writing and reading are two comparable skill in that they incorporate similar cognitive and intellectual procedures. They are two of the most fundamental academic and life competences that have a close relationship. At the point when learners read broadly, they turn out to be better writers, which means that reading provides prior knowledge, thoughts, and data that help learners achieve their language. Moreover, both reading and composing are vital instruments to manufacture the structures and elements of a language. Hence, students need to successfully comprehend the elements of the two modes, to build up their level in the learned language.

Alderson and Bachman (2002, p.1) state that the chief function of writing is to support the patterns of language use: grammar and vocabulary. The written work requires knowledge about the different parts of speech, the language structure and how to use them appropriately. Since grammar is a key component not only in writing, but also in language in general. For example in the Process Approach, grammar is taken into consideration at the last stage, but students cannot pay attention to the different stage in the process writing as far as they have obstacles with grammar, punctuation and many other mechanics. Therefore, writing teachers ought to help students overcome this kind of obstacles if they want the writing procedure to work successfully. According to Clark classes were viewed as a "device force preparing a

trained and disciplined work force" (2003, p.1). This means it does not matter how knowledgeable you are if you are not taught how to use and obey the rules as well as it is not enough to have much of vocabulary to reach a good product, but you should know how to combine them into meaningful statements. Similarly, Xin believes that "if vocabulary is the building blocks of language study, then sentences are the layer of the building" (2007, p. 19). Writing and grammar support each other interchangeably, good use of grammar enables learners to achieve good products and through writing learners show their control of the grammar rules.

Writing is no more an opinion, it is a necessity as Graham and Perin claimed it (2007, p.3). Schools, the work places and the community requires a level of writing skill Carroll (1990, p.1) states that: "Without a doubt, the most important invention in human history is writing. It provides a relatively permanent record of information, opinions, beliefs, feelings, arguments explanations, theories, and many other things. Writing allows us to share our communication not only with our contemporaries, but also with future generations it permits people from the near and far distance past to speak to us".

We write to learn, to find our personal satisfaction through the choice of words and the organization of thoughts into coherent explanations for an effective communication (Bazerman, 2010, p. 2). Besides, writing gives students the opportunity to explore their creative inner side, to be persuasive and command respect (Bazerman, 2010, p. 7). He believes that writing is a form of conveying speech that was invented to solve a particular problem (Bazerman, 2010, p. 8). It acts as an aide to express our ideas clearly when we belong to different time and location. According to Canadesikan (2009, p. 2, 3 and 4). Through writing we record events because before "information could exist only if someone could remember it. Once it was gone from memory it was gone for good" In the same context, he stated, "Writing takes words and turns them into objects, visible or tangible. Written down, words remain on the page like butterflies stuck onto boards with pins". Writing; therefore, is a fundamental skill in language learning, we have to be taught how to write; otherwise, we will never be good writers. This implies that writing itself is seen as a discovery, a complex process that is neither easy nor spontaneous for many second or foreign language students and writers. In addition to all these reasons writing fulfils pedagogic purposes in the first and second language. Final studies require from graduate students to submit their research proposals, essays, thesis, thus it is a process that helps students discover themselves (Xin, 2007, p.19).

Summing up, the act of writing is becoming increasingly important in our global community. It helps students express their ideas, personality likes and dislikes, fulfil their own motives, make connections with people to give information and explain it to the readers, and the most important to provide the needed arguments to convince the others about the writers point of view, especially when the receiver of the communication is not physically present.

1.1.3. Writing in English as a Foreign Language

One of students' most challenging aspect is writing in a second language or a foreign language. EFL writing has been a big problem to students in higher education. They feel perplexed and get frustrated easily. However, they need fully develop this skill for various reasons despite all the challenges they may encounter during the EFL writing process.

Learners use the productive skills in order to produce language as it gives them the opportunity to communicate in the classroom. Thus, to write appropriately is a task that most EFL learners hope to accomplish. This writing task is influenced by a variety of factors especially for non –native speakers of language studying in an EFL context. According to Hyland, backgrounds and the personality of students will influence the way and the speed they learn to write in a second language (2003, p. 32). Many people think that EFL writing is affected by the students' first language (L1), but in reality the educational context and setting where they have been learning plays a great role in the improvement of learner's ESL writing (Manchon, 2009, p. 23). Writing in a second language requires the mastery of new vocabulary, format and register conventions (Grossmann, 2009, p. 5). Since the majority of students do not write in their first language, they lack confidence and experience that does not enable them to write in one genre and if they do, it does not mean mastery in another. Yi stated another factor which is the lack of self-motivation (2010, p. 30). Most ESL and EFL students are not motivated to write because they do not know why they need to learn to write or they think they will not understand the writing process and they will not use this skill in everyday life.

Writing in foreign language or in L2 is more troublesome and less successful than writing in L1. It has been proved that students may confront numerous issues including those identified with language. What learners need is to bear in mind that the skill's trouble can be overcome by creating written work procedures that assist in enhancing their composing

abilities. These techniques, lie in seeing the written work as a recursive invention and imaginative procedure too .Thus, affirmation on vocabulary learning and providing enough time to complete and develop a writing task ought to be taken into consideration .

1.1.4. Writing Forms

Writing is supposed to be concise and precise. The meaning of the sentence is not only balanced by words, but also by their relations to each other. Unstructured sentences will mislead the reader therefore; the writer should pay attention to the structure of his /her piece of writing. Writing can take different forms and being a student means you are likely asked to write essays, research papers or dissertations which are based on one unit that is the paragraph.

1.1.4.1. Paragraph writing

To communicate ideas there are diverse sorts of composing such as: letters, essays, paragraphs, dissertations, reports, articles. Among the distinctive sorts of composing, paragraph is the most important, in which EFL learners face numerous troubles to compose and to create a coherent piece of writing.

1.1.4.1.1. What is a Paragraph?

A paragraph is a piece of writing consisting of several related sentences that develop one unit of thought. It is the "basic unit of academic writing" (Boardman and Frydenberg, 2008, p.3) and composition (Ardaunet, 1981, p. 1). Laplount has made a comparison between the paragraph and the family where all the members are related to each other as well as the sentences within the paragraph are also linked one to another (2002, p. 2). It is just one idea claims Hogue (1996, p. 3) that vary in length, it can be one sentence or ten sentences (Oshima, Hogue, 2006, p.2). Zemach and Islam state that the paragraph is just one topic that is developed in about 6-12 sentences either to give information, tell an opinion or explain something (2006, p.1). Usually the first sentence of a paragraph is indented or the rest of the sentences are coherently and cohesively interrelated.

A paragraph can stand alone as a unit, but usually it is a part of a long piece of writing such as an essay. For the writer's communication to be successful, it depends on respecting some conventions and rules of communication that the reader expect to find within the written message. Although, any paragraph should include the three main points that shape its structure, few paragraphs does not contain of a topic sentence especially if it speak about series of events which follow each other and does not refer to one idea that need to be clarified through the sentences that follow it.

1.1.4.1.2. Paragraph Structure /Organization

A paragraph is a structured block that has three main parts: the topic sentence, the supporting details and the concluding sentence. A paragraph begins with a statement that is called "the topic sentence" It is a sentence that announces the content of the paragraph to the reader. It is placed at the beginning of the paragraph to get the readers' attention. Robitaille and Connely state that a topic sentence expresses and controlled the idea to be developed by the other sentences in the paragraph in a form of opinion ,feeling, attitude, belief but not a fact that could not be developed (2007, p. 56). A Paragraph that has a topic sentence at its beginning is claimed to be the most organized, effective and the clearest, the simplest and the easiest for the reader to understand. A topic sentence moves from general to the particular. It includes a subject and a controlling idea, it is limited and lend itself for development.

In a paragraph, all the sentences that add details to the topic sentence are known as the supporting sentences/ details. Referring to its function Oshima and Hogue (2006, p. 3) claim that supporting sentences "explain or prove the topic sentence by giving more information about it". Zemach and Rumisek add that sometimes the details make the topic sentence clear and more interesting (2005, p.12). They may show why the topic sentence is true, they should be clear that the reader could follow the writer's thinking. In the same scope Oshima and Hogue (1998, p. 17) stated some ways in which a topic sentence can be developed and clarified such as examples, details, anecdotes, facts, statistics and quotations. These details are organized and linked together through a given structure that results with paragraph unity and coherence (Smith and Curtis, 1999, p. 4). Supporting sentences take about 80% of the whole paragraph to fully develop and support the topic sentence with the appropriate arguments.

The concluding sentence is the last sentence in the paragraph .It may not only restate the central idea, but emphasis and assists on its meaning ("Paragraph Writing", 2014, p. 3). According to Zemach and Rumisek "a sentence that sum up the paragraph reminds the reader of what the writer's main idea and supporting points were"(2003, p. 19). So, the concluding sentence should not introduce a new idea in the reader's mind, but it should leave an idea on the reader's mind (Oshima and Hogue, 1991, p.18) and leaves the final comment on the topic (Brandon, 2010, p. 1). A concluding sentence or the so called the closing sentence completes the paragraph and indicates its end using some linking words: all in all, to sum up, in brief, and at the end.

To sum up, a good paragraph begins with a topic sentence, it must be fully developed and its end must signal the completion of the unit of thought. In addition, it forms a unit where all the sentences within the paragraph are about the same topic that helps the reader to follow the writer's thoughts. It is clearly noticed that a paragraph has unity when every sentence stick to the subject. Unity goes in parallel with coherence which is achieved through a natural flow order of ideas.

1.1.4.1.3. Types of Paragraphs

Writing a paragraph depends on the purpose you are writing for. Narration, description and exposition, process, examples and details, definition, cause and effect, comparison and contrast and classification are the major types of paragraphs dealt with in the English language. Each of this three has a unique purpose; therefore, they are structured differently

A narrative paragraph tells what happened. It is the kind of writing that you find in novels, short stories and biographies. According to "Writing Paragraphs and The Writer Process", 1999, p.30 narration is associated with time order which is the arrangement of ideas in the order of their occurrence. It is used to write about an event or a series of events such as: a wedding, a vacation, a happy occasion or a person's life story. Las Positas college argues that "elements of narration help create a sense of drama that whets the readers 'appetite" (nd , p. 30). In the same scope Robitaille and Connelly (2007 p.123) claims that elements of narration answer some questions which are: who? What? When? Where? Why? and how? In order to show the order of events while narrating, different transition words

and phrases can be used: first, next, later, then, meanwhile, and finally. Time phrases also can be used as while we were..., after we finished (See appendix 1).

Description tells how something or someone looks or feels (Zemach and Rumisek, 2005, p.25). It is like "painting a still life picture" described by "Writing Paragraphs and The Writer Process", (1999, p.34). So, descriptive writing appeals to the senses and show the reader the external features of people, places or things through the creation of a word picture (Las positas college, nd, p.27). Thus, Robitaille and connelly insist on the importance use of specific words like noun, verbs, descriptive adjectives, adverbs and vivid images that carries a strong meaning. Also they put emphasis on the space order, chronological order that are considered as important ways to organize ideas (2007, p.119). Writing a descriptive paragraph, the writer ought to begin at one point and move in the same path not to confuse the reader who should have the capacity to imagine the photo that the writer had in his mind. (See appendix 2).

Exposition is the writing that explains something and helps to understand what we see (Las Politas college, nd, p.31). This type of paragraph is associated with a logical order, so as to "Writing Paragraphs and The Writer Process", (1991, p. 29) divides expository writing into two types: informative and persuasive. The former is used to explain facts and convey information while the latter is used to persuade or argue an opinion . To develop an expository paragraph there are different methods: Process, examples and details, definition, cause and effect, comparison and contrast and classification (See appendix 3).

The process method explains how to do something. It deals with events (Las Politas College, nd, p.39) or steps that are predictable (Boardman and Frydenberg, 2008, p.15). Ardaunet states that when dealing with this method the writer is usually dealing with steps and stages for that it is a kind of enumeration (1981, p.62). Describing events can be either through a simple or a complex process (Robitaille and Connelly, 2007, p.135). To explain a process ,often time order is used because it separates the process into steps which appears through the transition signals such as :first, next, then, until. Information presented by Las Politas College confirm that dealing with process might be a process that we choose to perform or a process that appears naturally (nd, p.39). Students may write a paragraph describing a process in the past when they speak about how something happened, in the present to speak about how something works in the moment of its occurrence or in the future to give instructions about how to do something (See appendix 4).

One of the most common forms of exposition is examples and details paragraph. The writer may use examples and details to help the reader understand a relevant information as well as the writer's point of view, so the reader will get the writer's message. Samples are of less importance if the reader does not see the association between the example itself and the thought it is expected to clarify. Robitaille and Connelly note that "examples are more memorable than abstraction" (2007, p. 129). This method acts as a help for readers because it makes abstract ideas concrete and easier to understand. The writer attempts to convince the reader on an issue, hence different transition signals can be used to develop an examples type of paragraph: for example, for instance, such a, like, to exemplify, as (see appendix 5).

Definition is the dictionary definition which provides a synonym or shows how a word fits into some class or particular situation (Arnaudet, 1981, p.164). This method tries to explain the meaning of a word from different angles through another term, phrase, expression, concept or theory (Robitaille and connelly, 2007, p.157). The Writing definition method of development is used to make clear to the reader the idea that the writer is trying to convey. A well-developed definition paragraph requires some tips: (wikispaces.com)

- -Start your paragraph with a dictionary or other authority's definition of the word or phrase you are writing about.
- -Add another point, your own, to this definition.
- -Tell your reader one thing that mother's day is not.
- -Choose another point and explain it here.
- -Choose one of the other points you can think of, and explain it here.
 - -Choose another point and explain it here.
 - -If you have another point, explain it here.
- -Finish with a conclusion which reflects all that you mentioned in your paragraph

In short, words felt may not be understood, unfamiliar terms or old terms used in a new way should be defined by the writer in a definition paragraph (See appendix 6).

The cause and effect paragraph is concerned with exploring or discovering why something happened or explaining what happened because of something else. The topic

sentence of this kind of paragraph and the supporting sentences are related to each other with a causal relationship (Ardaunet, 1981, p.101). So the subject and the kind of relationship that would be analysed (whether cause and effect or both) should be mentioned in the topic sentence (Robitaille and connelly, 2007, p. 153). Sometimes such paragraph deals only with causes because the effects are already clear. Transition signals showing the relationship between causes and effect might well include the following: Because, since, as, due to, to result from, so (that) consequently, as a result, thus, therefore, as a consequence (See appendix 7).

In comparison and contrast paragraph, the writer explains the similarities and differences between two items such as two characters in a book or play, two political parties, two computers operating system, etc. The purpose of comparison and contrast is to show how people, places, things, or ideas are similar or different (Boardman and Frydenberg, 2008, p.159). There are two ways to organize the points in comparison and contrast paragraph. One way is called block organization and the other way is called point -by -point organization. Using the first way the writer can group all the similarities together in one block and all the differences together in another group and write each group; however, using the point-by-point organization, he can use sub-topics to write about similarities and differences. In order to show the reader what is the same and what is different the writer can use different transition signals that make the similarities and differences clear :also, and ,like, not only, similarly, as.....as, however, while, on the other hand, even though, whereas, compared with /to (See appendix 8).

Classification is the method of organizing information into general categories. Broadman and Frydenberg note, "when you classify you divide people, object or ideas into groups or categories" (2008, p.128). Classification is the arrangement of elements into groups or classes. It is the fact of placing items, ideas and people into different categories. According to Ewen and Diane (nd, p. 20), in the classification paragraph the writer can start with a general topic then divide it into sub—topics p.20. Classification compared to the other types of paragraphs is relatively easy. After deciding the category to be dealt with within the piece of writing, the writer should identify the characteristics of each category following the same order. Hence, the different categories included in the paragraph should be mentioned in the topic sentence of the paragraph (See appendix 9).

1.2. Writing Instruction

After the 1960's, writing gained importance and was considered central in the language learning context. The teaching of writing has been a central element in education and this interest in writing as a skill leads to the emergence of different conflicting views concerning the most effective approach of teaching L2 writing.

1.2.1. Teaching Writing in the EFL Classroom

Research on teaching writing in the second language was initiated in the late 1960's (Kim, p.33) to prove that writing as an active ESL/EFL skill is a challenging process. In the past many educational systems in different countries emphasised teaching writing for taking test, to pass an examination or to get a good grade in the class, but there has been a paradigm shift because writing has become important in all spheres of life, especially in education ,so everyone want to know the best way to teach it.

Writing is disliked and avoided because it is frustrating and unnatural. Writing teachers need to know the best way of how to teach this skill. Because it is not a matter of asking students to write about a topic and then ask them to submit their work to be corrected. According to Xin "what teachers need to do is to help learners find the real purpose to write ,to show them how to do it, to give learners the internal impetus to reflect on their own and to evaluate and correct it at the right time" (2007, p. 20). Writing teachers should be encouraged to provide students with the sufficient linguistic components such as vocabulary, grammar, and spelling. Something more important to be taken into account that the teacher is not dealing with native speakers of the language being taught, but with students thinking in a second language what makes of it difficult to master. Teachers also should act as facilitators of the writing process taking into account students' needs and the type of writing activities that fit their level.

Brown argues that types of writing activities to perform writing should be based on the students' level and capacity (2001, p. 343-345). For him there are five major categories of classroom writing performance:

-Imitative or writing down: students will simply write English letters, words, and possibly sentences.

- -Intensive or controlled writing: this type appears in controlled written grammar exercises and it does not allow creativity.
- -Self-writing: The representative of this type are note taking, diary, and journals by the students
- -Display writing: It includes short answer exercises, essay examination, and research report
- -Real writing: This type refers to the genuine communication of a certain message to a particular audience.

Teaching writing to ESL/EFL students is an important task for the teacher who plays a great role in this process. Kuzbaska notes that the teachers goals, procedures, materials, classroom interaction patterns, their roles, their students and the school they work in are influenced by their beliefs (2011, p.102).

Writing is a complex skill that requires moving through different stages as brainstorming, multiple drafting ,revision and final editing(Jun, 2008, p.96). It is not like the first language, that it is why learners are obliged to make efforts to succeed in the writing task. The different stages of the writing process are mental and unconscious and in almost time, they are asked to write and re-write that make learners feel bored. Writing in a second language is a source of frustration and embarrassment for students who have no background of the learned language (Nation, 2003, p.2). Grossmann claims that "previous learning experiences plays an important role in students' views of what they can or cannot do, and these preconceptions often prevent them from experimenting and taking risk with language instead restoring to translate from their L1 because it feels safer"(2009, p. 186). Mostly, there are many reasons a student avoid writing in L2 that is different in nature from L1.

1.2.2. Approaches to Teaching Writing

Language is one of the most important elements in education because it becomes the targeted skill focus ("Teaching Writing for Students", 2012, p.119), therefore its productive skills are given much importance. In order for students to bring about good outcomes ,they should master writing composition .Writing is a challenging process and the interest on this productive skill leads to the emergence of a variety of learning approaches to encourage students second language writing. In order to help students write correctly and fluently, there have been numerous approaches to the teaching of writing over time. Some of the used

approaches during the learning writing process such as the product approach, the creative approach, the cooperative approach, the process approach, the genre approach and the process-genre approach will be mentioned bellow.

1.2.2.1. The Product Approach

Writing was seen as being primarily a tool to reinforce the linguistic knowledge with a great focus on grammar, vocabulary, syntax, cohesive and transition devices (Tangpermpoon, 2008, p.2). Errors, grammar and lexis were countinousely corrected, the importance was given to the surface structure of the language rather than the meaning. Students in classes adopting the product approach need a simple pattern to be imitated (Clenton, p.1, Nordin and Mohammad, p.76) discussed and analysed (Klimova, 2014, p. 148). Bashyal notes that the product approach to teaching writing is usually interested on the final product (2009, p.15). Similarly Sun and Feng argues that the focus in this approach is on the final input rather than the process of how to reach that input (2009, p.6). According to Mubarak (2013, p.22) in this writing approach, learning has four stage:

- 1: Familiarization: This stage aims to make learners aware of certain features of a particular text
- 2: Controlled writing and guided writing: In this stage learners practice the skills with increasing freedom until they are ready for the free writing stage
- 3: Free writing: In this stage they use the writing skill as a part of genuine activity such as letter, story.

According to White (1988, p.46) the product approach is;

The first step is the model content which is concentrated on and examined from distinctive perspectives, for example, structure of linguistic use, substance, sentence association. In the second stage, the distinctive components that the students take from the model content are controlled. At the last stage, they are given a theme and requested that deliver a parallel content.

Learning ("Teaching Writing for Students", 2012, p. 125 as cited in Pincas, 1982, p.24) is seen as an "assisted imitation" guided by the teacher and adopts many techniques such as substitution tables where learners respond to a stimulus provided by the teacher; however, students should feel as if they are creating something of their own.

Centre of English Language Studies, University of Birmingham claims that the use of the product approach is based on three factors (2011, p. 1):

- 1: implementation is easy
- 2: It enforces a minimal level of writing
- 3: It was the most used and is how teachers and parents were taught

A common characteristic of the product-oriented approach is that the teacher is not only pre-occupied with grammatical accuracy, but also acts as a judge of students' writing rather than a facilitator. Teachers evaluate the written product, judge its form and content, according to a set of criteria. Evidence from the teachers' evaluation suggested that the focus neglected the content/meaning of the students' writing and concentrated on form and surface level errors of spelling, punctuation and organization.

1.2.2.2. The Creative Approach

Creative writing another approach to the teaching of writing suggest imaginative tasks such as poetry, stories and plays (Harmer, 2001, p.259). Significantly marked for creative writing Ur notes that "the final result is often quite different from the original conception, but usually I feel pride in it and want people to read it. I like reading what others have written on the same topic and am interested in hearing their reaction to my writing" (1996, p. 173). Learners should have a certain level in the language being learned and because creative writing is an important part of any language, proficiency is required (Tarnopolsky, 2005, p.77). Kenny state that creative writing is all about using the five senses and linking different information and thoughts to create a piece of writing (2011).

Considering the effect of creative writing in the classroom, she (2011) points four major reasons for using creative writing in the classroom:

1: Freedom of expression: Creative writing activities have a direct connection to the learners' imagination and it allows them to explore their ideas in a spontaneous and personal way.

- 2: The use of imagination: Promoting self-expression will help learners to raise their motivation to learn
- 3: Emotional response: Creative writing can "ignite" emotional response that may affect their learning of a language.
- 4: Connecting the known and the unknown: Creative writing allows learners to link between existing experience and new ones using different structures.

The principle of this approach is to show the pure creativity of learners through writing which represents their own views and experiences as well as their self-awareness. This approach promotes the self- pride that need to be provided with an appropriate audience apart from the teachers. Friends, parents and may be web sites can be used.

1.2.2.3. The Cooperative Approach

Different features that encourage language learning characterize cooperative writing. Storch (2011, p. 275) states, "collaborative writing may be defined as the joint production or the coauthoring of a text by two or more writers". Writing cooperatively can be greatly motivating for students because it involves not only writing but also research, discussion, peer-evaluation and group pride in a group accomplishment. Harmer states, "Individual students also found themselves saying and writing things they might not have come up with their own and the groups' research was broader than an individual's normally was." (2001, p.260). Mulligan and Garfalo argues that students awareness about the organizational and syntactical elements can be raised due to peer writing (2011, p.5). A study by Storch (1999) which compared individual and pair performance on a range of grammar-focused exercises completed in pairs were generally more accurate than when completed individually. However in this study the same students performed the exercises in pairs and individually. Writing in the cooperative approach encourages learners to be able to work in groups, accept the others opinions and change your mind. Moreover, group work might well minimizes the occurrence of individual unpleasant attitudes and maximizes the positive interdependence, Face-to-face interaction and the use collaborative skills for a high level of team processing.

1.2.2.4. The Process Approach

The process approach has had a widespread influence on the teaching of writing for both native speakers and foreign students; therefore, recent years research has stressed the shift of EFL/ESL writing instructions from the traditional product approach to the modern approach that views writing as a progressive process.

1.2.2.4.1. Definition of the Process Approach

Dissatisfaction with the product approach in the mid 17's leads to the appearance of the process approach. It is a reform effort in improving teaching composition (Deqi, 2005, p.66). The process approach emerged to interpret the act of writing as separate thinking processes (Bayat, 2014, p.134). According to Yi "accuracy of spelling and punctuation is no longer central concern and writing is writer-oriented self-discovery" (2010, p.31) which means that the process approach places more emphasis on the writing stages of the writing process than on the final product. It is a learner-centered approach that enable students to explore their thoughts and discover new ways to express what they want to say (Kim, 2007, p.35). Using this approach the teacher plays a great role. He moves from being someone who gives instructions and receive a final product to someone who gives feedback during the process stages (Sun and Feng, 2009, p.150). Kim states that:

what teachers need to do is to help learners find the real purposes to write, to show them how to do it, to give learners the internal impetus to reflect on their own and to evaluate and correct it at the right time. But the most important thing in teaching writing is to give learners as many chances as possible to have adequate exposure to the language through activities, so that they could sense the language function as a communication system (2007, p.20).

The process approach is a series of stages organized in a hierarchical way. According to Tangkiengsirism learners are required to produce multiple drafts during the various stages of the process as well as appropriate comments should be provided by the teacher .So as to, the teacher's role is to help students find the suitable strategies to get started. Adapting this approach means that learners have the opportunity to plan, write, revise and edit their work .The writing process approach has been accepted in many schools and its implementation varies from teacher to teacher and from school to school in the 90's (Elashri, 2013, p .5)

This model sees writing as a "non-linear, exploratory, and generative process whereby writers discover and reformulate their ideas as they attempt to approximate meaning." (Hyland, 2003, p.11). All the work can be checked on, assessed and revised before delivering any work for that the process approach is characterised by a set of features (Ouskourt, 2008, cited in Hairston, 1988):

- -It focuses on the writing process; instructors intervene in students' writing during the process.
- -It teaches strategies for invention and discovery; instructors help students generate content and discover purpose.
- -It is rhetorically based; audience, purpose and occasion figure prominently in the assignment of writing tasks.
- -Instructors evaluate the written product by how well it fulfils the writer's intention and meets the audience's needs.
- -It views writing as a recursive rather than a linear process; pre-writing as an activity that involves the intuitive and non-rational as well as the rational faculties.
- -It emphasises that writing is a way of learning and developing as well as a communication skill.
- -It includes a variety of writing modes, expressive as well as expository.
- It is informed by other disciplines, especially Cognitive Psychology and Linguistics.
- -It views writing as a disciplined creative activity that can be analysed and described; its practitioners believe that writing can be taught.
- -It is based on linguistic research and research into the composing process.
- It stresses the principle that writing teachers should be people who write

Tradionally evaluating students comes at the end after they submit their works to the teacher. In recent years evaluation goes in parallel with each step of the writing process. In this case, the teacher ought to evaluate his students in terms of obeying the rules of the process writing for example how many drafts they are using, whether they are collecting ideas or not and in which way these ideas are organized and so on. Step by step evaluation might well help students to write acceptable pieces of works as well as helps teachers to reach their lesson objectives.

1.2.2.4.2. Stages of the Process Approach

The process approach is the second process prominent in research on writing. It is the name given to five specific steps that writers go through to get their desired product.

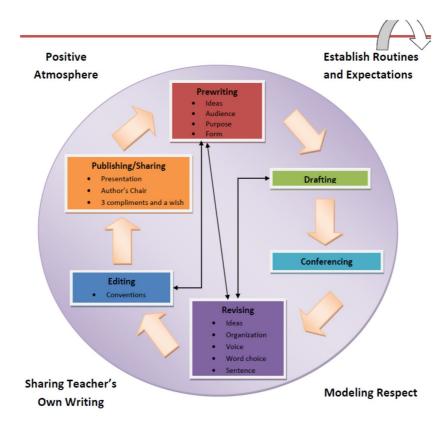


Figure 1.1: The Writing Process: a writing resource guide, Orange Country Public Schools, p .9

Before you start writing, you should decide what you are going to write about. The pre-writing phase is the planning stage for writing. It is any writing you do before you start writing, Peha states that in pre-writing you can draw, read, scribble random thoughts, and make a web or a story map (2003, p. 5). This stage may include different techniques that help the learner discover ideas: listing, clustering free writing and mind mapping.

The pre-writing activity could be done individually or in groups according to the given task. It is worth noting that students should be aware of the importance of this stage in a writing class. Thus, they are advised to spend more time thinking about the given topic, the more they take their time the more they facilitate working on the following stages and at the end, they will come up with good products. The pre-writing stage usually end with a plan . This outline which is the result of thinking about and organizing ideas might ensure a good

piece of work in terms of organization, cohesion and coherence because it draws the structure of the writing piece.

In this stage, students are going to put what they have done during the planning stage on papers, but they have not to include everything. They just have to start writing, let their ideas flow and do not stop writing Matthew D. states that:

"As you draft, don't stop to edit or look up small pieces of information; there will be more time for precision later. Just get your ideas out without worrying about punctuation or spelling for now. Similarly, if you notice a big gap which requires more research, skip it, and work on other sections. The important thing is to let your ideas keep coming and making progress on the page. No matter how irrelevant your words may appear, write on" (2006, p. 24)

Barton notes that drafting is all the written text except for the very copy the student hand to the teacher (2006, p.24). In the first draft students start making connections and discovering new ideas, the more complicated the task is the more they will spend time drafting. Multiple drafts help students to pick up the appropriate words and ideas. According to Coffin the focus on this stage is on the development of meaning and concentration on the content, but spelling mistakes are ignored (2003, p.38).

In the reviewing stage students revise their drafts and share it with their friend ("The Writing Process", 2005, p.33) states that revision is to rewrite a paper based on what has been done on the previous stages In this phase content can be arranged, some ideas can be added and others can be eliminated. It is a stage of reviewing, improvement and word choice. Reviewing, which always follow the drafting stage and precede the final stage, deals with more than checking grammar and punctuation. It also includes checking whether the content and the purpose of a given piece of writing is appropriate and clear for the reader. Therefore working on his stage students will try to change and replace things to make ideas clear and convince their readers.

In editing, the focus is on the correction of the spelling rules, punctuation, and grammar .It allows checking for errors, whether the main points are well developed and organized or not. Editing means polishing the draft before submitting it to the teacher. In the same context Johnson (2008: 167) states that: "Basically 'editing' means making your piece as reader-friendly as possible by making the sentences flow in a clear, easy-to read way". It

also means "bringing your piece of writing into line with accepted ways of using English: using the appropriate grammar for the purposes of the piece, appropriate punctuation and spelling, and appropriate paragraphing." During this stage different techniques such as proofreading and checklists (for example COPS: C: capitalization, O: organization, P: punctuation/ paragraphs, S: sentences/spelling.) can be used.

A model checklist (Azzioui, A., 2009 cited in Hedge, 1998, p. 23) was proposed by Hedge in which writers ask themselves the following questions both during and after composition:

- Am I sharing my impressions clearly enough with my reader?
- Have I missed out any important points of information?
- Are there any points in the writing where my reader has to make a "jump" because I've omitted a line of argument or I've forgotten to explain something?
- Does the vocabulary need to be made stronger at any point?
- Are there any sentences which don't say much or which are too repetitive and could be missed out?
- Can I rearrange any sets of sentences to make the writing clearer or more interesting?
- Do I need to rearrange any paragraphs?
- Are the links between sections clear?

Do they guide my reader through the writing?

While editing students go through their piece line by line, and make sure that each sentence, phrase and word is as strong as possible. Editing helps students to spot mistakes they have done, correct grammatical and spelling errors and avoid repetition.

Publishing is the last stage in the process approach of teaching writing. Students submit their work to the teacher after checking out the content and the structure of their piece of writing. Writing is supposed to be for a reason for that when students finish writing they should have someone to read their work. Publishing helps motivating students to write and it is a good way to examine the way they think and the level of literacy they have.

1.2.2.5 -The Genre Approach

The genre approach has been given considerable attention since the mid 1980's (Kim, p.33). Its emphasis is "the importance of exploring the social and cultural context of language use in a piece of writing" (Luu, 2011, p.122). Genre based approach pedagogies help learners to be effective participants outside the EFL classroom (Hyland, 2007, p.149). According to Cope and Kalantizis (1993, p.10-11) the genre approach consists of three phases:

- 1: Modelling: In this stage learners are exposed to examples of the genre they have to produce. The teacher scaffolds his learners in order to analyse everything about the text to guide their writing structure explicitly.
- 2: The construction: In this stage students do not have any sample but they have to remember and to draw on previous knowledge about the text they either come across through reading, writing or a model text.
- 3: Independent construction: In this phase the teacher is absent and learners have to show their knowledge about the language to be used in the text, what is the purpose of the text and who are the intended audience.

There are strong similarities between the genre and the product approach. "The genre approach like product approach portrays writing as mainly linguistic but unlike product, it stresses that writing is different from the social context in which it is produced ("Using Vocabulary profile", 2013, p .14). The two approaches (product and genre) are similar in the sense that they focus on linguistic knowledge as an input to text creation (Mubarek, 2013, p. 33). This approach is successful to make students understand that different texts requires different structures.

1.2.2.6. The Process Genre Approach

The process –genre approach is a synthesis of three approaches: the product approach, the process approach and the genre approach. Reonal notes that the use of both approaches is a help for learners to develop their writing skill because they go through the writing process stages as well as they gain knowledge about the writing context and the reason for their writing (2015, p. 187). Similarly, Du argues that synthesising the product and genre approach will result in:

- -Both students and teachers will learn how to respect and stick to a particular purpose and genre
- -take into account the writing procedure
- -Pay attention to the extent of language change in relation with the function
- -Having opportunities to revise and learn how to qualify a writing piece (2005, p. 29)

According to Yan (2005, p.20) this approach helps students to gain knowledge about the suitable use of a specific form for a specific purpose and genre through the recursive process of pre-writing, drafting, revising and editing. He claims that the process-genre approach consists of six steps which are: preparation, modelling and reinforcing, planning, joint constructing, independent constructing and revising.

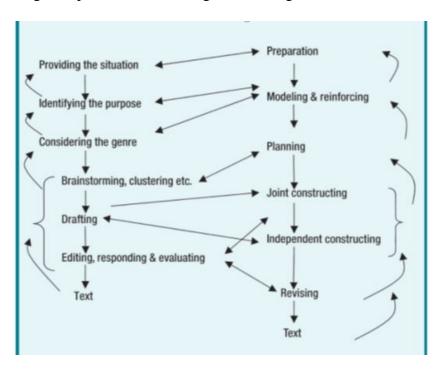


Figure 1.2: Application of the Process Genre Approach (Yan, 2005, p.21)

The chart above provided by Yan (2005, p. 21) indicates that teaching through the process genre approach is divided into six interrelated steps: preparation, modeling and reinforcing, planning, joint constructing, independent constructing, and revising.

1: Preparation: The instructor starts defining so as to set up the learners to start writing about a particular type, for example, a convincing piece of writing contending for or against an issue of current hobby.

- 2: Modeling and reinforcing: at first the teacher introduces a model and lets students guess the social purpose of the text, and to whom the text will be addressed. After that, the teacher moves to study the structure and the organization of the text. The learners may do a few examinations with different writings to strengthen what they have found out about the specific genre.
- 3: Planning: In this stage students go through a variety of activities such as brainstorming, discussing, and reading associated material. In order to help them add an enthusiasm for the theme by relating it to their experience
- 4: Joint constructing: During this step, the teacher and his students work in a collaborative way to start composing a content, the teacher follows he writing process procedures with the whole steps and students cooperate with their ideas and thoughts .The result of the group work will be considered as a reference for coming individual activities
- 5: Independent constructing: At this point students are ready to start writing by their own after they have together built a content in the class. In this step time is not important and the teacher is accessible to help, clear up, or counsel about the procedure. The composition can be proceeded as a homework task.
- 6: Revising: students may check, talk about, and assess their work with their classmates and do not wait for the teacher to correct all of their works although appreciation from the teacher may well encourage the learners' autonomous learning and motivate them to be better writers.

Learners frequently seems headed towards more linguistic use practice and have a tendency to disregard the particular steps and systems which they need to experience before coming to their last item. Consequently, it is trustworthy that the ideal approach to show composing is that the teacher controls his students through the procedure of regulated composing. So that, he helps them deliver very organized structures. In that, the educator must be available in every progression of the students' making process, and not just enter the scene when the last work is delivered.

Through the process approach, writers plan, draft and edit but then often re-plan, re-draft and re-edit. They may move backwards and forwards so that they constantly revise and modify their productions. This orientation aims at helping students to gain control over each step of these steps, and the next chapter will explain how can students control the pre

-writing stage of the process approach and discover the different pre-writing strategies used to gather ideas.

Conclusion

To sum up, the writing skill is deemed to be a difficult and a complex task for both EFL learners and teachers. It plays a vital role in communicating ideas and conveying messages, that is why its status in the curriculum of EFL classroom is of a high degree of importance. Therefore, it should be taught in the appropriate way. Moreover, teachers need to adapt the appropriate approach to be followed during the teaching writing procedure. In this chapter, as far as writing is concerned, we have clarified its nature, forms as well as some of the available approaches that can be adapted while teaching writing, focusing on the process approach as the one which fits the students writing abilities when they write their paragraphs. The process approach incorporated with its steps helps students to brainstorm and generate ideas while their works are being revised, reviewed and evaluated. More emphasis will be shown in the next chapter as the core of this study is the use of pre-writing technique.

CHAPTER TWO

Design Thinking as a Pre-Writing strategy

Chapter Two

Introduction
2.1. Pre-writing strategies
2.2. The design thinking strategy
2.2.1. The origin of the design thinking strategy37
2.2.2. Definition of the design thinking process
2.2.3. Characteristics of the design thinking strategy43
2.2.4. The design thinking procedure45
2.2.5. Design Thinking in the Classroom50
Conclusion53

Introduction

Due to the globe changes in all spheres of life, especially education, it has become a necessity to prepare a generation capable of learning with different thinking styles. This generation should not depend on the teacher in the first place, but should focus on developing thinking abilities and creativity. This includes writing which is also a creative act of communication that implies thinking. After the student has decided on a subject, it is time to begin the writing process that involves cognitive phases. However, on the one hand, many lack ideas and cannot think of anything interesting to write about. On the other hand, most EFL teachers are confronted with problems in their writing classes and therefore cannot stimulate students' imagination. As a solution, preparing a plan will lead to a well-structured writing assignment. Pre- writing strategies such as the design thinking strategy which is the core of this research, might solve students' thinking problems and trigger creativity. It allows figuring out what a learner wants to explore in his piece of writing. The most known pre-writing strategies and how they are processed will be introduced in this chapter, putting stress on the one which will be experienced in this study.

2. 1. Pre-writing Strategies

As a source of composing, pre-writing is the first phase of the writing process. Proceeding with the process approach to teaching writing, the English teachers can use a variety of techniques such as: Journalist questions- Asking "who, what, where, when, and why". This type of questions are generally used by journalists and researchers for getting a complete story- and interviewing - talking with people who know something about a certain topic- but the most used ones are: clustering or mind mapping, brainstorming or listening, free writing and design thinking.

Clustering is one of the most used pre-writing strategies. It is A technique developed by Rico who explained that clustering "gives you a non-linear, visual, and flexible technique to understand and organize your material" (1983, p. 35). It is a pre-writing technique to start writing the given task and a method that permits students to describe what comes first at their minds, gain control over their thoughts and create images of the piece before writing it (Charmaz, 2006, p. 86). This technique is great for visual learners since it allows them to see how ideas can go together under each cluster. According to Hoshima and Hogue clustering

is a non –linear strategy to generate ideas, images and feelings around a stimulus word and to solve problems of vocabulary and grammar (1999, p. 8). The form of clustering is easy to understand because it allows the writer to explore the relationships between ideas. The writer should write his central idea, circle it and engage in free associations with the original word to show its relationships. Based on that, Styati (2010, p. 32) provides some steps to the clustering technique:

- 1: Choosing a word or phrases
- 2: Putting the word or phrases in central
- 3: Circling the word or phrases
- 4: Writing words all around the word or phrases that associate with the word in central
- 5: Connecting the new word or phrases to previous ones with lines



Figure 2.3. Clustering Example (www.skylinecollege.edu)

Similar strategies to clustering are named differently. The Writing Centre (2012) clarifies that according to the type of the activity itself or the final product: mind mapping, webbing concepts all carry the same notion. Concept mapping are visual organizers to investigate the relationship between different concepts (Starkey, 2004, p. 4). It starts from the most general to the most specific. Using this technique, the student may realize existing links between ideas and topics he had not already given attention to. It will be easy for him to visualize his ideas to make logical relations.

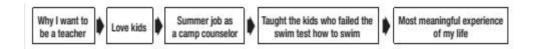


Figure 2.4: How to write great essays, Sample concept map (Starkey, 2004, p. 4)

We conclude that clustering is a type of pre-writing method that allows you to explore many ideas as soon as they occur to you. It involves writing an idea in the middle of a page and circling it. Then draw lines leading from that circle or "bubble" to new bubbles where you write different subtopics of that central idea. This technique can be helpful because it can offer you a visual evidence of your interests and knowledge: the more branches or bubbles you have along one line of ideas, the more competence or interest you likely have in that idea.

Teaching writing to EFL/ESL learners starting with brainstorming which has become increasingly important to foster learners' motivation. Brainstorming is a term used to refer to one stage of the pre-writing process that can help the learner to generate the maximum number of ideas while preparing to write a piece of writing.

Osborn offered this technique in 1957. Generating ideas and finding solutions to problems are the result of a cooperative learning between 3 to 5 participants (Maghsoudi and Haririan, 2013, p. 61). Brainstorming as a team helps to bring out the ideas of each member and to organize them in a way that fits not only the individual's thinking but also the whole team creative ability. Feinberg and Nemeth argue that it is a strategy used to not only foster ideas but also idea generation using four main rules (2008, p. 167).

- (1) Come up with as many ideas as you can
- (2) Do not criticize one another's ideas

(3) Free-wheel and share wild ideas

(4) Expand and elaborate on existing ideas

This pre-writing strategy allows the learner to spend much time to establish a point of view on the top and supports it before beginning to write. As stated by Hashempoo, Rostampour and Behjat "brainstorming is the automatic act of note taking of ideas in preparation for different steps of writing" (2015, p. 88). Consequently, what the learner has as a skill and what he is in need to look for can be recognized during the writing activity. This technique is like free writing which is based on writing a list instead of complete sentences and phrases (Starkey, 2004, p. 3). Referring to its importance, brainstorming might enhance communication and foster a variety of opinions. Similarly, Al- Katib states that brainstorming, as a teaching strategy, can help students to solve problems that have to do with creativity and invention, get benefit from group work, build new ideas from the shared ones and establish good relationships between students to drive them accept the other's side point of view (2009, p. 292). Brainstorming is not only helpful for the student but for the teacher as well; it provides him with the suitable way to offer to his learners the opportunity to stimulate their prior knowledge and develop their skills by clarifying their views and organizing their thoughts before starting to write.

Brainstorming means creating a list of ideas or items associated with the topic you are assigned. According to Carney and Barrett (2013, p.1) using a list allows the writer a great deal of freedom to state his/her ideas without hierarchy. After listing as much ideas as the writer can, he/ she needs to review the list and decide which items are the most important either by crossing some items out, grouping some, or elaborating new ideas upon some existing ones. At the end, he/she will be able to filter his/her list of thoughts to determine the main ideas, the supporting ones and the appropriate way to arrange them into a meaningful piece of writing.

In short, brainstorming or listing is a type of prewriting technique that is used to help generate ideas and enhance learners' creative output. It requires a free flowing of thoughts. While brainstorming the more you come up with ideas, the more it will be better and the more you will enrich your piece of writing with arguments. At this stage, ideas should not be edited or evaluated. Words, phrases or sentences might be listed without organization.

Free writing is another non- linear pre-writing strategy. Applying this technique students are required to consider the topic and just write continuously for 5 to 10 minutes.

They have just to write whatever comes to their head at the moment. Free writing means writing without worrying about spelling, punctuation or any other conventions. There are no restrictions that guide the piece of writing format or length. Since there is no expectation in this phase, inhibition that influences writing can be avoided, but the teacher's help in terms of organization and methodology guidance is still required (Dickson, 2001, p. 29).

According to Mogahed free writing means "using the right side of the brain, which deals with concepts and abstractions. As soon as you begin to organize, edit and censor your ideas, you have moved over to the left side of the brain, where the linear thinking happens" (2013, p. 65). This means that reviewing in free writing appears in a second position after jotting down ideas in a non-organized way that might well result in repetition. This latter can indicate the importance of a particular concept or idea that should be discussed on the one hand, on the other hand there appears new ideas that may lead students to use their imagination in order to change the topic being discussed unconsciously. Therefore, Successful writing requires what follows:

- -Resist the temptation to look back at what you have written during the process.
- If you can't stay on topic, keep writing anything to maintain the flow.
- Do not censor yourself; your free writing is not going to be seen by others, so commit every thought to paper.
- Follow your ideas wherever they lead you.
- When finished, read your free writing with a highlighter, noting the most interesting and strongest ideas.
- Try the process again after you have focused your topic; more ideas may be generated (Starkey, 2004, p. 3)

Free writing is similar to brainstorming, but instead of just jotting single words, you write down as quickly as you can whole sentences about the topic without stopping. Starting to write with a number of limitations such as lack of ideas without knowing from where to start, you may find you have more to say than you first realized. Free writing may even lead you to discover another topic that excites you even more. Free writing can be open or focused. The fact that you really do not have any idea what to write about, and

just begin to write about any ideas that come to your mind without any specification is called "open" free write; whereas, focused free write is to choose one idea among the ideas that have been written during the open free write. This step will narrow your topic and help you to investigate on a specific idea. (Simpson College, 2015).

To conclude, free writing is a great tool to launch into composing. This technique is a way to free up the mind without wise preparation and without concern for correctness or quality of ideas because it forces you to write so quickly that you are unable to edit any of your ideas. This warm-up exercise helps to formulate the writer's ideas and the key in this technique is to keep writing, even when the writer is having difficulty in thinking of something to say.

2.2. The design Thinking Strategy

It has become a routine to re-design everything related to our life: our homes, our personal way of communicating, our appearance and many other things. Through time design focus seems to change its direction from dealing with professions and economy, to deal with daily activities and education.

2.2.1. The Origin of the Design Thinking Strategy

A number of few innovation methods have emerged during the past two decades with an increasing interdisciplinary collaboration between the engineering, economic and social sciences. From the mid 1980's up to date was a race to discover new methods for improving business services and design. Design thinking (DT) was a realization through the evolution of different (collaborative) design process methods that were developed to improve and extend design to other areas of practice. Rowe Peter first used the term design thinking in his book Design Thinking (1987), where DT was used in the context of architecture and urban planning (Luka, 2014, p. 64). It was popularized by the Silicon Valley Design Firm IDEO and its applicability to a wide range of challenges and solutions is presented in IDEO founder Tim Brown's book "Change by Design" (Morris and Warman, 2015). As a result of the merger between David Kelley creation (Apple Computer's first mouse in 1982) and ID Two design (the first laptop computer in 1982), IDEO was formed in 1991. As a primary

function, IDEO's main concerns are on traditional business designing products like the Palm V personal digital assistant, Oral-B toothbrushes, and Steelcase chairs.

By 2001, IDEO was asked by different social institutions to find solutions to problems that are far afield from traditional design matters. A healthcare foundation asked IDEO to help restructure its organization, a century-old manufacturing company wanted to better understand its clients, and a university hoped to create alternative learning environments to traditional classrooms. This makes IDEO move from designing 'consumer products' to designing 'consumer experiences' (Brown & Wyatt 2010, p. 33). As claimed by Bostwik "User empathy, or putting yourself in the user's shoes to find solution, is a big concept distinguishing DT" (2012). The interest in and exploration of design thinking may be traced back to the publication of the book The *Art of Innovation*. Author Tom Kelley, then general manager of the Silicon Valley-based IDEO, provided unique insights into the world of product design.

Although the interest of design thinking may be coined with Tom Kelly's book 'The Art of Innovation, a unique perceptions into the world of product design was provides by the general manager of the Silicon Valley-Based IDEO. DT approach was originated in architecture design and art and nowadays is used in a wide range of contexts. Despite all this varied and disparate functions, design thinking is a multidisciplinary tool to communicate and to coordinate activities. Hence, business and schools as an essential part of the 21st century innovation and creativity nowadays embrace it.

2.2.2. Definition the Design Thinking Process

Design thinking has been defined in different ways. A process that focuses on developing one's creative confidence. Design thinking is used to discover opportunities and new ideas (Autadesk Digital Steam Workshop, 2013). This process is a shift paradigm to deal with existing problems in different professions (Dorst, 1997, p.131). The latter concept is used in diverse perspectives such as: Architecture, education, industrial design, industrial Engineering, information systems, and innovation management (Dolak, 2013, p. 3). According to IDEO, design thinking is a mind-set," it is about believing we can make a difference and having an interactional process in order to get new, relevant solutions that create positive impact"(2012, p.11).

There are different definitions of design thinking, since they are rooted in diverse perspectives (Efeoglu, A., Moller, CH., Boer, H. 2014, p 2):

Architecture: The book "Design Thinking" by the architect (Rowe, 1991) was one of the first to illustrate the systematic use of problem solving procedures in architecture and urban planning. The main research focus lies within the domain of design cognition.

Education: Sometimes referred to as "design-based learning", design thinking is seen as a model for enhancing creativity, endurance, engagement and innovation.

Industrial Design: The focus of design thinking in industrial design lies within the act or process of designing as well as the designed end products.

Industrial Engineering: Industrial Engineering aims to generate alterative solutions to satisfy performance requirements. In general, it focuses on the creation of new and innovative products.

Information Systems: Within the field of information systems, the importance of design thinking is seen in its capacity to deal with complexity and its iterative process of design evaluation.

Innovation Management: Here, the importance of design thinking lies within its power to foster innovation and to generate competitive advantages. It is used for product, service, and business model innovation

Design thinking helps his/her user to draw a path for purposeful procedure to get to new, important arrangements that make positive effect. Design thinking promotes his users with a great amount of self-confidence in their creative abilities and guide them to change the obstacles they have faced whatever and however difficult it is into new chances and opportunities to design and create something different, valuable and useful. When thinking to apply design thinking to any kind of problem, as proposed by Yong (2010, p.5), there are key themes as constituting design thinking in practice:

Human-centered: it places people at the center of the design process because it is
mainly concerned with deep empathy and understanding of human needs. Instead of
starting with technology, mostly what a designer is trying to do with design is to start

with might we need, what makes life easier, more fruitful and what meets the desires of customers.

- Research –based: qualitative empirical methods that is based on observations or experimentation that provide reliable data for the design challenge.
- Broader contextual view: Expanding the area of research into a wider span so that
 the design challenge questions will vary according to the set of context where the
 design challenge can be found.
- Collaborative and multi-disciplinary: Design thinking is a collaborative process between unlimited number of people in order to solve one common problem. It remotes the idea that everyone can make change whatever the problem is since it an enjoyable process.

Design thinking is adopted as a way to creativity for that it is viewed as how people think (Dunne and Marin, 2006, p. 512). Ambrose and Harris claim that the design thinking process requires a noticeable level of mind abilities. Hence, this mental process should be controlled in a way that enables the designer to find a solution to the problem being dealt with (2010, p. 11). It is based on its users' demands as it boosts brainstorming and modeling as well as recompenses out-of-the box thinking that takes simple ideas and turn them into valuable solutions (Morris and Warman, 2015). Dealing with design thinking means that moral imagination is being used in order to improve the human condition and environment. Bruce (2008, p. 3) argues that design thinking is a series of steps or as strategies that scaffold people to have the ability to solve complex problems and he states:

Design Thinking is a heuristic process, encouraging moving forward by trial and error, risk taking and experimentation. By fostering a free and unencumbered exploration of ideas, design thinking looks to explore all possibilities while making certain that unrealistic or problematic solutions are quickly swept aside allowing practical alternatives to grow and develop

In design thinking the collaboration of a variety of minds works better for solving a specific problem. This means that this process benefits from the several points of views rather than an individual perspective. Consequently, multiple views reinforce and sustain one's creativity and mental abilities. In Design thinking participants believe that everyone is able to make change and they all share one characteristic which is being "optimistic". For

that may hinder them to reach their collaborative team goals. Thus, each one of them has to believe in his own abilities and try to use his creativity to see the problem from different angles so as to fill the missing gap and comes out with new ideas to realize a suitable solution that fits everyone surrounding the team members. Because opening yourself up to creative possibilities and trusting as long as you really grounded to the desires of the people you are designing for, your ideas will evolve into the right solutions and everyone will benefit.

Design thinking is linked to economic success. It is now more required than the past to corporate different strategies in order to compete in this world which is based on technological development and constant innovation, and design thinking is one of these strategies. As claimed by Brown, Adison's approach is a clear sample of what is nowadays known as design thinking when he broke the rule of only genuine people who can innovate and he formed a team-based approach for innovation. Because understanding what are the people's desires, needs and what they think about, how a certain product is produced, packaged, advertised, sold and supported, is a great reason for innovation and everyone is capable of making a change in one way or in another (2008, p. 86). In the same context, Brown has also clarified that design thinking draws an interchangeable relationship between peoples' needs, what is technologically achievable and economically viable.

Year	Author(s)	Definition: Design thinking	Publication Type
1982	Cross	"() tackles ill-defined problems."	Journal Article
2005	Dym et al.	"() a systematic, intelligent process in which design-	Journal Article
		ers generate, evaluate, and specify concepts for devic-	
		es, systems, or processes whose form and function	
		achieve clients' objectives or users' needs while satis-	
		fying a specified set of constraints."	
2006	Dorst	"This description of paradoxical situations defines the	Journal Article
		nature of the problematic relationship that designers	
		and engineers are dealing with through their design	
		thinking."	
2007	Junginger	"() inquire into the organization's problems from an	Practitioner
		user's point of view."	Literature
2008	Bousbaci	"() the study of the cognitive processes that are man-	Journal Article
		ifested in design action."	
2009	Brown	"Design thinking begins with skills designers have	Book
		learned over many decades in their quest to match	
		human needs with available technical resources with-	
		in the practical constraints of business. By integrating	
		what is desirable from a human point of view with	
		what is technologically feasible and economically	
		viable (). Design Thinking taps into capacities ()	
		that are overlooked by more conventional problem-	
		solving practices. It is not only human-centered; it is	
		deeply human in and of itself. () I now use it as a	
		way of describing a set of principles that can be ap-	
		plied by diverse people to a wide range of problems."	
2009	Martin	"The design-thinking organization applies the design-	Book
		er's most crucial tool to the problems of business. That	
		tool is abductive reasoning."	

Table 2.1: Selective overview of relevant definitions for the term design thinking" (Dolak, Uebernickel and Brenner, 2013, p.3)

The design thinking as a mindset is considered to be an approach to solve problems by understanding user's need and finding solutions that fit their environment. A methodology teaches individuals new strategies to solve problems. Despite all the different meanings and definition of the concept "design thinking", its main goal is to promote and to

encourage the imaginative and creative way of thinking use a number of ideas so as to solve a particular problem, but insists to take into account people's experience and feedback.

2.2.3. Characteristics of the Design Thinking Process and the Design Thinker

Many characteristics may apply for Design Thinking. It is worth mentioning that design thinking procedure attempts and assist people to think like designers. Therefore, it is characterized by its nature as a process and its humanistic perspectives. The former is related with the structure and the various characteristics of the phases to be followed such as: human-centricity, collaboration and team work; whereas, the latter emphasises more on the personal attitudes, characteristics and contributions of the design thinkers since they help to eliminate some major weaknesses in the students' creations.

First, as a process, it is clear that empathy is the core of the process. For the user to be comfortable and pleasant with the new product insights should be gathered. Since people are the source of inspiration, any solution is of a great value to the individual for whom the problem is tried to be solved and in the same time for solving design challenges (Brown, 2009; Dunne and Martin, 2006). In this phase the designer should not rush with a solution, he should ask questions, collect examples and most importantly be aware of the needs of the person he is trying to help. Another major characteristic is collaboration and teamwork. Design Thinking assumes that anyone can be creative and working on team may raise questions, prepare the floor for everyone to discuss anything that may promote the emergence of innovative ideas. MacFadyen (2014, p.1) argues that "design thinking uses divergent and convergent thinking to 'flesh out' potential solutions for problems at any level" which means that DT is an opening door for going beyond ideas that anyone would respond to immediately; although, the most valuable ones are the simplest ones that solve the problem. According to Efeoglu, Boer and Moller multidisciplinary teams will lead to the development of knowledge, the support other team members and to greater results than teams that come from the same discipline (2014, p. 251).

Second, design thinkers' personal characteristics. According to Brown "the willing and even enthusiastic acceptance of competing constraints is the foundation of design thinking" (2009, p.18). Thus, a design thinker is someone who is instinctively motivated and is not scared of moving away from the comfort zone to develop and improve his way of

dealing with new things. The table below provides a set of a good design thinker' characteristics provided by different researchers.

d.school Bootcamp Bootleg (2009)	d.school Bootcamp Bootleg (2010)	Tim Brown (2008)	Baeck & Gremett (2011)	Comment	
Focus on human values	Focus on human values	Empathy	Empathy	"Focus on human values" includes empathy for users and feedback from them.	
Create clarity from complexity	Craft clarity	Integrative thinking	Ambiguity Curiosity Holistic Open mindset	All these items refer to styles of thinking. "Clarity" refers to producing a coherent vision out of messy problems. Baeck & Gremet focus on attitudes of the Design Thinker.	
		Optimism		Only mentioned by Tim Brown, but seems to be regarded as a universal characteristic of Design Thinkers.	
Get experimental and experiential	Embrace experimentation	Experimentalism	Curiosity Open mindset	Experimentation is an integral part of the designer's work.	
Collaborate across boundaries	Radical collaboration	Collaboration	Collaborative	Refers to the collaboration between people from different disciplines (having different backgrounds and viewpoints).	
Show, don't tellBias toward action	Show, don't tell Bias toward action			Emphasizes action, for example, by creating meaningful prototypes and confronting potential users with them.	
Be mindful of process	Be mindful of process			Emphasizes that Design Thinkers need to keep the overall process (which is regarded as a core element of Design Thinking), in mind with respect to methods and goals.	

Table 2.2: Characteristics of Design Thinkers (Waloszek , 2012, retrieved from : https://experience.sap.com/skillup/introduction-to-design-thinking/)

A fundamental characteristic of a design thinker is having a metacognitive awareness of the process (Rauth, et al., 2010, p. 3) and the skill of handling different perspectives because developing oneself challenging behaviour and questioning attitude is related with learning from others who have non- alike views. They can imagine the world from multiple perspectives, imagine solutions that are desirable and meet peoples' needs. They notice things that others do not. They are very optimistic, for a design thinker one solution instead of the existing alternative is better no matter of how much are the existing constraints. They are experimentalist who are capable of noticing things that others do not through asking questions, and explore barriers in creative ways that proceed in entirely new directions.

To sum up, design thinking is a complicated process applied through a set of interrelated stages. These later are put into practice by the design thinker. Therefore, both of them are of a great value and they are characterized by a set of features. The design thinking process creates solutions from a user-need perspective. It is more based on the human side of the problem solving and the collaboration between the members of the teamwork. Asking many questions, being optimistic to create new solutions no matter how impossible something might seem to be are the characteristics of a good design thinker.

2.2.4. The Design Thinking Procedure

The design thinking phases are set up for a specific issue that needs solutions for its potential problems. This process focuses on helping students deal with complex problems and progress using their natural capacities to deal with ambiguities. Different sides such as the Hasso Platner institute and Erdmann's circular model have developed design thinking stages. According to Erdmann's circular model, the design thinking process compounds of the following phases that can be linear or circular they can occur simultaneously and can be repeated: Understand, Observe, Synthesise, Ideate, Prototype and Test.

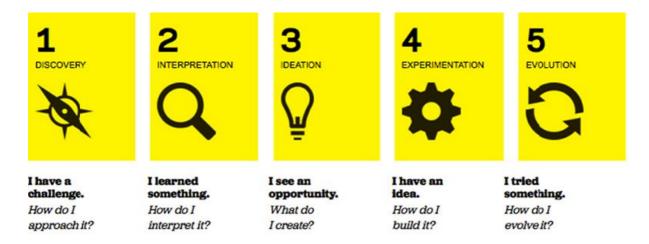


Figure 2.5: The design Thinking Process (IDEO, 2012)

The first phase of the design thinking process is understanding or defining. Designer students should work and discuss their knowledge about the design challenge as a team. Working as a team is a space to express everybody's knowledge, and to make sure that their perspectives and skill are being taken into consideration during the process. Noweski et al. claim that the more the team members spend time in discussion, the more the problem solution will be ensured (2012, p. 83). During the first phase, a variety of resources may be used such as conversation with experts, multimedia, conducting research, planning activities, and exploring unfamiliar context with curiosity in order to develop students' background knowledge about the issue being dealt with. The problem definition and understanding stage or the so called 'Discovery stage' is "the solid foundation for the ideas" claims Ching (2014, p. 113) and help keep heading in the right direction during the whole process (IDEO, 2012). d. school Stanford (2011, p. 2) notes that:

Two goals of the define mode are to develop a deep understanding of your users and the design space and, based on that understanding, to come up with an actionable problem statement: your point of view. Your point of view should be a guiding statement that focuses on specific users, and insights and needs that you uncovered during the empathize mode.

This means that during this stage students immerse themselves in learning. They talk to experts and conduct research. The goal is to develop background knowledge. Thus, they use their developing understandings as a foundation as they begin to address design' challenges. According to Grots and Creuznacher "the discovery stage aims at finding the available points for change" (2012, p. 2). Hence, the phrase "How might we...." is often used

to present suggestions about how to make changes that will have an impact on peoples' experiences. This phase emphasises the designer distinctive design mental picture that will be crafted based on his individual discoveries during the discovery work. According to Grots and Creuznacher, the discovery stage aims at finding the available points for change (2012, p. 2). This phase emphasises the designer distinctive design mental picture that will be crafted based on his individual discoveries during the discovery work.

In the observing phase of the design thinking, the focus is on becoming aware of peoples' needs. Based on what people say, how they behave and what they really want to express, the design thinker scrutinize and examine their actions (Noweski, CH. et al, 2012, p. 84). To be an observer means to be an explorer. According to Noweski et al., observing means "Watch real people in real-life situations to find out how they work, what confuses them, what they like and dislike, and where their needs can be better served" (2008, p. 45). This phase starts with collecting information and combine them together until the designer get a clear view about what he will be dealing with and get ready for the ideation stage. The aim of this stage is to augment the information acquired in the first step of understanding with further points of view (Grots and Creuznacher, 2012, p. 2). This stage is often the hardest phase in the process. Synthesizing means that students are required to combine what has been learned in the previous stages taking into account the user's needs and intuitions. The objectives of the synthesise phase is to associate between, on the one hand the input that includes collection, understanding and processing of ideas and the output on the other hand (Grots and Creuznacher, 2012, p. 5). So that they will be able to manipulate something new.

Ideate is the third stage in the design thinking process. In this stage, ideas are generated and organized (Harris and Ambrose, 2010, p. 11). Mentally, ideation of ideas means "group wide" to look for concepts and outcomes (Ching, 2014, p. 114). In the ideation phase quantity is encouraged and any idea is suggested is recorded, the more the idea is clear and evident, the more it will be accepted for implementation. IDEO, 2012 claims that brainstorming is the core element of this phase. Students are asked to generate ideas and accept others' ideas. In the classroom they should create a supportive climate, they should have the savoir –faire, be risk takers and thinkers. In the ideate phase solutions are generated individually and in the team. As a team, students contribute and work on their design with sincerity to accept unexpected ideas and new possibilities.

According to Both (2009) "you ideate by combining your conscious and unconscious mind, and rational thoughts with imagination". The ideate step is actually the easiest part of the design thinking process. Grots and Creuznacher state that during this phase what was theoretical is turned to be concrete and real (2012, p. 4). The basis for every idea generation is the synthesis phase. Ideation phase is also known with the use of divergent thinking that requires thinking from different perspectives, being surrounded with inspiring materials and accept all confusions in order to reach an advanced point which you will not be able to stretch to with a simple way of thinking.

A pre-testing stage is referred to as prototyping. In this phase, the audience can experience what the design team is working on. Ideas will be transformed into a physical form so that the audience can experience and interact with them. It does not have to be perfect, but "primarily deliver the main concept of the idea to outside people and answers to predefined question to the team in order to prove and improve ideas and concepts" (C. Noweski et al., 2012, p. 83). Prototyping causes one to think about the details of the idea to make them tangible, learn when building them and sharing them with people (IDEO, 2012). Prototyping speeds the innovation of the process. The faster you put things into the physical, real world, the faster you learn about the quality of your idea, the faster you improve it and the faster you get to an idea that is ultimately going to work.

Ambrose and Harris argue that prototyping is the next step to refine ideas and get feedback that should be visible and communicable (2010, p. 11). If the design team, the user or other people can interact with the idea, prototyping will be more successful and drives to good solutions (Both, 2009, p. 4), not only for the future user but also for the design thinking team itself (Grots and Creuznacher, 2012, p. 5). It is clear that, once the designing team have an idea for what they are building, then they need to know how to build it and prototype is the vehicle through which they experiment to do this. It requires practice skills to build and imagination to bridge the gap between the problem and the finished product. The idea is to fail early because prototyping offers a safe environment to skill failing until we succeed.

Testing is the last phase of the process and the stage of concept proofing. It is closely related with the step of prototyping because it serves at incorporating the future people concerned and affected by the design process, under the testing effect of the solution that has been developed. IDEO (2012), claims that testing or evaluation is "the development of your concept over time". This means that while testing the next step should be planned, ideas

should be communicated to people who are able to aid with its accomplishment. Thus, knowing what works and what does not is the major purpose of testing. Testing ensures that ideas will be improved and developed for specific users (Grots and Creuznacher, 2012, p.5). So, testing is related to deployment and feedback, for that designing something is all about learning and the best learning is supported by experience.

The process of ideating, prototyping and testing is repeated early for the purpose that mistake are quick, cheap, and ultimately lead to success.

Prototypical Stages	Wikipedia /Herbert Simon	IDEO Toolkit	Tim Brown (IDEO)	d.school/D- School (HPI)	d.school Bootcamp Bootleg (HPI) – Modes	Baeck & Gremett (2011)	Mark Dziersk (Fast Company)
Understand the problem	Define	Discovery	Inspiration	Understand	Empathize: Observe, engage,	Define the problem to solve	(1) Define the problem
Observe users	Research			Observe	immerse	Look for inspiration	
Interpret the results		Interpretation		Point of View	Define (Problem statement)	_	
Generate ideas (Ideate)	Ideation	Ideation	Ideation	Ideate	Ideate	Ideate multiple ideas	(2) Create and consider many options
Prototype, experiment	Prototype	Experimentation	Implementation	Prototype	Prototype	Generate prototypes	(3) Refine selected directions(3.5) Repeat (optional; steps 2 and 3)
Test, implement, improve	Objectives/Choose Implement Learn	Evolution		Test	Test (includes refine and improve solutions)	Solicit user feedback	(4) Pick the winner, execute

Table 2.3: Comparison of Several Design Thinking Process Models (Waloszek, 2012,

https://experience.sap.com/skillup/introduction-to-design-thinking/

Summing up, design thinking is a process that enables us to solve complex problems and those who practise it are design thinkers. It goes hand in hand with complex systems by improving their interdisciplinary, complex, uncertain, evolutionary nature. It creates options that has not existed before. It requires an initial phase of divergent thinking where we ask expensive questions. The design thinking process' stages are used to explore the different contexts before we have to narrow our vision upon a single problem and refine it through convergent thinking. It involves five (5) steps that begin with learning from customers and ends with producing a product that solves the customers' problem in a valuable way. Hence, design thinking describes a repeatable process that offers some structures to assist the design thinkers in the design or the development of a design or serves.

2.2.5. Design Thinking in the Classroom

The 21st century has brought many challenges for people in all spheres including education. Among the new strategies to enhance learning, design thinking is used. Barseghian states that applying the technique of design to education, teachers change the process of traditional learning into a process which deals with learner's creative abilities, and boost them to dig with subject problem and analyses it to figure its details (2009). Design thinking is an approach and model of learning that may be used in the teaching-learning process to develop and enhance innovation and creativity in the classroom. Seemingly, it is clear that Kwek argues when he claims that:

The notion that learning involves students as co-creator and collaborative problem solver and is characteristic of sharing ,researching evaluating and collaborating with peers, are more likely to enact and inspire teaching and learning practice that emulate the forms of sharing and social engagement that are flourishing in the 21st century world (2011, p. 3).

Design thinking is deeply a human approach that relies on the individual's ability to be intuitive, to interpret what he observes and to develop ideas that are emotionally meaningful to those he/she is designing for. As clarified by Kwek (2011, p. 6) design thinking leads to better ideas because it encourages the perpetual deconstruction and building of thoughts which are previously regarded as static. Therefore, this process is applied to help students design solutions to the obstacles that encounter them while making an exercise (Lindberg. et all, 2010, p. 243). 21st century skills and education are positively influenced by this new concept because they are based on design thinking as a tool of gathering ideas as well as

teaching skills as noted by Ray (2012). Jobs. B et all. (2012, p. 36) states that design thinking provokes learners to take risk and participate in solving problems which they don't know rather than doing what they know .Participating in solving mysterious problems is an evidence of high level of person's trust that help to ameliorate the one's creative confidence.

Design thinking does not only encourage self-confidence, but drives its users to synthesize what they know in new constructions, arrangements, patterns, compositions, and concepts in addition to that it encourages ideation and fosters problem solving skills and other competences which are similar to the five assumptions outlined by Zhao (2009, p. 151). Who thinks a school should teach:

- 1. Skills and knowledge that are not available at a cheaper price in other countries or that cannot be rendered useless by machines
- 2. Creativity, interpreted as both ability and passion to make new things and adapt to new situations;
- 3. New skills and knowledge that are needed for living in the global world and the virtual world (examples include foreign languages, global awareness, and multicultural literacy, and knowledge to cope with the global world, and digital or technology literacy for the virtual world);
- 4. High-level cognitive skills such as problem solving and critical thinking;
- 5. Emotional intelligence the ability and capacity to understand and manage emotions of self and others, the ability to interact with others, understand others, communicate with others, and manage one's own feelings

To prepare future innovators to be advanced thinkers using design thinking, a design school was built to educate design thinking in Stanford and Postdam and was officially established in 2005 (Rauth, 2010, p.3). Taking design thinking to school is a collaboration of the Hasso Plattner Institute of Design (d.school) which was opened in 2007 in Potsdam and Germany, the School of Education (SUSE) and teachers in local schools to explore how design thinking can best impact teaching and learning. For that, its benefit in pedagogy refer to its character which enable students to work successfully in multi-disciplinary teams (Rauth et al, 2010, p.2). Therefore, helping students to think like designers may better

prepare them to deal with difficult situations and to solve complex problems in school, in their careers, and in life in general.

In education design thinking is sometimes referred to as design-based learning (Luka, 2014, p. 69). It is perceived as a model for enhancing creativity, endurance, engagement and innovation (Dolak, 2013, p. 2). As a style of thinking, it is generally considered "the ability to combine empathy for the context of a problem, creativity in the generation of insights and solutions, and rationality to analyze and fit solutions to the context" (Brown, 2008, p. 85). Images claims "Design thinking can seem a bit abstract to teachers. It's not part of traditional teacher training programs and has only recently entered the teachers vernacular" (http://www2.kqed.org/). Concerning the relationships between teachers and students, teachers are not only instructors of the method but models to the students, as well. Teachers act as advisors and co-creators, but not as judges and evaluators.

Teachers cultivate a creative mindset to develop rigorous and relevant programs for their students. Design thinking allows students to fail fast and learn by doing rather than avoiding failure by striving for initial perfection. It fosters the need to ask relevant questions versus giving correct answers. It requires teachers to guide and show pupils instead of telling and lecturing. It encourages students to become process experts as opposed to subject experts. (http://createdu.org/)

A core part of design thinking education is to be open to learning from others. There is therefore very little individual competition in design thinking schools. The attitude of helping each other within and between teams predominates. Jobst et al. claim that teams do not focus on competing with each other but on solving complex challenges and delivering satisfying results (2012, p. 41). In the same context, he claims that at the design thinking schools in Potsdam and Stanford a team member has experiences that the alone never would have had: experiences of communication, visualization, structuring contents, organization, and risk taking. He learns how to observe others (his team members) and likewise how he is being observed. Due to the distribution of competences and ideas among the students, every single one of them moves in a constant flow of indirect experiences.

In summary, by improving students' design thinking skills, students will be more ready to face problems, think outside of the box, and come up with innovative solutions.

Conclusion

Many writers have prepared outlines before beginning to write, whereas the importance of distinguishing between the different pre-writing strategies is stressed. The latter tends to be used to generate ideas and highlights the main obstacles that hinder the thinking abilities in the writing process. Pre- writing strategies as writing techniques allow students to describe what comes first at their minds either by using mind-maps, list of ideas and items, writing complete sentence continuously for a specific period of time or following a set of steps while generating ideas. In this chapter, some of the most known and useful pre- writing strategies individual learners can use to develop their writing abilities and their learning capabilities in general, have been identified such as: clustering, brainstorming, free-writing, with a special emphasis on the design thinking. The latter tries to push students to proceed with the five stages' writing process to cope with the difficulties that they may encounter. Following the design thinking process, the teacher aims at encouraging his learners to think aloud and share their ideas in class discussion so that they will be able to figure out the writing obstacles and ultimately find the appropriate solutions.

CHAPTER THREE

Implementation of the Experiment and Analysis of the Findings

Chapter Three

Introduction	54
3.1 Aim of the Experiment	54
3.2 The Population and Sample	54
3.3 Experimental Procedure	55
3.3.1 The Pre-test	55
3.3.2 The treatment	56
3.3.3 The Post-test	56
3.4. Content of the Experiment	57
3.4.1 First Course: Process Paragraph	57
3.4.2 Second Course: Cause and effect Paragraph	61
3.4.3 Third course: Comparison and contrast Paragraph	67
3.4.4 Fourth Course: Argumentative Paragraph	73
3.4.5 Fifth Course: Classification Paragraph	77
3.5. The scoring Criteria	81
3.6. Quantitative Results of the Control Group (Descriptive)	82
3.6.1 Pre-test Achievement	82
3.7. Quantitative Results the Experimental Group (Descriptive)	85
3.7.1 Pre-test Achievement	85
3.8. The Experimental Group Overall Treatment Scores	88
3.9. The Experimental Group Overall Treatment Results	89
3.10. The Control Group Achievement	90
3.10.1 Post-test Achievement	90
3.11. The Experimental Group Achievement	92

3.11.1 Post-test Achievement92		
3.12. Comparative Evaluation of Achievement95		
3.12.1. Comparison of Pre-test /Post-test Achievement of Control Group		
3.12.2 Comparison of Pre-test/Post-test Achievement of Experimental Group		
3.13. Hypothesis Testing96		
Conclusion		

Introduction

The main aim of this study was to evaluate the effectiveness of using the design thinking process for developing students' paragraph writing skill in terms of content and organization. This chapter presents the experimental study which has been conducted at Mohamed Kheider University, Biskra. A detailed description of the experiment is provided by defining its aims, the population under study, the sample and the content of the experiment. In addition, the present study seeks to check out whether the treatment could positively affect second-year LMD university paragraphs. In this chapter, both descriptive and inferential statistics will be computed in order to find out whether there is a positive improvement in the participants' paragraphs.

3.1. Aim of the Experiment

As pointed out before, the aim behind this experiment is to contribute in improving the participants' paragraphs (content and organization) through using the design thinking process. Thus, one groups of second year LMD students at Mohamed Kheider University, Biskra received the treatment to check the independent variable effect on the dependent one.

3.2. The Population and Sample

Wright and Fowlere (1986) stated that "a sample is a subset or a relatively small group selected from a population, and we hope that our sample will be representative of the Target Population".

The empirical study took place in the Department of English, The University of Mohamed Kheider, Biskra. The sample consists of two groups of second year LMD students. Two group out of ten EFL students whose mother tongue is Arabic took part in this study, the first one was considered as the experimental group (n=17) and the other one as the control group (n=17) whose overall age range between twenty and twenty three years. The number of participants in each group was larger, but some papers were eliminated from the study because of their writers' absences either during the time of the instruction or on the day during which the post-test was administered.

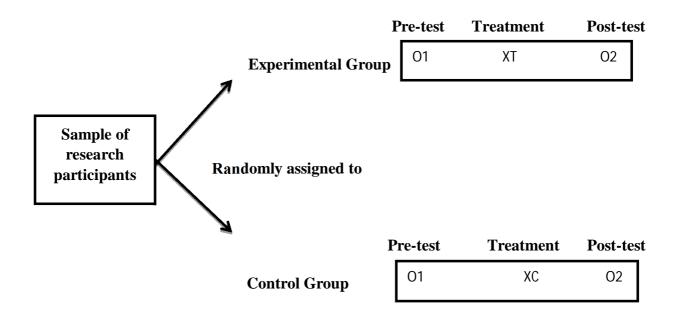


Figure 3.6: Pre-test-Post-test Control-Group and Experimental Design

(Adapted from Johnson & Christensen, 2012, p. 303)

Where: O1 and O2 represent the pre-test and post-test assessment of the dependent variable.

XT represents the treatment condition.

XC represents the control or standard treatment condition

This figure represents the scheme of this work that we relied on to do the treatment. A pre-test was presented to both groups at the same time. The experimental group studied paragraph writing according to the new method "using the design thinking process" and the control group studied according to the written expression teacher approach of teaching. I taught paragraph writing to the Eg in full myself whereas another teacher taught the Cg. At the end of the experiment, which lasted five weeks in the second term (2016), a post-test was presented to both groups.

3.3. Experimental Procedure

This experiment was carried out into three stages:

3.3. 1. Pre-test: It was administrated to both groups controlled and experimental (N=34). The participants have sat for the test in regular sessions. After the participants were introduced to the general paragraph writing techniques, they were directly asked to

accomplish the researcher's task (to write a short paragraph about the given topic: how to convince an obese infant to lose weight) individually and silently in approximately 1h in full. This task was chosen on purpose as it was intended to assess and evaluate how much they can generate ideas and match them based on the general rules of paragraph organization.

3.3.2. Treatment: The independent variable used in this study consisted of two conditions: an experimental condition in which the students practised paragraph writing according to the principles of the design thinking process and a control condition in which the students were exposed to paragraph writing according to the written expression's teacher personal approach of teaching writing.

With the experimental group, at the beginning, the aims of the experiment and its principles were explained. We also familiarized the students with the different stages they are going to proceed with during each lesson. Structure was mostly taught implicitly (inductively). This means that students are going to generate ideas and acquire paragraph structures simultaneously while they are engaged and involved in tasks and activities without forcing them to participate and without necessitating mastery of certain rules.

Furthermore, we focused on the use of sample paragraph in each paragraph type session, using different types of activities. In the class, students' seats were arranged in paired group of four in order to write their final paragraphs cooperatively. We introduced and facilitated the communicative activities, and we acted as an observer and a monitor while the students performed the tasks and whenever needed, the teacher should provide explanation

3.3.3. The Post-test: It was administered to both groups (experimental and control groups). In the post-test, the participants were asked to rewrite a short paragraph using the same method of development (process paragraph) about a different topic: how to succeed in the exam taking into consideration what they have learnt about the example paragraph using the new method during the time of the instruction to check and tie test their level after extensive courses, but using the same method as they did with the pre-test. They were supplied with a checklist which served as a reminder of the different organization aspects they are supposed to realize in their texts.

3.4. Content of the Experiment

The experiment includes a series of lessons prepared by the researcher himself to help students to improve their paragraph writing content and organization. The courses that we prepare are part of their syllabus.

3.4.1. Lesson N° 1: "Process Paragraph"

Date: 14/02/2016

Place: Betaibi, room 1

Time: 8:00 to 9:30

Module: Written expression

Topic: how to manage your anger (process paragraph)

Materials: paper, pen, board, handout

Lesson focus: The aspects of the lesson focus will be on ideas choice and organization.

-Students will focus on the relevant information related to the topic (content).

-Students will work on the different parts of a paragraph:

• Topic sentence: participants identify the topic sentence

• Body (supporting details): participants list the supporting sentences

• Conclusion: participants identify the conclusion

Objective: By the end of the course, participants will be able to write paragraphs following the design thinking process' steps to improve their paragraphs' content and organization.

Competencies: The ability to write a short paragraph persuading children from more than one perspective (teamwork).

Personal goals: the aspects of teaching I am trying to improve is planning lessons that help learners to ameliorate their paragraphs in terms of content and organization.

Phase one: Defining: In this phase, the teacher divides the learners into groups

❖ The teacher asks the students about the types of paragraph they know. Participants expected answers: descriptive, process, narrative, expository.

- ❖ He/ she introduces the topic: "how to manage your anger" in order to stimulate the learners thinking abilities about the nature of the task. After that the teacher tries to elicit information from the students asking them questions such as: based on the topic, which type of paragraph will be used.
- Participants will try to give different answers mainly: descriptive and process.
- ❖ The teacher will give a definition of the process paragraph (A process paragraph explains how to do something or describes or explains how something is done) and the different steps to be followed in order to write a process paragraph.
- ❖ The teacher asks the participants about the organization of a process paragraph:
- a- What are the different parts of a paragraph?

Participants provide answers:

- -Topic sentence: participants identify the topic sentence
- Body (supporting details): participants list the supporting sentences
- Conclusion: participants identify the conclusion
- b- What is the function of the topic sentence in a process paragraph?

Participants might well answer: - introduces the topic.

-Tells the audience how the information will be organized.

c- What does the supporting sentences in a process paragraph provide?

Participants provide answers: all the information and instructions needed to complete a task.

d- How are the supporting sentences related?

Students respond: They are related in a chronological order using time transitions such as: first, after that, then, while, before.

d- How a process paragraph is ended?

We end the paragraph with a concluding sentence. It should restate the topic of the paragraph

Activity: In this activity students will be aware of the importance of cohesion, coherence and the use of time transitions to relate ideas.

"How to gain control when you feel overwhelmed by heavy work load"

When you feel overwhelmed by a heavy workload, there are several steps you can take to gain control. The first is to list as quickly as possible everything that needs to get done. For a report or assignment, this can mean brainstorming or throwing as many ideas you can think of onto paper in ten minutes, without worrying about order or form. Second, divide the task into three groups: what has to be done immediately, what can be done within the next week or so, and what can be postponed till a later date. Next, break each task down into the exact steps you must to get it done then, as on a text, do the easiest ones first and go back to the hard ones later. Instead of just worrying about what you ought to be doing, you will be getting something done and you will be surprised at how easily one-step leads to another.

Content

1. What kind of paragraph is it?	
a- Descriptive	
b- Process	
c- Persuasive	
d- Narrative	
2. Does the paragraph have unity	, with no irrelevant sentences?
Organization	
1. Underline the topic senter	nce of the paragraph
2. Underline the closing sen	itence (s)
3. Use brackets ([]) to fram	e the body sentences.
4. What kind of ordering do	oes the paragraph use?
a- chronological order	
b- Spatial order	
c- Logical order	
3. What are the transition words	that help guide you through the paragraph

Phase two: Observing/ Interpretation:

- ❖ In order to involve the students in the task, the teacher will carry out a discussion with his students to enable them to collect as much information as possible about the topic .Participants will discuss all what they know about the subject of the lesson i.e. each one give his/ her ideas or general information about the topic by answering the teachers' questions.
- The teacher writes the word "temper" on the board.
- Ask participants to call out the first thing that come to mind and record their first ten responses on the board.

Participants may answer: people avoidance, screaming at people, bad habit, bad reputation, disrespected, makes people scared of you

- Explain that to many people, the word has more than one meaning. In some circumstances, the term anger refers to a normal, healthy emotion, but it becomes a problem when it harms you or others.
- Write the definition of Temper on the board: Anger refers to a natural reaction to pain or being hurt that results in negative emotional reactions.
- Ask: Can you think of any examples that causes you to be angry and fit this definition?

Participants may respond:

You and your brother (or sister) share a room. Your brother (or sister) leaves clothes and sports equipment on the floor and the desk chair. You like things to be neater, and get angry when you see the "messy" room. You want the situation to improve

You and your friend are disagreeing because your friend calls you by a nickname in front of your friends, and this embarrasses you.

Tell participants that, while anger is a strong emotion, they probably already have strategies they use to get their anger under control.

They may answer: Deep breathing, thinking of a pleasant image, talking to yourself.

Students should take individual notes.

Phase three: Synthesizing: In this phase participants will take only what they need by

specifying their direction i.e. only what is related to the purpose of the topic.

❖ Participants are required to combine what has been learned from the classroom

discussion in the previous stages with their previous knowledge, so that they will be

able to manipulating something new.

❖ The teacher will give back to the participants their previous paragraphs (pre-test) so

that they will figure out the mistakes they have done, not to be repeated.

Phase four: Ideation: In this phase students cooperate with each other to generate

appropriate ideas.

Forming groups of four, participants will cooperate with each other to write a good

paragraph.

• Participants will gather and exchange the information they have recorded from the

classroom discussion so as to write a good topic sentence, diverse supporting details

which are interrelated in a cohesive way and logically ordered and conclude with a

suitable concluding sentence, thus quantity is encouraged.

Phase five: Pre- testing/ prototyping: In this phase, the teacher's task is to check the flow

of the process, the quality of the ideas in order to guide participants to improve their

paragraphs. This will encourage them to correct errors or make modification (revision phase)

since they will receive feedback from the teacher, they will try to improve the draft until it

becomes acceptable.

Phase six: Testing: testing is related to the feedback and the final output. In this phase

finally, participants will be asked to write their paragraphs to deliver their products to the

teacher to be corrected.

3.4.2. Lesson N° 2: "Cause and Effect paragraph"

Date: 14/02/2016

Place: Betaibi, room 1

Time: 8:00- 9:30

Module: Written expression

61

Topic: Negative consequences of divorce on families (cause and effect paragraph)

Materials: paper, pen, board, handouts, reading passage.

Lesson focus: The aspects of lesson focus will be on ideas choice and organization.

- Participants will focus on the relevant information related to the topic

(content).

- Participants will work on the different parts of a paragraph:

• Topic sentence: participants identify the topic sentence

• Body (supporting details): participants list the supporting sentences

• Conclusion: participants identify the conclusion

Objective: By the end of the course, participants will be able to write paragraphs following the design thinking process' steps to improve their paragraphs' content and organization using the appropriate transition words for the cause and effect paragraph. Thus, they will have a clear idea about:

1. Definition and purposes of cause and effect

2. Organization of cause and effect paragraphs

3. Language useful for the topic sentences of cause and effect paragraphs

4. Coherence in cause and effect paragraphs

Competencies: The ability to write a short paragraph giving appropriate arguments that express cause and effect (teamwork).

Personal goals: the aspects of teaching I am trying to improve is planning lessons that help learners to ameliorate their paragraphs in terms of content and organization.

Phase one: Defining: in this phase:

The teacher asks participants about the organization of a paragraph as a kind of

revision and preparation for the task:

Participants provide answers:

-Topic sentence

- Body (supporting details)

62

- Conclusion

- The teacher tells his learners that today's session is about the second type of paragraph development methods which is: Cause and Effect.
- The teacher asks them a set of introductory question that are related to the task:

1: What is a cause and effect paragraph?

Participants provide the following:

- A cause and effect paragraph discusses causes or reasons that produce some effect
- Points out the effect that comes from some causes
- It answers the question "why"
- 2: For what purpose cause and effect paragraph is used?
 - They provide these answers: To convince, to justify, to prove or disapprove an idea.
- 3: What should a topic sentence of cause and effect paragraph mention?
 - Participants answer: a topic sentence of cause and effect paragraph mention both causes and effect to show the relationship between them
- 4: How can cohesion be achieved in a cause and effect paragraph?
 - Participants reply: Cohesion can be achieved through the use of words that indicate numerical order (**first**, **second**,...) or the use of transition markers that indicate cause and effect(**because**, **so**, **since**, **as**, **because of**, **due to**, **the effect of**, **so** (**that**), **consequently**, **as a result**, **thus**, **therefore**, **as a consequence**, **to result in**).
- The teacher distributes handout to his learners that include the following:

Why do children leave school?

One of the biggest issues that some families encounter is their children's dropping out of school. This is due to many reasons.

-In this activity students will be aware of the importance cohesion, coherence and the use of time transitions to relate between ideas. As well as they will be able to differentiate between a sentence that expresses a cause and another one that expresses an effect.

Activity 1: select body and closing sentences to add to this topic sentence.

1:	Write "B" for body sentences and "C" for closing sentences in the first blank
2:	Write "C" for cause sentences and "E" for effect sentences in the second blank
•	Another reason is that poor families can't afford to provide their children with all what they need for school, as books and school things are getting expensive. [], []
•	Generally speaking, they are victims of circumstances and are, thus, often imprisoned [], []
•	First, most children who live in rural areas can't attend school regularly because it is situated far away from where they live. Their parents also need them to help with the housework. [], []
•	As a result, these poor kids get lost in the world of adults. Some become addicted to smoking and drugs. Others turn to crime. [], []
•	The problem is also due to family problems and divorce. Children can't study when parents often have rows. In cities, small children leave school early to go out to work and support their deprived families. [], []
3: Re	-order the previous sentences so that you form a coherent cause and effect paragraph
*	The teacher checks and correct the learners' answers orally.

Phase two: Observing/ Interpretation:

❖ In order to involve the participants in the task, the teacher will ask his participants to listen to a short passage he is going to read so as to they will be able to collect as much as possible information about the topic and answer the teachers' questions in their handouts.(activity 2).

Participants should take individual notes.

Activity2: the teacher reads the passage and asks learners to take notes.

Divorce is a complex issue with more than one cause and effect. One of the main reasons is the rapid change in society. Families in the modern world no longer stay together. People live away from their parents, and women often work outside the home. Traditional rules of marriage have changed. Another factor is pressure o marry. Many young people rush into marriage. Their parents also often push young people into getting married. A third cause is unrealistic expectation and lack of preparation. The main emphasis is on the cost of the wedding, not on the difficulties of sharing life with another person. As the high levels of divorce have had many causes it has also many effects. The biggest effect is on children. Children of divorced parents often have social or emotional problems. They may lack support or care in the home or have difficulties in the new family. They may even have problems at schools. Women and men are also effected. After divorce, they may suffer from financial problems or from not being able to see their children or find a suitable partner. Divorce is a serious issue with major implications for children, men, women and society.

A/ Give the suitable supporting sentences for the following topic and concluding sentences.

Participants will individually answer based on their previous knowledge and the information have been given by the teacher.

Topic sentence: Divorce is a complex issue with more than one cause and effect.

Cause 1:
Explanation:
Cause 2:
Explantation:
Effect 1:
Explanation:
Effect 1:
Explanation:

Concluding sentence: Divorce is a serious issue with major implications for children, men, women and society.

Phase three: Synthesizing: In this phase participants will take only what they need by specifying their direction i.e. only what is related to the purpose of the topic.

❖ Participants are required to combine what has been learned from the classroom discussion in the previous stages with their previous knowledge, so that they will be able to manipulating something new.

B/ individually write a short cause and effect paragraph using the appropriate transition
words to relate between your ideas.

Phase four: Ideation: In this phase participants cooperate with each other to generate appropriate ideas.

- ❖ Forming groups of four, students will cooperate with each other to write a good paragraph.
- ❖ Participants will gather and exchange the information they have recorded from the classroom discussion and activity (1, B), so as to write a good topic sentence, diverse supporting details which are interrelated in a cohesive way and logically ordered and conclude with a suitable concluding sentence, thus quantity is encouraged.

Phase five: Pre- testing/ prototyping: In this phase, the teacher's task is to check the flow of the process, the quality of the ideas in order to guide students to improve their paragraphs. This will encourage them to correct errors or make modification (revision phase) since they will receive feedback from the teacher, they will try to improve the draft until it becomes acceptable.

Phase six: Testing: testing is related to the feedback and the final output. In this phase finally, participants will be asked to write their paragraphs to deliver their products to the teacher to be corrected.

3.4.3. Lesson N° 3: "Comparison and contrast paragraph"

Date: 21/02/2016

Place: Betaibi, room 1

Time: 8:00-9:30

Module: Written expression

Topic: Similarities and differences between studies at high school and university

(comparison and contrast paragraph)

Materials: paper, pen, board, handout.

Lesson focus: The aspects of lesson focus will be on ideas choice and organization.

- Participants will focus on the relevant information related to the topic

(content).

- Participants Students will work on the different parts of a paragraph:

• Topic sentence: participants identify the topic sentence

• Body (supporting details): participants list the supporting sentences

• Conclusion: participants identify the conclusion

Objective: By the end of the course, participants will be able to write paragraphs following

the design thinking process' steps to improve their comparison and contrast paragraphs'

content and organization.

Competencies: The ability to write a short paragraph differentiating between the similarities

and differences of two compared things (teamwork).

Personal goals: the aspects of teaching I am trying to improve is planning lessons that help

learners to ameliorate their paragraphs in terms of content and organization.

Phase one: Defining: In this phase, the teacher gives the learners handout:

* The teacher asks the learners to read silently their handouts for a limited period of

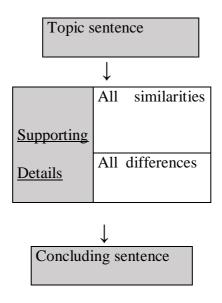
time.

67

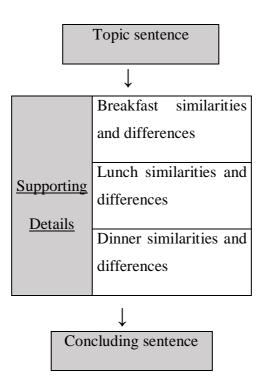
- 1: In the comparison and contrast paragraph you explain the similarities and the differences between two items such as two characters in a book or a play, two political parties, operating systems or two restaurants.
- 2: The purpose of comparison is to show how people, places, things or ideas are similar; whereas, the purpose of contrast is to show how people, places, things or ideas are different.
- **3:** In order to show the reader what is the same and what is different, we can use different signals that make the similarities and differences clear such as:

Comparison	Contrast
- Also	-However
- And, as, like	-While
- Not onlybut	-On the other hand
- Neithernor	-Although
- Similar to	-Even though
- Similarly	-Whereas
- Asas	-Compared to/ with

- **4:** There are two ways to organize the points in comparison and contrast paragraph, one way is called **Block organization** and the other way is called **point-by-point organization**.
 - ❖ <u>Block organization:</u> in this way we can group all the similarities together in one block and all the differences together in another block and rite about each group



❖ <u>Point-by-point organization:</u> In this way we can use "sub topics" to write about similarities and differences for example: if you are comparing and contrasting the menu of two restaurants, your sub topics might be breakfast, lunch and dinner



The teacher explains to the learners the comparison and contrast paragraph, how it is organized and the transition words used to relate between the different similarities and differences of the compared items.

Phase two: Observing/ Interpretation: In order to involve the participants in the task, the teacher will ask his students to read the two sample paragraphs and answer the teachers' questions in their handouts(Activity 1, 2).

Activity 1:

Sample 1:

Students who have Mr. Jones and Mr. Smith are immediately aware of the difference in the lecturing manner of each teacher. Mr. Jones has a pleasant voice, which helps hold the interest of the students. He pronounces clearly in a rhythmic pattern emphasizing key words. His moderate tone and inflected words make his lectures interesting. Mr. Jones also adds humor to his subject, and he welcomes questions from students who

don't understand the material. He takes his time and explains slowly. He tries to make sure that his students understand a concept before he moves on to something new, and he is very enthusiastic about his subject. Mr. Smith, on the other hand, has a different tone, pronunciation, expression and attitude from Mr. Jones. He has a booming voice, which commands rather than teaches, and sometimes it is hard to understand because he runs his words together. His lectures are not as interesting as those of Mr. Jones, either, because Mr. Smith speaks in a boring monotone. He also hates to be determined mood. Thus, as the above points illustrate, the lectures of Mr. Jones and Mr. Smith are quite different

Sample 2:

Students who have Mr. Smith and Mr. Jones are immediately aware of the difference in the lecturing manner of each teacher. Mr. Jones has a pleasant voice, which helps hold the interest of the students. Mr. Smith, however, has a booming voice, which commands rather than teaches. Mr. Jones pronounces clearly in a rhythmic pattern emphasizing key words. On the other hand, Mr. Smith mumbles, running his words together. The moderate tone and inflected words of Mr. Jones make his lectures more interesting than those of Mr. Smith, who speaks in a boring monotone. Mr. Jones also adds humor to the subject, whereas Mr. Smith is always serious about each lesson. Mr. Jones welcomes questions from students who don't understand the material, as compared to Mr. Smith who hates to be interrupted. Mr. Jones takes his time and explains slowly, whereas Mr. Smith rushes through each lesson. Mr. Jones is very enthusiastic about his subject: he tries to make sure everyone understands a concept before he moves on to something new. Mr. Smith, however, is always in a determined mood; he feels that he must cover everything. Each teacher has a different voice, tone, pronunciation, expression, and attitude: and as a result, their lectures are quite different.

Q1: Underline the topic sentence and the concluding idea in each paragraph

Q2: Identify the method of development for each sample paragraph

Q3: Complete the table

Similarities	Differences	Signal to show similarities	Signal to show differences

Activity 2:

A/ The teacher will carry a small discussion with his learners asking several question so that they will be able to collect ideas about the similarities and differences between studies at high school and university.

- **!** Is there any similarities and differences?
- Participants will answer, yes of course
- ❖ The teacher asks: can you mention any similarities or differences , completing the table on the board:

Similarities	Differences		
Similarities - Studying in organized classes - Exams at the end of each semester - Holidays	University - The session timing (1h: 30) - You can study 2 session per day - Number of semesters (2 semesters) - Depend on yourself - Specialized in one field - Attendance is not obligatory	High school The session timing (1h) From 8:00 to 5:00 pm 3 semesters Depend on the teacher Study different fields You are obliged to	
	Ordinary clothesShared session among the groups(sections)	attendYou are obliged to wear your uniform	

				- Each group has his
				own class.
		1		
B / The teacher	r ask his part	icipants to use	the information	above to write a suitable topic
	-	-	porting sentence	-
Topic sentence	»:			
<u>Similarities</u>				
SS 1:				
SS 2:				
SS 3:				
Difference.				
SS 1:				
SS 2:		• • • • • • • • • • • • • • • • • • • •		
SS 3:				
Concluding ide	ea:			
Phase three: S	Synthesizing:	In this phase		
Particip	ants are requ	uired to combin	ne what has be	en learned from the classroom
discuss	ion in the pre	vious stages wi	th their previous	s knowledge so that they will be
able to	manipulating	something new		
C/ individuall	y write a sho	ort comparison	and contrast p	aragraph using the appropriate
transition word	ls to relate be	tween your idea	s. (Limited peri	od of time)
•••••	•••••	•••••		
The tea	cher checks t	he learners para	graphs after the	y finish

❖ The teacher will give back to the students their previous paragraphs so that they will

figure out the mistakes they have done, not to be repeated

Phase four: Ideation: In this phase participants cooperate with each other to generate

appropriate ideas.

Forming groups of four, students will cooperate with each other to write a good

paragraph.

• Participants will gather and exchange the information they have recorded from the

classroom discussion and activity1 (A, B, C) so as to write a good topic sentence,

diverse supporting details which are interrelated in a cohesive way and logically

ordered and conclude with a suitable concluding sentence, thus quantity is

encouraged.

Phase five: Pre- testing/ prototyping: In this phase, the teacher's task is to check the flow

of the process, the quality of the ideas in order to guide the participants to improve their

paragraphs. This will encourage them to correct errors or make modification (revision phase)

since they will receive feedback from the teacher, they will try to improve the draft until it

becomes acceptable.

Phase six: Testing: testing is related to the feedback and the final output. In this phase

finally, participants will be asked to write their paragraphs to deliver their products to the

teacher to be corrected.

3.4.4. Lesson N° 4: "Argumentative or persuasive paragraph"

Date: 22/02/2016

Place: Betaibi, room 1

Time: 8:00- 9:30

Module: Written expression

Topic: write a paragraph persuading your reader about "How Drugs Can Destroy People's

Lives' (Argumentative paragraph)

Materials: paper, pen, board,

Lesson focus: The aspects of lesson focus will be on ideas choice and organization.

73

-Students will focus on the relevant information related to the topic (content).

-Students will work on the different parts of a paragraph:

• Topic sentence: participants identify the topic sentence

• Body (supporting details): participants list the supporting sentences

• Conclusion: participants identify the conclusion

Objective: By the end of the course, students will be able to write paragraphs following the design thinking process' steps to improve their comparison and contrast paragraphs' content and organization.

Competencies: The ability to write a short paragraph convincing the reader of your point of view (teamwork).

Personal goals: the aspects of teaching I am trying to improve is planning lessons that help learners to ameliorate their paragraphs in terms of content and organization.

Phase one: Defining: In this phase, the teacher gives the students handouts that includes:

Argumentation is the type of paragraph development in which various aspects of questions or problems are presented in a logical order

In this method you try to persuade your reader to agree with your opinion about a controversial topic, outlining the advantages and disadvantages of a certain topic, or providing solutions to problems.

You should support your opinion by including examples and reasons for what you have said using phrases such as "In my opinion", "I believe", "I think", "I strongly believe", and "In my view"

Sample:

Getting a Driver's license

In my opinion, people should be at least eighteen years old before they are allowed to get a driver's license. First of all, people under eighteen should be concentrating on their studies. It takes a lot of time for teenagers to learn the rules of the road and how to handle a

vehicle. It should be better if they used this time to study. Second, statistics show that young drivers have more accidents than older drivers. They tend to be careless, and a machine that weights several thousand pounds should be handled very seriously. Finally, and most importantly in my opinion, if teenagers cannot drive, they will learn other ways to get around which may lead to good life long habits such as: using public transportation, bicycling, or just walking. These habits may ultimately help the environment and most certainly will help teenagers to be more physically active. In short, it is clear that there are many good reasons for a young person to wait until age eighteen to get a driver's license.

Activity 1: read the above paragraph then identify:
1: the topic sentence
2: The arguments that support the main idea
3: The examples that support the arguments
4: The concluding sentence
5: The expressions used to express the writer's opinion

Phase two: Observing/ Interpretation: in this phase in order to involve the participants in the task,
❖ The teacher will present a video of 7:64 minutes in length to the participants to watch and after that make a discussion responding to the teacher's questions
1: What is the video about?
-Students will answer: Marin's story: The Battle against Heroin (drugs).
2: Does drugs affect Marin's life? How?
-They answer: -She started to have conflicts with her friends,
-She has a family breakdown,
-She started to find herself in situations where she did not feel entirely in control of her actions, taking drugs increases the likelihood of acting in a violent way, feeling stressed instead of relaxed.
-She stole her father's credit card trying to get the money to buy drugs
-This Life style influenced her study?
Phase three: Synthesizing: In this phase participants will take only what they need by specifying their direction i.e. only what is related to the purpose of the topic.
Participants are required to combine what has been learned from the classroom discussion in the previous stages with their previous knowledge (the second phase) so that they will be able to manipulating something new.
Activity 2: Based on Marin's experience and your previous knowledge about the effects of drugs, give your own arguments to persuade your reader about "How Drugs Can Destroy People's Lives"
Topic sentence:
Argument 1:

Argument 2:.....

Argument 3:....

Argument 4:.....

Concluding sentence:

Phase four: Ideation: In this phase participants cooperate with each other to generate

appropriate ideas.

Forming groups of four, students will cooperate with each other to write a good

paragraph.

Participants will gather and exchange the information they have recorded from the

classroom discussion so as to write a good topic sentence, diverse supporting details

which are interrelated in a cohesive way and logically ordered and conclude with a

suitable concluding sentence, thus quantity is encouraged.

Phase five: Pre- testing/ prototyping: In this phase, the teacher's task is to check the flow

of the process, the quality of the ideas in order to guide the participants to improve their

paragraphs. This will encourage them to correct errors or make modification (revision phase)

since they will receive feedback from the teacher, they will try to improve the draft until it

becomes acceptable.

Phase six: Testing: testing is related to the feedback and the final output. In this phase

finally, participants will be asked to write their paragraphs to deliver their products to the

teacher to be corrected.

3.4.5. Lesson N° 5: "Classification paragraph"

Date: 28/02/2016

Place: Betaibi, room 1

Time: 8:00- 9:30

Module: Written expression

Topic: Types of friends (Classification paragraph)

Materials: paper, pen, board, handout.

77

Lesson focus: The aspects of lesson focus will be on ideas choice and organization.

- Participants will focus on the relevant information related to the topic (content).
 - Participants will work on the different parts of a paragraph:
 - Topic sentence: participants identify the topic sentence
 - Body (supporting details): participants list the supporting sentences
 - Conclusion: participants identify the conclusion

Objective: By the end of the course, participants will be able to write paragraphs following the design thinking process' steps to improve their paragraphs' content and organization.

Competencies: The ability to write a short paragraph, classifying friends from more than one perspective (teamwork).

Personal goals: the aspects of teaching I am trying to improve is planning lessons that help learners to ameliorate their paragraphs in terms of content and organization.

Phase one: Defining: In this phase, the teacher gives the participants handouts that includes:

- Classification is the method of organizing information into general categories
- ➤ It is the arrangement of elements into group or classes. It is the fact of placing items, ideas, objects and people into different categories.
- ➤ The topic sentence has two parts: the topic, and the basis of classification, which is the controlling idea; it controls how the writer approaches the subject.
- ➤ Useful transitional words and phrases
 - can be divided, can be classified, and can be categorized
 - the first/second/third type, the first/second third category
- ❖ The teacher explains the definition to the participants and then present a sample to be followed.

Sample:

"Types of Facebook Users"

Facebook has been a hit to social networking websites users regardless their age, race, geographical setting and so forth. Basically, Facebook users can be categorized into three group; i.e. the friend seekers, the game addicts and the blog mania. The first category of Facebook users is the friend seekers. Friend seekers are new friends' initiators, old friends' finders. They are those who like to make new friends, get connected with their friends or even search for long lost friends. The next category is the game addicts. Game addicts can be categorized into player, challenger and designer. Facebook includes many entertaining games and quizzes. Farmville, for example, requires its player to invest, harvest and get rewarded. The second type of game addict- the players are usually addicted to this game making it hard for them to do other thing than playing this game. They could also be a challengers, invite their friends to play games on Facebook and compete with them or designers who create their own games. The final category of Facebook users are the blogmania. Blog mania are those who like to share their, political views, feelings opinions or even products to be broadcasted online and commented by other users. They log in to the site just for the sake of writing their feeling on the blog or to promote their products like hairclips as in babypinkcraft.blogspot.com. They spend most of their time updating the latest news about their business, respond to their customers' questions or purchases on Facebook. Various types of people use the social networking website Facebook. Some seek for friends, some entertain themselves while some broadcast their ideas or opinions.

The teacher asks the participants to read the sample and answer the activities in their handout.

Activity 1: Read the sample paragraph then answer the following questions:
A/ What is the topic sentence of the paragraph?
B / What are the three categories of Facebook users that have been mentioned in the paragraph?

C/ What are the examples used to clarify each category?

	•••••	 	• • • • • • • • • • • • • • • • • • • •
		 	• • • • • • • • • • • • • • • • • • • •
		 	• • • • • • • • • • • • • • • • • • • •
		 	• • • • • • • • • • • • • • • • • • • •
	•••••	 	
D / The concluding idea of	1 0 1		
And its function is to:			

Phase two: Observing/ Interpretation:

❖ In order to involve the participants in the task, the teacher will carry out a discussion with his students about the topic of "friendship" that they have already dealt with with their teacher of written expression. So as a brainstorming, students will discuss all what they know about the subject of the lesson i.e. each one give his/ her ideas or general information about the topic.

Phase three: Synthesizing: In this phase participants will take only what they need by specifying their direction i.e. only what is related to the purpose of the topic.

- ❖ Participants are required to combine what has been learned from the classroom discussion in the previous stages with their previous knowledge (Friendship paragraphs) and classification paragraph organization so that they will be able to manipulating something new.
- ❖ The teacher presents the task to the participants:

Activity 2:

Friends can be classified according to their honesty, loyalty, the type that fits you into their schedule, or the type that finds time for you when they need something. In groups write a classification paragraph about these categories

Phase four: Ideation: In this phase participants cooperate with each other to generate appropriate ideas.

- ❖ Forming groups of four, students will cooperate with each other to write a good paragraph.
- ❖ Participants will gather and exchange the information they have recorded from the classroom discussion so as to write a good topic sentence, diverse supporting details which are interrelated in a cohesive way and logically ordered and conclude with a suitable concluding sentence, thus quantity is encouraged.

Phase five: Pre- testing/ prototyping: In this phase, the teacher's task is to check the flow of the process, the quality of the ideas in order to guide the participants to improve their paragraphs. This will encourage them to correct errors or make modification (revision phase) since they will receive feedback from the teacher, they will try to improve the draft until it becomes acceptable.

Phase six: Testing: testing is related to the feedback and the final output. In this phase finally, participants will be asked to write their paragraphs to deliver their products to the teacher to be corrected.

3.5. The scoring Criteria

After collecting the data, they were analyzed. According to Harris (1979: 68-69) there are five aspects to be analyzed which are: content (20%), organization(20%), vocabulary(20%), grammar(20%) and mechanic(20%), but referring to the nature of the research which is based only on content and organization the computation will be namely as follows:

- 1. Content (50%): the substance of the writing, the idea expressed
- 2. Organization: (50%): the organization of content

The criteria of scoring in this research will be divided into five categories in every component: Excellent, Good, Fair, Poor and Very Poor as mentioned in the table below:

Criteria	Scores	Level of Criteria
Content	50 40 30 20	Excellent, all developing sentences support the main idea Good, 75% of developing sentences support main idea Fair, 50% sentences support main idea Poor, 25% sentences support main idea Very poor, no developing sentences support main idea
Organisation	50 40 30 20	Excellent, title, indentation, topic sentences, there are at least two right uses of transitional words and all the supporting sentences are written in spatial order, a concluding idea. Good, title, indentation, acceptable topic and concluding sentence there is at least one right use of transitional word and all supporting sentences are written in spatial order. Fair, no title, indentation, either a topic sentence or a concluding idea, two of all supporting sentences are written in spatial order. Poor, no title, no indentation, one of all supporting sentences is written in spatial order. Very poor, no title no indentation, no topic sentence and controlling idea there is no supporting sentence is written in spatial order.

Table 3.4. Scoring Criteria

3.6. Quantitative Results of the Control Group (Descriptive Statistics)

In This section, we are going to focus on the results of descriptive statistics of the control group after doing the pre-test in terms of the achievement.

3.6.1. The Control Group Pre-test Achievements

As stated above, before the treatment we collected quantitative data in terms of pre-test. The results are shown in the following tables below:

	Content	Organization	
Student's code	0-4-6-8-10	0-4-6-8-10	Total Score
01	4	4	8
02	3	6	9
03	4	4	8
04	6	4	10
05	4	6	10
06	6	4	10
07	6	6	12
08	3	4	7
09	4	6	10
10	6	6	12
11	4	4	8
12	6	4	10
13	4	6	10
14	4	6	10
15	3	3	6
16	6	4	10
17	3	4	7

Table 3.5: The Control Group Pre-test scores

It is clear the table above that the lowest score with the pre-test is 0 out of 20 and it is obtained by no participants. (15) Of participants have scored from 6, 7, and 8 till 10. (2) Of participants have been successful in reaching the average 12.

Content Scores	Frequencies
0-2/10	0
3-4/10	11
6/10	6
8/10	0
10/10	0

Organization Scores	Frequencies
0-2/10	0
3-4/10	10
6/10	7
8/10	0
10/10	0

Content and Organization Scores	Frequencies
0-4/20	0
8-10/20	15
12/20	2
16/20	0
20/20	0

Table 3.6. The Control Group Pre-test Scores and their Frequencies

It becomes clearer that the table above displays that the lowest score with the pretest is 0 out of 20 and it is obtained by no participants. (15) Of participants have scored from 6, 7, and 8 till 10. (2) Of participants have been successful in reaching the average 12.

N	Tests	Mean	Variance	Standard Deviation
17	Pre test	9,23	2,64	1,62

Table 3.7: The Control Group Overview of Means Scores of Paragraph Writing

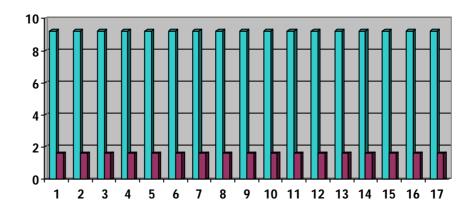


Figure 3.7: The Control Group Pre-test Results

The results in this table 3.7 indicate that students' paragraph writing capabilities differ from 5 to 12. This proves that the majority of the students do not have the same level and do not have the same writing abilities. This illustrates to us that the second year LMD students in general are not really good writers as the mean recorded was just (9.23) and standard deviation recorded as (1.62).

3.7. Quantitative Results of the Experimental Group (Descriptive Statistics)

In This section, we are going to focus on the results of descriptive statistics of the experimental group after doing the pre-test in terms of the achievement.

3.7.1. The Experimental Group Pre-test Achievement

Before the treatment we collected quantitative data of the experiment group through pretest. The results are shown in the following tables below:

	Content	Organization	
Student's code	0-4-6-8-10	0-4-6-8-10	Total Score
01	2	2	4
02	4	4	8
03	4	4	8
04	4	4	8

05	4	4	8
06	4	4	8
07	4	4	8
08	6	4	10
09	4	4	8
10	3	4	7
11	4	6	10
12	4	4	8
13	4	4	8
14	4	4	8
15	6	4	10
16	6	4	10
17	5	4	9

Table 3.8: The Experimental Group Pre-test scores

In this table, the lowest score in the pre-test is 4/20. It is obtained by one participants who has produced a very poor paragraph. The rest of the participants (16 students) have scored from 7 till 10/20 which means that they have not reached a fair level of paragraph writing. These results are clearly stated in the table below which clarify the experimental group pre-test results and frequencies.

Content Scores	Frequencies
0-2/10	1
3-4/10	12
5-6/10	4
8/10	0
10/10	0

Content and Organization Scores	Frequencies
0-4/20	1
7-8-9-10/20	16
12/20	0

Organization Scores	Frequencies
0-2/10	1
3-4/10	15
5-6/10	1
8/10	0
10/10	0

16/20	0
20/20	0

Table 3.9. The Experimental Group Pre -test Scores and Frequencies

This table shows different scores. The participants got different, (16) participants have got different marks that range between 7, 8, 9, 10, and only (1) of them have got 4/20.

N	Tests	Mean	Variance	Standard Deviation
17	Pre test	8,23	2,07	1,43

Table 3.10: The Experimental Group Overview of Means Scores of Paragraph Writing

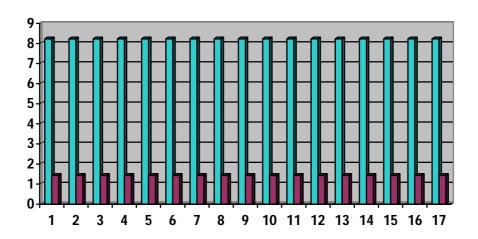


Figure 3.8: The Experimental Group Pre-test Results

Table 3.9 and display all the results recorded in the experimental group pre-test followed by table 3.10 which includes each performant's mean and standard deviation scores, The mean and standard deviation scores recorded were 8.23 for the mean and 1.43 for standard deviation.

3.8. The Experimental Group Overall Treatment Scores

Stud	ent's	Lesson One	Lesson Two	Lesson Three	Lesson Four	Lesson Five	Lesson One	Lesson Two	Lesson Three	Lesson Four	Lesson Five	Lesson One	Lesson Two	Lesson Three	Lesson Four	Lesson Five
co			(Conten	t			Org	ganiza	tion						
			0-	4-6-8- 1	10			0-	4-6-8	-10			To	otal S	core	
	1															
G: 01	2															
	3	4	4	6	8	8	6	4	6	6	8	10	10	12	14	16
	4															
G:	5															
02	6	4	6	8	8	8	6	8	6	6	6	10	14	14	14	14
	7															
G: 03	8	3	8	6	8	6	4	8	8	8	4	7	16	14	16	10
	9	?	0	O	0	0	4	0	0	O	4	1		14	10	
	10															
	11															
G: 04	12	8	6	10	8	10	8	4	10	8	8	16	10	20	16	18
	13															
	14															
C	15															
G: 05	16	6	4		0	10	6	Л	6	6	o	10		10	4.4	10
	17	6 Tol		6	8	10	6	4	6	6	8	12	8	12	14	18

Table 3.11: The Experimental Group Overall Treatment scores

3.9. The Experimental Group Overall Treatment Results

Student's code		Total Scores	Mean	Differences	Differences Squared	
	1					
G 01	2	12,50	10,90	1,6	2,56	
G: 01	3					
	4					
G: 02	5	13,20	10,90	2,3	5,29	
	6					
	7		10,90	1,7		
G: 03	8	12,60			2,89	
	9					
	11	16	10,90	5,1		
G: 04	12				26,01	
	13					
	14					
	15					
G: 05	16	12,80	10,90	1,9	3,61	
	17					

Table3. 12: The Experimental Group Overall Treatment Results

It seems from the above results that working into groups while applying the design thinking strategy has brought observable results. This achievement appears through the mean scores obtained 10, 90.

N	Tests	Mean	Variance	Standard Deviation
17	Treatment	10,90	8,07	2,84

Table 3.13: The Experimental Group Overall means scores

Table 3.13 shows all the results scored during the experimental group treatment: mean (10, 90) and standard deviation (2, 84). The results displays the recognizable achievement that participants have accomplished.

3.10. The Control Group Achievements

3.10.1 Post-test Achievement

	Content	Organization	
Student's code			Total Score
	0-4-6-8-10	0-4-6-8-10	10001
01	4	2	6
02	4	2	6
03	2	2	4
04	4	3	7
05	6	3	9
06	3	4	7
07	4	2	6
08	3	4	7
09	3	3	6
10	2	4	6
11	3	3	6
12	2	4	6
13	4	2	6

14	2	2	4
15	3	3	6
16	4	2	6
17	2	2	4

Table 3.14: The Control Group Post -test Scores

Content Scores	Frequencies
0-2/10	5
3-4/10	11
5-6/10	1
8/10	0
10/10	0

Organization Scores	Frequencies
0-2/10	8
3-4/10	9
5-6/10	9
8/10	0
10/10	0

Content and Organization Scores	Frequencies
0-4/20	3
6-7-8-9-10/20	15
12/20	1
16/20	0
20/20	0

Table 3.15: The Control Group Post –test Scores and Frequencies

Based on this table, we notice that there are different scores. The participants got different scores that range between 4 and 12. Based on the data recorded on the table above (table 3.15), (3) participants have got 3/2, (15) of them have got various marks from 6 till 10/20 and just one student has got 12/20

N	Tests	Mean	Variance	Standard deviation
17	Pre test	6	1,41	1,18

Table 3.16: The Control Group Overview of Means Scores of Paragraph Writing

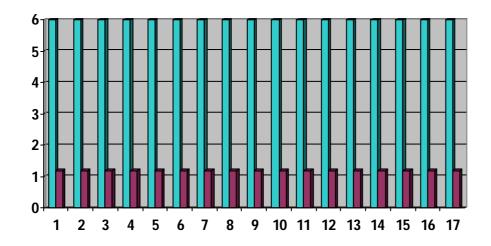


Figure 3.9: The Control Group Post-test Results

The results in this table indicate that students' paragraph writing scores varies from 4 to 9. This proves that the majority of students are not aware about the organization of a paragraph and do not have enough information about the topic they are supposed to write about.

We conclude that the majority of students have not reached the average because they did not use to be exposed to the design thinking strategy, since their teacher uses the traditional method

3.11. The Experimental Group Achievements

In This section, we are going to focus on the results of descriptive statistics of the experimental group after doing post-test in terms of the achievement

3.11.1 Post-test Achievement

After the treatment, we collected quantitative data of the experiment group through the post test to see if there is improvement or not. The results are shown in the tables below:

	Content	Organization	
Student's code	0-4-6-8-10	0-4-6-8-10	Total Score
01	10	8	18
02	8	6	14
03	8	6	14
04	8	8	16
05	6	6	12
06	6	6	12
07	8	8	16
08	8	8	16
09	8	8	16
10	6	8	14
11	10	8	18
12	6	8	14
13	8	8	16
14	8	8	16
15	8	8	16
16	10	10	20
17	10	8	18

Table 3.17: The Experimental Group Post -test Scores

Content Scores	Frequencies
0-2/10	0
3-4/10	0
5-6/10	4
8/10	9

Content and Organization Scores	Frequencies
0-4/20	0

10/10	4

Organization Scores	Frequencies
0-2/10	0
3-4/10	0
5-6/10	4
8/10	12
10/10	1

7-8-9-10/20	0
12-14/20	6
16-18/20	10
20/20	1

Table 3.18: The Experimental Group Post –test Scores and Frequencies

It becomes clear that the tables above (**Table 3.17**, **Table 3.18**) represent that the lowest score in the post -test is 12 out of twenty by (2) participants .The highest score is 20 by (1) participant .(4) participants have got the average 14 , (7) participants have got 16 and (3) participants have reached the average 18 out of twenty

N	Tests	Mean	Variance	Standard Deviation
17	Pre test	15,64	4,33	2,08

Table 3.19: The Experimental Group Overview of Means Scores of Paragraph Writing

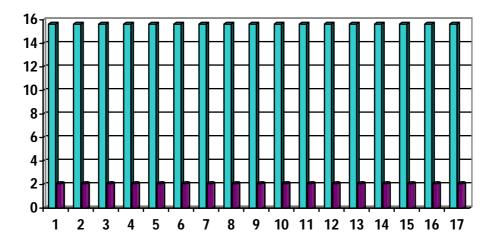


Figure 3.10: The Experimental Group Post-test Results

The results in the above tables (**Table 3.19**) indicate that the design thinking strategy affects their paragraph writing in terms of content and organization. This techniques used was so helpful for the students and the scores obtained indicate that the majority of students improved their level as the mean recorded was (15, 64).

3.12. Comparative Evaluation of Achievement

In this section, we are going to focus on the achievement of the experimental group i.e. the results recorded in both test (pre-test and post-test) will be compared in order to see if any improvement had occurred. This will prove or refute the hypothesis formulated in this research concerning the effect of the independent variable (the effect of design thinking as a pre-writing strategy) on the dependant variable(students' paragraphs), where the performance of each student before and after the treatment will be displayed.

3.12.1. Comparison of Pre-test and Post-test Achievement of the Control Group.

N	Tests	Means	Standard deviation
	Pre test		1,62
17	Post test	6	1,18
	Differences	3,23	0,44

Table: 3.20: Overall Pre-test /Post-test Difference of Control Group

The results in this table indicate that the majority of students are not aware about the organization of a paragraph and do not have enough information about the topic they are supposed to write about. The prove is the mean score obtained in the post-test (6) that differ from the pre-test mean with 3, 23.

We conclude that the majority of students have not reached the average because they did not use to be exposed to the design thinking strategy, since their teacher uses the traditional method.

3.12.2. Comparison of Pre-test and Post-test Achievement of Experimental Group:

N	Tests	Means	Standard deviation
	Pre test	8,23	1,4
17	Post test	15,64	2,08
	Differences	7,41	0,68

Table 3.21. Overall Pre-test /Post-test Difference of Control Group

we can deduce from this table that the mean scores obtained in the post test differ totally from the mean scores obtained in the pre-test, with an overall mean score of 15.64 which represents the average score for this variable. If we refer to this table, we remark that the difference between the post -test and the pre-test is 7, 14 confirming that the participants paragraphs have significantly improved.

Consequently, the obtained data prove that the treatment was efficient in that the large majority of the participants developed their paragraph in terms of content and organization.

3.13. Hypothesis Testing

In order to test the hypothesis inferential statistics has to be used after having used descriptive statistics to analyse the improvement of student's paragraph in terms of content and organization through using the design thinking strategy on a more solid statistical test. the t-test to compare the two means (pre-test and post-test) has been chosen. Since the research is based on two different groups (control/ experimental group), the independent t-test or the unpaired test is the appropriate one to conduct one-tailed research to test the effect of design thinking as a pre- writing strategy on student's paragraphs.

The statistical test is used to determine the probability that the observed results could have occurred under the null hypothesis. If this probability is less than, or equal to 0.05, the null hypothesis is rejected in favor of the alternative hypothesis and the results are said to be significant (Chelli, 2011). Thus, the aim of the research is to confirm the effectiveness of the alternative hypothesis (H1) which assume that there is a difference between the pre-test and the post –test and reject the null hypothesis which assume that there exist no difference between them.

In this research, we have to prove that the treatment used in the experiment: the implementation of the design thinking process will enhance students' paragraphs in terms of content and organization. In order to do this, we have chosen:

- The independent sampled-test to check our hypotheses,
- 0.05 as a p-value which means that only 5% of the results is due to chance while 95% are likely to be sure. Small p-values suggest that the null hypothesis is unlikely to be true. The smaller it is, the more convincing is the rejection of the null hypothesis.
- Degree of freedom suitable for this T-test is: N+N-2
 The following stages used to calculate the unpaired t-test for this experiment (Miller in Chelli, 2011:239)
 - 1. Calculate the mean each pair of scores $(\overline{X1}-\overline{X2})$

$$\bar{X} = \frac{\sum X}{N}$$

2. Calculate the Variation of each group $(S^2_1 - S^2_2)$

$$S^2 = \frac{\sum X^2}{N} - \overline{x^2}$$

3. Find the critical value of the t for the desired level of significance:

$$t_{N_1} + N_2 - 2 = \frac{(\bar{X}_1 - \bar{X}_2)\sqrt{(N_1 + N_2 - 2)N_1 N_2}}{\sqrt{(N_1 S_1^2 + N_2 S_2^2)(N_1 + N_2)}}$$

As mentioned before in the theoretical part the alternative hypotheses formulated in this research are:

H1 = the implementation of the Design Thinking strategy will develop learners' paragraphs in terms of content and organization

H0 = the implementation of the Design Thinking will not develop learners' paragraphs in terms of content and organization

Degree of freedom =
$$N + N - 2 = (17 + 17 - 2) = 32$$

Critical value = 1,69

P- Value or $\alpha = 0.05$

In order to reject the null hypothesis or accept the alternative hypothesis, we have to calculate the t-test, but before doing that we need to know the means and squared means as done in the table below in order to calculate the differences between the pre-test and post-test means for both the control and experimental groups

The control group and experimental group pre-tests and post-tests

N	Students'	Mea	D:fforom oo	Difference
IN	Scores	n	Difference	Squared
01	8	9,23	-1,23	1,51
02	9	9,23	-0,23	0,05
03	8	9,23	-1,23	1,51
04	10	9,23	0,77	0,59
05	10	9,23	0,77	0,59
06	10	9,23	0,77	0,59
07	12	9,23	2,77	7,67
08	7	9,23	-2,23	4,97
09	10	9,23	0,77	0,59
10	12	9,23	2,77	7,67
11	8	9,23	-1,23	1,51
12	10	9,23	0,77	0,59
13	10	9,23	0,77	0,59
14	10	9,23	0,77	0,59
15	6	9,23	-3,23	10,43
16	10	9,23	0,77	0,59
17	7	9,23	-2,23	4,97

N	Total scores	Mean	Differences	Differences Squared
01	6	6	0	0
02	6	6	0	0
03	4	6	-2	4
04	7	6	1	1
05	9	6	3	9
06	7	6	1	1
07	6	6	0	0
08	7	6	1	1
09	6	6	0	0
10	6	6	0	0
11	6	6	0	0
12	6	6	0	0
13	6	6	0	0
14	4	6	-2	4
15	6	6	0	0
16	6	6	0	0
17	4	6	-2	4

Table 3.22: The Control Group Pre-test Result

Table 3.23: The Control Group

Post- Test Results

N	Total scores	Mean	Differences	Differences Squared
01	4	8,23	-4,13	17,05
02	8	8,23	-0,23	0,05
03	8	8,23	-0,23	0,05
04	8	8,23	-0,23	0,05
05	8	8,23	-0,23	0,05
06	8	8,23	-0,23	0,05
07	8	8,23	-0,23	0,05
08	10	8,23	1,77	3,13
09	8	8,23	-0,23	0,05
10	7	8,23	-1,23	1,51
11	10	8,23	1,77	3,13
12	8	8,23	-0,23	0,05
13	8	8,23	-0,23	0,05
14	8	8,23	-0,23	0,05
15	10	8,23	1,77	3,13
16	10	8,23	1,77	3,13
17	9	8,23	0,77	0,59

N	Total scores	Mean Differences		Differences Square	
01	18	15,64	2,36	5,56	
02	14	15,64	-1,64	2,68	
03	14	15,64	-1,64	2,68	
04	16	15,64	0,36	0,12	
05	12	15,64	-3,64	13,24	
06	12	15,64	-3,64	13,24	
07	16	15,64	0,36	0,12	
08	16	15,64	0,36	0,12	
09	16	15,64	0,36	0,12	
10	14	15,64	-1,64	2,68	
11	18	15,64	2,36	5,56	
12	14	15,64	-1,64	2,68	
13	16	15,64	0,36	0,12	
14	16	15,64	0,36	0,12	
15	16	15,64	0,36	0,12	
16	20	15,64	4,36	19	
17	18	15,64	2,36	5,56	

Table 3.24: The Experimental Group Pre-test Results

Table 3.25: The Experimental Group Post-test Result

Experime	ental group	Control group		
Post-Test mean	Post-test mean	Post-test mean	Post- test mean	
scores	squared	scores	squared	
(X1)	$(X1^2)$	(X2)	$(X2^2)$	
Σ X1 = 15,64	$\Sigma X1^2 = 244,60$	$\sum \mathbf{X2} = 6$	$\sum \mathbf{X2^2} = 36$	

Table 4.26: Experimental and Control Groups Scores Differences in Paragraph Writing

The calculation of T test:

1.
$$\overline{X1} = \frac{\sum X_1}{N_1} = \frac{15,64}{17} = 0,92.$$

2.
$$\overline{X2} = \frac{\sum X_2}{N_2} = \frac{6}{17} = 0.35$$

3.
$$S^2_{1} = \frac{\sum X_1^2}{N_1} - \overline{X_1^2} = \frac{244,60}{17} - 0,8464 = 14,38 - 0,8464 = 13.54$$

4.
$$S^{2}_{1} = \frac{\sum X_{2}^{2}}{N_{2}} - \overline{X_{2}^{2}} = \frac{36}{17} - 0,1225 = 2,11-0,1225 = 1.99$$

5.

$$t_{N_1} + N_2 - 2 = \frac{(X_1 - X_2)\sqrt{(N_1 + N_2 - 2)N_1 N_2}}{\sqrt{[(N]_1 S_1^2 + N_2 S_2^2)(N_1 + N_2)}}$$

$$t_{N_1} + N_2 - 2 = \frac{(0.92 - 0.35)\sqrt{(17 + 17 - 2)17 \times 17}}{\sqrt{17 \times 13.54 + 17 \times 1.99)(17 + 17)}} = \frac{-0.57\sqrt{32 \times 289}}{\sqrt{(230.18 + 33.83)34}}$$

$$=\frac{931,85}{293,22}=3.17$$

$$T = 3.17$$

N	Tests	Mean	Standard Deviation	T- test value	P-value
17	Pre-test	8,23	1,4	3.17	0.05
	Post-test	15,64	2,08		
	Difference	7,41	0,68		

Table 3.27: The Experimental Group T-test Value Results

Interpretations

The results of the study showed a significant difference in the mean scores at $\alpha = 0.05$ in the students' achievement of the post-test in favor of the experimental group concerning the component "content" and "organization" as compared with the control group. They also revealed that the achievement of the experimental group was higher than that of the control group which is attributed to the design thinking strategy. Thus, there was a significance difference on students' paragraphs in terms of content and organization because the t-test value (3.17) was greater than the critical value for thirty-two degrees of freedom (1.69, see appendix 10). This confirmed that the informants were able to produce organized paragraphs that include interrelated ideas than those before the treatment; consequently, we accept the alternative hypothesis and reject the null one.

Conclusion

This present chapter has presented the findings that have confirmed the stated hypothesis concerning the role of the design thinking strategy in enhancing students' paragraphs. Based on that testing, the research findings have confirmed that the experimental group participants, who had been taught through that technique, developed to a certain extent their writing abilities in terms of organization and content than those of the control group. In other word, the use of design thinking technique, as pre- writing strategy, is more effective as it leads to significant improvements as far as the writing skill is concerned. Therefore, students need to get familiar with pre- writing strategies in order to emphasize the link between the writing process and feedback in an attempt to offer a new insight on E.F.L. writing, because effective writing depends not only on how the goal of directed writing is, but also on the writer's ability to coordinate all the different processes involved to improve his/her thought processes and writing abilities.

General Conclusion

Teaching and learning to write in any language is an essential area that influences students' performance and language learning. Writing in English as a Second Language/English as well as Foreign Language has always been a complex activity and a challenging skill for foreign language learners as it requires comprehensive abilities and different components to develop it. The majority of students fail to produce acceptable texts: paragraphs and essays since they do not know how to manipulate the language and coordinate their ideas to produce meaningful papers. Nowadays, writing in English as a Foreign Language is no more regarded as a product but as a process where learners are supposed to plan, draft, and revise their products before presenting them to be red. The problem is mainly due to the fact that students lack the necessary pre-writing strategies that enable them to write in an effective way. Therefore, this dissertation aimed to investigate the effects of the design thinking as a pre-writing strategy on students' paragraphs.

In order to answer the dissertation' questions, the research work had been divided into three main chapters. The first chapter was devoted to the importance of the writing skill that learners of English as a second or foreign language need to develop. In order to understand the nature of L2 writing, it seems worthwhile to provide a brief account of its definition, why it is important to be taught and leaned and an overview about the common approaches which have dominated the teaching of L2 writing over the past decades, and which are still applied in classroom methodologies nowadays. As far as the writing process is concerned, it had been clearly stressed on its different stages. In the second chapter we had dealt with the different pre-writing strategies: brainstorming, listing, clustering, mind mapping emphasizing on design thinking being the independent variable of our work. The latter strategy had been fully presented in terms of its definition, history, stages, characteristics and educational implication. Finally, the third chapter comprised the analysis, presentation and interpretation of the findings resulting from this study. The analysis and interpretation of data was carried out in two phases:

In the first section the researcher had dealt with the description of the experiment and its aim, the population sample, and the content of the experiment that includes the different lessons through which the design thinking process had been applied. The DT process had been applied to teach five types of paragraphs: Process, Comparison and Contrast, Argumentative, Cause and Effect, and Classification. During the session, students were trained how to write an organized paragraph respecting the main elements that should

be included: title, topic sentence supporting ideas, and a concluding sentence. In addition to this, they were exposed to a variety of information so that they will be able to gather as much information about the topic they are supposed to write about at the end of the session. The second section presented the experiment' results which aimed at investigating the impact of design thinking as a pre- writing strategy on students' paragraphs.

The results of the study revealed that there is a significant relationship between the pre-writing strategy "design thinking" and learners' level of paragraph writing achievement. The t-test value (3.17), showed the significance of the experiment's results. This help us to establish the effect of the hypothesis' independent variable on its dependent one. In other words, confirming the prediction we supposed which claimed that design thinking as a pre-writing strategy could raise the learners' level of paragraph writing in terms of content and organization. Therefore, it is proved from the research findings showing that students who are taught using this technique have better writing skill in terms of content and organization and it can encourage the students to write actively.

The research findings from the experience in implementing the design thinking strategy to second year students' paragraphs confirmed that the latter strategy might well affect their writing competence optimally. The study found that background knowledge and familiarity with topics were significant aids to their writings. Furthermore, this study came to be a witness of its strong impact on students' pieces of work. Thus, based on the research findings, I would strongly recommend that in the further research in the L2 writing teachers are suggested to be more creative and innovative in using various kinds of teaching techniques that accompany the materials. So that the students will be more active and encouraged to learn on the one hand, on the other hand by applying this technique, they will be more skillful.

To be able to understand the students' needs and potentialities, and recognize the obstacles that they may encounter, it is a good idea for one to be armed with new techniques and strategies of teaching and implement them when needed. All students have the potential to benefit greatly from the use of prewriting strategies. Therefore, the implementation of classroom group work creates situations for students to foster the exchange of knowledge and sharing ideas which in turn helps in ameliorating language learning as well as language development to promote their paragraphs and decide what avenues their writing piece is going to take. Thus, explicit instruction about the topic to be dealt with has to be involved within the course process in English paragraph teaching

curricula where the focus is on raising learners' awareness of the importance of the shared knowledge.

Limitation of the study

This study had several limitations because of issues and concerns that arose during the experiment. First, the length of the experiment was not long enough to fully determine the effectiveness of the pre-strategy instructions. Due to time constraints, the researcher did not have enough time to give feedback, he was not allowed to treat the problem in an adequate way and students could not effectively practice the strategy that was introduced in the classroom. Second, since the study was confined to two groups of students from the Department of Foreign Languages, Section of English at Biskra University, the findings of the study may not be generalized to represent all the Algerian universities or elsewhere.

Suggestions for Future Research

Based on the issues raised during data analysis, some suggestion can be put forward for further research:

- Teachers are suggested to apply the design thinking technique in writing activities.
- Applying the different phases of the design thinking strategy on two session for each type of paragraph.
- Teaching writing using direct instruction that might well tend to develop the idea mastery which comes up in the students' mind.
- The teacher need to give feedback and show interest to each individual's suggested ideas.
- students need to bear in mind that the difficulty of the skill can be overcome by applying the different steps of the writing process that help in improving their writing
- Teachers ought to teach learners various facilitating pre-writing strategies to equip them with enough knowledge of strategies taking into account their individual differences.
- Enhancing group work for developing and sharing ideas and thoughts to improve the learning practices.

Bibliography

- Ardaunet, Martin L. (1981). Paragraph Development: A guide for students of English as a second language .New Jersey. Prentice Hall
- Ambrose, G. & Harris, P. 1st ed. (2010). *Design Thinking*. AVA Publishing SA.
- Azzioui, A. (2008). *Teaching Writing through the Process Approach*. (Published Master Dissertation), Mentouri University, Constantine.
- Autodesk Digital Steam Workshop. (2013). The Design Thinking Guide. Autodesk Inc.
- Alderson, J. Charles & Backman, Lyle F. (2002). Assessing Writing. Cambridge University Press. UK.
- Al-Katib, B A. (2012). The Effect of Using Brainstorming Strategies in Developing
 Creative Problem Solving Skill among Female Students in Princess Alia University
 College. American International Journal of Contemporary Research, 2 (10), 29-38.
 Center for Promoting Ideas, USA.
- Barseghian, T. (2009). Design Thinking: Creative Ways to Solve Problems. In Edutopia. Retrieved June 28, 2015.
- Bazerman, Charles .5th ed. (2010). *The Informed Writer: Using Sources in The Disciplines*. The WAC Clearinghouse.
- Bazerman, Charles. (2013). *A Theory of Literature Action: Literate Action Volume*2. United States of America. Parlor Press.

- Bashyal, Gopal Prasad. (2009). MTDP: A Model of Teaching Writing, Journal of NELTA, 14, 14-20
- Bayat, Nihat. (2014). The Effect of The Process Writing Approach on Writing Success and Anxiety. Educational Science: Theory and Practice, 14(3), 1133-1141.10.12738/estp.2014.3.1720. DOI: 10.12738/estp.2014.3.1720
- **Boardman, C. A & Frydenberg. J.** 3rd ed. (2008). Writing to Communicate 2: Paragraphs and Essays. Pearson Education
- **Brandon, Lee**. 5th ed (2010). *At a Glance Paragraph*. Cengage Learning.
- **Brown, Douglas.** H. 2nd ed. (2000). *Teaching by Principles: An Interactive Approach to Language Pedagogy*. Longman.
- **Brown, T. & Wyatt, J.** (2010). *Design Thinking for Social Innovation*. Stanford Social Innovation Review, 8(1), 30-35.
- **Brown, Tim.** (2008). *Design Thinking*. Harvard Business Review, 1-10.
- **Brown, Tim.** (2008). *Design Thinking*. Harvard Business Review, 85-92.
- **Brown, Tim**. (2009). *Change by Design: How Design Thinking Transforms Organizations and Inspires Innovation*. New York. Harpercollins Publishers.
- **Bostwick, lisa**. (2012). *Design Thinking: An Introduction*. The Knowledge Center. National Association of Independent Schools. Retrieved from:

 $\underline{\text{http://www.nais.org/Magazines-Newsletters/ITMagazine/Pages/Design-Thinking-}} \\ \underline{\text{An-Introduction.aspx}}$

- Bruse, Christopher. (2008). Best Practice in Education: An Introduction to DesignThninking. GRAM.
- **Both, Thomas**. (2009). *Bootcamp Bootleg*. Institute of Design at Stanford. Retrieved from http://creativecommons.org/licenses/by-nc-sa/3.0/
- Bachani, Mohini. (nd). Teaching Writing Way made College of Education.
 Vallabh Vidyanagar. Retrieved from http://waymadedu.org/StudentSupport/Teaching%20Writing.pdf
- Barton, Mathew. D. (2006). *Rhetoric and Composition: A Guide for the College Writer*. Wikimedia Foundation Inc.
- Coffin, Caroline, et al. (2003). *Teaching Academic Writing: A Toolkit for HigherEducation*. London and New York. Routledge.
- Cope, B. & Kantizis, M. (1993). The Powers of Literacy. A Genre Approach to Teaching Writing. Pittsburg: University of Pittsburg Press.
- Crème, Phyllis.3rd ed. (2008). Writing at University: A Guide for Students. Open University Press.
- Coulmas, Florian. (2003). Writing Systems: An Introduction to Their Linguistic Analysis. Cambridge: Cambridge University Press
- Carroll, Robert Todd. (1990). Students Success Guide: Writing Skill. Pearson Custom Publishing.

- Carney, Peter. & Barrett, Meredith. (2013). Pre-Writing: Brainstorming, Organizing and Outlining Ideas. RISD Writing Center.
- Clark, Irene L. (2003). Concepts in Composition: Theory and Practice in the Teaching of Writing. London. Lawrence Erlbaum Associates. Inc.
- Centre of English Language Studies. (2011). Process Writing. The University of Birmingham.
- Charmaz, Kathy. (2006). Constructing Grounded Theory: A practical Guide Through Quantitative Analysis. London. SAGE Publications Ltd.
- Ching, Hong Yuh. (2014). Design Thinking in Classroom: An Experience with Undergraduate Students of a Buisness Course, Buisnesss and Management and Research, 3(2), 110-119.
- Chelli, Saliha. (2011). The Effectiveness of the Competency Based Approach on Learners Writing Achievements . (published Dissertation), Biskra University
- **Du, Bingqian**. (2005). Raising Process-Genre Awareness: A Proposal of ESP Writing Lesson plan, Creative Education, 6, 631-639.
- **Dickson, Keneth** J. (2001). *Free-Writing, Prompts and Feedback*. The Internet TESL Journal, VII (8).
- **Deqi, Zeng.** (2005). The process-Oriented Approach to ESL/EFL Writing Instruction and Research, CELEA Journal (Biomonthly), 28, 66-70.

- Dunne, D. & Martin, R. (2006). Design Thinking and How It Will Change Management Education. An Interview and Discussion. Academy of Management Learning and Education, 5 (4), 512-523.
- **Dorst, K.** (1997). *Describing Design: A Comparison of Paradigms*, Thesis TU Delft, the Netherlands.
- Dolak, F., Vebernickel, F., Brenner. W. (2013). Design Thinking and Design Science Research. Institute of Information Management. University of St.Gallen Switzeland. HSG/IWI.
- d.school Stanford. (2011). An Introduction to Design Thinking: Process Guide.
 Institute of Design at Stanford. Available on: http://dschool.stanford.edu/wp-content/uploads/2011/03/BootcampBootleg2010v2SLIM.pdf
- Elashri, Ismail Ibrahim Elshirbini Abd-ElFatah. (2013). The Effect of the Genre-Based Approach to Teaching Writing on the EFL Al-Azhr Secondary Students' Writing Skills and Their Attitudes Towards Writing. Mansoura University Faculty of Education Department of Methods and curriculum (Published Doctoral Dissertation).
- **Efeoglu, A., Boer, H., Moller, CH**. (2013). *Design thinking: characteristics and promises*. Enschede: Continuous Innovation Network (CINet), 241 –256. DOI:10.13140/2.1.4737.664 2014)
- Ewen. M. A, Diane. (n.d.). Workbook on Paragraphs Writing and Learning
 .Centre Ontario College of Art and Design. Retrieved from:
 https://www.yumpu.com/en/Workbook on Paragraphs Writing and Learning
- Freinberg, Lauren. (2008). Feinberg, Matthew & Nemeth Charlan. (2008). "The "Rules" of Brainstorming: An Impediment to Creativity?" .IRLE Working Paper No. 167-08. Retrieved from: http://irle.berkeley.edu/workingpapers/167-08.pdf.

- Gnanadesikan, Amalia E. (2009). The writing Revolution: Cuneiform to the Internet .United Kingdom .Wiley-Blackwell.
- Graham, S. & Perin, D. (2007). Writing Next: Effective Strategies to Improve Writing of Adolescents in Middle and High School. A Report to Carnegie Corporation of New York. Washington, D.C: Alliance for Excellent Education Publisher.
- Grots, A. & Creuznacher, I. (2012). Design Thinking Process or Culture? A Method for Change Management. Retrieved from:
 http://2013.lodzdesign.com/wp-content/uploads/2013/09/alex_grots--artykul-1.pdf
- **Grossmann, Deborah**. (2009). *Process Approach to Writing*. (Published Master Dissertation). Centre for English Studies. University of Birmingham.
- **Hyland, ken**. (2003). *Second Language Writing* .New York. Cambridge University Press.
- **Harmer, Jeremy**. 3rd ed. (2001). *The Practice of English Language Teaching*. Longman.
- Harmer, Jeremy. (2007). How to Teach English. Pearson Education Limited.
- **Hogue, Ann.** (1996). *First Steps in Academic Writing* .Longman. Addison-Wesley Publishing Company.
- Hashempoor, Z et al. (2015). The Effect of Brainstorming as a Pre-Writing Strategy on EFL Advanced Learners Writing Ability. Journal of Applied Linguistics and Language Research, 2(1), 86-99.
- **IDEO.** 2nd ed. (2012). *Design thinking for educators*. Retrieved from http://www.designthinkingforeducators.com.

- Irvin, Lennie L. (2010). What is Academic Writing. Parlor Press.
- Jun, Zhang. (2008). A Comprehensive Review of Studies on Second Language Writing. HKBU Papers in Applied Language Studies, 12, 89-123.
- Johnson, B., & Christensen, L. B. (2012). Educational research: Quantitative, qualitative, and mixed approaches. Thousand Oaks, Calif: SAGE Publications
- **Jobst, B et al.** (2012). The Faith-Factor in Design Thinking: Creative Confidence Through Education at the Design Thinking Schools Potsdam and Standford?. Springer-Verlag Berlin Heidelberg. DOI 10.1007/978-3-642-31991-4_3
- Johnson, A. P. (2008). Teaching Reading and Writing: A Guidebook for Tutoring and Remediating Students. USA: Rowman & Littlefield Education.
- Klimova, Blanka Frydrychava. (2014). Approaches to the Teaching of writing skills .Inernational Conference on Education and Educational Psychology .Procedia
 Social and Behavioral Sciences, 112, 147 151. Elsevier Ltd.
- Kamehameha School. (2007). An Overview of Research on Teaching Writing as a Process. Kamehameha School.
- **Kenny, Semon.** (2011). *Teaching Creative Writing in an ESL Context*. Japan TESOL Journal. www.ab .auone-net.jp.
- **Kwek, S.H.** (2011). *Innovation in the Classroom: Design Thinking for 21st Century Learning*. (Published Master's thesis). Retrieved from: http://www.stanford.edu/group/redlab/cgibin/publications_resources.php

- **Kuzborska, Irena**. (2011). Links Between Teacher's Beliefs and Practice and Reasearch on Reading, Reading in foreign language, 23,102
- Kim, Miymoun Sophia. (2007). Genre-Based Approach to Teaching Writing.
 Retrieved from
 http://www.hpu.edu/CHSS/English/TESOL/ProfessionalDevelopment/200680TWP
 fall06/07Kim_Genre. pdf, July 18, 2015.
- Laplount, Dianne Tucker. (2002). The Paragraph Book 1: Writing the How-to Paragraph. Educators Publishing Service.
- Las Positas College. (nd). *Paragraphs*. The English Program.
- Luu, Tuan Trong. (2011). Teaching Writing through Genre-based Approach, BELT Journal, 2, 121-136.
- Luka, Ineta. (2014). *Design Thinking In Pedagogy*. Journal of Education Culture and society, 2, 63-74.
- Lindberg, R. Gumienny, B. Jobst, CH. M. (2010). *Is There a Need for a Design Thinking Process?*. In Proceedings of Design Thinking Research Symposium 8 (Design 2010), Sydney, Australia.
- Mari, H & Gordon, W. (2000). Writing in Knowledge Building Communities.

 Research in the Teaching of English, 34(3), 430-457
- Maghsoudi, M. & Haririan, J. (2013). The Impact of Strategies on Iranian EFL Learners' Writing Skill Regarding Their Social Class status. International Journal of Language and Linguistics, 1(4-1), 60-67.

- Mogahed, Mogahed M. (2013). *Planning Out Pre- Writing Activities*. Academic Journals, 4(3), 60-68.
- Mubarak, Mohamed. (2013). Corrective Feedback in L2 Writing: A Study of Practice and Effectiveness in the Bahrain Context. (Unpublished doctoral dissertation). The University of Sheffield.
- Manchon, Rosa M. (2009). Second Language Acquisition Writing in Foreign Language Contexts: Learning, Teaching and Research. Multilingual Matters.
- Mulligan, Ch. & Garofalo, R. (2011). A Collaborative Writing Approach: Methodology and Student Assessment, The Language Teacher (TLT) Feature Article, 35 (3), 5-10.
- MacFadyen. (2014). Design Thinking. Holistic Nursing Practice, 28(1), 3-5
- Morris, H. E, & Warman, G. (2015). Using Design Thinking in Higher Education.
 Retrieved from http://er.educause.edu/articles/2015/1/using-design-thinking-in-higher-education
- Nation, Paul. (2003). *The Role of First Language in Foreign Learning*. Asian EFL Journal. The EFL Professional's Written Forum, 1-8.
- Noweski, CH et al. (2012). Towards a Paradigm Shift in Education Practice: Developing Twenty-First Century Skills with Design Thinking. Hasso-Plattner-Institute, Potsdam, Germany.
- Oshima, A. & Hogue, A. 3rd ed. (2006). *Writing Academic English*. Addison Wesley Longman.
- Oshima, Alice. & Hogue, Ann. 3rd ed. (1999). *Academic English*. New York: Longman.

- Oshima, A. & Hogue, A. 3rd ed. (1991). *Writing Academic English*. California: Addison-Wesley Publishing Company.
- Oshima, A. & Hogue, A. 4th ed. (2005). Writing Academic English .Pearson.
- Ouskourt, M. (2008). Effectiveness of the Process Approach in Improving Writing: A Theoretical Background. Revue Sciences Humaines, A, 69-75.
- "Paragraph Writing". (2014). Writing Centre Learning Guide. The University of Adelaide. Retrieved from www.adelaide.edu.au/writingcentre/
- Peha, Steve. (2003). *The writing Process Notebook*. Teaching That Makes Senses, Inc.
- Reonal, Agnes M. (2015). *Process-Genre Approach in Teaching Expository Writing in Secondary School ESL Classes*. International Journal of Social Science and Humanities Research, 3, (3), 187-191.
- Richards, Jack C. (2003). Second Language Writing. Cambridge University Press. UK.
- Rijhaardam, Gert et al. (2015). *Psychology and the Teaching of Writing in 8000 and some Words*. Pedagogy Learning for Teaching. The British Psychological Society, 127-153.
- Rico, Gabriele Lusser. (1983). Writing the Natural Way. J. P. Tarcher, Inc. California.
- **Robitaille, J. & Connelly, R**. 2nd ed. (2007). *Writer's Resources from Paragraph to Essay*. Unites States of America. Thomson.

- Rauth, Ingo et al. (2010). Design Thinking: Design Thinking: An Educational Model towards Creative Confidence. The 1st International Conference on Design Creativity. Kobe, Japan.
- Ray, Betty. (2012). *Design Thinking: Lessons for the Classroom*. Retrieved from: http://www.edutopia.org/blog/design-thinking-betty-ray
- Sun, Ch. & Feng, G. (2009). Process Approach to Teaching Writing Applied in Different Teaching Models. English language Teaching, 2, 150-155.
- **Storch, N.** (1999). Are Two Heads Better than One?: Pair Work and Accuracy. System, 27, 363-374.
- **Simpson College**. (2015). *Prewriting Techniques*. Hawley Academic Resource and Advising Center. Retrieved from: http://simpson.edu/hawley/prewriting-techniques/
- Smith, A A. & Curtis, K. (1999). Writing Paragraphs and the Writing Process.

 National Adults Literacy Database.
- Starkey, Lauren. (2004). *How to Write Great Essays*. New York. Learning Express.
- Styati, Erlik Widiyani. (2010). The Effectiveness of Clustering Technique To Teach Writing Skill Viewed From students' Linguistic Intelligence. Published Discertation. Sebelas Maret University, Surakata.
- Servati, Katrina. (2012). Pre- Writing Strategies and Their Effect on Student
 Writing. Fisher Digital Publication. Education Masters. Available at
 http://fisherpub.sjfc.edu/education_ETD_masters/242.

- 'Support Materials and Exercises for Writing Paragraphs'. (Winter 1999). The
 National Adult Literacy Database. Retrieved from:
 http://www.readingwritinghotline.edu.au/wpcontent/uploads/writing-paragraphs.pdf
- Tornapolsky, Olg. (2005). Creative EFL Writing as a Means of Intensify English Writing skill Acquisition: a Ukrainian Experience. TESL Canada Journal, 23, 76-88.
- Tangpermpoon, Thanatkum. (2008). Integrated Approaches to Improve Students' writing Skill for English Major Students. ABBC Journal, 28, 1-9.
- "The Writing Process". (nd). A Writing Resource Guide. Orange Country Public School. Retrieved from:
 https://www.ocps.net/cs/services/cs/currareas/lang/IR/Documents/The%20Writing
 %20Process%20A%20Writing%20Resource%20Guide%20Final.pdf
 - **Torrance, et al.** (2007). Writing and Cognition Research and Application .Elsevier LTd.
 - "Teaching writing for students". July 2012. JETA Vista of teaching English in Indonesia, 2, 119.
 - **The Writing Center.** (2012). *Brainstorming*. College of Arts and Sciences. UNC Chapel Hill.
 - Ur, Penny. (1991). A Course in Language Teaching Practice and Theory. London.
 Cambridge University Press.
 - "Using vocabulary profile", October, 2013. The Iranian EFL Journal, 9(5), 14.

- "Writing a Paragraph". Cambridge University Press. Retrieved from www.cambridge.org/download_file/586164/0/, 16th July, 2015.
- Williams, James D. 3rd ed. (2003). *Preparing to Teach Writing Research, Theory and Practice*. London. Erblaum Associates, Inc Publisher.
- Weight, G. & Fowler, C. (1986). *Investigating Design and Statistics*. Penguin
- White, R.V. (1988). Academic writing: Process and product. In P. Robinson (Ed.)
- Xin, Zhuang. (2007). Reflective Thinking on Communicative Teaching in Writing. US-China Education Review, 4, 19-25.
- Yan, Guo. (2005). A Process Genre Model for Teaching Writing. English Teaching Forum, 43, 18-26.
- Yong, Grant. (2011). Design Thinking and Sustainability. Retrieved from http://zum.io/wp-content/uploads/2010/06/Design-thinking-and-sustainability.pdf
- Yi, Yan. (2010). Towards an eclectic Framework for Teaching EFL Writing in a Chinese Context. US- China Education Review, 7, 29-33.
- Zemach, D.E. & Rumisek, L.A. (2003). College Writing: From Paragraph to Essay. Macmillan Publishers.
- Zemach, D.E. & Rumisek, L.A. (2005). Academic Writing: From Paragraph to Essay. Macmillan Publishers.
- **Zemach, D. & Islam, C.** (2006). Writing in Paragraphs. Macmillan Publishers.

- **Zhao, Yong**. (2009). Catching up or Leading the Way: American Education in the Age of Globalization. Alexandria. Virginia USA. ASCD.
- http://e-writing.wikispaces.com/Definition+Paragraph
- http://createdu.org/design-thinking/
- http://ww2.kqed.org/mindshift/2013/03/04/what-does-design-thinking-look-like-in-school/? utma=1.1259478668.1446405162.1446405162.1446405162.1& utmb= 1.0.10.1446405162& utmc=1& utmx= utmz=1.1446405162.1.1.utmcsr=(direct)|utmccn=(direct)|utmcmd=(none)&

utmv=-&__utmk=143989557#

Appendices

Appendix 1: Sample of narrative paragraph

Appendix 2: Sample of Descriptive paragraph

Appendix 3: Sample of Expository paragraph

Appendix 4: Sample of Process paragraph

Appendix 5: Sample of Examples paragraph

Appendix 6: Sample of Definition paragraph

Appendix 7: Sample of Cause and Effect paragraph

Appendix 8: Sample of Comparison and Contrast paragraph

Appendix 9: Sample of Classification paragraph

Appendix 10: Table of Critical Values of the T- distribution: One-Tailed

Appendix 11: Control Group Pretest productions

Appendix 12: Experimental Group Pre-test Productions

Appendix 13: Control Group Post-test Productions

Appendix 14: Experimental Group Post-test Productions

Appendix (1): narrative paragraph

I had never thought about getting a pet until I saw Marla's kittens. They were snuggled next to their mother, lying stretched out like spokes in a wheel when I saw them first. They were tiny and not very interesting then, but a few days later I arrived to find them scattered across the kitchen floor, rolling madly in every corner of the kitchen. When Marla produced a wind-up mouse from her junk drawer, their wild scrabbling became even more entertaining. I watched them as I chatted and drank my coffee. I couldn't help but laugh at their tricks. Suddenly, I noticed that one kitten was missing. A minute later, he reappeared, clawing his way up the arm of the chair next to me. As soon as he reached the top, he scrunched down, swished his little tail, and then gathered all his energy into a surprisingly long leap. I felt his needle-sharp claws dig into the skin of my shoulder as soon as he landed. Before I could detach him, he had smuggled into the corner of my neck, settled down and started to purr rhythmically. He was instantly asleep, and I had fallen in love. He wasn't quite ready to leave his mother that day, but within two weeks I was back at Marla's door with a basket and some soft cushions so I could take my new friend home. That was five years ago, and Sebastian still sleeps curled up on shoulder and purrs in my ear.

Ian's gun was loaded, and he knew that he would not hesitate to use it. On the other side of the ravine, Luke was crouched in terror behind a fallen tree stump, trying to remain invisible from his vicious opponent. The two men were positioned well to meet this ultimate challenge, but their escape routes would soon be blocked by a mud slide brought on by heavy rains in the Belmont Butte area. With every crack of a twig, Ian's brain raced, "Where was that sound coming from?" Luke, on the other hand, knew that his job as backup man required that he wait quietly until the action started before he could move into position behind their prey. Both hunters were fully aware of the danger posed by their search for the rabid dog which was even now dragging itself up the creek bed at the base of the ravine.

Appendix (1): (Writing Paragraphs and the Writing Process, 1999, p. 31)

Appendix (2): Descriptive paragraph

Niagara Falls, a popular destination for thousands of visitors each year, is a beautiful place. When you stand at the edge and look down at the 188 feet off white waterfalls, you fell amazed at the power of nature. The tree-lined river that leads into the falls is fast-moving, pouring over the edge of the falls and crashing to the bottom in a loud roar. If you want to experience the falls close up, go for a boat ride. You'll come near enough to look up at the

roaring streams of water flowing over the edge and feel the cool mist that rises as the water hits the rock below. Seeing Niagara Falls is an unforgettable experience!

Appendix (2): (Zemach, D .and Rumisek, L. A., 2005, p. 26)

Appendix (3): Expository paragraph

The Bathurst Adult Learning Centre has been in existence for seven years. It was founded in 1991 by a group of citizens concerned about the large number of local people who had low literacy levels. Initially, the volunteers worked to raise public awareness with meetings, newspaper articles, and radio commercials. Then in 1992, the group learned of a provincial government program, Community Academic Services Program (CASP) designed to help volunteer organizations set up and run community-based classrooms for adults in need of literacy training. Today, classes are still held in the Donald Eddy Memorial Hall on St. Patrick Street in Bathurst. During the seven years of its existence, more than 200 students have been registered. Many of them have since been able to find work or have advanced to Senior Academic Upgrading at the Community College. The future looks bright for this locally run literacy initiative

Appendix (3): (Writing Paragraphs and the Writing Process, 1999, p. 30)

Appendix (4): Process paragraph

Training for My First Marathon

My year of training for my first marathon consisted of three stages. First stage of all I need to improve my strength so i started going to a gym every day. I did an aerobic exercises with free weights took a weightlifting class and even climbed the gym's rock wall. At this point started working on my flexibility. I added yoga to my exercise routine. After a few months I really noticed a difference. Without any difficulty I could stretch far enough to touch the floor. My third stage was an emphasis on stamina. After I started jogging very morning my resting heart rate was slowing down and i as breathing better. The aerobic nature of jogging really helped me. At the end of my year in training I finally felt brave enough to register for marathon. I never thought it would be possible but I actually competed in a marathon last year and it was great!

Appendix (4): (Boardman, C.A and Frydenberg, J., 1999, p. 30)

Appendix (5): Examples paragraph

Artists

All artists quiver under the lash of adverse criticism. Rachmaninoff's first symphony was a failure, so he took sick. He lay around on sofas for a year, without writing one measure of music. After he recovered, he went on to write music again. When Beethoven heard that a certain conductor refused to perform one of his symphonies, he went to bed and stayed there until the symphony was performed. Charles Dickens was forever defending himself against criticism, writing letters to the press and protesting that he was misunderstood. Yet neither criticism nor misunderstanding stopped his output.

Appendix (5): (Paragraphs: The English Program Las Positas College, p. 36)

Appendix (6): Definition paragraph

The knee

The knee is the meeting place of the two major leg bones: the thighbone, called the femur, and the shinbone, called the tibia. The bottom end of the thighbone is shaped like a baby's behind and coated with cartilage. The top of the lower leg bone has two shallow scoops hollowed out of it and a ridge along the middle. The femur rides along this ridge like a cowboy in a saddle. Wedges of cartilage line the top of the tibia, acting as shock absorbers and keeping the femur from rocking too much from side to side

Appendix (6): (Paragraphs: The English Program Las Positas College, p. 33)

Appendix (7): Cause and Effect paragraph

Going Nowhere

My decision to return to school was motivated by my desire to better myself. After working for minimum wage for two years, I realized that without a degree, I couldn't earn enough money to support myself, let alone support a family. My salary barely covered my living expenses, and I had nothing left over for emergencies, extras, or savings. Without a degree, I had no hope of getting a promotion or a raise. My job and my life were going nowhere, and I was beginning to feel like a loser. I needed to make a change; I needed to do something to turn my life around and have a brighter future. When I found out I could take classes part-time and still keep my job, I decided that going back to school was the perfect solution. It would allow me to work toward a degree while supporting myself.

Poor but Proud

My decision to return to school has had a big impact on my life. First, because of the added expense of books and tuition, I have even less spending money than I did before I came back to school. This has meant that I've had to postpone making big purchases such as replacing the dishwasher when it broke, and I've had to cut back on small expenses such as going out to eat and going to the movies. Not only do I have less money than before I went back to school, but I also have less time. Rather than watching TV after dinner, I now study. Gone are the days when I could spend hours hanging out with my friends. These days most of my free time is spent studying and completing reading and writing assignments for my classes. By far the most important effect on my life, however, has been the change in the way I see myself. Through my experiences in school, I have gained a new respect for myself. I have learned I can set my mind to something and do it, and this new confidence in myself far outweighs the temporary inconveniences of not having as much time or money as I once did.

Appendix (7): (Robitaille, J. and Connelly, R., 2007, p. 152)

Appendix (8): Comparison and Contrast paragraph

Driving a car is much more convenient than taking a bus. When you rely on mass transportation, for example, you're at the mercy of schedules that may not suit your needs. When you drive a car, on the other hand, you can choose when you'll leave for work or school or shopping trips. As well, having to carry large, unwieldy items like portfolio cases or piles of grocery bags on a bus is a major pain. With a car, you will have no problem transporting whatever bundles you take with you. Finally, you probably don't enjoy waiting at a bus stop on bitter winter days and then riding for miles pressed up against strangers as the snow from their soggy winter clothes forms puddles at your feet. In your car, you'll be able to enjoy winter drives in warmth, comfort, and privacy. For convenience, driving a car is clearly the ideal choice

Appendix (8): (Ewen, M.A.D. (n.d.). Workbook on Writing Paragraphs Writing and Learning .Centre Ontario College of Art and Design)

Appendix (9): Classification paragraph

Campers

Campers can be classified as weekend partyers, family vacationers, or true outdoorsmen or -women based on their motivations, general preparedness, and attitudes

toward nature. Weekend partyers see camping as an opportunity for an extended outdoor party. They arrive at the campsite laden with lawn chairs, games, coolers full of their favorite beverage, and plenty of party snacks. Unfortunately, they often neglect such essential items as appropriate clothing, insect repellent, and food, and they frequently demonstrate ignorance of basic camping techniques such as how to set up a tent. They frequently party late into the night, preventing those around them from getting any sleep, and they leave behind a campsite littered with their trash. The second type of camper, the family vacationer, is motivated by a desire for inexpensive accommodations that also provide educational and entertainment opportunities for the entire family. They bring along trunk loads of tents, chairs, lanterns, and toys, turning their campsites into miniature villages, from which they organize expeditions to nearby natural or manmade attractions. The best parents go out of their way to set a good example for their children by picking up trash and not harming plants or animals. The true outdoorsmen and -women, unlike other campers, are interested in the opportunity to appreciate nature, and they are the least visible and obtrusive type of camper. They are the minimalists of the camping world, arriving with carefully packed essential equipment, and they typically spend their days hiking, fishing, and taking pictures. The clean campsites they leave behind reflect their respect for nature. Campers say a lot about themselves by the way they behave while camping

Appendix (9): (Robitaille, J. and Connelly, R., 2007, p. 164)

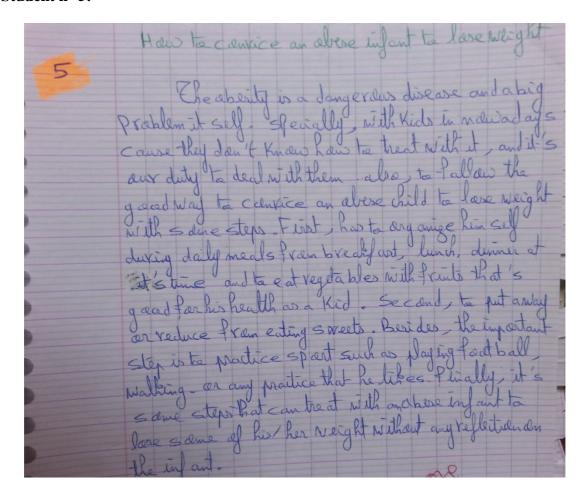
Appendix (10): Table of Critical Values of the T- distribution: One-Tailed

df	One-Tail = .4 Two-Tail = .8	.25 .5	.1 .2	.05 .1	.025 .05	.01 .02	.005 .01	.0025 .005	.001 .002	.0005
1	0.325	1.000	3.078	6.314	12.706	31.821	63.657	127.32	318.31	636.62
2	0.289	0.816	1.886	2.920	4.303	6.965	9.925	14.089	22.327	31.598
3	0.277	0.765	1.638	2.353	3.182	4.541	5.841	7.453	10.214	12.924
4	0.271	0.741	1.533	2.132	2.776	3.747	4.604	5.598	7.173	8.610
5	0.267	0.727	1.476	2.015	2.571	3.365	4.032	4.773	5.893	6.86
6	0.265	0.718	1.440	1.943	2.447	3.143	3.707	4.317	5.208	5.95
7	0.263	0.711	1.415	1.895	2.365	2.998	3.499	4.029	4.785	5.40
8	0.262	0.706	1.397	1.860	2.306	2.896	3.355	3.833	4.501	5.04
9	0.261	0.703	1.383	1.833	2.262	2.821	3.250	3.690	4.297	4.78
10	0.260	0.700	1.372	1.812	2.228	2.764	3.169	3.581	4.144	4.58
11	0.260	0.697	1.363	1.796	2.201	2.718	3.106	3.497	4.025	4.43
12	0.259	0.695	1.356	1.782	2.179	2.681	3.055	3.428	3.930	4.31
13	0.259	0.694	1.350	1.771	2.160	2.650	3.012	3.372	3.852	4.22
14	0.258	0.692	1.345	1.761	2.145	2.624	2.977	3.326	3.787	4.14
15	0.258	0.691	1.341	1.753	2.131	2.602	2.947	3.286	3.733	4.07
16	0.258	0.690	1.337	1.746	2.120	2.583	2.921	3.252	3.686	4.01
17	0.257	0.689	1.333	1.740	2.110	2.567	2.898	3.222	3.646	3.96
18	0.257	0.688	1.330	1.734	2.101	2.552	2.878	3.197	3.610	3.92
19	0.257	0.688	1.328	1.729	2.093	2.539	2.861	3.174	3.579	3.88
20	0.257	0.687	1.325	1.725	2.086	2.528	2.845	3.153	3.552	3.85
21	0.257	0.686	1.323	1.721	2.080	2.518	2.831	3.135	3.527	3.81
22	0.256	0.686	1.321	1.717	2.074	2.508	2.819	3.119	3.505	3.79
23	0.256	0.685	1.319	1.714	2.069	2.500	2.807	3.104	3.485	3.76
24	0.256	0.685	1.318	1.711	2.064	2.492	2.797	3.091	3.467	3.74
25	0.256	0.684	1.316	1.708	2.060	2.485	2.787	3.078	3.450	3.72
26	0.256	0.684	1.315	1.706	2.056	2.479	2.779	3.067	3.435	3.70
27	0.256	0.684	1.314	1.703	2.052	2.473	2.771	3.057	3.421	3.69
28	0.256	0.683	1.313	1.701	2.048	2.467	2.763	3.047	3.408	3.67
29	0.256	0.683	1.311	1.699	2.045	2.462	2.756	3.038	3.396	3.65
30	0.256	0.683	1.310	1.697	2.042	2.457	2.750	3.030	3.385	3.64
40	0.255	0.681	1.303	1.684	2.021	2.423	2.704	2.971	3.307	3.55
60	0.254	0.679	1.296	1.671	2.000	2.390	2.660	2.915	3.232	3.46
20	0.254	0.677	1.289	1.658	1.980	2.358	2.617	2.860	3.160	3.37
00	0.253	0.674	1.282	1.645	1.960	2.326	2.576	2.807	3.090	3.29

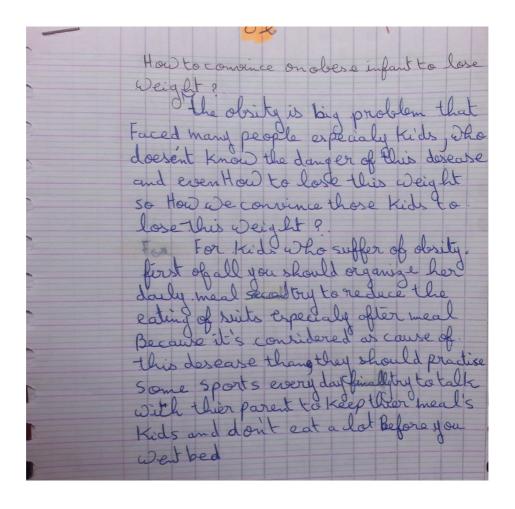
Source: From Biometrika Tables for Statisticians, Vol. 1, Third Edition, edited by E. S. Pearson and H. O. Hartley, 1966, p. 146. Reprinted by permission of the Biometrika Trustees.

Appendix (11): Control Group Pretest productions

Student n° 5:



Student n° 2:



Student n° 6:

_	pre-test
6	How to convince an obese infant to
	lose Weight
	Before you decided to lose weight
	you have to answer the question "Why", why
	should I lose weight. Well obesity is a
	slowly death . it eauses many diseases such
	as diabetic. it also make your life so hard
	so you can't do the simple things that all the
	people that you see can do like practice
	sport, simply you'll not be able to live
	a respectful and healthier life, Im sure
	that you'll choose the active life which
	is fulling with enjoyment from the sluggist
	life which is so boring and full only with
	deaseses diseases

Student n° 1:

Does thy is a kind of disease that the infant suffer from.

The abese infants face problems in Their hearts and breath. It touchs

This category because they don't know How They must manage

their aliment, They eat wholever they want, whenever they want—

without paying mind to the result, so unconsiously they get obese.

For that to cease Such sort of disease the infant have to obey

Some rules. Firstly, they should practise sport from time to time

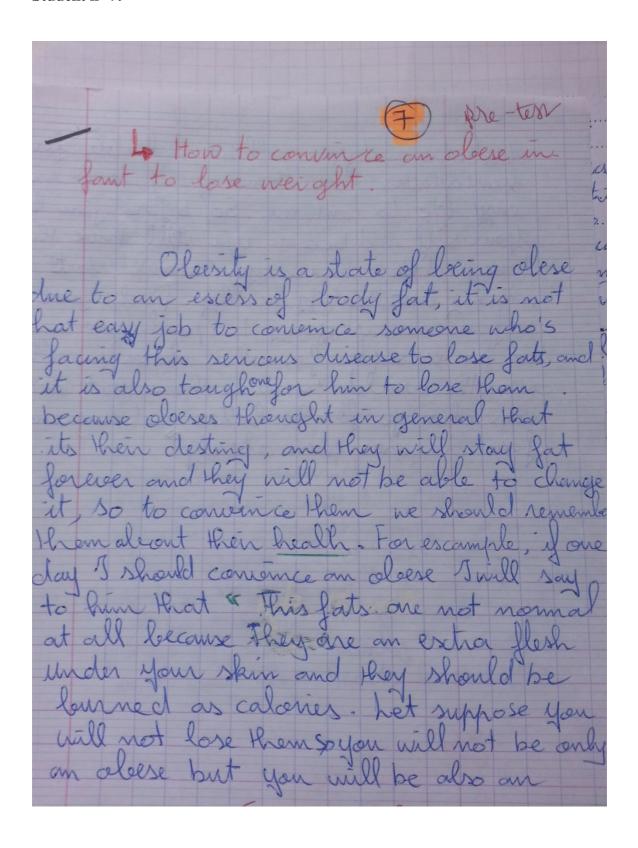
in order to sweep The fots. Secondly, they must chose only

the healthy food also alliviate eating cake That made of sory ar.

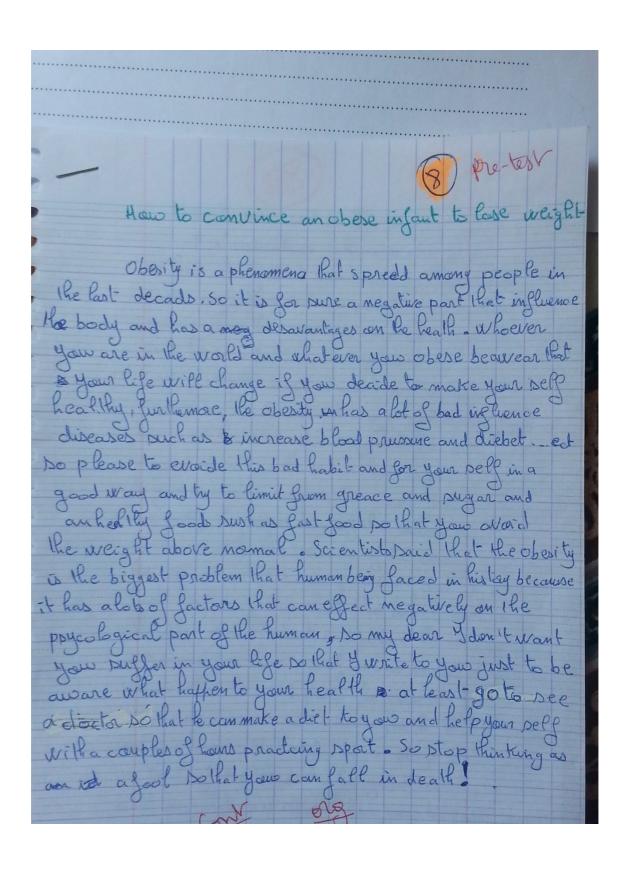
Thirdly, setting up and regulating The food 's time table.

Appendix 12: Experimental Group Pre-test Productions

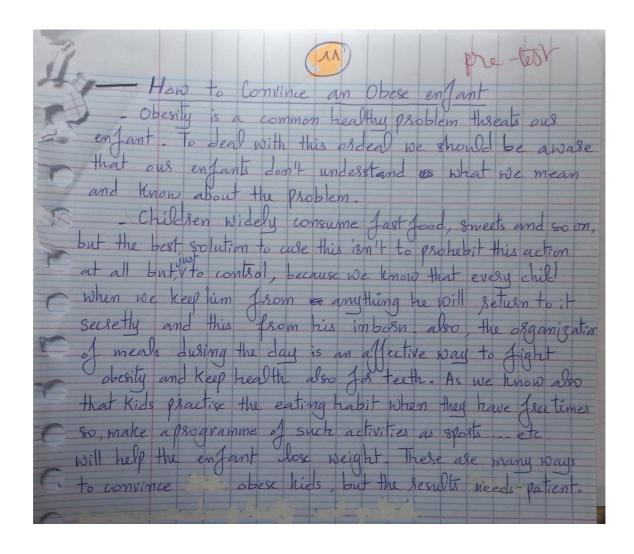
Student n° 7:



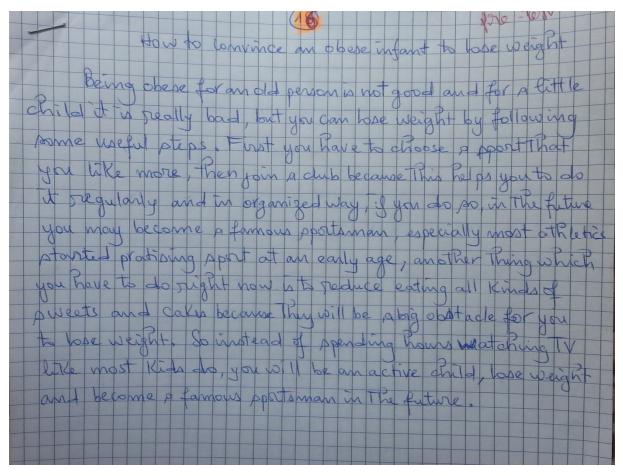
Student n° 8:



Student n° 11:



Student n° 16:



Appendix (12): Control Group Post-test Productions

Student n° 5:

	How to succeed in the exam-
-5-	Ehere are many effective ways that help you
	in the exam. Sa, how to succeed . First, you must
	have an over view about the coursesthat you dealt
	with in the whole senester, also making a simple
	summary to all of that course to help keep the
	information and ventual in the day of the exam.
	second, the most important strategie to start your
	it easy to give your same matirate due third, it's
	another strategie to be always present in your
	Serious eventhough they are barring to take notes
	and gloreral idea about what you are going la deal
	with therees success is the goal of each shall
	and to reach it there are same steps you have to
	fallow, and wark on it also, always remember
	that God helps thane who help-themselves.

Student n° 2:

02 How to succeed in the excen successful in the escan is very important result that I student can gain in their studies and to optain this result you should Tallow many steps First of all attending the courses this is very important steps especially. When you want to revise and think algorit information you don't undorstand it second revising and proparing Their lesson to participate in class this can help many student to paraphase and summarize less con to memorine it easily also manage time in the exem which used , can help then in order to don't confused when student revise and do many tasks to Practice what they neverse to understand well and a harved hight level area finally this steps schould Fallawed by an student and to succeed in the Exa

Student n° 6:

How to succed in the exam

As we all know, there is no student on earth like exams due to the stress and fear of failing that it caused and to passing this obstacle must be done by several steps to begin with serious and good revising, Hard Work never goes for nothing. In addition to that there is what we called self-confidence, you have to believe that you have the abilities to passe and succed in this exam, you have enough experiences, just remember all the exams that you have passed, More over, during exams, you have to focus and organize your time believ that you can do it doubt let doubts sneak to your mind. When you finish you erame. take I two minutes just for general quiek revision .

Student n° 1:

Escamination is the essential step where The students prove their level. In each Demaster we pass as escams in each module to test own back ground and to see whether we understand what we taught or not. In order to succeed in the escan you have to obey some rules before tackling the escan and while for instance, you have to set up an outline to mange time, in addition, while revising the lessons you ought to start from the first lesson since all the information are given successively in order to not be lost and confused. Furthermore you should nevise every note an whormation without making predictions about The questions. However while passing the exam, The first step is presending (i.e) read the questions without think about The answers. and the Second read must be with concentration with writing down The possible answers, Then check them later on. It's preferable to begin with the easy question to save time finally avoid he sitation and depens on your self and Knowledgeo

Appendix (13): Experimental Group Post-test Productions

Student n° 7:

How to succeed in the escan? go stess
show com Knowle dge con ability in a particular
() I Charles Valor of the Alexander
1 Constitution of the state of
First, we have to alter of all he letters,
Sacration all the ferrors INV Sacration
after you learn than at law of the Descens.
Commise Cour mand and and that
that the man a day to Allette, and do one
led on exerch. Third, We the periord
tee fore escarus not to depres Ins self but to
study in a very or gamme way so you have to drinks and eat well without for geting sleeping well to relase your body and
geting sleeping well to relase your boil
N. N. X. C.
and how the loads to another

Student n° 8:

	Exams. o	ne a forma	I test inve	lving answ	kring
תנא	itten or oral a	uestions wi	th no or le	miled acces	s. to. text.
boe	Is on the like	There are	several step	is to succeed	d in the
ex	am . The first	, is to men	rouze less	ons and un	derstand
the	m, that can h	ielp.you.an	mer very	well the que	extions
Se	m., that can be	enare. Hoursel	before the	escams and	clear
48	our mind in a rvous and feel	nder to get	the ansor	mations and	not be
.me	rvous and feel	confident.	Nesct, du	ring escams	try to
.Co	mantrate an	d take time	2 to under	stand every	thing
··	gorleangwarum	a	make you	as well wi-	helle
RAGO	mrs. and get a resuments of o	good June	lts. Final	y, toxams a	re the
ex,	resuments of a	un levels, So	that, we	should w	rove that
WE.	care good st	idents by v	varking h	and to succ	eed in the

Student n° 11:

How to Succeed in the Exam.
ge al. Process paragrafn.
"Success" is something springs up from our imborn love
me at what we case about as students. So, what are
The appropriate ways to acheive success? First, your mark
in any examination defends on your uncerstanding of your
lessons, because good undesstanding makes you break down and explain any task in front of you by your own style.
Second, sevising, and this process spatience and intellegence,
a good leasnes always tries to select the imposmution
he leasned many many times to make it deeper in his memory
also, many scientific studies about memory proved that when you use and remember an impormation twice aday one in
mosning and one just before steeling will tell you keep
mosning and one just before sleeping will trell you keep it so long periods . last but no least, trust your
calacities and be suse that you are created to succeed
So, come on and just think about your dreams and
all the moments of pleasuse and trappiness you will find after this success because seally trave aspectal
taste by its own.

Student n° 16:

How to succeed in the exam! Being processful in The exam needs to follow many teps. First of all you have to concentrate during the classes so you have to interact with teachers, as clarification questions, and so on, the second step you have to be very organized, so every day after classes try perise what have you studied that day, and Then ask your teacher about every unclear point, the third step comes in the period proceeding the exam in this period try to give every madule enough time for good preparation, The last step which is very important, is during the exams, here you have to read the questions several times to essure good under standing in your graft start with the canest question because This will give you some psycological push and Water sich Relps to concentrate in the difficult questions. Rather Than being confused, you wil easiery succeed in your exam by following These

Résumé

Étant donné que l'écriture est l'un des processus très complexe, la plupart des étudiants de la section anglaise en tant que langue étrangère à l'Université de Biskra, rencontrent des complications à maîtriser tous ses aspects et de produire des paragraphes adéquats. En effet, les enseignants sont à la recherche de stratégies appropriées qui peuvent aider leurs apprenants à développer leurs compétences d'écriture et de parvenir à une communication efficace. D'autant la prise de conscience des enseignants de l'utilisation de stratégies et techniques appropriées. Ce travail de recherche a pour objectif d'analyser les résultats de 'design thinking' comme une stratégie de pré -écriture sur les paragraphes des étudiants de deuxième année au Département des Langues Etrangères à l'université de Biskra. Afin de confirmer ou de rejeter l'hypothèse que la mise en œuvre d'une telle stratégie de pré-écriture apporterait des résultats positifs, deux groupes intactes : un groupe témoin (N = 17) et un groupe expérimental (N = 17) ont été choisis au hasard pour une recherche quasi-expérimentale. Cette étude a pour but de comparer les écrits des participants avant et après l'expérience afin de démontrer les effets du traitement. La valeur du t - test (3,17), étant supérieure à la valeur critique (1.69) et de = 0,05 degrés de liberté, a révélé que les participants ont atteint des niveaux plus élevés en termes de contenu et d'organisation. En revanche, en raison du rôle important que la technique 'design thinking' ait sur le niveau d'écriture des participants, le réexamen de l'importance des stratégies de préécriture en anglais devrait être pris en compte.