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**Scaffolding First Year English Degree Students'
Critical Thinking Skills through Dynamic Assessment**

**Thesis submitted to the department of English in candidacy for the
degree of LMD Doctorate in Applied Linguistics and TEFL**

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Statement of Originality

I hereby declare that this doctoral thesis is the result of the researcher's own efforts and investigation; it has not been published or written by another person either in the context under investigation or abroad. Every statement or idea is based on her own reflections except where otherwise stated.

Student: Lydia Benmouhoub

Date: 15/07/2021

Dedication

I dedicate this work to my parents

Acknowledgments

I thank Allah the Almighty for giving me patience, courage, and perseverance in order to accomplish this doctoral thesis.

I thank my parents for their constant support and love, for travelling with me during my Ph.D. journey, I would not be where I am today without you.

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Abstract

How to think rather than what to think has been a subject of research among educational psychologists and philosophers. As a matter of fact, different definitions have germinated due to the opposing views about the meaning of critical thinking. Practical strategies have also been developed in order to help individuals reason more and become reflective thinkers. However, how to assess foreign language students' critical thinking skills has gained little attention in the area of English Language Teaching, specifically in the Algerian context. To address this gap, the content of this thesis explored the effect of scaffolding first year English degree students' critical thinking skills through dynamic assessment. The latter combines assessment and instruction in one activity. In this perspective, we relied on Depth of Knowledge as a type of instruction in the present research. Two major aims were targeted; first, to gain a deeper understanding of assessment practices in higher education in general; and second, to experience an alternative approach of assessment that would assist students in acquiring critical thinking skills in their academic and professional careers. Towards such aims, the sample of this study consisted of 254 first year English degree students and 15 teachers, at the department of English, University of Algiers 2 (Algeria). Because the research emphasised both causality and perceptions/attitudes, two research designs were adopted; these are experimental research and exploratory case study. Five main research instruments were used for data collection; these include students questionnaires, a pre-test, post-test 1/2, classroom observation checklists, students' reflective personal journals and teachers semi-structured interview. The data obtained were analysed through descriptive and analytic analysis as well as thematic coding and categorising. The results revealed first year degree students' difficulty to think critically in English and their dissatisfaction with their teachers' assessment practices. In addition, dynamic assessment appeared to be effective in helping the experimental group acquire a set of critical thinking skills. Finally, the participants (both students and teachers) in the present study expressed a positive attitude towards the use of dynamic assessment as an alternative approach of

formative assessment in EFL classes. These results led to crucial implications and among them: The consideration of teachers' conceptions of teaching and assessment, the inclusion of students' learning objectives and expectations, the training of teachers and students on assessment literacy.

Keywords: Assessment literacy, critical thinking skills (CTS), depth of knowledge (DOK), dynamic assessment (DA), scaffolding

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List of Abbreviations

BA: Bachelor of Arts

CA: Cognitive Apprenticeship

CALL: Computer Assisted Language Learning

CAT: California Assessment Test

CCTT: California Critical Thinking Test

CELT: Comprehensive English Language Test

CFC: Cambridge First Certificate

DA: Dynamic Assessment

DOK: Depth of Knowledge

EFL: English as a Foreign Language

EMI: English as Medium of Instruction

FIE: Feuerstein Instrumental Enrichment

HOT: Higher Order Thinking

IELTS: International English Language Testing System

IEP: Intensive English Programme

IQ: Intelligence Quotient

LMD: Licence, Master, Doctorat

MA: Master of Arts

MELAB: Michigan English Language Assessment Battery

MLE: Mediated Learning Experience

Ph.D.: Doctor of Philosophy

SCT: Sociocultural Theory

SLA: Second Language Acquisition

TOEFL: Test of English as a Foreign Language

WCT: Writing Communication Test

ZAD: Zone of Actual Development

ZPD: Zone of proximal Development

General Introduction

Learning and teaching in the 21st century have yielded substantial changes in education to mesh with the requirements of the global market. By implementing the LMD (Licence, Master, Doctorat) system in Algerian higher education, the aim was to build an active generation of students with educational and professional skills that are mobilised both nationally and internationally to be in line with those needs (i.e., 21st century needs). In this perspective, the role of the teacher is to act as a guide and a facilitator of knowledge acquisition, whereas students as agents and active participants in the classroom. Ongoing assessment is the required model in this system; it is characterised by the encouragement of tutorials, coaching, portfolios, projects and oral presentations, group work, seminars and conferences. Overall, the aim of assessment consists in monitoring students' progress and fostering their understanding of the input material; however, reality seems to be different from what is expected.

The majority of Algerian university teachers welcomed this new reform without being supplied with sufficient information on the way to implement it in the Algerian context. Teachers also appear to lack a clear understanding of the type of corresponding assessment procedures. Assessment is considered as a core concept in higher education that requires greater emphasis and training from teachers and students in order to promote assessment literacy. The latter refers to the knowledge of 'What', 'When', 'How', and 'Why' to assess. Consequently, traditional assessment still appears to gain power and interest to some category of teachers, maybe because it is less effort demanding and time-consuming. In this case, students round off the academic year with a lack of critical thinking skills because the purpose of teaching and learning is based on facts rather than the training of students' minds to think. In fact, the concept of critical thinking does not seem to be present in all the modules at the university level but only in a few of them such as the module of critical writing. However, how do teachers and administrators conceptualise it still appears under-researched.

Because of the problem of assessment practices in higher education and their negative impacts on the development of students' critical thinking, the researcher of the present thesis delved into suggesting an alternative instructional approach of assessment in order to scaffold first year English degree students' critical thinking skills. This alternative form of assessment is called 'dynamic assessment' (henceforth DA). The latter has its origin in Vygotsky's sociocultural theory and zone of proximal development (henceforth ZPD). It relies on mediation and its main objective is to promote change within a student's cognitive development; this is why it is called dynamic. The emphasis is not on the student's current level but the changes that may emerge during the process of learning. The present study focuses on three main variables, which consist of critical thinking skills, scaffolding, and DA; it is connected to both educational psychology and philosophy (assessment and critical thinking) which are the researcher's major interests. These two fields deal with humans' minds; that is to say, abstract aspects. We always wanted to understand the way people think and the nature of their arguments, as well as the materials, techniques, and strategies we can use to assess critical thinking. This doctoral thesis has been an opportunity to attain this objective.

To our knowledge, little research has been conducted on the assessment of first year English degree students' critical thinking skills in higher education. More precisely, the concept of DA does not appear to gain the attention of Algerian scholars and practitioners. Even abroad, this concept seems to have gained a scarce interest too. It seems that a few foreign researchers explored the effectiveness of DA on the improvement of students' language learning. As has been noticed, scholars who dealt with the theme focused mainly on language skills such as speaking (e.g., Poehner, 2008), reading (e.g., Naeni & Duvall, 2012), listening (e.g., Khonamri & Sannaati, 2014), and writing (e.g., Farrokh & Rahmani, 2017). Others directed their research on teachers' perceptions towards DA (e.g., Karimi & Shafiee, 2014; Nazari, 2015). The same trend has been noticed as far as critical thinking is concerned; we may find studies that stressed the importance of its

development in EFL classes, but rarely provide a comprehensive picture on how to teach it.

To fill these gaps, the present research can be considered as a contribution to English language teachers at both theoretical and practical levels. At a theoretical level, we believe that the research at hand will give teachers deep insights to the meaning of critical thinking and assessment, and the way they need to conceptualise them in higher education. In addition, it will help them change their perspective towards English language teaching and learning, as well as open the doors for change and implementation of dynamic approaches of assessment in their classes. At a practical level, the thesis will provide practical techniques, strategies on how to scaffold EFL students' critical thinking skills by relying on an interventionist approach of DA. The ultimate aim of the present research is to shift from the focus on teach-to-test to a more active learning environment, which favours a dialogue between teacher and student. By suggesting the present approach of assessment, we hope to build students' confidence, motivation and self-esteem, as well as freedom of thought. The latter aspect sounds a major problem in education as most of the tests and exams focus on memorisation, and less opportunity is given to students to express themselves in the English language.

To address the problem of assessment and critical thinking in Algerian higher education, we, therefore, set three major questions. They are listed below:

1. To what extent are first year English degree students able to think critically in the English language?
2. What are the perceptions of first year English degree students towards their teachers' assessment?
3. What are the attitudes of first year English degree students and teachers towards the use of DA in EFL classes?

Two hypotheses have been suggested in the present research; these are as follows:

1. Teachers' lack of assessment literacy is among the issues that lead to students' lack of critical thinking skills.

2. The use of DA in EFL classes helps first year degree students develop their critical thinking skills.

The sample of the study consists of 254 first year English degree students and 15 teachers at the department of English, University of Algiers 2 (Algeria) of the academic year (2017/2018). The experiment was conducted with two groups only (control and experimental); they were assigned randomly to the researcher. Based on the requirements of the present research, two research designs have been adopted; they consist of randomised experimental research and exploratory case study. The former was adopted to probe the effect of scaffolding first year English degree students' critical thinking skills, whereas the latter seeks to explore students' degree of argumentation, their perceptions towards their teachers' current assessment practices, as well as their attitudes towards DA and critical thinking instruction. The attitudes of teachers towards DA are emphasised too.

This study relied on both deductive and inductive approaches because the purpose was on both causality and the exploration of new phenomena emerging from the data. The researcher holds an advocacy/participatory philosophical worldview, which relies on action and change at the end of the study (Creswell, 2007, 2009). To collect data, quantitative and qualitative instruments have been used. Quantitative instruments consist of students questionnaires (ordinal + factual, behavioural and attitudinal data), pre-test, post-test 1/2, whereas qualitative instruments include classroom observation checklists, students' personal journals, and teachers semi-structured interview. As far as data analysis is concerned, descriptive and analytic analysis were used for analysing the students questionnaires, pre-test, intervention, post-test 1/2, classroom observation checklists and students' personal journals. Whereas, we relied on thematic coding and categorising for analysing teachers semi-structured interview.

The present doctoral thesis is divided into four main chapters; they consist of the literature review chapter, the methodology chapter, presentation of results and data analysis chapter, and the last chapter is devoted to the discussion of findings. A list of references and appendices have been provided at the end of the

thesis. The first chapter sets the theoretical background of the three connected variables of the present study: Critical thinking skills, scaffolding, and DA. It aims to provide a clear understanding and conceptualisation of the aforementioned terms to succeed in the experimental and exploratory case study. Next, the chapter presents a number of empirical studies that have explored the topic under investigation. The purpose is to diagnose the strengths and weaknesses of those studies to fill any gap in the literature as well as validate or support the researcher's stance.

The second chapter describes the research methodology adopted in the present study. The difference between research methodology and research methods was highlighted in this chapter to make the distinction between the two and to avoid any ambiguity. Then a detailed account of the research design and framework, the researcher's epistemological positioning and ethical issues were highlighted in order to explain the process we went through while conducting this study. In so doing, the chapter might assist the readers in shaping the personality of the researcher and her rigour towards scientific integrity. The third chapter presents a systematic account of the results and data analysis in accordance with the research questions. The last chapter is about the discussion of findings, pedagogical implications, and further research. The researcher relied on triangulation to maximize objectivity in the interpretation of findings. At the end of the thesis, a general conclusion was provided to synthesise and conclude the major concepts and results as well as answer and validate the research hypotheses.

Chapter One: Literature Review

Introduction

The present chapter focuses on an extensive critical review analysis of the major theoretical concepts and empirical studies in relation with the theme under investigation. The aim is to contextualise the research at hand and find out the main strengths and weaknesses of the previous studies. The chapter contains four main sections which are devoted to the following themes: Critical thinking skills, scaffolding, dynamic assessment, and empirical studies. In the first section, we explored what critical thinking is and how it varies from one discipline to another. Frameworks for thinking have been presented in details including the framework adopted in the present research. Next, the dispositions (i.e., the motivation and will to use critical thinking skills, more details have been provided in section one of this chapter, pp. 16, 17) that are needed to boost critical thinking are delineated, and an account of argument and argumentation in higher education have been emphasised too. Then, approaches to develop critical thinking skills have been reviewed in this chapter along with the elements, steps and mistakes to avoid in critical thinking. Finally, the chapter ends with an emphasis on the major challenges in designing critical thinking assessment.

In the second section, we dealt with the second variable which is scaffolding; we reviewed its major types, levels of supports and layers and conditions of scaffolding. Since dynamic assessment springs from sociocultural theory, we felt it important to shed light on its main principles and perspectives. The relationship between contingency, challenge and support has been addressed and the role of teachers within the context of mediated activity has been emphasised as well. Besides, an emphasis was put on the pedagogical features of cognitive apprenticeship along with Piagetian versus Vygotskian's view of L2 development. In the third section, we examined assessment from a historical perspective, highlighted its characteristics, types of assessment and purposes, principles as well as the assessment cycle, then we shifted into introducing

dynamic assessment, its approaches, features and issues. The last section was devoted to empirical studies.

1.1. Section One: Critical Thinking Skills

Introduction

The goal of education is meant to help students become critical thinkers and responsible citizens. We are no more in the period of Latin or Greek when students used to be treated as passive recipients of knowledge; we are now in the era of modernism and technology. According to Egege and Kutieleh (2004), critical thinking is the only concept that helps to compare secondary school from university, and it varies from one culture to another because it has a relation with academic history and tradition. These scholars consider that good reasoning springs from a good depiction of critical thinking skills such as the evidence of reasoning, the tools used, and the language as well as the structure of arguments. In this section, we will emphasise the notion of critical thinking including other central aspects such as the frameworks for critical thinking, argument and argumentation in higher education, critical thinking dispositions, approaches, elements of thought, and thinking in education. Next, we will highlight the importance of critical thinking and the steps for promoting it in an EFL setting. Finally, we will shed light on the major mistakes to avoid in critical thinking and the challenges for designing critical thinking assessment.

1.1.1. Overview of Critical Thinking Skills

Given the plethora of definitions on critical thinking, no common definition seems to be given. This explains the tremendous research that has been conducted on the concept, and which led to the emergence of new perspectives and distinctive terminology. For instance, the term seems to have no consensus between researchers concerning the origin of critical thinking. Some attribute it to a textbook by Black, which was published in 1952, others to Stebbing and Royce who are logicians in Great Britain (Wilson, 2016). It appears that the first who coined the term critical thinking was the American psychologist Glaser. According to this scholar, critical thinking is a cognitive skill that contains three paramount peculiarities such as (1) a positive attitude of people's experiences, (2) knowledge of logical reasoning and strategies, and (3) the application of attitudes and

strategies (Cooper & Patton, 1946). Essentially, critical thinking goes back to the Socratic period in his Elenchus, or Socratic dialogue. A debate between educators on the concept took place in the 1980s, during which they discussed matters related to the future of education (Facione & Giancarlo, 2000). According to Ameziane (2016), the term was conceptualised in the 1960s in terms of classification, comparison, and contrast strategies. Then, it developed in the 1980s to include problem-solving situations, and the 1990s to encompass the introduction of transfer skills and thinking processes from 'school-life to real-life contexts via cognition and intercultural reflection' (p. 137).

Houston (2011) stated that the concept was originally a subfield of philosophy, which focused on logic and the structure of arguments, and then it extended to other disciplines such as psychology and education. In his view, critical thinking is the discipline of thought and the validity of arguments. In turn, De Waelsche (2015) defines it as the assessment, judgement, or evaluation of any issue as well as an evaluation of one's reasoning. Raingruber and Haffer (2001) conceptualise it as the validation of previous information and the creation of a new one as well as the need for reflective thinking. The latter was also stressed by Dewey (1910); this scholar conceived critical thinking as active reflective thinking; he made a distinction between thinking and thought. The former means 'everything that goes through our heads', whereas the latter refers to 'everything that is in our head or goes out through minds' (p 2). He also made a distinction between thinking and reflection in which the first refers to all what is inside our heads and mind, whereas the second focalises on reasoning. For example, at secondary school, we used to believe everything that is spread on the media because we were not yet mentally mature, and we kept having the same thoughts that all what was said on television was true. As has been noticed, the former is a subconscious process and the latter is conscious and systematic. In addition, Dewey suggests that, 'reflection implies that something is believed in (or disbelieved in), not on its direct account, but through something else which stands as witness, proof, voucher, warrant; that is, as ground of belief' (Dewey, 1910, p.

3). To make people reflect upon the things around them, we need to provide them with convincing arguments that make them believe or question those things.

Paul and Elder (2002) conceptualised critical thinking as the skill of thinking about our thinking during the thinking process in order to achieve clarity, accuracy and defensibility. As far as Moon (2008) is concerned, critical thinking refers to the ability to make an idea more challenging and complex by considering three essential elements such as ‘empathy’, ‘culture’, and ‘history’. Roberts and Billings (2012) perceive critical thinking as the explanation and manipulation of complex texts. However, Lau (2011) linked critical thinking with creativity; he provided us with eight crucial characteristics of a critical thinker (p. 2):

A critical thinker is the one who:

- a. Understands the logical connections between ideas.
- b. Formulates ideas succinctly and precisely.
- c. Identifies, constructs, and evaluates arguments.
- d. Evaluates the pros and cons of a decision.
- e. Evaluates the evidence for and against a hypothesis.
- f. Detects inconsistencies and common mistakes in reasoning.
- g. Analyses problems systematically.
- h. Identifies the relevance and importance of ideas, justifies one’s beliefs and values.
- i. Reflects and evaluates one’s thinking skills.

All these characteristics sound crucial indeed; however, knowing them only is not sufficient if we do not apply them in the context of language use. We need in fact to harness the power of education by putting emphasis on practical strategies and techniques to boost those characteristics within the students. In addition, Davies (2015) compared between critical thinking and criticality. He said that the latter is a wide concept, which contains three elements: Thinking, reflecting, acting, and aims at radical development. Whereas, critical thinking refers to the skills of argumentation, which aims at educating an individual. This goes in harmony with Davies and Barnett’s (2015) three perspectives of critical thinking (as cited in Wilson, 2016) such as ‘skills’, ‘criticality’, and ‘critical pedagogy’. The first is concerned with the skills needed for reasoning and analysing arguments. For example, the four language skills (speaking, listening,

reading and writing); knowledge about the major concepts related to critical thinking like judgement, reasoning, criticality. It is described as being structural and pragmatic. The second focuses on students' open-mindedness about other ideas, their willingness to be inquisitive, self-regulated/corrective, and autonomous. The third refers to the awareness of social and political forces such as the ability to have a critique of hidden agendas and full engagement with civil society as well as political discourse.

Furthermore, Lipman (1991) the founder of the philosophy for children and Facione (1990) the creator of the California Critical Thinking Test (Henceforth, CCTT), agree that critical thinking is purposeful, self-corrective, context-sensitive, criteria-guided and judgement-conducive. For Lipman, the twin pillars of critical thinking include 'reasoning' and 'judgement'. The former refers to the inferences and conclusions that a person makes based on facts and evidence, whereas the latter concerns the determination of thinking, speech action and creation. Lipman further adds that:

If we are to foster and strengthen critical thinking in schools and colleges, we need a clear conception of what it is and what it can be. We need to see its defining features, its characteristics outcomes and the underlying conditions that make it possible. (Lipman, 1991, p. 38)

We agree with Lipman (1991) because having a clear understanding of critical thinking will help educators shape this idea to their students and at the same time choose the appropriate approach and adopt it. After clarifying what critical thinking is, it is, however, also crucial to pinpoint what this concept is not. For instance, critical thinking is not criticising others or denouncing them in public; it does not also mean to be out of emotions. It is rather necessary to be polite and respect others' opinions, and think of what is good and bad in a relationship in order to make it harmonious (Houston, 2011; Lau, 2011). In fact, such perspectives are either occurring in education or outside because of a lack of knowledge of what is meant by critical thinking skills. Consequently, the majority of students venture to speak in the classroom, participate in conferences or integrate themselves in any debate. A witness we have experienced throughout our teaching at university;

some students reported their fear of negative evaluation when speaking or writing in the English language. Such a feeling might be attributed to some psychological factors such as shyness and low self-esteem.

In opposition with the researchers above, Atkinson and Ramanathan (1995) state that critical thinking is culturally-based which means that EFL communities were not brought up to question their authorities. In a study he conducted, Atkinson (1997) asserts that critical thinking could not be a definable concept since many professors at an American university were unable to define it during the interview. This statement was commented by Davidson (1998) who stated that the findings of Atkinson (1997) showed a lack of understanding of critical thinking rather than its indefinability.

In a nutshell, critical thinking is not just about giving arguments to defend one's stance, but one needs to convince the audience and help them understand why a given idea is important and the other not. Besides, many qualities are also crucial when it comes to expressing one's thoughts such as respect, politeness, and tolerance of uncertainty. Respecting these elements makes our ideas more cogent and academic, and this, of course, reflects the quality of a respected citizen.

1.1.2. Frameworks for Thinking

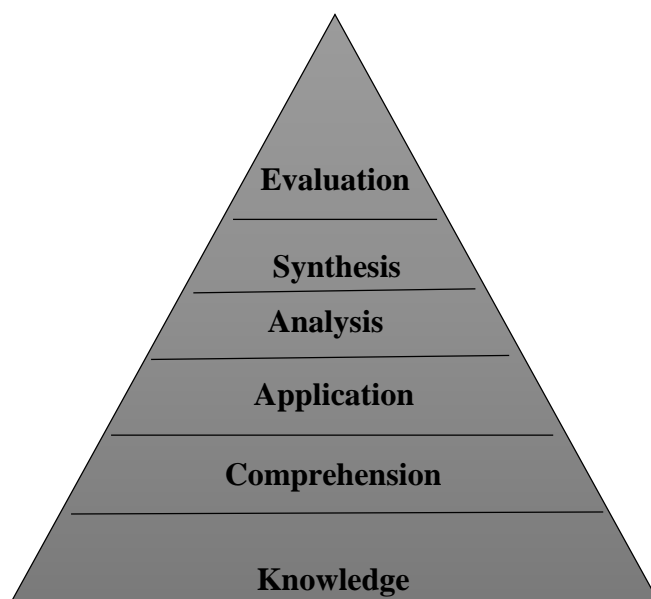
In the literature, four frameworks emerge for enhancing critical thinking in education. Among these frameworks include (1) Bloom's taxonomy of educational objectives, (2) Romiszowski's framework for knowledge and skills, (3) Krathwohl's and Anderson's revision of Bloom Taxonomy, and (4) Webbs' Depth of Knowledge (DOK). These are briefly discussed in subsections on pages 13, 14, 15 and 16.

1.1.2.1. Bloom's Taxonomy of Educational Objectives

Bloom (1956) divided critical thinking in terms of the classification of skills, which are ranked from 'lower order' to 'higher order', and the latter is the most complex which he refers to as 'critical thinking'. Bloom notes that the application of knowledge is the cornerstone in the taxonomy, which therefore leads to critical thinking skills. As he stated in his book, the taxonomy aimed to guide teachers, administrators, professional specialists, and research workers by supplying them with the classification of goals in the educational system and discussing any problem related to curriculum. The classification system was done at an informal meeting of college examiners who took part in the 1948 American Psychological Convention in Boston.

The first stage in Bloom's taxonomy is called knowledge, which means the acquisition of information. When having the latter at our disposal, we need then to make sense of that knowledge (when, how and for which purpose to use it) which is the second stage in the taxonomy. After that, we will apply the background knowledge we acquired in a given situation (third stage). The first and second stages are what Bloom (1956) calls 'lower order-thinking skills'. However, analysis, synthesis, and evaluation are referred to as 'higher order-thinking skills'. In those three stages, the person needs to use more complex thinking skills to solve tasks and problems (i.e. more creativity and autonomy are required). An illustration of Bloom's original taxonomy appears in Figure 1.1.1 on page 14.

Figure 1.1 1. *Bloom's Original Taxonomy* (Bloom, 1956)

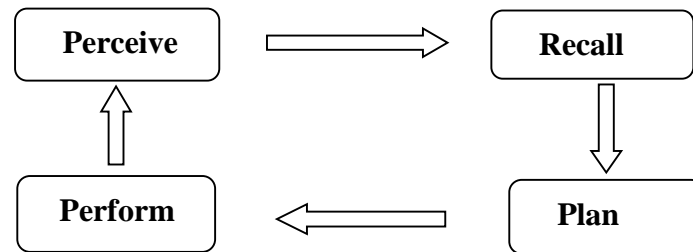


1.1.2.2. Romiszowski's Framework for Knowledge and Skills

Bloom's taxonomy significantly influenced Romiszowski's investigation of cognitive processes and methods of improving educational instruction (Romiszowski, 1981, as cited in Dwyer, 2017). According to Romiszowski, the relationship between instruction and learning is described as a three-part sequence, which consists of input (i.e. information), the use of a system (i.e. a cognitive process) and output (i.e. performance, application or production of knowledge). To this scholar, skill development is dependent on how often the skill is practised and on how well skill development is supported by instructional design and an accommodating learning environment. In Romiszowski's view, an individual perceives first the information, recalls it, makes plans, and then performs actions based on that information. In this perspective, Romiszowski's skill-cycle is connected to Bloom's taxonomy in that the second level of the skill-cycle is similar to Bloom's lower-order thinking such as knowledge and comprehension while the third level is in harmony with Bloom's higher-order thinking such as analysis, synthesis, and evaluation. Moseley et al. (2005) consider Romiszowski's skill-cycle appealing because they believe that planning is for purpose and results in action.

An illustration of the skill-cycle is shown in Figure 1.1.2. below:

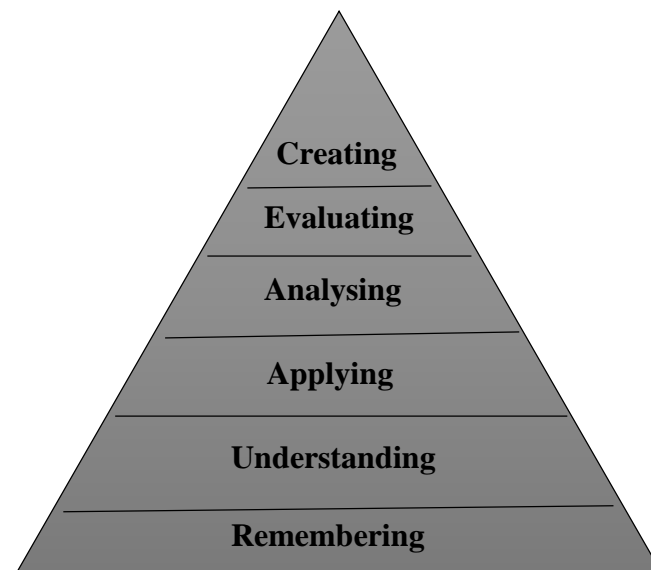
Figure 1.1 2. *Romiszowski's Skill-cycle* (Romiszowsky, 1981, as cited in Dwyer, 2017, p. 15)



1.1.2.3. *Anderson and Krathwohl's Revision of Bloom's Taxonomy*

Like Romiszowski (1981), Anderson and Krathwohl (2001) wanted to describe thinking in terms of actions, and this by changing the noun forms of Bloom's thinking processes into verbs (as cited in Dwyer, Hogan & Stewart, 2014). An example is shown in Figure 1.1.3 below:

Figure 1.1 3. *Anderson and Krathwohl's Revision of Bloom's Taxonomy* (Anderson & Krathwohl, 2001, as cited in Dwyer, 2017)



1.1.2.4. *Webb's Depth of Knowledge*

The Depth of Knowledge (DOK), was developed by Webb in 1997; assessment and evaluation are one of his major research interests. As far as DOK is concerned, it was first developed for mathematics and science standards, and then it extended to other disciplines such as social sciences (Webb, 1999).

According to Webb et al. (2002), 'alignment of expectations for student learning and assessment for measuring students' attainment of these expectations is an essential attribute for an effective standard-based education system' (p. 2). They defined alignment as the relationship between expectations and assessment, and it is considered as one of the critical aspects of DOK. The latter is based on four main stages: (1) Recall and reproduction, (2) skills and concepts, (3) strategic thinking, and (4) extended thinking. Similar to Bloom's taxonomy and Romiszowski's skill-cycle, recall and reproduction, as well as skills and concepts, refer to lower-order thinking skills, whereas strategic and extended thinking are congruent with higher-order thinking skills.

In this research, we adopted Webb's DOK approach because it takes into account three essential criteria which consist of 'assessment', 'learning objectives' and 'students' expectations'. According to Wyse and Viger (2011), 'An important part of test development is ensuring alignment between test forms and content standards. One common way of measuring alignment is the alignment procedure' (p. 2). In other words, the tests should go in harmony with the content being taught as well as the standards that have been set right from the beginning such as linking the tests to objectives of the course, students' level and needs. For recall, the purpose of this research is to make a link between assessment, instruction and critical thinking skills. In so doing, assessment and instruction will be combined in order to assist students in transferring the skills of critical thinking in their learning and professional careers.

1.1.3. Critical Thinking Dispositions

Critical thinking is a crucial aspect of the 21st century, which necessitates a combination of skills and dispositions. For instance, Dwyer (2017) considers skills as the knowledge and understanding of when, how and why to use critical thinking in a given situation, whereas dispositions are conceptualised as a person's motivation, tendencies or engagement. In this perspective, critical thinking dispositions may be classified in terms of three categories: dispositions arising in

relation to the self, others and the world (Davies, 2015). The dispositions appear in Table 1.1.1 below:

Table 1.1 1. Critical Thinking Dispositions (Davies, 2015, p. 58)

Dispositions arising in relation to the self	Dispositions arising in relation to others	Dispositions arising in relation to the world	Other
Desire to be well informed	Respect for alternative viewpoints	Interest	Mindfulness
		Inquisitiveness	Critical
Willingness to seek or be guided by reason	Open-mindedness	Seeing both sides of an issue	Spiritedness
Tentativeness	Fair-mindedness		
Tolerance of ambiguity	Appreciation of individual differences		
Intellectual humility	Skepticism		
Intellectual courage			
Integrity			
Empathy			
Perseverance			
Holding ethical standards			

Table 1.1.1 shows that critical thinking skills do not appear sufficient to function well in education and society as a whole; one needs to possess the motivation or the disposition to use those skills in their appropriate context. An end we want to reach in the setting under investigation by introducing the skills and strategies of critical thinking to the experimental group, and then make them aware of the importance to put those skills and strategies into action.

1.1.4. Argument and Argumentation in Higher Education

Argument and argumentation are two important concepts in higher education. The most expected outcome of the 21st century education is to develop in the student the ability to argue as a civic citizen. In the past, the main objective of learning was to fill the mind of students with facts in order to repeat them during tests and exams. As a result, these students graduate from colleges without the necessary competencies that permit them to attain the objectives required at the

workplace. Hence, it is necessary to make changes in higher education and this by making the concept of critical thinking as the cornerstone in EFL classes. Andrew's (2009) work gives a comprehensible conceptualisation of argument and argumentation. This scholar conceives argument as a 'product' and argumentation as a 'process'. For instance, in writing, students need to provide effective arguments to support their point of view about a given issue. However, argumentation refers to the ways these arguments take place at tertiary education, for example, through debates, conferences, seminars, and workshops.

In connection with Andrew (2009), McKinley (2015) made the argument that students' academic writing needs to be conceived as socially constructed pieces of writing that comprises a writer's cultural identity and critical argument. In this perspective, EFL writing is viewed from the social constructivist lens, which maintains that critical thinking processes are connected with sociocultural conventions of academic discourse. This author explained in his article the way EFL student writers make arguments to generate a discussion, such as citing evidence, hedging and boosting claims, interpreting the literature to back up one's own claims, and addressing counterclaims, and these elements were focused in the present research too. Aberkane (2016) stresses the importance to shift from the education of stocks to the dynamic one. In other words, the focus of education is to encourage argumentation rather than the teaching of facts, an aim we want to reach in the present study. We are aware that such an aim sounds ambitious to some extent but nothing is impossible if we do not try to make changes. This is likely to happen if we apply the new perspectives, methodologies that go with the demands of the global world. To this end, universities, in general, have to be a platform that encourages argumentation and freedom of speech, a place where discussions and new ideas flourish in order to motivate students towards exploring their creativity and imagination.

1.1.5. Approaches to Critical Thinking

It is generally agreed that any approach a teacher adopts will reflect his/her identity and perception towards teaching and learning. We summarised below two

fundamental approaches to critical thinking from Browne and Keeley (2007) called: The sponge and the panning-for gold approach.

1.1.5.1. *The Sponge Approach*

It focuses on knowledge acquisition; in other words, the more knowledge people acquire the better they will be able to criticise others' arguments.

1.1.5.2. *The Panning for Gold-approach*

This aspect emphasises interaction and knowledge acquisition; it questions the reasons that push the author to make various claims. Browne and Keeley (2007) mentioned the weak and strong sense of critical thinking introduced by Paul. The weak sense concerns the use of critical thinking for defending our opinions and beliefs, whereas the strong sense refers to the application of the knowledge of critical thinking to all claims.

We have shown below the critical questions that Browne and Keeley (2007) provided for critical thinking acquisition (p. 13):

- a. What are the issues and conclusions?
- b. What are the reasons?
- c. Which words or phrases are ambiguous?
- d. What are the value conflicts and assumptions?
- e. What are the descriptive assumptions?
- f. Are there any fallacies in the reasoning?
- g. How good is the evidence?
- h. Are the statistics deceptive?
- i. What significant information is omitted?
- j. What reasonable conclusions are possible?

In the present study, such questions have been emphasised in order to boost students' reflection and understanding of critical thinking. Moore (2004) reviewed in his article the debate between the generic vs. the specific discipline approach to critical thinking. The debate that was put forward between the 'specifists' (e.g. McPeck) who view critical thinking as a subject-specific discourse, and the 'generalists' (e.g. Ennis), who conceptualise it as an independently disciplinary context. The generalists are described as those for whom critical thinking is a universal, general skill. Moore asked a crucial question concerning this debate: 'is it best for our undergraduate students to be taught about

critical thinking as a subject of study in itself, or should it be handled within the context of students' study in the disciplines?' (Moore, 2004, p. 4). Moore sees the generalist approach as being flawed and pedagogically-ill, and that is why he argued that the discourse of general thinking needs to be taught from the specificist approach.

Another approach to critical thinking is called the 'infusion approach'. Lin (2018) states that the infusion approach was primarily developed by Swartz and Parks in 1994 as an approach to teaching thinking skills with content instruction. In her book, she introduced the framework of the infusion lessons which rely on the thinking process and sociocultural theory. The infusion approach focuses on three paramount elements, which are instruction, internalisation and transfer. In the introduction phase, instruction is important and aims at assisting students in acquiring set of skills in critical thinking. In the thinking actively phase, the teacher models those skills to students and then the latter practise them in groups after the skills have been well internalised. In the thinking about thinking phase, the aim is to promote students' reflection on their thinking process. Finally, in the applying thinking phase, transfer of skills to other contexts is the targeted objective. This approach (i.e. the infusion approach) is in harmony with sociocultural theory and critical thinking frameworks previously mentioned (e.g. Blooms' Taxonomy and Webb's Depth of Knowledge). The framework of the infusion lessons is illustrated in Figure 1.1.4 on page 21:

Figure 1.1 4. *Conceptual Framework of Infusion Lessons* (Lin, 2018, p. 13)

Introduction	<ul style="list-style-type: none"> • The teacher provides instruction on thinking skills and content objectives
Thinking actively	<ul style="list-style-type: none"> • The teacher models how to use thinking skills to solve learning problems. • The students complete thinking task in groups by using thinking skills and subject knowledge. • Students share group ideas with the whole class and the teacher provides feedback.
Thinking about thinking	<ul style="list-style-type: none"> • The teacher facilitates additional opportunities for students to apply their thinking skills to similar and different content to promote transfer.
Applying thinking	<ul style="list-style-type: none"> • The teacher asks questions to guide students to reflect on their thinking process.

The aforementioned approaches (i.e. the sponge approach, the panning for gold approach, specific vs. generic discipline, and the infusion approach) are all important since their objective is to promote critical thinking. They were focused in the present thesis in order to help the readers understand the way critical thinking can be taught within EFL classes, and then assist them in choosing the appropriate approach that suits better their conception and understanding of critical thinking to succeed in their learning/teaching practices. As we have noticed in the literature previously cited (e.g. Moore, 2004), a debate was raised between generalists and specificists concerning the teaching of critical thinking. In this research, critical thinking is perceived as a universal, generic skill that can be applied to all disciplines and domains. The aim is to help students apply the skills of critical thinking in their real life problems and professional careers. We disagree with Moore when he pointed out that the generalist approach to critical thinking is flawed and pedagogically-ill. As a response to his statement, we suggest that teaching critical thinking as a specific domain is limited to a specific field of study only, and might not be applied to other domains. In addition, acquiring general skills of critical thinking might be more beneficial because they are universal and easier to be taught rather than specific skills since we need the mastery of both the discipline and skills of critical thinking restricted to that discipline.

1.1.6. Elements of Thought

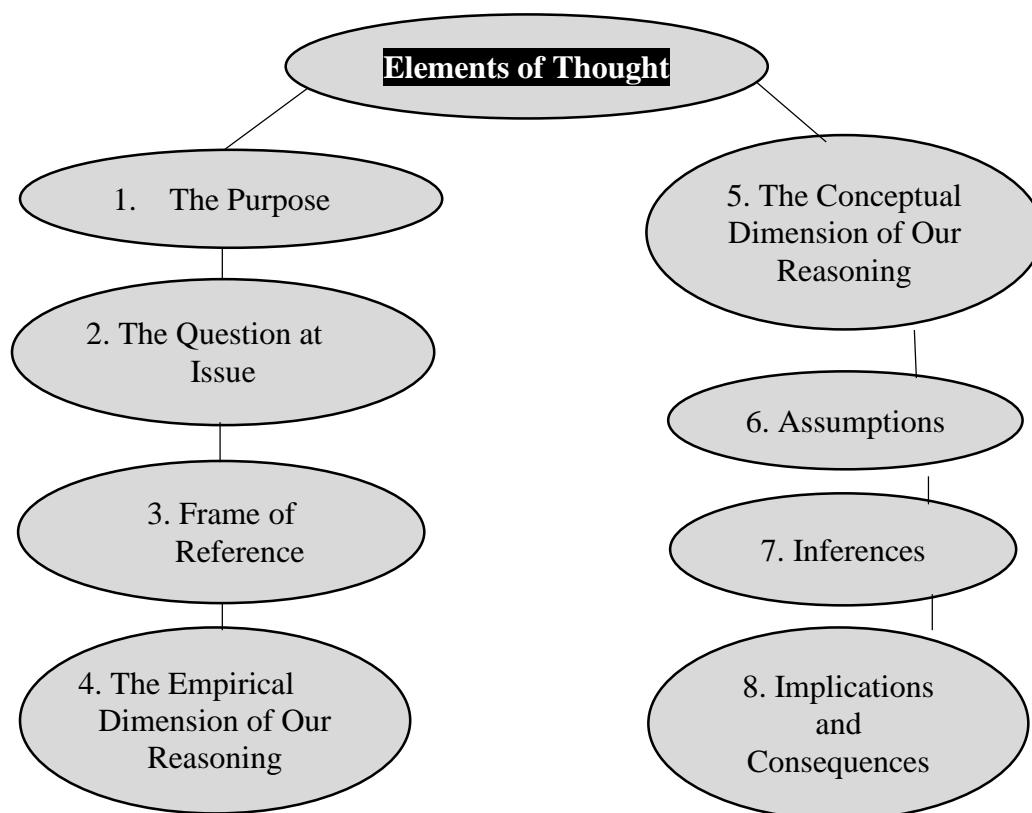
Making good judgement and reasoning requires the knowledge of the elements of thought. Paul and Elder (2002) described eight important elements of thought; we have briefly discussed them below.

The first element we need to take into account in critical thinking is the purpose of reasoning. For instance, the purpose of this study is to scaffold EFL students' critical thinking skills through DA. The second element has to do with the question at issue; a question in the mind of the person that we want to solve, understand or reconsider. One of the questions we want to answer in the present research is whether first year students are able to think critically in the English language. The third element concerns the frame of reference, which aims at convincing people that our reasoning is based on logic and facts. The evidence can come from other sources such as books, articles, journals, newspapers or any other reference that will validate our point of view. For example, we might say that students lack critical thinking due to the assessment practices in higher education.

The fourth element is based on selected experiences, data, and the materials that we will adopt. For instance, in the present study, we relied on previous studies, the researcher's own experiences, students questionnaires and personal journals, classroom observation checklists, and teachers semi-structured interview. The fifth element focalises on the conceptual dimension of our reasoning. For example, the three main concepts that underpin our reasoning are EFL students, critical thinking skills, and assessment practices. The sixth element relies on assumptions, which are important in testing theories and validate them, and in this research, two assumptions have been emphasised. The seventh element concentrates on drawing conclusions and the last element on implications and consequences.

An illustration of the elements of thought appears in Figure 1.1.5 below.

Figure 1.1 5. *Elements of Thought* (Paul & Elder, 2002)



1.1.7. Thinking in Education

To foster critical thinking skills in education in general and at university in particular, we need to explain first how thinking is understood by administrators and policymakers, and second, the principles that we have to take into account as teachers in the field of applied linguistics and English language teaching.

To begin with, educators need to focus on the definition of critical thinking and the decision about the way to teach the concept including teachers' freedom. In other words, an operational definition of critical thinking is necessary in education because it will shape the identity of teachers and administrators as well as their students. For example, knowing that critical thinking is the ability to analyse others' arguments, as well as ours based on the three perspectives that we have already presented (skills, criticality, and critical pedagogy), might contribute in assisting students to become good critical thinkers and successful in their

learning as well as professional careers. Furthermore, an understanding of the critical thinking approach to be adopted in teaching is worth considering; that is to say, are teachers going to opt for the sponge approach, the panning for-gold approach, specific vs. generic discipline or the infusion approach. As far as we are concerned, the infusion approach is the one used because it sounds in harmony with the aim of the present study, which is to scaffold EFL degree students' critical thinking skills through DA. Besides, teachers' freedom regarding the teaching of critical thinking is important. In this respect, teachers need to act as agents in their teaching process, which means to create their own space for teaching.

Along with these principles, Lipman (1991) provides us with three crucial features of critical thinking in education; they consist of (1) rationality as an organising principle, (2) education as enquiry, and (3) the community of practice. They will be examined to a certain depth below.

1.1.7.1. *Rationality as an Organising Principle*

Lipman (1991) distinguishes two types of rationality: Means-end rationality and the distribution of authority in a hierarchical organisation. For instance, the English language can be a means and an end in itself; a means when it is used as a means for communication only, and an end when it is for the aim of teaching; this is as far as the former is concerned. For the latter, we can give the example of the military, the government, and the church. We appreciated the statement of Lipman when he said, 'more reasonable schools mean more reasonable future parents, more reasonable citizens, and more reasonable values all around' (Lipman, 1991, p. 9). In addition to this, he states that higher-order thinking (Henceforth, HOT) is not similar to critical thinking and that HOT is the combination of critical and creative thinking. For him, HOT is the resource because it helps us look for the suitable information. It is necessary to mention that critical thinking consists of reasoning and critical judgement, whereas creative thinking comprises craft, artistry and creative judgement.

1.1.7.2. *Education as Enquiry*

Dewey (1910) and Freire (1976) were the ones who spoke of the problems of teaching in education. For example, Freire has well clarified in his book the reasons behind students' failure at school. In the book, he used 'banking' as a metaphor to delineate the educational issues; he reported that education becomes 'an act of depositing, in which the students are the depositories and the teacher the depositor' (Freire, 1976, p.72). In agreement with Freire, we think that some teachers still prefer to act as transmitters of knowledge rather than as guides, and therefore, students rely on rote learning rather than on meaningful and reflective ones. Therefore, students' failure to exhibit critical thinking skills might be due to education as it is the place where their ideas are shaped and knowledge accumulated. We also share the point of view of Freire when he pointed out that education needs to be based on a 'dialogue'. In this case, both teachers and students take part in the learning process, and critical thinking is highly practised. Following Freire's argument, Dewey noticed that the failure of education, in general, was the result of the focus on the product of enquiry, which aims at making students learn by heart rather than think critically.

In support, Hogan (2006) noticed in his experience as a lecturer that much time is given to didactic instruction and the reading of textbooks rather than the analysis and evaluation of knowledge (as cited in Dwyer, 2017). Long and Plucker (2015) state that the training of students' creative thinking is given less attention by teachers and that the latter showed a negative attitude towards the concept. Snyder and Snyder (2008) mentioned four barriers that hamper the development of critical thinking in education such as (1) the lack of training, (2) limited resources, (3) biased preconceptions, and (4) time constraints. Indeed, in education, many teachers seem to find difficulties to foster their students' critical thinking because they are themselves not critical thinkers and do not appear to possess the knowledge on how to teach critical thinking in their classes. Some of them are competent but the lack of materials and time constraints might not allow them to achieve that. The different interpretations given to the term (i.e. critical thinking) have mystified teachers too in understanding and promoting it in their

courses. Finally, yet importantly, Giroux (2017) argues that the majority of universities are affected by conservative ideologies, slavish methods, and administrators' lack of critical understanding of education as a weapon for encouraging imagination and democratic public life.

1.1.7.3. *The Community of Practice*

It can be defined as the community in which a group of people share goals, objectives, respect one another and have tolerance of ambiguity. In the field of education, it is felt important to have a community of practice in which teachers, administrators, and students come across together and discuss the way learning should take place; for example, the planning of goals, course contents, activities, and assessment. While engaging in dialogues, people reflect upon others' ideas, and by starting analysing their arguments, they become later critical thinkers.

To sum up, we have explained that thinking in education does not happen haphazardly without taking into account some principles as the aforementioned. There are many principles encountered in the literature, however, we have selected only the available ones that better reflect the purpose of the present thesis.

1.1.8. Steps for Promoting Critical Thinking

In order to teach and promote critical thinking in higher education, we need to take into account some crucial steps. Duron et al. (2006) mentioned five steps for promoting critical thinking in education; the explanation of each step is based on the researcher's own critical understanding; these are as follows:

1.1.8.1. *The Planning of Objectives*

We believe that the success of any teaching is the one that is based on reasonable and reflective planning. For instance, the teacher needs to plan the objectives that have to be attained at the end of the course and see whether those objectives mesh with students' expectations or not.

1.1.8.2. *The Teaching through Questions*

The use of questions might sound practical because it assists in making students work their minds. However, we may say that sometimes the type of

questions we ask may have either a positive or a negative impact on students' cognitive growth and development. For example, asking a direct question will encourage rote learning and students' passivity, whereas complex questions that aim at boosting students' thinking skills are much appreciated. To illustrate, the teacher may ask the following questions:

- a. What is your opinion concerning this statement?
- b. Do you think that the writer who wrote this statement is biased?
- c. Do you agree with the author? Explain
- d. Compare and contrast between these two statements.
- e. According to you, from which basis did the author interpret all these images?

1.1.8.3. *Practice*

After having clarified what critical thinking is, the next stage is to ask students to practise what they were taught by putting them into difficult situations. For instance, we suggest it would be better to divide students into groups of three or four and in each group give a situation in which they (i.e. students) will be asked to find a solution to the problem. Later, they will be required to compare and contrast their peers' answers as a way to encourage debate, exchange ideas and opinions and foster critical thinking.

1.1.8.4. *Reviewing, Refining and Improving*

This step has to do with the teacher's guidance and monitoring of classroom activities; this is actually one of the features of DA that has been discussed in section three of this chapter. When students are working on a given task, the teacher can turn around and see to what extent they have completed it, whether they need clarifications or not, and here, comes the notion of mediation and scaffolding.

1.1.8.5. *Providing Feedback and Assessment of Learning*

The last step in the teaching of critical thinking is feedback and assessment of students' learning; an important stage that needs careful attention and planning because the type of assessment and feedback will reflect the teachers' method in the classroom as well as their perception towards teaching and learning. The

present study follows Freire's conception that teaching and learning are based on a 'true dialogue' (Freire, 1976). In this perspective, we opted for DA as it takes mediation and interaction between the teacher and students as its cornerstone. In so doing, the teacher in this stage needs to be careful about the feedback provided to students; he/she is required to stay objective and not to praise considerably the good students in order not to affect the low performing and lowest ones in the class.

1.1.9. Importance of Critical Thinking Skills in an EFL Setting

Critical thinking skills are not just important, but a must that require consideration and instructions in every module at the university level. Many researchers have pinpointed remarkable elements that made them important. Among them is Lau (2011) who stated that critical thinking skills assist students in the communication of ideas, decision-making, analysis and problem-solving as well as the experience of a meaningful life and the capacity to make future plans. More importantly, the students will become cautious of tautology, flawed arguments, fallacy, and skepticism; they will make effective decisions, identify hidden agendas and understand the features of argumentation such as the author's position, propositions and reasons, a line of reasoning, conclusion, persuasion and the use of indicators and signal words (Cottrell, 2005). In support with the aforementioned researchers, Roberts and Billings (2012) argue that finding a workplace and contributing to a functioning democracy requires a great deal of communication and thinking skills. In this connection, Boud and Falchikof (2006) suggest that:

Preparing students for lifelong learning necessarily involves preparing them for the tasks of making complex judgements about their own work and that of others and for making decisions in the uncertain and unpredictable circumstances in which they will find themselves in the future. (p. 402)

At university level, students are required to possess the ability to reason effectively and make convincing arguments. Learning only facts is not sufficient because there are many ways for boosting students' culture and knowledge of a given subject, what they need in the classroom is activities that are challenging, interesting, motivating and inspiring, activities that encourage critical thinking and

autonomy. According to Goldsmith (2014), the absence of critical thinking creates a poorly educated mind and unsuccessful decisions in the modern world. In this perspective, promoting critical thinking in higher education sounds important and necessary.

1.1.10. Mistakes to Avoid in Critical Thinking

In order to become a good critical thinker, some major mistakes that students need to consider are worth mentioning. Hunter (2009) mentioned in his book six crucial mistakes; they are briefly examined below.

First, ‘appealing to origins’; for example, the theory of Darwin, which says that humans evolve from apes. This is a theory that any student may have learned during childhood or through their readings. Second, ‘personalising reasons’, reasons do not belong to any one of us only; we may believe in something and different people might believe in the same element too. In fact, we need to understand that knowledge is universal and reasons have to be objective. For instance, if somebody is holding a given opinion we should not attribute this opinion as if it belongs to this person only because here we may affect emotions and human personality. Third, ‘appealing to relativism’, which means that the facts are based on a person’s beliefs. According to the Stanford Encyclopaedia of Philosophy (2015), ‘relativism in contemporary philosophy means that there is no ready consensus on any one definition’. The opposite of relativism is absolutism, which refers to the idea that one absolute (right) answer exists; for example, if a person has a toothache, he/she goes to the dentist and not a cardiologist or ophthalmologist.

Fourth, ‘appealing to emotions’, we cannot rely just on emotions in order to justify something; they are not epistemic. As Hunter (2009) says, ‘it is a mistake to base our beliefs on nothing but emotional reasons. It is also a mistake to allow emotions to prevent us from collecting or assessing the evidence’ (p. 239). Indeed, evidence has to be objective and acceptable. Fifth, ‘privileging available evidence’; for instance, it happens to any person to possess evidence at his/her disposal that make him/her stop from looking at other reasons to augment the

credibility of the evidence at hand. Hence, an individual needs to widen his/her understanding of an issue and look for many sources to support his/her point of view. Finally, ‘appealing to traditions’, basing our beliefs and actions on traditions is also another mistake that students need to avoid in critical thinking. For example, if a student is raised in a conservative family where a woman’s job is to clean the house and take care of children and then is asked about his/her opinion concerning the job of a woman outside, he/she may in this case base the reasons on family’s tradition rather than reasonable and epistemic facts.

Additionally, Goldsmith (2014, p. 11) divided the errors in critical thinking into three major categories: ‘Logical’, ‘quantitative’, and ‘reasoning’. By logical errors, he meant the traditional logical fallacies identified in any text such as attacking the character of the person, appealing to prejudice, fear and emotion, assuming as true something yet to be proven, presenting only selected evidence, denying the antecedent. As for quantitative and reasoning, he combined them in one type (quantitative reasoning), by this, he refers to misuse of numbers and lack of training in making sound conclusions. Some of these errors include relying on small samples to draw conclusions, ignoring base rates, not understanding the rules of probability, ignoring regression to the mean and the role of chance as well as coincidence.

1.1.11. Major Challenges in Designing Critical Thinking Assessment

Liu et al. (2014, p. 1) state that critical thinking is one of the most important skills deemed necessary for college graduates to become effective contributors to the global Workforce. These scholars provided in their article six major challenges in designing critical thinking assessment; these are briefly discussed below.

One of the difficulties in designing an assessment for critical thinking is the assessor’s struggle to make a balance between authenticity and its psychometric quality. Another challenge in designing a standardised critical thinking assessment for higher education is the need to pay attention to the assessment’s instructional relevance. For instance, faculty members are sometimes

concerned about the limited relevance of general student learning outcomes' assessment results, as these assessments tend to be created in isolation from curriculum and instruction (Liu et al. 2014, p.11). Next, institutional vs. individual means we need to understand right from the beginning whether assessment is used for institutional purposes or individual ones. Another challenge is the debate about whether critical thinking can be defined and assessed as a generic skill or a specific one; in the present study, critical thinking is treated as a generic skill. Besides, some teachers prefer to provide a holistic evaluation for the student and others subscale scores. For instance, the researcher of the present study relied on both holistic evaluation and students' subscale scores to assess their critical thinking skills.

Summary

In a nutshell, assessing students' critical thinking skills sounds a long undertaking process since many variables have to be given much attention and concern. This section permitted us to conceptualise critical thinking in higher education and opt for the major approaches, strategies, and techniques to be adopted with the experimental group. For instance, we saw that critical thinking is based on reflection, analysis and evaluation and that many elements are important such as the identification of purpose and the question at issue, the frame of reference, the empirical and conceptual dimension of reasoning, assumptions, inferences and implications as well as consequences.

In addition, the steps for promoting critical thinking have been emphasised in this section, such as the planning of objectives, the teaching through questions, practising, reviewing, refining and improving, providing feedback and assessing learning. These are crucial aspects to take into account when teaching critical thinking in higher education; they need careful design of objectives and analytic evaluation of students' performance in the classroom. The benefits of critical thinking are numerous, among them; solving problems, making plans, becoming aware of tautology and flawed arguments as well as identifying hidden agendas. More importantly, the teacher needs to make students aware of the major mistakes

in critical thinking such as appealing to origins, traditions and relativism, personalising reasons, privileging available evidence and attacking the person's character. The next section is devoted to the concept of scaffolding and to this, we now turn.

1.2. Section Two: Scaffolding

Introduction

Developing EFL students' critical thinking skills requires the presence of effective instructions and methodologies. Scaffolding is one of the instructional approaches adopted in the present research. Therefore, the current section presents an account of the main concepts related to scaffolding since it is one of the independent variables of the present thesis. First, the section provides an overview of scaffolding, mainly its origin and researchers' conceptualisations along with the types and levels of support, as well as the layers and conditions of scaffolding. Second, it highlights the way learning is seen from a sociocultural perspective, and the relationship between contingency, challenge, and support. Third, it demonstrates the role of teachers within the context of mediated activity along with the pedagogical features and cognitive apprenticeship. Fourth, the section concludes with Piagetian and Vygotskian view of L2 development.

1.2.1. Overview of Scaffolding: Origin and Conceptualisations

Central to the entire discipline within applied linguistics is the concept of scaffolding. Literature on the topic (i.e. scaffolding) has revealed different definitions according to researchers' perspectives. An account of the definitions appears in a chronological order from oldest to most recent ones. Before presenting them, the origin of the term will be briefly discussed.

Scaffolding originated in the 1970s thanks to the work of Bruner, an American psychologist and educator who contributed to the emergence of cognitive psychology as well as important theories on perception, learning, and memory (Bruner, 1983). In an investigation into scaffolding, Bruner (1983) conducted research on six babies aged between 7 and 18 months. These babies played a game called 'Peekaboo' with their mothers, which lasted 10 months; the game had both a deep and a surface structure. The former (i.e. deep structure) concerns the thing or the person's appearance and disappearance; the latter (i.e. surface structure) can be either the screen or the cloths. Overall, the purpose of the

Peekaboo game was to delineate the notion of scaffolding in which the mother tried to model the game for her little child. After the latter had been well instructed, he/she later played the game alone.

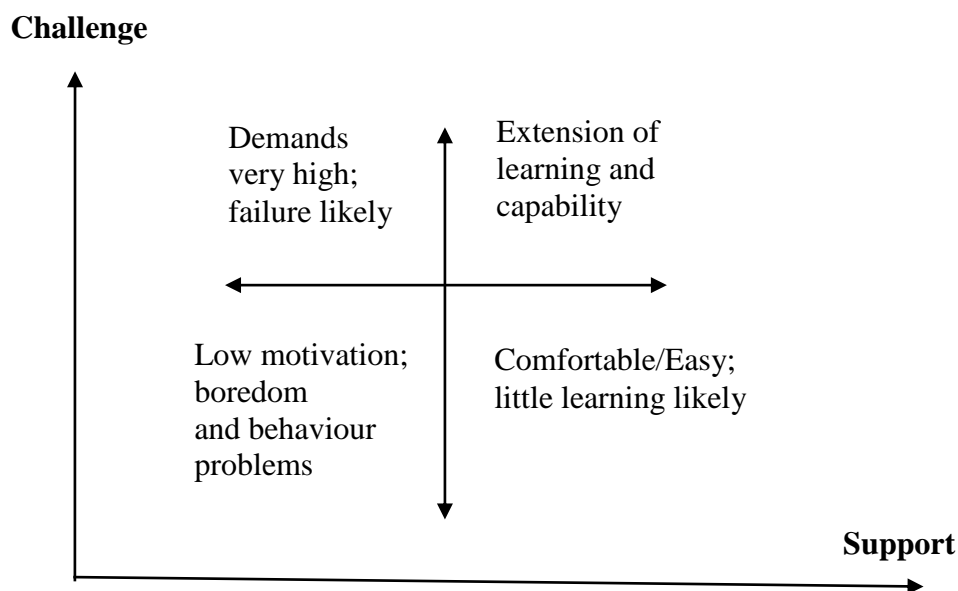
Bruner's (1983) description of scaffolding is reminiscent of our experiences at Berlitz School where we had a teacher training workshop that lasted a week. In order to help us become effective teachers, our instructor went through a few sessions of scaffolding; he used to teach English through games and he explained to us how to do that through modelling. Then, he gave us the agency to do the same thing (i.e. teaching English through games) by taking some classes to teach. Other authors like Wood and Ross have also contributed to the development of the term. For instance, Wood et al. (1976) state that scaffolding is an instructive process, which assists a person in solving a particular problem or accomplishing a task that is beyond his/her ability. They point out that people misinterpret the term and consider the idea of problem-solving as a characteristic of a person not being assisted. To these scholars, this seems a misunderstanding of the concept because, in fact, the social aspect plays a pivot role in shaping the way we learn and acquire things; a conception we do share and follow in the present research.

More importantly, the authors (i.e. Wood et al., 1976) suggested six characteristics for effective implementation of scaffolding such as (1) the raising of tutee's attention, (2) reduction in the degree of freedom, (3) management of goals, (4) critical features, (5) frustration and finally, (6) the modelling of solutions. Taking into account such features will help the teacher become organised and, consequently, is likely to lead to successful teaching and learning processes. Other researchers like Maybin et al. (1992) disagree with the idea that scaffolding is just helping students to accomplish a given task or solve a problem; they said it is the one that is goal-oriented. Furthermore, some consider it a contextual holistic approach that fosters the cultivation of discipline's objective comprehension and transfer (Reiser & Tabak, 2014).

Mariani (1997) perceived scaffolding differently to the authors previously mentioned. According to him, the word needs to contain both 'high challenge' and

‘high support’. In this connection, he states that students require tasks that are beyond their capacities, i.e. high challenging ones in order to build their ZPD. He proposed in his article a model that appears in Figure 1.2.1 below.

Figure 1.2 1. *A Model of Scaffolding as ‘High Challenge, High Support’* (Mariani, 1997, p. 91)



As Figure 1.2.1 demonstrates, the tasks that will be tackled in the classroom need to go in harmony with students’ level, interests, objectives and professional development. More importantly, the support should neither be very high nor very low but could be provided only whenever necessary; then, the opportunity is given to the students to accomplish the task by themselves in order to gain training on autonomous and self-regulated learning.

Lepper et al. (1997) support Wood et al.’s view concerning individuals’ perception of scaffolding (as cited in Hu, 2006). These scholars contradict the idea that when the teacher's assistance is not present, no learning takes place. Accordingly, Lepper et al. tried to provide a comprehensible definition of the word; they state that, ‘Scaffolding is the temporary structure that supports arches or tunnels under construction. When scaffolding is removed upon the completion of the construction, the arches or tunnels will be still in good condition’ (Lepper et al., 1997, as cited in Hu, 2006, pp. 44-45). The quotation suggests that its authors (i.e. Lepper et al.) hinged on a metaphor in order to describe scaffolding. In other words, these scholars view assistance as a concept that takes place the moment

students require mediation from their instructor; when the latter is no more present, students rely on themselves in order to complete any task or solve a problem. The metaphor given by the authors goes hand in hand with the one of Hammond and Gibbons (2005) when they compared scaffolding with new buildings in which the builder avoids using the scaffolding when the building is able to hold itself. In his doctoral thesis, Hu (2006) preferred to define scaffolding as a process or product that assists students in their learning. His way of delineating the concept is in some way mystifying because he did not explain the nature of that assistance; i.e. whether the help will be high (i.e. more support) or low (i.e. less support) as Mariani (1997) did.

Last but not least, Reynolds (2017), summarised the definition of scaffolding in terms of two categories, these are ‘interactional’ and ‘planned scaffolding’. The former occurs during the course, it is adaptive, flexible and dynamic (i.e. changes according to students’ aims, objectives and social environment) as well as temporary. For example, when students find difficulties to complete a given task, the teacher shows them how to do it. This kind of support is not planned in advance and it does not concern a particular problem, but it can happen at any moment when the students require help from their instructor. Another example might apply to the kind of children who first learn how to speak; parents provide them with incidental scaffolding, which later makes these children speak unconsciously. The latter (i.e. planned scaffolding) refers to the instruction that is carefully planned, explicit and systematic, i.e. it is determined before student starts learning; the instruction is fixed and permanent. This is the type of scaffolding that we have followed in the present research because our purpose is to develop EFL students’ critical thinking skills through DA and scaffolding is one characteristic of the approach we have suggested (i.e. DA). It is strategic because we are conscious of the criteria and strategies adopted during the process of conducting the experiment.

Table 1.2.1 highlights the terms that were attributed to interactional and planned scaffolding; the table appears below.

Table 1.2. 1. *Terms for Similar Forms of Scaffolding* (Reynolds, 2017, p.3)

Terms used for interactional scaffolding	Terms used for planned scaffolding
Social	Technological
Adaptive	Fixed
The dynamics of instruction	Pre-planned activities or instructional materials
Soft	Hard
Original	Evolved notion of scaffolding
Moment to moment	Instructional frameworks
Direct interaction	Group-oriented instruction
Temporary	Permanent
Interactional	Planned

In a nutshell, based on the definitions which have been examined, we will, therefore, propose our own conceptualisation of the term according to the objective of the present thesis. Reasonably, scaffolding is, for us, the stages behind which the teacher goes through, step by step in order to construct an area of knowledge or support that will pare down students' stress at studying a given subject, and mainly, help them to forge ahead for the purpose of developing their critical thinking skills. For recall, this research relied on DOK as a type of instruction to scaffold students' critical thinking skills through DA because the latter combines assessment and instruction in one activity. More details have been provided in section three of this chapter.

1.2.2. Levels of Support

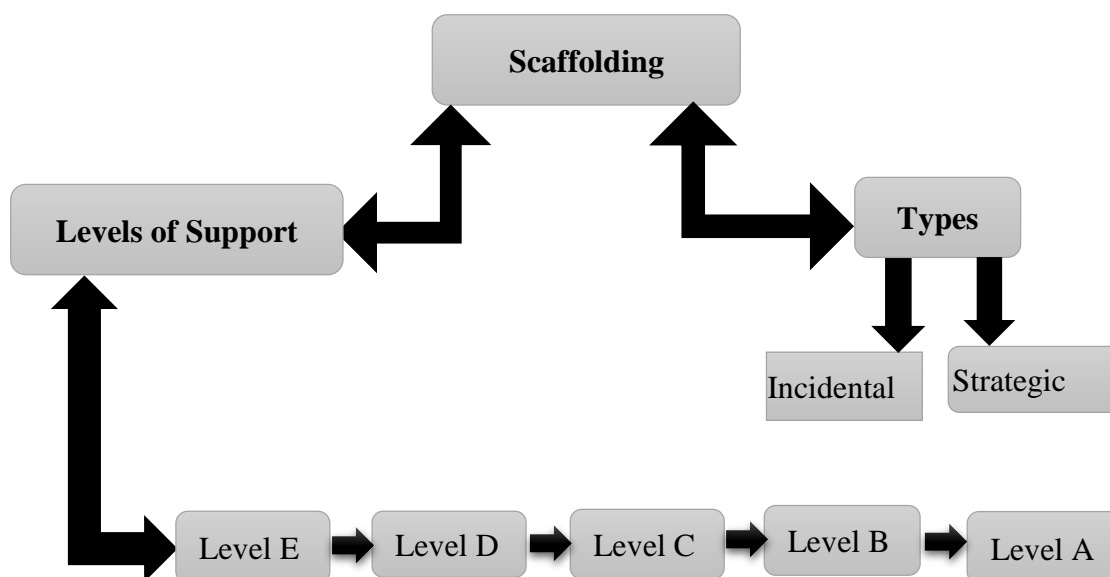
Five levels of support have been examined Based on Beed et al. (1991). The explanation and examples presented belong to the researcher of the present thesis. The levels of support have been ranked from E (least demanding) to A (most demanding).

In Level E, The teacher models the performance to the students and he/she gives them a complete explanation on how to do it. For example, the activity is

about writing a narrative essay in English, here the teacher explains first the meaning of a narrative text and later models explicitly the steps that students need to follow in order to complete the task; the students have not yet reached the level of independence. In Level D, the teacher models the performance with explanations, and then invites students to participate and do the task. In Level C, the teacher models specific elements related to a given strategy by indicating to the student the elements of the strategy used. For instance, the teacher taught students before how to use the coordinating conjunctions 'FANBOYS' in order to remember and use them when completing the task. During the activity, if students feel stuck and do not remember the coordinating conjunctions, here the teacher will give a series of prompts concerning the elements of the strategy, i.e. what each letter stands for. In Level B, the teacher models orally the strategy with no reference to its elements like level C. To illustrate, he/she will ask them whether they have used the FANBOYS in the paragraph. In Level A, the teacher in this stage provides support only when necessary because students have already been modelled and instructed on how to complete the task; students have more independence compared to other stages.

As the reader may notice, all these levels are ranked from most explicit (more control) to least explicit (less control). We think they might be mostly beneficial to pupils because they are the ones that need more explanations and guidance compared to students at university who may require guidance rather than explicit explanations. A summary of the types of scaffolding and levels of supports are illustrated in Figure 1.2.2 which appears on page 39.

Figure 1.2 2. *Types of Scaffolding and Levels of Support* (Beed et al., 1991)



Compared to Beed et al. (1991), Aljaafreh and Lantolf (1994) in their part recommended only three essential mechanisms for effective intervention within the ZPD; these are ‘graduation’, ‘contingency’, and ‘dialogicality’. The first refers to assistance that goes from most implicit to most explicit; the second means the mediation will be given only whenever necessary and will be withdrawn if it is no more required; the third is the kind of mediation that occurs through a dialogue between the teacher and student or between peers themselves. To comment, we can observe that Aljaafreh and Lantolf have grouped Beed et al.’s levels of support in only a word, which is ‘graduation’. This is to show how scholars who are involved in the same field of research can interpret the same idea differently. In a similar vein, Radford et al. (2014) used other terms to describe the levels of scaffolding such as support (i.e. feedback and encouragement), repair (consists of self-repair and other-initiated repair) and heuristic is concerned with the strategies that teachers adopt to assist students in solving problems.

1.2.3. Layers and Conditions of Scaffolding

Every strategy a teacher adopts requires careful planning. According to Van Lier (2004, p. 150), three major layers and six conditions of scaffolding are

worth considering; an explanation of each layer and condition based on the researcher's understanding follows next.

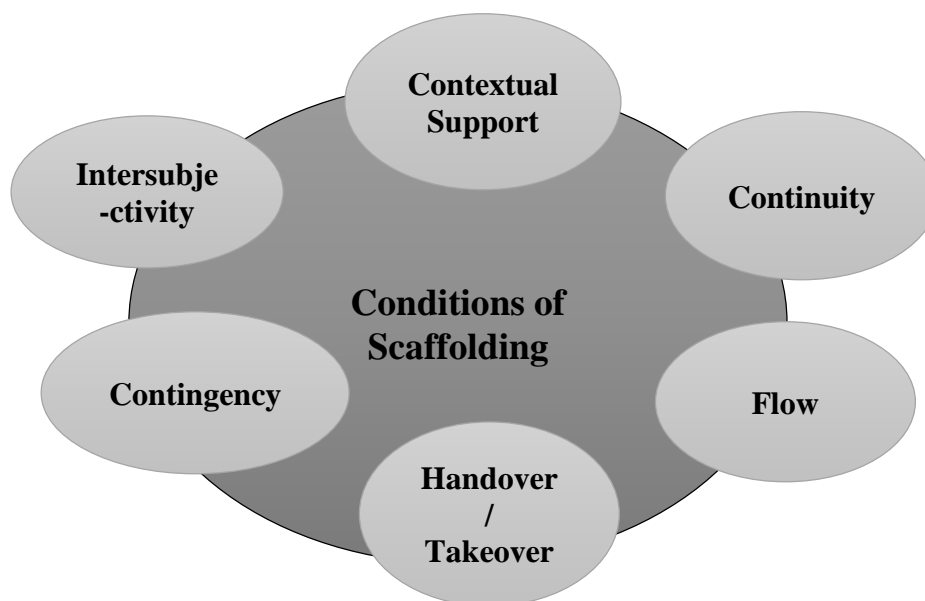
To begin with, the first layer of scaffolding concerns 'the planning of task sequences, projects, and recurring classroom rituals (Macro)'; in this layer, the teacher will plan the tasks that will be dealt in the classroom, the classification of projects in terms of units as well as classroom actions. It is called the macro layer because we are speaking about general tasks and sequences (not specific tasks pertaining to the lesson being taught), along with the number of projects and how they are going to be classified and the actions that will take place during the classroom. The second layer includes 'the planning of each activity in terms of sequences, actions, and moves (Meso)'; here, the activity will be sequenced according to the course objective, and each action and move is related to that activity more specifically. The third layer has to do with 'the actual process of interaction from moment to moment (Micro)' in which the focus is given to the nature of interaction. Methodologically and rationally speaking, we can say that the three layers might all be put in one layer, which is 'planning'; the latter may include everything Van Lier (2004) mentioned. The missing point in his layers concerns the implementation and evaluation of scaffolding, which are two crucial aspects in the planning stage (i.e. macro stage). It is important to be aware of the ways to evaluate/assess our students to make them ready on what we expect them to achieve; this gap has been filled in the present study.

Six conditions of scaffolding have been discussed, these are 'continuity', 'contextual support', 'intersubjectivity', 'contingency', 'handover/takeover', and 'flow'. In continuity scaffolding, the process is not linear but continuous that is based on the repetition of tasks to foster comprehension skills. For contextual support, the latter is socially-based; the goals and means are encouraged to promote students' success and development. In intersubjectivity, students take part in the learning-shared community. As far as contingency is concerned, the activities are equated with students' needs, interests, and levels. Next, handover/takeover has to do with teacher's control in handing over students'

willingness to take over the tasks. Finally, flow concerns the balance between students' skills and task challenges.

The aforementioned conditions seem similar to the levels of scaffolding mentioned by Beed et al. (1996). However, Tharp and Gualimore (1988) preferred in turn to speak about the conditions of scaffolding in terms of four paramount phases, which consist of 'assisted performance', 'self-assisted performance', 'developed performance', and the last stage is called the 'recursion through ZPD'. To explain, the first means that the student is provided assistance from a more knowledgeable person, then step by step he/she starts working collaboratively till he/she reaches the developed stage where no mediation is needed. Sometimes, because of some psychological and environmental changes, the student may go back to the previous stages for cognitive process remembrance. Other scholars such as Quintana et al. (2004) suggested three aspects of scaffolding such as sense-making (hypotheses testing and data interpretation), process management (monitoring the inquiry process), articulation and reflection (construction, evaluation, and evaluation of the learned thing). A summary of the conditions of scaffolding is illustrated in Figure 1.2.3 below.

Figure 1.2 3. *Conditions of Scaffolding* (Van Lier, 2004)



In the present research, all the conditions mentioned have been taken into consideration in order to make our research in harmony with the literature that we

have reported and analysed to a certain depth. In addition, we have tried to fill some of the gaps in the previous studies in order for our study to be original and creative.

1.2.4. Overview of Sociocultural Theory

Sociocultural theory is best known in Vygotsky's work on ZPD; it was considered as one of the theories that influenced the majority of researchers in the field of education and psychology.

To start with, Vygotsky and his colleagues contributed to the emergence of the sociocultural theory and the latter took various names like social-historical theory, cultural psychology and cultural-historical psychology between 1920 and 1930s. The focus was on both the study of the history of human growth as well as the cultural tools shaping this growth. This theory came into existence from the inspiration of Vygotsky on the Marxist philosophy, which stresses the idea that humans are shaped by their social environment; it is based on socialism and collectivism. Consequently, Vygotsky wanted to bring those ideas of Marxism to his model of child development. For him, interaction promotes consciousness among individuals and their development. Because some psychologists did not provide a comprehensible explanation of human behaviour, Vygotsky and his colleagues filled this gap by creating a powerful and multifaceted sociocultural theory that comprises various topics such as the psychology of arts, language and thought, learning and development, and education of students with special needs. It was argued that Vygotsky's death resulted in 20 years of deletion to his work, which revived again in the late 1950s and early 1960s. The sociocultural theory emphasises the idea that mediation, which is culturally constructed, is the cornerstone of humans' mental development and it is connected to logic, ontology and epistemology (Aljaafreh & Lantolf, 1994; Steiner & Mahn, 1996; Negueruela-Azarola, 2003; Fani & Ghaemi, 2011; Mishra, 2013).

In applied linguistics, the first to employ sociocultural theory was Lantolf (Storch, 2017). According to this scholar, 'SCT is not a theory of second language learning but rather a psychological theory...From a sociocultural perspective,

assistance is key to cognitive development but only if that assistance is scaffolded' (Storch, 2017, pp. 71-77). This quotation supports the notion that scaffolding is an important concept within the field of SCT, and that the latter is the concern of cognitive psychologists rather than any researcher or pedagogue in the field of teaching and learning.

1.2.5. Principles of Sociocultural Theory

Walqui (2006) has pinpointed five paramount principles to the theory (i.e. SCT); these are (1) learning precedes development, (2) language is the main vehicle of thought, (3) mediation is central to learning, (4) social interaction is the basis of learning and development, and (5) Zone of Proximal Development. The explanation of each principle belongs to the effort of the researcher's present thesis.

1.2.5.1. *Learning Precedes Development*

This means that for students to reach the level of growth they need to go through the process of learning; students need some instructions and knowledge that can help them complete a given task. In this perspective, they may either do it alone or ask the help of their teacher, and here, comes the notion of scaffolding which is an important aspect of the theory. The word development refers mainly to the stage in which students become more autonomous, self-regulated, and aware of their learning goals and objectives. A concept that we want to promote in the present research by relying on scaffolding as an aspect of DA in order to cement students' critical thinking skills.

1.2.5.2. *Language Is the Main Vehicle of Thought*

Thinking does not occur haphazardly without taking into account considerable notions and stages. Language is, however, among the requirements for thinking. Nevertheless, possessing background knowledge about the topic is of paramount importance because it is only through it that our ideas will be noticed and taken into account. To achieve that, we need to use language to make our thoughts heard or read by others. Our thoughts are shaped by the social environment, which has a significant effect on how we think and perceive things.

1.2.5.3. Mediation Is Central to Learning

Mediation is the cornerstone in our research in particular and DA in general. It has been given different definitions by various scholars in the field of applied linguistics and English language teaching. It can be defined as the intervention or the interaction between the teacher and students or between the peers themselves for the purpose of enhancing learning. The types of mediation will be accounted for in the following pages of the present study. Additionally, it is considered to be crucial to learning because the teacher will identify the areas of weaknesses and strengths among his/her students as well as the solutions to remedy them in the future. Among the American scholars that borrowed the notion of mediation from Vygotsky, we can mention Michael Cole. This scholar introduced the concept of artefact-mediated action, which differs from Vygotsky's sign mediation. For instance, artefact-mediated actions were defined as the actions individuals carry out with the use of artefacts to reach their goals. However, Vygotsky's sign mediation has to do with psychological functions such as memory and attention (Miller, 2011).

1.2.5.4. Social Interaction Is the Basis of Learning and Development

The social factor remains an important element in learning and development. As humans, we all possess what we call a 'common literacy', which is the shared knowledge between the members of a given community. This knowledge is different from one society to another and from one culture to another. To learn and reach the level of development; we need to keep in touch with the members of our society; we need contact with the school environment because learning does not take place in isolation but in a social milieu, within individuals who share the same goals and aims.

1.2.5.5. The Zone of Proximal Development (Henceforth, ZPD)

ZPD is just an alternative to Intelligence Quotient (henceforth, IQ) testing and a means for child development. Traditionally, researchers rely on IQ testing for determining children's achievement at school and IQ scores were the only way to group children's abilities. Because some children with high IQs tend to score

less than those of low IQs, Vygotsky and his colleagues looked for another alternative of assessment like the use of hints and prompts in order to better understand the child's mental functioning. In this regard, they (i.e., Vygotsky & his colleagues) did empirical research with children entering school. The result of their study showed that children with high ZPD were achieving better results than those with less ZPD. Also, Vygotsky argued that IQ and ZPD report different results; the former is independent and the latter assisted performance. More importantly, ZPD is central to DA and Vygotsky is the notable author who contributed to the development of the term. As is mentioned in the literature, ZPD began to exist only one year before his death in 1934 in manuscripts, transcripts of lectures and book chapters, and the purpose was to understand the child's development. However, it was argued that Vygotsky did not provide a specific methodology on the use of ZPD. (Chaiklin, 2003; Fani, & Ghaemi, 2011). For Vygotsky, a child undergoes two stages in his development: the interpsychological and intrapsychological stage. In the former, the child interacts with the members of the environment and after having acquired the significant knowledge that can help him/her function alone, they start being self-regulated and autonomous (intrapsychological stage).

According to Poehner (2007), 'The ZPD is Vygotsky's approach to understanding and supporting cognitive development. It rests on two important, interrelated constructs: Mediation and internalisation' (p. 326). Moreover, Chaiklin (2003) gave three common interpretations to the concept (i.e. ZPD): The generality assumption (i.e., it is applied to learning all tasks of the subject matter), the assisted assumption (i.e., based on interventions) and the potential assumption (potentials of the learner, his willingness to learn). The author (i.e., Chaiklin) said that one of the misinterpretations of ZPD is the idea that the person is able to do a considerable amount of task alone; in fact, he/she can do more than that in cooperation and collaboration with others. A problem he questioned was the kinds of tasks that entailed a ZPD. An interesting point he mentioned is that since ZPD can be applied to the learning of all tasks as it is being interpreted by the majority of people; then, Vygotsky would have called it the Zone of Proximal Learning. He

said that there is a relationship between learning and development but they are not identically the same and this is what is being confirmed in Vygotsky's work. He added that Vygotsky made a clear description between instruction for a full child's development and instruction that aims at developing a particular skill. More importantly, Vygotsky's notion of ZPD is called a theory of praxis, which means, 'theory both guides and is formulated through practice' (Poehner & Compernelle 2011, p. 187)

To summarise, ZPD seems to have various interpretations by researchers in the field of applied linguistics in general and psychology in particular. The term as defined by Chaiklin (2003) appears to relate to the development of a child in general; it is both a theoretical and an empirical activity (since it guides development). In Chaiklin's view, the crucial characteristics include the whole child, internal structure, development as a qualitative change in the structural relationship, the child's actions in the social situations of development and the internal structure.

In this connection, Van Lier (2004) pointed out that ZPD has been considered to be similar to Krashen's Input Hypothesis ($i+1$), which bases on the notion that input is the cause of language acquisition. Table 1.2.2 shows the differences between ZPD and $i+1$, illustration appears on page 47.

Table 1.2. 2. ZPD and $i+1$ Compared (Van Lier, 2004, p. 155)

Categories of Comparison	$i+1$	ZPD
Unit of Analysis	Comprehensible input at $i+1$, linguistic structures	Action, activity
Learning Outcome or Objective	The next linguistic structures or items	More complex activity higher mental functions, self-regulation
Process	Subconscious processing	Internalisation/appropriation and transformation
Learner	Passive 'loner'	Conscious and active social participant
Guiding Metaphor	Hard-wired computer processor	Active organism in an ecosystem
Model of Language	Information processing, transmission of information	Co-constructing meaning, dialogical
Teacher	Provides input and keeps filter low	Guides students' activity, scaffolds supports, and success

Table 1.2.2 shows the differences between the input hypothesis suggested by Krashen and Vygotsky's ZPD. As we can notice, the input hypothesis and acquisition are based on causality, the learning process is subconscious and the learner is a passive recipient of knowledge (hard-wired processor). However, in the ZPD, learning is a conscious process, which goes through three stages: Internalisation, appropriation, and transformation. The learners are active participants, autonomous and self-regulated, and the interaction takes place between the students and teachers. While the input hypothesis is based on transmission, ZPD rather focuses on transformation.

Furthermore, Winnips (2001) chimes in with the previous researchers we have mentioned so far concerning the conceptualisation of ZPD. To this scholar, Vygotsky's ZPD is the area between students' ability and incompetence. In the classroom, the teacher needs to take into account the balance between students' actual level of development and their potential one. Compared to Walqui (2006), Steiner and Mahn (1996) described the principles of SCT in three tenets, which

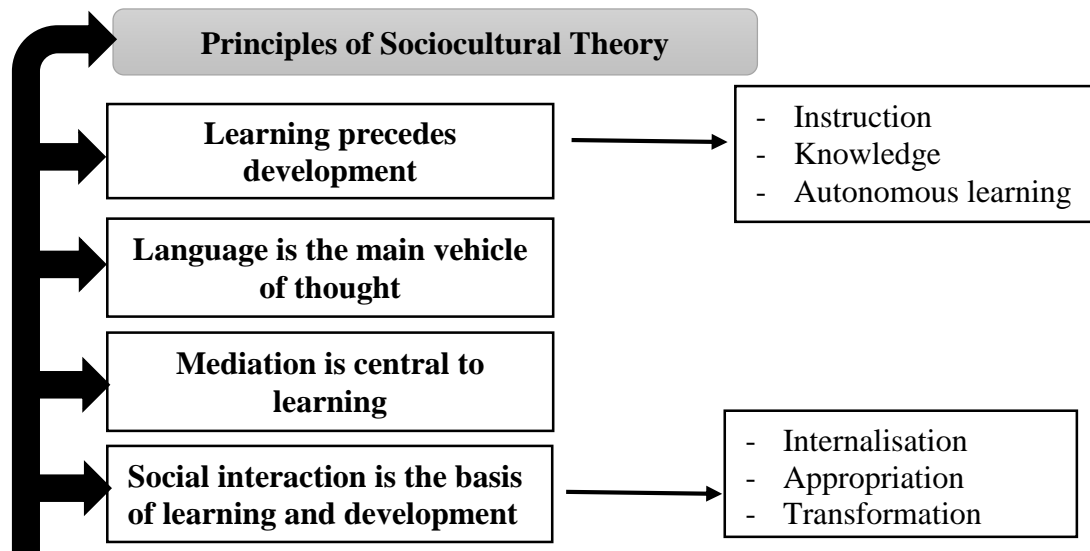
consist of (1) social sources of development, (2) semiotic mediation, and (3) genetic analysis. The first means that a person gets knowledge first from the members of his/her environment and later depends on themselves for more independence. The second focuses on the connection between origins and the history of phenomena (Vygotsky, 1978). The third was developed by the American philosopher Peirce who said that signs function as a medium of communication (Mertz & Parmentier, 1985, p. 24). Steiner and Mahn (1996) argued that Vygotsky coined the term (i.e. SCT) to express the idea that internalisation is based on 'transformation' rather than 'transmission'.

Moreover, as Vygotsky (1978) stated, 'to study something historically means to study it in the process of change' (pp. 64-65). We agree with Vygotsky because to make an analysis of a child's genetic development is not sufficient to understand how he learns or acquires things, but it is also important to account for the changes that occurred during the stages he underwent from childhood until adulthood. In addition to this, Steiner and Mahn (1996) said that in order to understand the concept of internalisation, Vygotsky relied on two levels: the theoretical (using dialectical logic) and psychological (through experimental and developmental methods).

In the present thesis, the social constructivist approach is part of DA, in this perspective, an understanding of the mechanisms within the classroom atmosphere sounds essential for effective implementation of this approach. In this concern, we emphasised Palincsar's (1998) three types of analysis of social constructivist perspectives; these are the 'institutional analysis', 'the interpersonal analysis', and the 'discursive analysis'. For instance, the setting (the institutional analysis) under which we have undertaken the experiment was known by the researcher since she is a doctoral student and has been a part-time teacher for three years (2015/2016; 2016/2017; 2017/2018). For the second analysis, we relied on both teacher-student and student-student interaction. As for the last analysis, the discourse is communicative because the purpose is to create an atmosphere where students could share ideas and knowledge as well as debate between one another

by respecting the characteristics of a critical thinker. Figure 1.2.4 highlights the principles of sociocultural theory to facilitate the readers' comprehension.

Figure 1.2 4. *Principles of Sociocultural Theory* (Walqui, 2006)



1.2.6. Relationship between Contingency, Challenge, and Support

We have previously stated that the type of support has an important effect on students' learning and development. Therefore, when the instruction is non-contingent and the teacher provides more control to the students with less challenging tasks, no learning takes place. It is similar when providing high challenging tasks with no support or when the control and the challenge are equal, no learning takes place as well. However, when there is contingency support and the task is appropriate to the students' level, here we observe that learning is present. This is also what we have done in the present research in which paramount criteria such as students' level, the type of support and course goals have been significantly taken into account. Table 1.2.3 shows the relationship between contingency, challenge and students' support (illustration appears on page 50).

Table 1.2. 3. Contingency Patterns (Van de Pol & Elbers, 2013, p. 33)

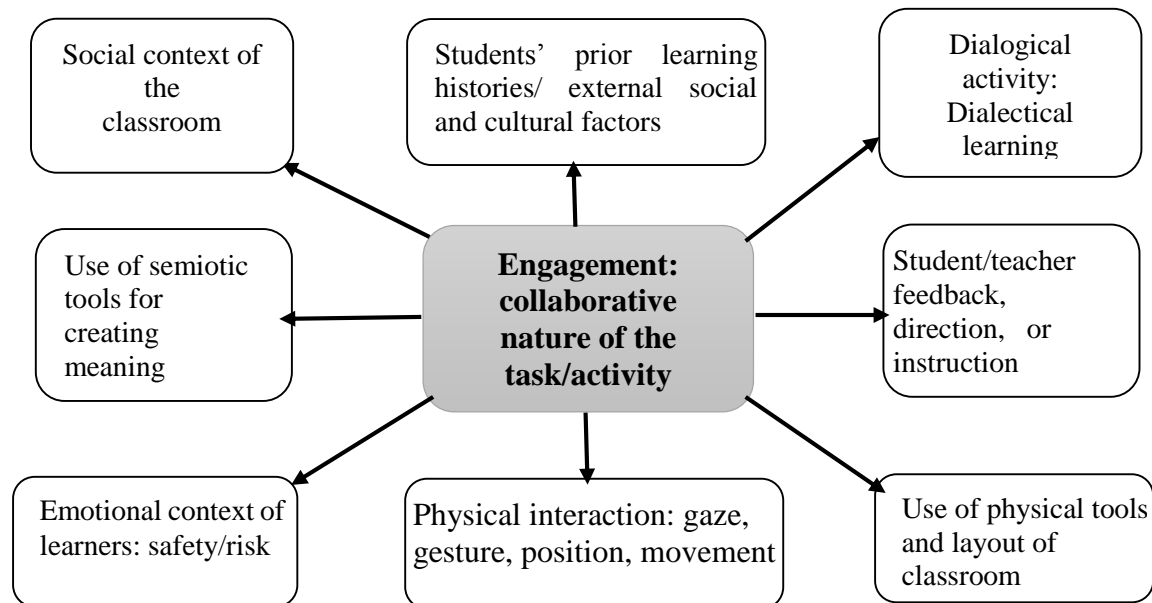
		Increase of control (Control +)	Decrease of control (Control -)	Same control (=Control)
Non-contingent support	Students' initial understanding is:	Good	Poor/partial	Poor/good
	Teacher students' understanding	Overestimates	Underestimates	Underestimates/overestimates
	Degree of challenge:	Too little challenge	Too much challenge	Too little/too much challenge
	Learning:	No learning	No learning	No learning
Contingent support	Students' initial understanding is:	Poor/partial	Good	Partial
	Teacher students' understanding	Correctly estimates	Correctly estimates	Correctly estimates
	Degree of challenge:	Appropriate	Appropriate	Appropriate level of challenge
	Learning:	Learning	Learning	Learning

1.2.7. The Role of Teachers and Students within the Context of Mediated Activity

Understanding the role of teachers and students within the context of a mediated classroom is incumbent. In order to implement DA appropriately in the classroom, we, therefore, delved into looking at the processes that we need to go through before conducting the experiment. For this reason, we will present below the description of the teacher and student's roles within the context of mediated activity by Thompson (2013) who prepared a theoretical framework from a Vygotskian perspective in order to examine the role of mediation in the development of students' writing skill. Therefore, his framework concentrates on eight main criteria, these are: (1) Social context of the classroom (e.g., behaviours, attitudes, emotions, beliefs, and perceptions), (2) students' prior learning, (3) dialogical activity (i.e., learning through dialogue), (4) use of semiotic tools (e.g., gestures, pictures), (5) student/teacher feedback, (6) emotional context of learners

(e.g., the feeling of security), (7) physical interaction, and (8) use of physical tools. The framework is illustrated in Figure 1.2.5 below:

Figure 1.2.5. *The Contexts of Mediated Activity: Psychological and Physical Tools Usage within a ZPD* (Thompson, 2013, p. 259)



All the elements mentioned in Figure 1.2.5 seem in harmony with what the previous researchers stated when they introduced the notion of scaffolding and SCT (e.g., Walqui, 2006; Van de Pol & Elbers, 2013). They all appear to agree that when engaging in a mediated learning classroom, some criteria (as the ones mentioned in Figure 1.2.5) have to be known by both the teacher and students in order to boost students' awareness about the importance of interaction and the exchange of meaning that make them reflect and then make a good judgement and reasoning.

1.2.8. Pedagogical Features of Cognitive Apprenticeship

Cognitive apprenticeship sounds also among the important concepts in the sociocultural theory proposed by Vygotsky and his followers. Before presenting the pedagogical features of cognitive apprenticeship we will first provide a definition to the concept.

According to Dennen (2003), cognitive apprenticeship can be described as follow:

It occurs through legitimate peripheral participation, a process in which newcomers enter on the periphery gradually move.....it is the use of an apprentice model to support learning in the cognitive domain, it is one such method that has gained respect and popularity throughout the 1990s and into the 2000s. (p. 813)

To comment, the quotation above demonstrates the idea that cognitive apprenticeship aims at developing the cognitive aspect of students, i.e., summarising, memorising, analysing, and applying things in real-life situations. This is also what we have strived for in the present research. Collins and Kapur (2014) distinguished between traditional apprenticeship and cognitive apprenticeship; the former focuses on teaching skills in its context of use, whereas the latter stresses the generalisation of knowledge to different settings.

According to Winnips (2001), cognitive apprenticeship comprises five pedagogical features; these are ‘modelling’, ‘coaching’, ‘reflection’, ‘articulation’, and ‘exploration’. They are briefly discussed below.

First, when using modelling, the teacher provides examples or demonstrations on how to do something and then it is up to the students to follow the instructions. Second, the aim of coaching is to help the work performance of employees as a way to improve their previous level. It stresses mostly the assistance of a specific goal. For example, coaching can be concerned with asking leading questions to complement parts of the process that is beyond students’ ability. Coaching has been compared with mentoring in which the latter focuses on the support of a general goal. Third, reflection relies on collaboration and assistance, and helps students to engage in problem-solving tasks that require both negotiations of meaning and critical thinking. Fourth, articulation concerns the process of putting into action the skills acquired during the cognitive apprenticeship. Fifth and last feature is called exploration; for instance, the teacher may ask students to explore what they need to know in order to succeed in their learning such as setting goals, exploring the strategies of learning and so forth.

1.2.9. Piagetian vs. Vygotskian's View of L2 Development

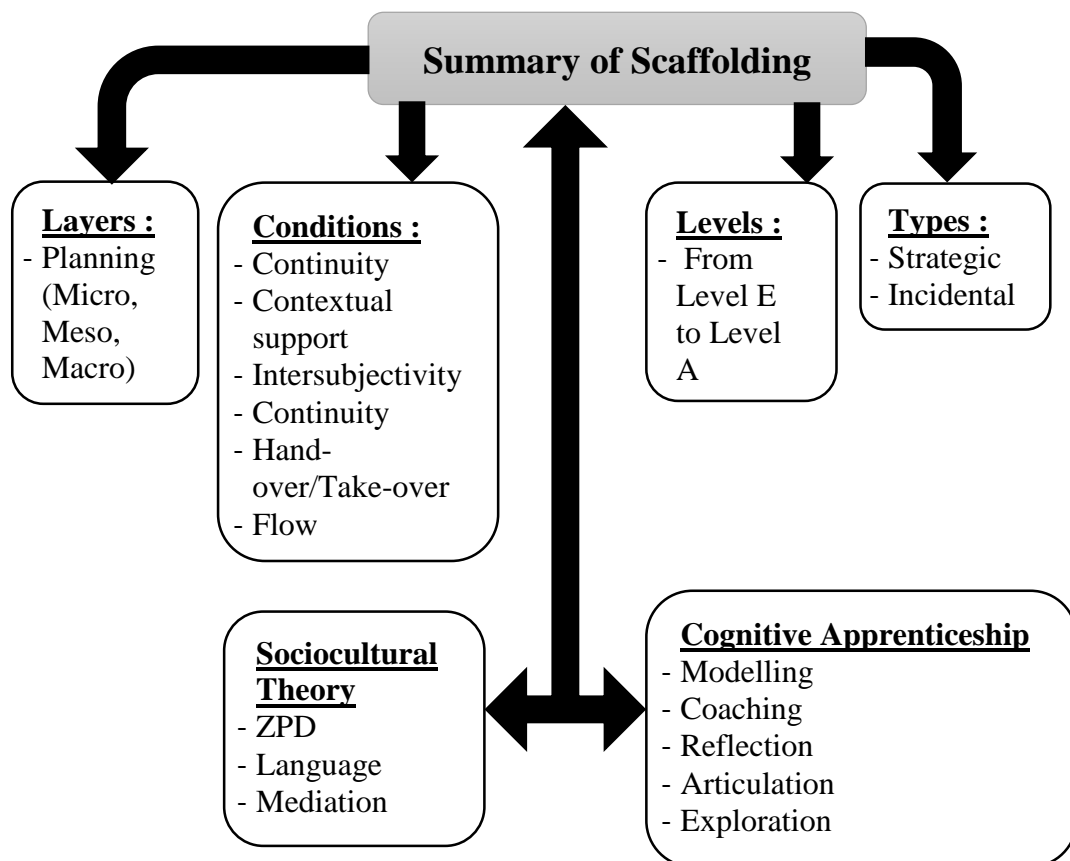
Since the notion of development sounds a pivot aspect in second language acquisition (henceforth, SLA) in general, and DA in particular, it is, however, important to describe the way Piaget and Vygotsky view the concept. The former is known as the genetic epistemologist who considers biological maturity and experiences as the cornerstone for child development, and for him, all children from birth until the age of 14, share the same experiences because they are genetically likewise. This means that when the child grows, his mental development grows throughout a series of stages. These are as stated below:

- a. The sensorimotor stage (birth to age two).
- b. Preoperational stage (acquisition of motor skills)
- c. The concrete operational stage (from age seven to eleven with the development of concrete logical reasoning).
- d. Formal operational stage (development of abstract reasoning which occurs after the age of eleven).

However, the latter (i.e. Vygotsky) states that instruction plays a paramount role in child's development and that maturation is just a precondition but not the end itself which is a perspective that Piaget does not chime with as he thinks that development can happen naturally. (Vygotsky, 1978; Negueruela-Azarola, 2003; Mishera, 2013). Vygotsky rejected the idea of explaining the human mind through individualistic or biological reductionism, which makes him disagree with Piaget's conceptualisation of human development (Ageyev, 2003). According to this scholar (i.e Ageyev), many American scholars made a huge contribution to Vygotsky's ideas on different spheres: theory, research, and applications. However, the question he asked was whether Vygotsky's theory contradicts with American culture and his answer was yes. In a similar vein, Kuhn (2016) considers Piaget's Constructivist Theory, Vygotsky's SCT, and Feuerstein's Mediated-learning Experience Theory as the three essential constructs of DA. He added that Binet's ideas on individual abilities and mediation helped significantly in the development of DA.

Development in this research relied on Vygotsky's theory because he is an important figure in DA. We believe that instruction is needed in order to assist students in their learning process. We do not deny the work of Piaget, but psychologically and rationally speaking, we think that since an individual lives within a society, he/she acquires knowledge, which is shared between the members of a given community. As Mirzaei et al. (2017) pinpointed, 'collaboration with others through speech helps learners to co-construct meaning and regulate their thinking' (p. 116). Indeed, interaction with others is the road that leads to critical thinking and negotiation of meaning. As people speak to one another, they start to rethink what is being said and question others' ideas, and these are among the pivot aspects we tried to foster in the present research. Finally, we summarised the whole section in Figure 1.2.6 below.

Figure 1.2 6. *Summary of Scaffolding*



Summary

To encapsulate, this section helped us to clarify the concept of scaffolding and gain a deep understanding of its origin and main conceptualisations, which have been highlighted by prominent researchers. For instance, we have seen that the term originated from the work of Bruner; the latter spoke about the concept in terms of surface and deep structure. Other scholars (e.g. Wood et al., 1976) defined it as an instructive process, which assists a person to solve a task that is beyond his/her ability. In addition, different levels of support, layers and conditions of scaffolding have been reviewed in this section, and we pointed out that the support can be withdrawn whenever the individual reaches full understanding and independence. Also, we said that scaffolding springs from the sociocultural theory and the latter has major principles among them: ‘learning precedes development’, ‘language is the main vehicle of thought’, ‘mediation is central to learning’, ‘central interaction is the basis of learning and development’, as well as ‘ZPD’. We stated that the theory (i.e. SCT) came into existence from the inspiration of Vygotsky and Marxist philosophy, which believes on the idea that humans are shaped by their social environment. Moreover, the section provided an account of the role of teachers and students within the context of mediated activity; we mentioned that some major criteria have to be known by both the teacher and students in order to enhance learning and teaching. Finally, we ended the section by highlighting Piagetian and Vygotskian’s view of L2 development. The former believes on individualistic or biological reductionism and the latter regards social interaction as the basis for learning.

For recall, the aim of the present thesis is to scaffold first year English degree students’ critical thinking skills through dynamic assessment. The latter is based on both instruction and assessment, more details have been provided in section three of this chapter, and to this, we now turn.

1.3. Section Three: Dynamic Assessment

Introduction

Assessment is an important concept in higher education; teachers adopt different assessment practices depending on their perspectives and educational environment. According to Ferrara et al. (2009), any change and innovation in the language curriculum need to start first from assessment. In this perspective, the success of students is based on the type of assessment practised at University. Therefore, we were interested in assessment in the present study specifically 'DA' as an endeavour to spur first year English degree students' critical thinking skills. Before giving an account description of DA, we will first provide a brief historical survey of assessment versus language testing. Then, we will speak about the types of assessment and purposes, the assessment cycle, characteristics and principles of classroom assessment. Next, we will introduce dynamic assessment, its approaches, features, and issues.

1.3.1. Theoretical Survey of Assessment vs. Testing

In order to understand assessment, it seems necessary to track account for its development throughout history. In the past, assessment and evaluation were considered to be the job of specialists and that is why it had not been fully investigated in the field of English language teaching and not well understood by practitioners (Davison & Cummins, 2007). Giri (2003) drew distinction of testing in three different countries: Britain, America, and Australia. For instance, in Britain, the University of Cambridge organised public examination tests overseas in 1963 in order to test ten foreign candidates and continued to do that in the next four decades of the 19th century. In 1898, it possessed 36 colonial centres with 1220 foreign candidates; it was believed that Cambridge examinations lacked reliability in its tests because of its focus on true-false questions and subjective grading (i.e. what to test rather than how to test). In North America, tests were developed for the first time in order to assess immigrants' proficiency in English, which was considered obligatory for attending the American College Institutions. In the last two decades, students interested to enter the American College were

expected to undertake these tests: Comprehensive English Language Test (CELT), Michigan English Language Assessment Battery (MELAB) or Test of English as a Foreign Language (TOEFL). In Australia, the tests were more or less similar to British ones.

In her book, Malone (2017) summarised the three important periods of language testing by Spolsky (Spolsky, 1977, as cited in Malone, 2017) who divided them from the 1800s through the 1980s into ‘prescientific’, ‘psychometric’, and ‘sociolinguistic’. The first period called the prescientific approach, focuses on the judgements of instructors as they assessed translation, composition, or oral performance or another open-ended task presented to students. It is called prescientific because it was judged as ‘unscientific’ and many debates were raised about the reliability of written and oral exams which were handed to large groups of students. In opposition, the second period, named as the psychometric period, relies on statistics and measurement and shifted from open-ended test questions to test items focusing on discrete aspects of language, such as vocabulary, grammar, pronunciation, and spelling. The format for testing also changed from the first to the second period, while in the prescientific period, students answer through prompts for a written essay or oral response, and test items in the psychometric period comprise shorter questions. The third period termed the sociolinguistic approach appeared as a result of a change in society, educational measurement, and theories of language learning. This period shifted from discrete-point testing toward tests to measure meaningful communication.

Furthermore, Bachman (2000), Birjandi and Sarem (2012) have also described the development of language testing; we summarised it as follows:

1.3.1.1. *The 1960s and 1970s (Structuralist Approach)*

During this period, language testing aimed at assessing the micro-skills such as listening, speaking, reading and writing as well as language components such as grammar, vocabulary, and pronunciation. This means that the focus was on testing isolated forms of language.

1.3.1.2. *The 1980s (The Integrative and Functional Communicative Approach)*

This period saw development in terms of language testing due to the emergence of the communicative approach, and among its eminent contributors include Widdowson, Canale, and Swain. These authors rebutted the traditional way of language testing which separates language from its context of use. In connection with Spolsky (Spolsky, 1977, as cited in Malone 2017), language testing, in the 1980s, was viewed as multi-componential and dynamic which took into account discourse and the socio-linguistic aspects of language use. In addition, this approach saw other impacts on language testing like second language acquisition research, which pushed language testers to rely not only on field independence/dependence, academic discipline and background knowledge and discourse domains on language test performance, but also on the strategies used for language testing.

1.3.1.3. *The 1990s*

As far as this period is concerned, there was a development in ‘research methodology’, ‘practical advances’, ‘factors affecting performance on language tests’ and ‘ethics of language testing and professionalising the field’. They have been summarised and discussed in subsections below.

1.3.1.3.1. Research Methodology. The emergence of new powerful quantitative methodologies like criterion-referenced measurement, generalisability theory, item-response theory, structural equation theory, and qualitative research approaches. The first was developed by Hudson and Lynch for language achievement tests; however, some authors showed the complementary use of both criterion and norm-referenced methodologies in the expansion of placement test. The second helps to predict the impacts of multiple sources of measurement error. The third permits to predict the statistical properties of items and the capacities of test-takers. The fourth ‘enables us to investigate both the factor structure or the measures we use and the relationships among these factors, or latent variables’ (Bachman, 2000, p. 6). The last one involves experts’ judgements, introspective and retrospective verbal reports, observations,

questionnaires and interviews, text analysis, conversational analysis, and discourse analysis.

1.3.1.3.2. Practical Advances. In the past, the only goal of testing was the measurement of the micro-skills mainly reading and writing, i.e. the testing of knowledge acquired during the classroom. However, more practical advances in research gave birth to other forms of testing such as languages for specific purposes, cross-cultural pragmatics, vocabulary testing, and a computer-based assessment. This made the quality of assessment more meaningful and rich compared to what it has been used to assess, and assessors would have a clear idea of their students' language ability and thinking skills.

1.3.1.3.3. Factors Affecting Performance on the Language Test. Many factors may impact performance on the language test. These factors include the characteristics of the assessment procedure, the processes, and strategies adopted by test takers, and the characteristics of test-takers themselves. Each one of them may have the problem of validity and reliability if they are not used objectively.

1.3.1.3.4. Ethics of Language Testing and Professionalising the Field. Ethics is one of the paramount aspects of language testing. It was taken into account in the 1990s as researchers believe that a good research is the one in which everything is under the path of ethics. Hence, being a professional in the field of assessment means caring for ethics because spreading false ideas and knowledge means building a generation of ignorant individuals. Moreover, during the Medieval Period, the purpose of education was to teach students to learn the Holy book by heart, and teachers used to assess them on the basis of how much they have learnt it. Learning takes place only in monasteries and convents (Wilbrink, 1997).

1.3.2. Types of Assessment and Purposes

The LMD system was launched in the Algerian Higher Education during the academic year 2003-2004 in order to integrate into the global economy and market. It was believed that the classical system did not seem to satisfy this need

and hence a change was required to go in line with the growing world of scientific research and students' expectations.

The word assessment is different from evaluation, measurement, and test. For example, a student undertook a Ph.D. examination (Test), and after 20 days, the student saw his/her final grade (Measurement) in the exam, and the decision of the CFD (Comité de la formation Doctorale) was acceptance of candidacy (Evaluation). In this example, the test is in the form of an exam paper. According to Tabatabaei and Bakhtiarvand (2014), a test is 'a method of measuring a person's ability or knowledge in a given area' (p. 53). Based on this definition, we can say that a test is quantitative and assessment is qualitative. However, measurement means the numbers assigned to a given person, and evaluation is the decision making like the word in the example we have shown 'Admission'. Originally, the term assessment comes from the Latin word 'assidere', which means 'to value or rate for taxing' (Partridge, 2006).

Kibby (1995) argues that an educational setting is composed of assessment and evaluation. For the first, he defines it as the process of measurement and the latter as the decision-making about the quality of measurement. Earl and Katz (2006) share the same definition of assessment; they clarified that the word measurement refers to the identification of the degree of a thing. According to Roberst and Billings (2012), 'the second common question about teaching thinking in our schools has to do with assessment' (p. xii). In fact, in EFL classes, students are supposed to practise their language ability either orally or in a written form. In this case, the feedback that the teacher gives to students will, however, help them improve their learning skills and move forward. This can happen only if assessment is used to assess students' weaknesses and strengths in the use of language. More importantly, the role of the teacher here is to encourage students to develop the necessary skills in order to think critically while speaking, writing, listening and reading.

A distinction between formal (explicit) and informal assessment (implicit) is highlighted by Bachman (1990); he said that the former can be formative or

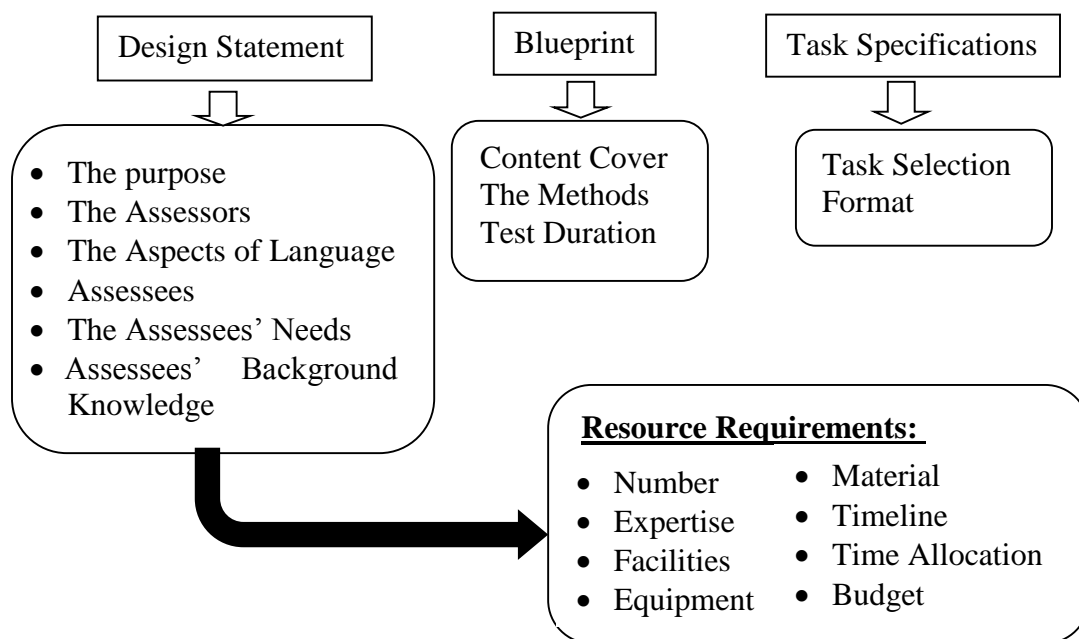
summative, and both the teacher and students know when the assessment will occur. In our case, the suggested approach we have implemented in the present research differs from the types of assessment we have mentioned because the one adopted takes ‘mediation’ as its major goals. Another distinction is between ‘formative’ and ‘summative assessment’; for instance, in Algeria, summative assessment is the one that the majority of teachers (from primary school until university) rely on in their teaching. It is defined as the assessment that is planned at the end of the course, semester or year in order to give the final grade to the students that permit them to pass to the following year. However, formative assessment is an ongoing process that aims at improving the quality of learning and teaching through the use of different instruments such as observation, evaluation grid, journals, diaries, questionnaires, interviews, and other helpful tools.

Furthermore, Harding and Beech (1991) pointed out two kinds of assessment in education: Norm-referenced assessment and criterion-referenced assessment. The first means that the score of an individual is compared with the other score from a sample of a given population. For the second, it aims at identifying the position of an individual in the learning process. According to the authors (i.e. Harding & Beech), teachers cannot use all kinds of assessment because some tests require an understanding of psychometric principles and norm procedures, which is the job of psychologists. Lidz (2017) argues that the majority of teachers use norm-referenced tests (test information) because it is the one required by administration. She mentioned another test called curriculum-based test which is based on instructional objectives. In the latter, the aim is to reflect on the content being taught in the classroom; it is similar to achievement tests. According to Lantolf and Poehner (2004), achievement tests are used to measure an individual’s actual level rather than his/her potential development. We can mention two other kinds of assessment such as language proficiency test, which aims at testing students’ mastery of the language, as well as diagnostic test, which aims at identifying the strengths and weaknesses of students’ learning.

Speaking of assessment and learning, McDowell et al. (2009) distinguished in their part three types of assessments: Assessment of learning, assessment for learning and assessment as learning. The first refers to assessment of the taught content; it is similar to summative assessment. The second is used for improving the teaching method and students' learning; it is synonymous with formative and alternative assessments. Third and last, assessment as learning means the ability of students to assess themselves as a way to develop and improve their learning. As for Davidson and Lynch (2002), success in assessment comes from an agreement between the members of the educational staff. In addition, Harmer (1991) introduced different types of tests such as (1) placement tests, which aim at placing students in the appropriate class, (2) tests that control students' knowledge and (3) direct as well as indirect tests, which contain questions related to real-life situations. Their function is to test students' metacognitive skills (e.g. role-plays, case of direct tests; multiple-choice items, case of indirect tests).

1.3.3. The Assessment Cycle

When speaking of the assessment cycle, we are referring mainly to the designers, objectives, and specifications (Green, 2014). Based on Green's conceptualisation of assessment, three core elements of assessment have been examined. The elements consist of (1) design statement, (2) blueprint and (3) task specifications. First, in the design of the statement, the purpose of assessment needs to be clarified right from the beginning; for instance, are students assessed in order to test the taught content or their critical thinking skills? In addition, the assessors need to possess expertise in the field in order to succeed in their teaching process, and aspects of language, assessee's needs and background knowledge have to be emphasised too. Second, the blueprint has to do with the content cover, methods, and duration of the assessment. Third, task specifications refer to the format of tasks. An illustration of the skill-cycle appears in Figure 1.3.1 on page 63.

Figure 1.3 1. Assessment Cycle (Green, 2014)

1.3.4. Characteristics of Classroom Assessment

Classroom assessment assists teachers in obtaining information on what, how much, and how well their students learn (Angelo & Cross, 1993). We outlined the major characteristics from the book of Angelo and Cross (1993), these are 'learner-centeredness', 'teacher-directness', 'mutual-beneficiary', 'formative', 'context-specific', and 'rooted in good teaching practice'. We felt it necessary and important to mention these characteristics in this research as they are part of assessment practices in higher education and assist the teachers and students in understanding where their roles stand for. The characteristics are briefly examined below.

1.3.4.1. *Learner-centeredness*

Classroom assessment is based on learner-centred approach, which means that the students are the most active participants in the classroom who take charge of their own learning process.

1.3.4.2. *Teacher-directedness*

The teacher in classroom assessment directs his/her students by showing them the right path they need to follow in order to succeed. To achieve that, teachers need to be given the agency in their teaching process as well as the

freedom to guide the students and help them to become autonomous and self-regulated.

1.3.4.3. *Mutual-beneficiary*

A classroom that fosters students' learning and autonomy might lead to mutual-beneficiary. Through interaction and guidance, students benefit from their teachers as well as peers' knowledge and experience. They are all engaged in a community of practice where goals of learning are shared and flourished.

1.3.4.4. *Formative*

Classroom assessment is based on a formative way of assessing; the purpose is not to grade students but to boost their competence and learning process.

1.3.4.5. *Context-specific*

Before assessing students, we need to make sure that the criteria of assessment adhere to the context in which language is used. In this regard, the teacher is required to take into account the needs and interests of the students. As Angelo and Cross (1993) reported, 'classroom assessments have to respond to the particular needs and characteristics of the teachers, students and disciplines to which they are applied' (p. 6). Neglecting the needs and characteristics of teachers and students are among the problems in the Algerian higher education. The teacher finds himself/herself struggling with the lack of materials as well as the printing machine, which is available only during the tests and exams. Consequently, these problems may hamper the development of students' critical thinking.

1.3.4.5. *Rooted in Good Teaching Practice*

Classroom assessment is rooted in good teaching practice because it starts with clear goals; the approaches, techniques, strategies and the procedures adopted are systematic and flexible.

1.3.5. Principles of Classroom Assessment

To implement DA in the classroom, we need to adhere to some crucial principles. Earl and Katz (2006) highlighted four major principles of classroom assessment, which consist of ‘reliability’, ‘reference points’, ‘validity’, and ‘record keeping’. They are briefly discussed below.

First, reliability refers to a feature of assessment, which ensures that the assessment process is in harmony with the objective of classroom assessment. In our case, the alternative form of assessment is connected with DOK, which means, if the objective of assessment is to develop skills and concepts, the test will target that objective. Brown (2004) distinguished four categories of this concept (i.e. reliability), these are ‘student-related reliability’, ‘rater-reliability’, ‘test-administration reliability’, and ‘test-reliability’. For instance, in student-related reliability, the majority of students feel anxious during the test or before its administration; this may be due to a lack of confidence in their capacity to achieve a good grade or maybe because of a lack of preparedness. In this case, to assure the reliability of the test, students need to feel less anxious by distracting them at the beginning before administering the test.

As far as rater-reliability is concerned, it comprises two elements: ‘Inter-rater reliability’ and ‘intra-rater reliability’. The former means two or more scorers arrive at the same score for the same test (e.g. the Baccalaureate exam). Whereas, the latter is based on an internal factor; for instance, the teacher may yield different scores of the test because many extraneous factors may interfere like tiredness, time constraints, bias and so forth. Concerning test-administration reliability, here, some paramount criteria need to be taken into account by the teacher before the administration of the test such as making sure that all the students are organised in their right places, the materials are present and that the place is not noisy where the test is taken. Besides, in test reliability, the teacher makes sure that the test is designed for the objective to test a given skill or criterion, i.e. the test will measure what is supposed to measure.

The second principle of assessment is reference points. Earl and Katz (2006, p. 10) cited three reference points that teachers use when considering students' performance such as (1) the way a student performs in relation to some pre-determined criteria, learning outcome, or expectation, (2) the way a student performs in relation to the performance of other students in the defined group, and (3) the way a student performs in relation to his or her performance at a prior time. The third principle has to do with validity, which is about data interpretation of classroom assessment. In this regard, teacher's decision of students' competence and competency should be objective and systematic, i.e. it adheres to ethics and civics.

Some types of validity are summarised from the work of Cronbach and Meehl (1955) and Green (2014); they consist of 'criterion-oriented validity', 'content validity', 'construct validity', 'convergent validity', and 'divergent validity'. For instance, in criterion-oriented validity, a connection exists between a test and a given criterion; it is composed of predictive validity and concurrent validity. The former means the test aims at predicting some future criteria such as academic success; the researcher wants to investigate a criterion he wishes to predict and this criterion is obtained after the test is given. For example, the predictive validity of a test designed to test students' critical thinking skills would be associated with students' effective arguments and line of reasoning. However, concurrent validity aims at predicting a criterion while the test is given; for instance, the validity of test designed to test students' writing production would be backed up by comparing the results of other teachers by asking them to correct students' papers.

Concerning content validity, the content of the test represents the sample of the field that was tested; i.e. the test measures what it is supposed to measure. To illustrate, the purpose of teaching is to develop students' critical thinking skills, in this case, the test should tackle the skills of critical thinking. In construct validity, the tester relies on indirect measures. As stated by Cronbach and Meehl (1955), 'A construct is some postulated attribute of people, assumed to be reflected

in test performance. In test validation, the attribute about which we make statements in interpreting a test is a construct' (p. 283). For instance, students' active engagement in class maybe attributed to good quality of teaching. For convergent validity, the focus is on comparing the results of one assessment (A) with the results of another assessment (B) that addresses the same knowledge or ability but different task types. Whereas in divergent validity, the emphasis is on comparing the results of one assessment with the results of another assessment (B) that deals with different knowledge, abilities but uses the same task types, for example Cambridge First Certificate (CFC) and Test of English as Foreign Language (TOEFL).

There are also other types of validity such as face and consequential validity. The first refers to the extent through which the test appears to be good and in harmony with the criteria of test design. The second is defined as the impact of the test on society and the educational system as well as the scorers (Bachman & Palmer, 1996). According to Messick (1992), two basic threats underpin validity: construct irrelevance (not connected to the knowledge, skills, or abilities intended to measure), and construct under-representation (no presence of the elements related to the students' knowledge, skills or abilities).

The third principle of classroom assessment is called record-keeping; it is the best instrument a teacher can rely on to help students diagnose their weaknesses and strengths. This material may also assist teachers in reconsidering their assessment practices, and students as well as colleagues may give them feedback to better improve their teaching. Along with these principles, Brown (2004) added three other principles of assessment such as 'applicability', 'authenticity', and 'washback'. To illustrate, the first is concerned with the feasibility of the test in the context which the test is undertaken. Authenticity means the test is based on a natural language, contextualised items, meaningful and interesting topic. Washback refers to the positive or negative impact of testing on students' learning. For instance, Hoadjli (2015) conducted an exploratory research about the washback effect of an alternative testing model on teaching and learning at Biskra

secondary school. In his work, a distinction was made between washback and impact. The former was conceptualised from a narrower sense to mean the effect of the test on language teaching and learning, whereas the latter was viewed from a broader sense to refer to the effect of the test on the educational system and society in general.

Tsagari and Cheng (2017) stated that, ‘Washback, impact, and consequences refer to the educational phenomenon when testing (often large-scale and high-stakes), specifically the uses of test scores and the decisions made based on those scores, influence those stakeholders associated with such testing’ (p. 359). The authors (i.e. Tsagari & Cheng) said that the effects of testing on teaching and learning have been traditionally associated with test validity (consequential validity) and that washback is only one form of testing consequences that is included when evaluating validity. The study of Wall and Alderson (Wall & Alderson, 1993, as cited in Tsagari & Cheng, 2017) was the first empirical research published in the field of language testing. It investigated the nature of washback of a newly introduced national English examination in Sri Lanka by observing what was happening inside the classroom. Shohamy et al. (1996) added that the degree of impact of a test is often influenced by several other factors such as the status of the subject matter tested, the nature of the test (low or high stakes), the uses to which the test scores are put and that the washback effect may change over time.

Reasonably, doing research in assessment is a long undertaking process because there are always some factors that impinge the success of a given approach that a teacher adopts. In our part, as we are striving for a change and innovation in the quality of assessment, all the principles we stated above have been taken into account in our experiment.

1.3.6. Overview of Dynamic Assessment

A great number of researchers who investigated DA were questioning whether Vygotsky or Feuerstein was the founder of the concept. For example, Duvall (2008) argues that Vygotsky was not the pioneer of the term. He said that the concept refers to the mediation between the cultural-historical approach and the psychological process and it is based on teaching, testing, and learning, and has the purpose of understanding the development of a child's cognitive ability. Murphy (2011) states that both Vygotsky and Feuerstein contributed to the foundation of DA; the latter took place in the 19th century. In his research on DA, intelligence and measurement, Murphy mentioned six assumptions about the term by Losardo and Notari-Syverson (Losardo & Notari-Syverson, 2001, as cited in Murphy, 2011, p.10); these are as stated below:

- a. A Piagetian constructivist perspective.
- b. Vygotsky's social - interactionist view.
- c. Vygotsky's ZPD notion for long paradigm.
- d. Scaffolding.
- e. Feuersteinian mediated learning experience.
- f. Self- regulation, which encompasses some form of non - linear growth trajectory.

This means that DA is a combination of all these elements, which clarify how a person learns. Other prominent figures in the field of DA include Lantolf and Poehner (2004). According to these scholars, DA combines both assessment and instruction into a unified activity; in other words, the teacher provides the students with mediation in order to develop their abilities. They assert that Luria named the term because Vygotsky never used the concept as he died at an early age; Luria introduced it within Vygotsky's area on defectology. The latter is defined by Lubovsky (1974) as the scientific discipline that is interested in studying all handicapped children and adults. More importantly, Poehner (2008) states that Vygotsky expanded the term more than 80 years ago in his research on child's cognitive development. For Vygotsky, the child's development is not an innate capacity but a result of social interaction. Before Vygotsky's sociocultural theory came into existence, assessment and instruction were seen as subfields within applied linguistics; however, later on, they were unified when Vygotsky

stressed the importance of unifying them. Poehner was considered the first researcher to explore the use of DA in L2 education. In his doctoral thesis, he explained the origin of the term, approaches and many other paramount elements that we have deeply examined in the present thesis, and because he was the one who gave a clear description of the approach, the researcher (i.e. Poehner) has been cited many times in the present thesis due to his prominent works.

Murphy and Maree (2009) argue that, ‘dynamic assessment sees itself as encompassing intelligence and not as intelligence encompassing it... Intelligence as conventionally understood and measured is not the target of dynamic assessment intervention but the focus is on the remediation of problems.’ (p. 426). The quotation illustrates the idea that the purpose of dynamic assessment is on change that occurs within students’ learning processes. Lidz (1991) compared between DA and non-DA tests; for instance, non-DA tests are based on the psychometric theory, which was the concern of a plethora of researchers in the past decades. This theory is characterised as being more rigid and inflexible. According to Raykov and Marcoulides (2011), the theory is also called test theory and it is a scientific discipline interested in studying the human behaviour measurements and the problems that influence these behavioural measurements. In addition, it is seen as a theoretical framework and a crucial input for behavioural measuring instrument growth, instrument construction, revision, and modification, as well as social and educational measurement in general. It relies on formal logic, mathematical and statistical methods as well as modes. The authors compared this theory (i.e. psychometric theory) to behavioural assessment, which according to them, is more practical rather than theoretical and its role is to administer and interpret tests for measuring instruments under certain circumstances. Teasdale and Leung (2000) argue that ‘a key area of differential focus between a psychometric and an alternative approach to assessment is in the way conceptions of validity impact upon assessment procedures and in the type of research agenda which is implied’ (p. 167). In support, Lazaraton (2017) pointed out that psychometrics relies on objective measurement of psychological traits, processes,

and capacities as well as the use of quantitative data collection, analysis, and interpretations.

Renewing concern with Lidz's (1991) comparison of DA and non-DA tests, the author stated three elements of differences: (1) The view of abilities underlying the procedures, (2) the purpose of conducting the assessment, and (3) the role of the assessor. For example, non-DA separates instruction from assessment; the purpose of assessment is to measure their present learning ability, and the assessor is an authoritative and a transmitter of knowledge. Whereas, in DA, both instruction and assessment are monolithic; the purpose is to promote the child's cognitive development, and the assessor is a mediator and a guide. She added that the role of the teacher in traditional teaching and the teacher using DA is not the same; in her view, the assessor needs to act as an optimal teacher who relies on interventions to help the students understand the content being presented to them. Crucially, the teacher will not be concerned only with the identification of students' strengths and weaknesses but also the path towards cognitive development.

Moreover, Sternberg and Grigorenko (2002) said that 'fill-in-the-blank, multiple-choice, open-ended essays or even oral proficiency tests are in themselves neither static nor dynamic instruments' (Sternberg & Grigorenko, 2002, as cited in Lantolf & Poehner, 2004, p. 54). This means that to help us know whether a test is dynamic or static is through understanding the goal of the procedure. We can observe that DA is more beneficial since the main objective of the course is to scaffold students' ZPD through mediation. Beer (2010) states that standard (static) tests are based on an implicit assumption in which the testees may promote similar constructs being measured. Amod and Seabe (2013) critically reviewed the major criticisms of the traditional static testing approach, and discussed the theoretical basis of the DA approach within the South African context.

Amod and Seabe's (2013) chapter gives an account of the current empirical research on DA; they stated that:

Static testing refers to the administration of tests in a standardised manner as stipulated in test manuals. The limitation of this approach is that the knowledge and skills needed to fulfil the requirements of tests have not necessarily been taught to the child, and this will undoubtedly limit his or her ability to perform well on these tests. (Amod & Seabe, p. 120).

In her attempt to define DA, Kovalcikova (2015) highlighted three paramount features to this approach, which are (1) the didactic relationship between the examiner and examinee, (2) the focus on the learning processes, and (3) the conceptualisation of change. This makes the assessment more beneficial and fruitful. Other scholars distinguished between DA and formative assessment (Bavali et al., 2011). They claim that the first relies on an organised theory of development (i.e. ZPD); it is systematic, has long-term objectives, and encourages students' future development. Whereas the second is not based on a given theory but on teacher intuition (not deliberately planned), and it focuses on students' actual learning. Other scholars such as Schneider and Ganschow (2000) consider DA as an ongoing diagnostic approach to instruction, which is based on continuous interaction between the teacher and student.

Lidz (2017) points out that DA follows a pre-test, intervene, post-test format. A crucial aspect of this approach is that the assessor needs to observe and analyse the students' performance, and intervention is the most important part of the DA approach since its main aim is to produce change. Last but not least, Haywood and Tzuriel (2002) gave a definition which in our opinion, suits better the objective of the present thesis. They said that DA means change and it is based on the assessment of thinking, perception, learning, and problem solving which requires an active teaching process and the promotion of students' cognitive development. In the same vein, Lantolf and Poehner (2004) assert that 'higher level of thinking emerges as a result of interaction with individuals and symbolic and physical artifacts'. This confirms the idea that abstract thoughts can be assessed; the majority of researchers mainly those who follow the behaviourist approach

disagree because, for them, anything that is not seen or measured cannot be assessed or is not reliable and valid.

1.3.7. Approaches to Dynamic Assessment

The approach that we adopt in the classroom depends on the aim behind the assessment. In this perspective, two remarkable approaches to DA have been provided by Brown and Ferrara (1985); the first is called the ‘interventionist approach’ and the second is the ‘interactionist’.

1.3.7.1. *The Interventionist Approach*

It follows the psychometric properties of assessment and quantifying. Within it, we distinguish two formats called the ‘sandwich format’ (originated by Budoff and some of his colleagues, and it focuses on a pre-test- intervention/ training-post-test formats handled to an individual or a group), and ‘cake format’ (emphasises on mediation, and it goes from implicit to explicit during the assessment). Poehner (2008) provides four models of the interventionist approach to DA; these are briefly discussed below:

1.3.7.1.1. Budoff’s Learning Potential Measurement Approach. This approach resembles the non-DA in that students are graded and assessed based on the scores they get during the test or exam. The difference is that students in Budoff’s approach are trained and retested again.

1.3.7.1.2. Guthke's Lerntest Approach (also called the Leipzig Learning Test). For this one, Guthke prefers to involve mediation within the test compared to Budoff who instead separates the mediation phase from the test. He relies on verbalisation for monitoring students’ answers.

1.3.7.1.3. Carlson and Wiedl’s Testing-the-limits Approach. It is an alternative version of Guthke's lerntest approach; both use standardised hints and requests. However, the mediation in Carlson and Wiedl's approach is more extensive than Guthke's one, because the authors rely mostly on questioning when students provide them with either correct or incorrect answers to boost their reasoning skills.

1.3.7.1.4. Brown's Graduated-prompt Approach. It is characterised by a fixed menu of standardised hints and leading questions that are ranked from more implicit to less explicit. The thing that makes the approach a pivot one within Vygotskian perspective is its incorporation of transfer tasks.

1.3.7.2. *The Interactionist Approach*

The interactionist approach aims at developing the individual's cognitive ability without much focus on the outcome, and Reuven Feuerstein is the leading figure of this approach. Within it, there is what is called the 'Mediated Learning Experience' (henceforth, MLE) which comprises various components such as the feeling of competence, ability to self-regulate, and the internalisation of general learning principles. The examiner takes the role of the mediator, and his or her goal is to boost students' cognitive transformation rather than performance efficiency. According to Poehner (2008), Feuerstein's approach emerged independently from Vygotsky's work, but both of them share the same perspectives towards child's cognitive development. In a similar vein, Feuerstein et al. (1991) highlighted eleven features within MLE; these are stated briefly below:

1.3.7.2.1. Intentionality and Reciprocity. This means that the assessment is based on the interaction between the student and his/her teacher. The instruction meets the need of students and the mediation is given whenever necessary.

1.3.7.2.2. Transcendence. The student shifts from the interpersonal stage to the intrapersonal (i.e. He/she takes charge of his/her own learning without much assistance from the teacher).

1.3.7.2.3. Mediation of Meaning. The teacher provides students with mediation in order to help them understand better and develop their metacognitive skills.

1.3.7.2.4. Mediation of Feelings of Competence. By assisting the students in accomplishing a given task, we show them later the extent to which they are competent in order to boost their self-esteem and motivation.

1.3.7.2.5. Mediated Regulation and Control of Behaviour. Here the teacher controls the behaviour of the students for the purpose of making them more autonomous and self-regulated.

1.3.7.2.6. Mediated Sharing Behaviour. Communication between the teacher and students concerning the contribution of this latter to the task including their perceptions of its difficulty, their attitudes to the problem that arises and their feelings to the nature of the interaction.

1.3.7.2.7. Mediation of Individuation and Psychological Differentiation. The mediation focuses on students' psychological differences and the extent to which their abilities would benefit their peers.

1.3.7.2.8. Mediation of Goal-seeking, Goal-setting, Goal-planning, and Achieving Behaviour. The purpose of the mediation here is to assist students in conceiving their goals and planning them as well as the way to achieve those goals.

1.3.7.2.9. Mediation of Challenge. To provide students with tasks that are beyond their current ability in order to accustom and motivate them towards challenging tasks.

1.3.7.2.10. Mediation of an Awareness of the Human Being as a Changing Entity. Learning means changing behaviours, this seems similar with the MLE approach, which stresses the importance of modifiability among students' learning behaviour.

1.3.7.2.11. Mediation of an Optimistic Alternative. Mediation provides students with supports that can shift them from their current knowledge to a more enriching and transferable one.

In addition to the mediated learning experience approach, Feuerstein proposed two other concepts related to his approach of assessment such as 'cultural deprivation' and 'learning potential assessment' (Hatton, 1990). For instance, cultural deprivation means that children may not understand their own culture if they do not have a special relationship with adults. As for learning potential assessment, it refers to the measurement of the child's future development.

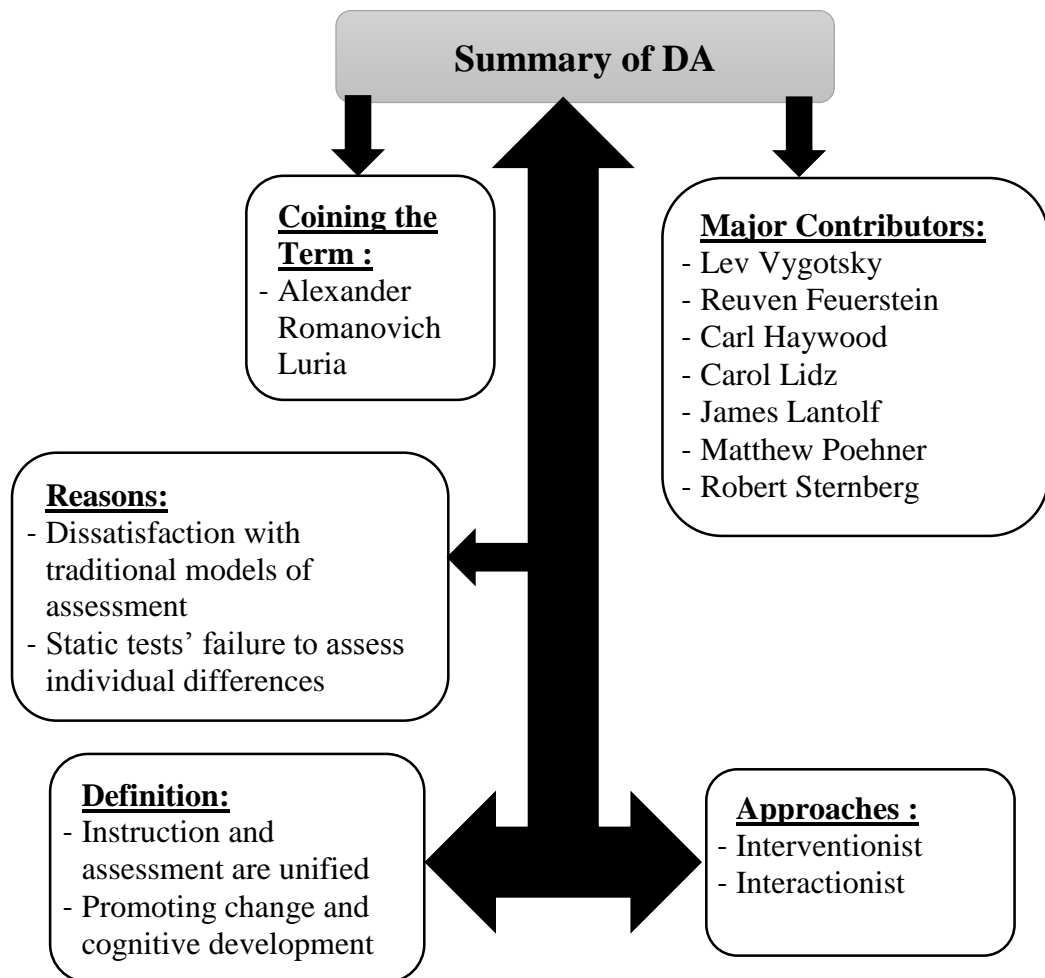
In the present research, the interventionist approach (Sandwich Format) is the one we have adopted to assess students' critical thinking skills. The reason is that it sounds appropriate and flexible to larger classes and writing skill because we have focused on students' writing productions to facilitate the assessment of their critical thinking skills. The interactionist approach appears feasible to smaller classes and mainly in the assessment of speaking.

1.3.8. Issues of Dynamic Assessment

Many researchers question the validity and reliability of DA. Since the field of social sciences is not an exact field, we think that the generalisability of the findings cannot be one of its characteristics since many extraneous variables may interfere while a researcher implements DA as an alternative approach of formal assessment in English language teaching. Mardani and Owusu (2019) state that the concept of reliability is derived from the ontology of traditional assessment, where outside factors are tightly controlled in order to control contamination of test takers. In this connection, Poehner (2008) argues that, 'the task of implementing DA in the classroom is a complex one requiring teachers to be attuned to learners' current level of ability while simultaneously endeavouring to help them move to new levels of functioning' (pp. 69-70). We admit that this approach seems a challenging one; however, everything depends on good planning, perseverance, and motivation of the teacher to bring change among his/her students. Lidz (1991) pointed out that the objective of DA was to bring change rather than remaining stable like traditional assessments. Grigorenko (2009) mentioned the lack of standardisation in the methodology and lack of validity in the results. However, he stated some similarities with Response to Intervention and formative assessment such as focusing on both instruction and intervention in one holistic activity (as cited in Anton, 2012). Besides, Yildirim (2008) holds the view that the theoretical framework proposed by Vygotsky was not followed by a methodological approach on how to use it in the classroom because he studied psychology rather than education. This makes it also one of the issues of the approach.

A summary of DA is provided in Figure 1.3.2 (See below):

Figure 1.3 2. *Summary of DA*



Summary

To summarise, the present section provided an account of dynamic assessment, a suggested approach we have adopted to scaffold first year English degree students' critical thinking skills. We have seen that assessment went through a series of periods from psychometric to sociolinguistic period and major characteristics and principles of assessment have been emphasised to gain deeper understanding of assessment. Concerning dynamic assessment, we have stated that many scholars have contributed to the development of the concept, among them Vygotsky, Feuerstein, Haywood, Lidz, Lantolf, Poehner, and Sternberg. They agreed that DA is based on both instruction and assessment as a unified activity. We compared between DA and Non DA and we said that the former relies on the change that happens within an individual and that the purpose is to promote cognitive modifiability, whereas the latter emphasises on present learning ability. We have also mentioned two approaches of DA, which are the interventionist and interactionist approach. We pointed out that the first is the one we have relied in the present study because it is feasible to larger classes and writing skill, whereas the second fits smaller classes and in speaking mostly. Finally, issues of DA have been highlighted in this section; we have stated that whatever the complexity of DA, it has to do with the teacher's motivation and perseverance to make changes in his/her classes.

1.4. Section Four: Empirical Studies

Introduction

In this section, ten empirical studies have been presented based on their connection with the topic under investigation. The aim is to look at the weaknesses and strengths of those studies in order to fill any gap that is missing in the literature and contribute with something novel, as well as understand and then conceptualise the main variables of the present thesis.

1.4.1. Presentation of the Empirical Studies

Study 1

Stapleton (2001) conducted a quasi-experimental research at Hokkaido University in order to assess critical thinking in the writing of Japanese undergraduate students. The latter were divided into experimental (46 students from three faculties: agriculture, veterinary science, and fisheries) and control group (23 participants from two faculties: law and education). The former received instruction on critical thinking for eleven weeks while the latter did not. This scholar asked the participants to supply two samples of their writing, one at the beginning of the semester, and the second at the end. In each group, half of the participants were supposed to write a piece of paragraph on a topic that is familiar to all Japanese students, and the other half were required to write an unfamiliar one. The samples of these participants were sent via email using the programme software Word 2000. Besides, a questionnaire was distributed to the participants and an interview was conducted with some of them. The results revealed that the instruction on critical thinking helped Japanese students to think critically; however, it seems that the familiarity of the topic content plays a role in the quality of thought of these participants. Finally, yet importantly, it was also indicated that the concept of hierarchy or collectivism did not hamper Japanese students from expressing their stance.

Study 2

A study that adopted DA as an approach in teaching is the one of Shrestha and Coffin (2012). In their research, they probed the value of tutor mediation in the context of academic writing development among undergraduate business studies students in open and distance learning through DA. They relied on text-based interaction between a tutor-researcher and two business studies students across various drafts of two assignments in line with the DA approach, and the interaction was via email. They concluded that DA led to the development of undergraduate students' academic writing. This seems interesting as it helps both teachers and students to interact together and have feedback on the students' writing assignments.

Study 3

Letseka and Zireva (2013) explained in their research the major causes that hamper students' critical thinking skills. They conducted an interview with final year students (between six to seven students per group) at Morgenster Teachers' College. The time allotted for the interview was 45 minutes to one hour, and the researchers used audiotapes and written reports. According to the interviewees, the causes that influence their critical thinking skills were: Religious doctrines, negative self- concept with regard to their capacity to freely comment on issues that are in the public domain, the influence of monologic pedagogy, lack of opportunities to exhibit critical thinking skills, closed-system college, the impact of gerontocratic and femininity orientations. As a conclusion, the researchers suggested the use of Dewey's book (1910) in order to heighten the participants' awareness of the importance to be a critical thinker.

Study 4

Mehta and Al-Mahrouqi (2014) conducted a qualitative case study to explore the feasibility of teaching critical thinking within an EFL context, as well as the difficulty encountered by EFL students in applying the skills of critical thinking in their writing production. In so doing, 30 English majors at Oman's Sultan Qaboos University took part in the study. The authors analysed the writing

tasks of the participants at two consecutive writing samples and the result revealed that critical thinking is a skill which can be imparted to EFL students and this by dividing the concept into its major components such as the identification of purpose, the speaker and the intention of the written text. In their article, they defined critical thinking as a set of skills and insisted on participants' constant practice and revision of those skills for its internalisation and promotion in EFL settings.

Study 5

Nazari (2015) conducted an interpretive qualitative study in the UK context with ten lecturers teaching English at different UK higher education institutions. This researcher relied on a semi-structured interview in order to investigate the participants' perceptions towards DA. The interview was analysed by adopting the procedures of grounded theory, which is inductive and a posteriori. The data indicated the use of both formative and summative assessment within the setting under investigation. Concerning the perceptions of the lecturers, they expressed an ambivalent view towards DA.

Study 6

Melouah (2016) explored the effect of an instructional model on the improvement of EFL students' critical thinking skills for reading historical documents in the department of English, at Blida University. He based his research on an experimental design during a period of one semester first year civilisation course. The aim was to help the participants reflect upon the historical texts rather than rely on rote learning. 100 students were randomly chosen to take part in the study. The researcher followed two instructional components in the experiment. The first consists of teaching reading strategies as suggested by Wineburg; and second, the teaching of critical thinking elements. Melouah followed an instructional framework by O'Malley and Chamot: preparation, presentation, practice, evaluation, and expansion. The result of the study demonstrated the participants' success in the tests as well as an increase in their inclination and engagement in the civilisation course and historical documents.

Study 7

Forbes (2018) explored the way first year undergraduate students conceptualise critical thinking in order to come up with pedagogical strategies. These participants used to take a course on language and literacy in the education faculty of a university in England. This scholar relied on a small-scale case study as a research design, and constructivist paradigm as the philosophical worldview which is seen to be idiographic and subjective. As far as the instruments of the study are concerned, she adopted a semi-structured interview which lasted 20 to 30 minutes, with each participant; she also asked two participants to bring a piece of written work to reflect on during an additional stimulated recall interview. As for the analysis, the researcher adopted a thematic coding approach, which led to the emergence of three major themes such as critical thinking across disciplines, the role of the tutor, and prior educational experiences. For instance, the participants of this study consider critical thinking as an element that is not taken for granted, and an evaluation of others' ideas and they all believe in the importance to developing this concept.

Study 8

Infante and Poehner (2019) conducted a research on L2 learner ability to manage the English tense and aspect system in an L2 writing programme. The first author acted as the mediator in the research; he worked with eight English learner from two sites in a mid-atlantic US college town. Four participants were adult L1 Arabic speakers registered in full-time studies at a university Intensive English Program (IEP), and the four remaining participants were adolescent L1 Korean English learners who study in a local-area secondary school. All the participants met individually with the mediator for six weekly sessions. In the first session, the participants engaged in a non-dynamic diagnostic assessment of metalinguistic knowledge, while in session two to five, they involved in a similar multiphase protocol in which mediator-learner dialogue began with the introduction or review of the conceptual tool. In the final session, a non-dynamic and dynamic version of the initial diagnostic assessment were handed to students in order to assess their

understanding of the English-tense aspect system. The result demonstrated the participants' success in conceptualising the English-tense aspect system.

Study 9

Hidri (2019) explored the impacts of mediation strategies on enhancing the cognitive modifiability in a dynamic assessment writing exam among ESP learners, in a college of applied sciences in Oman where English is a foreign language. 97 females and 35 males aged between 18 and 20 took part in the research. They were split into experimental (n=25) and control (n=107) groups. This researcher acted as the class teacher who was in charge of delivering the DA exam interactions by relying on qualitative and quantitative methods through a 14-week period. All the participants (n=132) undertook three tests: diagnostic, mid-term, and achievement. However, the experimental group (n=25) undertook an additional dynamic exam, which was handed before the mid-term. The findings indicated that only a few cognitive modifiability was present.

Study 10

Mardani and Owusu (2019) selected DA as a specific procedure for teaching and assessing critical thinking skills by adopting the sandwich format. Their objective sampling consists of ten senior EFL learners at a private English language institute. The instruments they used are divided into two categories. The first category is used for the testing and data gathering purposes such as TOEFL, EMI (English as a Medium of Instruction), teaching logs, and new tasks. The second category is used for teaching purposes or mediation phase such as information page, and quantitative test. The aim of their study was to demonstrate the variability and change in participants' awareness or interest towards critical thinking. In so doing, they distributed a questionnaire to the participants at the end of first session, and the same questionnaire was given to them at the end of the course too. In addition, the mediator used the teaching logs to record the class events. The authors explained that the positive effect of DA on reading comprehension is due to the fact that DA is more than a sheer form of assessment.

1.4.2. Discussion of the Empirical Studies

All the studies that we have reviewed in this section seem to confirm that explicit instruction sounds an effective strategy that promotes students' critical thinking skills. As a person cannot drive until he gets his driving license, a student cannot think well if he is not well instructed. Evidence comes also from Marin and Halpern (2011) who supported explicit instruction on critical thinking and who stated that effective thinking instruction is the one that is based on three outstanding elements such as (1) the introduction of the skill, (2) intentional practice and (3) transfer. In our case, we modelled the skills and strategies of critical thinking to the students; gave them activities for practice and helped them through mediation and assistance, and finally raised their awareness and encouraged them to apply those skills in their daily life actions. As we can see, there are different perspectives given to critical thinking skills, despite the efforts that were made to clarify this concept, the idea of whether it is innate or developmental seem highly debatable. In our opinion, we think that it is rather developmental because a person learns to think critically through time after being exposed to different skills required for understanding, analysing and evaluating. A person may acquire those skills at school, home, outside or university, and through media. In addition, studies we analysed seem to indicate that familiarity with the topic content and language proficiency play an important role in the quality of thoughts, whereas religious doctrines, negative self-concept, the influence of monologic pedagogy, closed system college, the impact of gerontocratic and femininity orientations appear to influence negatively students' critical thinking skills.

As for DA, it seems that the most preferred approach of assessment by the majority of researchers is the interventionist format maybe because it is flexible and can be used with larger classes, which does not sound to be the case with the interactionist one. The studies we reviewed confirmed the effectiveness of this approach (i.e. dynamic interventionist approach) on improving students' writing skills. Our study is different in that it does not focus on the improvement of writing skills but takes the latter as a technique to assess students' critical thinking skills.

The previous studies also corroborated the statement that teachers' perceptions of teaching impact their classroom practices. What is noticeable in the studies too is that the majority relied on interviews mainly the semi-structured interview as the prominent instrument for data collection. These studies barely investigated the assessment of critical thinking skills within students of English in a non-English context, only a few did that but mainly with students who majored in science and technology.

In the Algerian context, the notion of critical thinking assessment does not appear to attract the attention of Algerian scholars. The studies we reviewed corroborated the effectiveness of explicit instruction on the development of students' critical thinking skills. However, how to assess the concept of critical thinking is still not clear since the attention seems to be given to the teaching of this skill but not on its assessment. A gap we tried to fill in the present study and this by adopting DA as an alternative approach of assessment in higher education. This is going to be the researcher's contribution since the notion of DA has gained limited attention in the literature; the reason may be related to the complexity of this approach and the difficulty to conceptualise and enhance critical thinking in EFL classes since many factors may hamper its promotion.

1.4.3. Summary of the Empirical Studies

Table 1.4 1. *Summary of the Empirical Studies*

Authors	Year	Research Topic	Methodology	Results
Stapleton	2001	Assessing critical thinking in the writing of Japanese university students: Insights about assumptions, content familiarity, and biology.	1. Quasi-experimental research. 2. Questionnaire. 3. Interview.	The presence of the elements of critical thinking within Japanese students.
Shrestha & Coffin	2012	The value of tutor mediation in the context of academic writing development.	1. Tutor mediation. 2. Interview. 3. Researcher's comments.	DA assisted in the development of undergraduate students' academic writing.

Letseka & Zireva	2013	The causes that hamper students' critical thinking skills.	<ol style="list-style-type: none"> 1. Phenomenological approach. 2. Focused group interview. 	Religious doctrines, negative self-concept, the influence of monologic pedagogy, closed systems college, the impact of gerontocratic, femininity orientation.
Mehta & El Mahrouki	2014	The feasibility of teaching CT within an EFL context and the difficulty encountered by EFL students in applying the skills of CT in their writing production.	<ol style="list-style-type: none"> 1. Qualitative case study. 2. Analysis of writing tasks. 	Critical thinking is a skill which can be imparted to EFL students and this by dividing the concept into its major components.
Nazari	2015	English language lecturers' views on DA and its potential in higher education: Challenging the current assessment quo.	<ol style="list-style-type: none"> 1. Interpretive qualitative study. 2. Semi-structured interview. 	Lecturers' ambivalent attitudes.
Melouah	2016	The effect of an instructional model on the improvement of EFL students' critical thinking skills for reading historical documents.	<ol style="list-style-type: none"> 1. Experimental design. 2. Students questionnaire 3. Document-based task. 4. International Critical Thinking Essay Test. 	Students' success in the tests and increase in their motivation and engagement.
Forbes	2018	Undergraduate students' conceptualisations of critical thinking.	<ol style="list-style-type: none"> 1. Case study. 2. Interview. 3. Students' written works. 	Critical thinking is viewed as a concept, which is not taken for granted, and an evaluation of others' ideas.

Infante & Poehner	2019	Learner ability to manage the English tense aspect system in an L2 writing programme through DA.	<ol style="list-style-type: none"> 1. Theoretical Systemic Instruction. 2. Diagnostic assessment of metalinguistic knowledge. 	Students' success in conceptualising the English tense aspect system.
Hidri	2019	The impact of mediation strategies on enhancing the cognitive modifiability in a DA writing exam among ESP learners.	<ol style="list-style-type: none"> 1. Experimental research. 2. Diagnostic, mid and achievement tests. 	Less cognitive modifiability was present.
Mardani & Owusu	2019	Teaching and assessing critical thinking reading through dynamic assessment.	<ol style="list-style-type: none"> 1. TOEFL. 2. EMI. 3. Teaching logs; 4. Information page questionnaire. 	The positive effect of dynamic assessment on reading comprehension.

Conclusion

To conclude, this chapter explained the major concepts related to critical thinking skills, scaffolding, and DA, and then presented the prominent empirical studies that had relation and familiarity with the topic under investigation. For instance, we showed that a critical thinker is the one who has both competence and competency in reasoning; judgement, evaluation, and analysis of others' arguments as well as his/her own ideas. Some paramount criteria about thinking have to be known by both the teacher and students for effective development of critical thinking. In addition, we saw throughout this chapter that 'scaffolding' sounds an ambiguous concept, and this has been confirmed throughout the contradictory definitions provided by researchers. Even ZPD was not given a clear explanation by the scholars in the field of psychology and English language teaching. As far as we are concerned, scaffolding is just one feature of DA, which means, it will be used as an instructional procedure for developing students' critical thinking skills. As for DA, it is based on both instruction and assessment; they are inseparable. Whether the assessment is dynamic or not has to do with the procedures taken rather than the tests themselves.

Finally, the previous studies revealed that critical thinking could be taught in an EFL setting and contradicted Atkinson's view that critical thinking is a social practice. The studies showed that critical thinking is a skill that can be developed with constant practice and revision in order to promote transcendence. We have noticed in the analysis of empirical studies that a few researchers delved into investigating the role of DA on improving EFL students' critical thinking skills; the majority shifted attention to the development of the micro skills such as listening, speaking, reading, and writing. The interventionist approach of dynamic assessment was the preferred one by the majority of researchers. The next chapter is devoted to the description of the research methods adopted in the present research and to this, we now turn.

Chapter Two: Research Methodology

Introduction

In the previous chapter, a critical review analysis was put forward on the three main variables, which consist of critical thinking skills (the dependent variable), scaffolding (the independent variable), and DA (the independent variable). In this chapter, a description of the nature of research methods and research methodology is provided. Then, an account of the research design is significantly delineated, which comprises nine elements such as population and sampling, the research framework, philosophical worldview, selected strategies of inquiry, research methods, pilot study and validation of instruments, data collection procedures, data analysis, and data interpretation. Finally, an account of both the epistemological positioning and roles of the researcher, as well as the ethical issues and scientific integrity is included.

2.1. The Nature of Research Methodology and Research Methods

Table 2. 1. *The Nature of Research Methods and Research Methodology* (Rajaskar, et al., 2013, p.5)

Research Methods	Research Methodology
<ul style="list-style-type: none"> - Procedure schemes and algorithms used in research. - Planned, scientific and value-neutral. - Include theoretical procedures, experimental studies, numerical schemes, and statistical approaches. - Help us collect samples, data and find a solution to a problem. - They call for explanation, and they are based on collected facts, measurements, and observations, and not on reasoning only. - They accept only those explanations, which can be verified by experiments. 	<ul style="list-style-type: none"> - A systematic way to solve the problem. - A science of studying how research is to be carried out. - The procedures by which researchers go about their work of describing, explaining and predicting phenomena. - The study of methods by which knowledge is gained. - Its aim is to give the work plan of research

As we can see in Table 2.1 (p. 89), research methods are part of the research methodology. In other words, the former is specific whereas the latter is general.

2.2. Research Design

According to Maxwell and Loomis (2015), “research design” refers to ‘the components of a research study such as the purposes, conceptual framework, research questions, and validity strategies’ (p. 242). To explain it differently, research design means the plan and steps that a researcher opts for when undertaking his/her research process. Gibson and Brown (2011) distinguished between research designs and the research design. The former concerns the specific approaches to research such as experiments, case studies, ethnography, and action research. Whereas the latter refers to the research plan, which is the one used in this chapter. In the present thesis, the researcher followed a mixed-methods design because the nature of her area of investigation requires a blend of both quantitative and qualitative approaches such as the use of tests, questionnaires (quantitative), interviews, classroom observation and personal journals (qualitative). Quantitative approaches rely on deduction, positivism, data variance, and factual causation. Contrarily, qualitative approaches focus on induction, constructivism and textual information (Pinto, 2012).

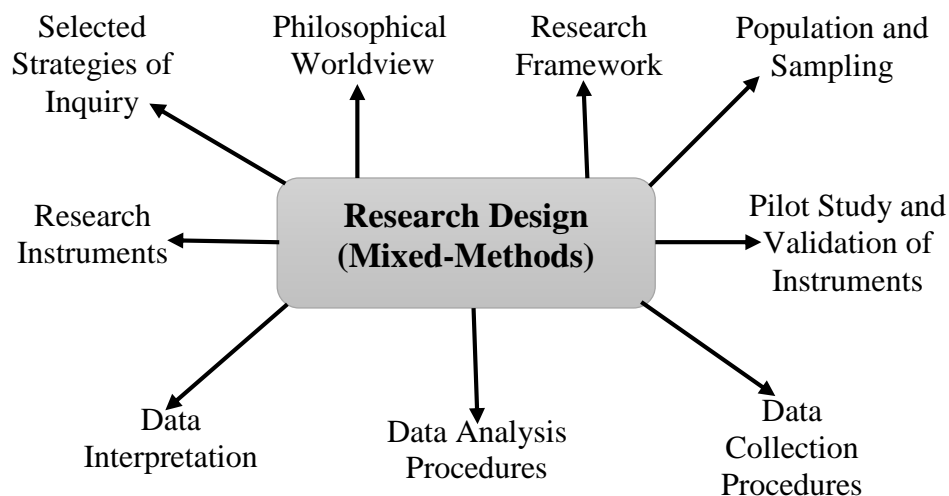
Historically, the notion of combining methods goes back to Campbell (social scientist) and Fiske (expert in personality assessment) who adopted different methods to study the validity of psychological traits in 1959 (Creswell, 2009). Terrell (2012) suggested that the emergence of the mixed-methods design was due to the paradigm wars between quantitative and qualitative research approaches. For instance, Bryman (2008) states that, ‘the emergence of the paradigm wars was a product of the way in which philosophical issues became attached to research methods and the domination of social research by quantitative research’ (p. 17). A reason that leads many social scientists and researchers to opt for mixed methods design in order for each instrument to complement each other and achieve validity as well as reliability of the findings. It is worth mentioning that mixed-methods design has been given other names such as mixed

methodology, multi-strategy research, integrated methods, multi-method research, and combined methods (Denscombe, 2007). For this scholar mixed method research has three important features (p. 108):

1. Use of qualitative and quantitative approaches within a single study.
2. Explicit focus on the link between approaches (triangulation). The term triangulation is described significantly in the section devoted to data interpretation procedures, p. 113.
3. Emphasis on practical approaches to research problems (Pragmatist).

The three mentioned features sound relevant in the present research in that they help the researcher to answer the research questions and confirm or disconfirm the hypothesis set at the start of the study. The researcher felt it necessary to implement different instruments which are meant to complement one another and achieve consistent and reliable results. An illustration of the research design adopted in the present thesis appears in Figure 2.1 below:

Figure 2. 1. *Research Design of the Thesis* (Creswell, 2007, 2009)

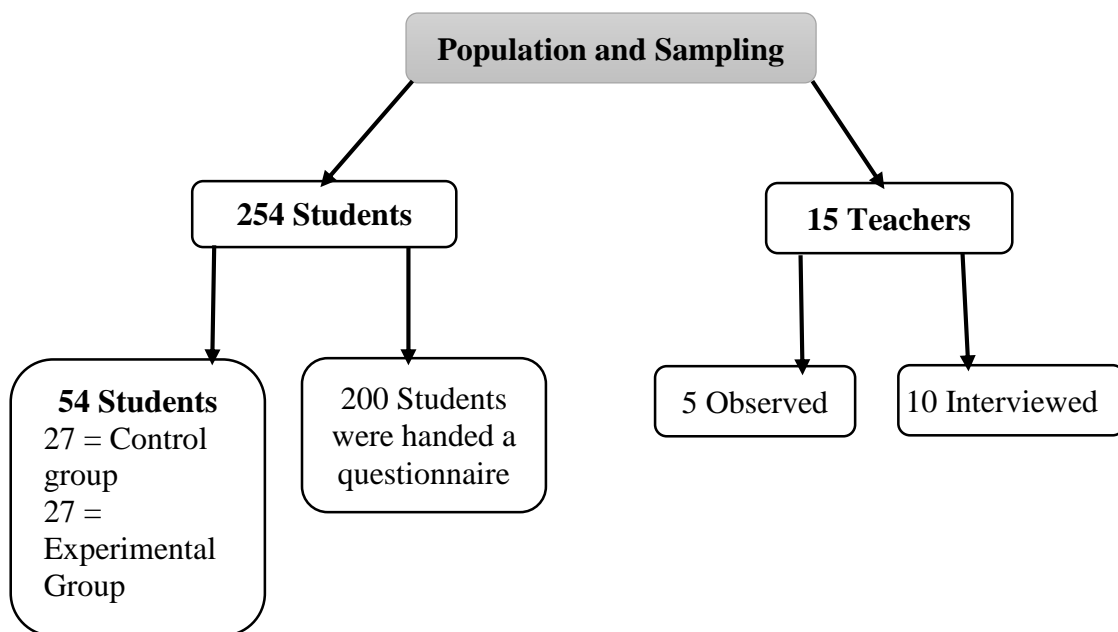


2.2.1. Population and Sampling

The population of this study consists of first year degree students and teachers of English, at the department of English, University of Abou El Kacem Saadallah, Algiers 2. We relied on probabilistic sampling, which means that everyone in the population has the chance of being included (Levey & Lemeshow, 2008). For instance, 254 (out of 1313) first year degree students and 15 teachers have been selected. Concerning the participants, in each group (out of 24 groups),

the researcher selects randomly 10 to 15 participants to answer the questionnaire which aims at investigating their perceptions towards their teachers' assessment as well as their attitudes concerning the teaching of critical thinking. In addition, two groups have been assigned randomly by the administration for the researcher. The two groups have been divided into experimental (27 participants), and control group (27 participants). The former were taught critical thinking explicitly through DA and the latter had no exposure to critical thinking but were taught the content of study skills by following a traditional method of assessment. As for the teachers, ten of them were interviewed and five observed in their classes. A description of the population and sampling is illustrated in Figure 2.2 below:

Figure 2. 2. Population and Sampling



2.2.1.1. Choice of the Sample

First year English degree students have been selected for this study because we believe that, at this level, they need more instruction and scaffolding on how to think critically in the target language. In addition, when students are trained at the beginning of their first year at university, they are likely to develop a global mindset, which will prepare them for professional carriers and life-long learning. Evidence from some teachers in charge of the module of critical writing, in the context of study, reported that their students lack critical thinking, and this

concerns third year degree students. Such a view reveals that this category of students did not seem to have the habit to think critically in the English language during their first and second years at university. This may be attributed to some teachers' belief about the idea that critical thinking has to be developed at an advanced level. We actually hold a different conception and think that the concept of critical thinking is an indispensable concept of the 21st century, and that is why first year students need to be aware of its value and utility in constructing their personal identity during cultural and intercultural communications. In this perspective, developing critical thinking skills at an early stage is highly recommended if we want our students to integrate into the global market.

2.2.1.2. Profile of the Participants

2.2.1.2.1. Control and Experimental Group. In this part, only the control and experimental group profiles have been described since a whole chapter has been devoted to the analysis of students questionnaire and teachers semi-structured interview. In order to obtain information on the participants' profiles, an informal interview has been conducted. Every participant was asked to introduce him/herself, and then answer the question about the stream, whether English was their first choice, the study objectives and the place where they live. The purpose was to obtain a clear picture of the participants in order to come up with strategies and techniques that were believed would assist the experimental group in scaffolding their critical thinking skills through dynamic assessment. Table 2.2 provides a delineation of the participants' profile (illustration appears on page 94).

Table 2.2. *Participants' Profile (Control + Experimental Group)*

Participants					
Age	<ul style="list-style-type: none"> - Between 18 to 21 (Control Group) - Between 17 to 22 (Experimental group) 				
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%; text-align: center;">Control</th> <th style="width: 50%; text-align: center;">Experimental</th> </tr> </thead> <tbody> <tr> <td style="vertical-align: top;"> <ul style="list-style-type: none"> - Foreign languages (76.6%) - Natural Sciences (10%) - Technical Math (6.6%) - Civil Engineering (6.6%) </td> <td style="vertical-align: top;"> <ul style="list-style-type: none"> - Foreign languages (93.3%) - Natural Sciences (6.6%) </td> </tr> </tbody> </table>	Control	Experimental	<ul style="list-style-type: none"> - Foreign languages (76.6%) - Natural Sciences (10%) - Technical Math (6.6%) - Civil Engineering (6.6%) 	<ul style="list-style-type: none"> - Foreign languages (93.3%) - Natural Sciences (6.6%)
Control	Experimental				
<ul style="list-style-type: none"> - Foreign languages (76.6%) - Natural Sciences (10%) - Technical Math (6.6%) - Civil Engineering (6.6%) 	<ul style="list-style-type: none"> - Foreign languages (93.3%) - Natural Sciences (6.6%) 				
Secondary School Streams					
The choice of English Language	<ul style="list-style-type: none"> - The majority said Yes (Control + Experimental Group) - Other participants prefer either French or German (Both groups) 				
Objectives of choosing English	<ul style="list-style-type: none"> - To become a translator, it is an international language, I love it, my parents advised me, for business purposes. 				
The place	<ul style="list-style-type: none"> - The majority are from Algiers (Control + Experimental Group) - Others from Boumerdes, Bouira, Djelfa, and Ouargla (Experimental Group) 				
Nationality	<ul style="list-style-type: none"> - All of them are Algerians except one participant in the control group who is Syrian. 				

As can be noticed in Table 2.2, most of the participants majored in foreign languages at Secondary school. They almost share approximately the same purposes concerning the choice of the English language, and the majority of them are from Algiers.

2.2.2. Research Framework

The present thesis follows Creswell's (2007, 2009) research framework. The reason for choosing this framework is that the author provided a comprehensible description on how to conduct a mixed-method research design.

This helped us select the research strategies and procedures that were viewed appropriate for the research approaches we adopted.

2.2.3. Philosophical Worldview

The philosophical assumption underpinning this research springs from an advocacy/participatory knowledge because the aim is to bring about change and innovation in assessment practices by raising the participants' awareness of the importance to shift from traditional assessment approaches to more dynamic, creative and interactive ones. According to Creswell (2007), 'the basic tenet of this worldview is that research should contain an action agenda for reform' (p.21). This is the main objective we strive for in the present research. Creswell states that some researchers call it (i.e. philosophical worldview) paradigms, epistemologies and ontologies, or research methodologies. He pointed out that advocacy and participatory knowledge took place between 1980 and 1990s when individuals conceived post-positivist assumptions to be as rigid because they impose structural laws and theories. As we can notice, this philosophical worldview matches the ideas of Freire (1976) who calls for action and change in the educational system which perceives students as empty vessels waiting their teacher to fill them with facts and knowledge. The present research also joins the view of Freire by considering learning to be constructed of dialogue between the teacher and student and changing the culture of teacher dominance to student-centeredness where critical thinking and creativity are encouraged.

2.2.4. Selected Strategies of Inquiry

2.2.4.1. Quantitative Strategy. Looking at the requirements of this thesis, experimental research sounds more appropriate and relevant. The aim is to test the effectiveness of scaffolding first year English degree students' critical thinking skills through DA. It is a randomised experimental research because it is based on probabilistic sampling, as only two groups out of 24 have been assigned randomly by the administration. Scholars, consensually, agree that experimental research is perceived as the best method for testing 'cause' and 'effect'; however, its disadvantage is that it cannot test abstract variables like 'motivation' and

‘anxiety’ (Cohen et al., 2007; Griffiee, 2012). Indeed, these are called extraneous variables that are present within any research conducted. Nevertheless, the researcher’s perseverance to obtain fruitful, valid and reliable findings, led her to use techniques and strategies that are believed to support the effectiveness of the experiment such as debates, role plays, group work (as techniques), and encouragement, jokes, as well as anecdotes (as strategies).

According to Kumar (2011), some researchers think that feelings, preferences, values, and sentiments cannot be measured by scientific methods. In his view, they can be measured indirectly by relying on appropriate indicators. This confirms our statement, which is that extraneous factors can be treated through the use of effective methods and strategies. However, Scherer (2005) argues that, ‘there are no objective methods of measuring the subjective experience of a person during an emotion episode’ (p. 712). For instance, instead of measuring discrete emotions, a focus was put forward on broad emotions of affect.

2.2.4.2. Qualitative Strategy. Case studies have been considered as the preferred strategies in qualitative research (Yin, 2003). Yin distinguished three types of case studies: Descriptive, explanatory and exploratory. Descriptive case study seeks to describe a phenomenon and the real-life context in which it happened. Explanatory case study aims at explaining the causal link in real-life interventions, which are perceived to be complex. Exploratory case study is the qualitative strategy adopted in the present thesis; it aims at exploring a situation, which is not clear or known by the researcher. We think it is an appropriate strategy that will help us answer the following major questions:

1. To what extent are first year English degree students able to think critically in the English language?
2. What are the perceptions of first year English degree students towards their teachers’ assessment?
3. What are the attitudes of students and teachers towards the use of DA in EFL classes?

As far as this research design (i.e. exploratory) is concerned, some researchers like Stebbins (2001) asserts that exploratory research aims at examining and researching a phenomenon for making a diagnostic analysis and then gaining greater knowledge and understanding of the problem. These are among the aims of this thesis, which is to come up with a clear picture of assessment practices in general, and DA in particular. It is important to mention too that case studies ‘share with other forms of qualitative research the search for meaning and understanding, the researcher as the primary instrument of data collection and analysis, an inductive investigative strategy, and the end product being richly descriptive’ (Merriam & Tisdell 2016, p. 37).

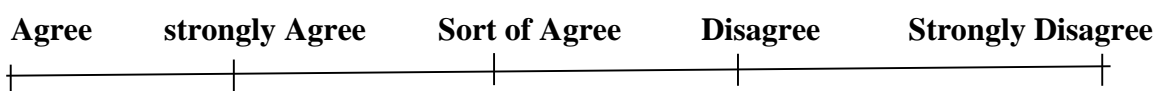
2.2.5. Research Instruments

2.2.5.1. Quantitative Instruments

2.2.5.1.1. Questionnaires. Two types of questionnaires have been used in the present study, one is ordinal and the other is a combination of factual (age and gender), behavioural (action) and attitudinal data. For recall, questionnaires are useful because they help the researcher to collect data in a short period. However, the answers of respondents are sometimes not reliable due to the contradiction and superficiality of the responses.

2.2.5.1.1.1. Ordinal Data. Ordinal data are the ones that are organised into categories; they are also called Likert Scale questionnaires. The one used in this research has the shape as presented in Figure 2.3:

Figure 2. 3. Likert Scale Format



An adapted Likert scale questionnaire was distributed in May 2017 to first year degree students at the department of English, University of Abou El Kacem Saadallah (Algiers 2). It is used as a preliminary study to examine the participants’ degree of argumentation. This Likert Scale was extracted from the book of Stella Cottrell (2005), an inspiring book that provides the readers with insightful knowledge on critical thinking, as well as the way of assessing this concept. The

aims behind using this instrument (i.e. Likert Scale questionnaire) was for the following reasons:

- a) Find out the problems students encounter most in critical thinking.
- b) Explore whether they are knowledgeable about the concept.
- c) Suggest strategies to remedy to those problems.
- d) Prepare first year degree students of the academic year (2017-2018) for the experiment.

The Likert Scale questionnaire was distributed to 110 participants; it contains eleven criteria, these are as follows:

- a) Students' ability to focus on the exact requirements of an activity.
- b) Knowledge of the meaning of an argument in critical thinking.
- c) Knowledge of the meaning of the line of reasoning.
- d) Awareness of the effect of beliefs on their opinion.
- e) Recognising the signals used to indicate the stages in an argument.
- f) Easiness to separate key points from other materials.
- g) Reading between the lines
- h) Assessing different points of view fairly.
- i) Understanding the structure of an argument.
- j) Spotting inconsistencies in an argument easily.
- k) Evaluation of source materials.

The collection of participants' answers (110 papers) took approximately two weeks. Some of them answered the questionnaire immediately others asked to do it at home. It is important to mention that the participants who answered the Likert Scale questionnaire were not concerned by the experiment but assist in planning for the present study, that is why we called it a 'preliminary study'.

2.2.5.1.1.2. Factual, Behavioural and Attitudinal Data. This type of questionnaire was handed to first year degree students of the academic year (2017-2018). It took the researcher a month (From April 9th, 2018 till May 9th, 2018) to finish collecting the questionnaires due to the colossal number of participants (22 groups). Ten to fifteen participants from each group were given a questionnaire in

order to have a representative sampling. The participants were given fifteen to half an hour in order to fill it out, and more clarifications were provided to them to make sure that everyone had understood the questions. The majority of participants liked the questionnaire and asked the researcher whether some changes would be made in the future. This shows the participants' willingness for change and innovation in higher education; the questionnaire was divided into five major sections, these are as follows :

➤ *Section one*

This section is entitled 'Background Knowledge', and it contains five questions. The first question is about the students' gender and age. The second seeks to discover whether English was chosen by students, and if their answer is affirmative, they need to provide the researcher with the reasons for this decision. The third question aims at identifying the level of students before their first entrance at university. Question four has instead the purpose of examining the level of students at the end of the academic year, whether some changes occurred or not. The last question is about students' learning preferences; the objective behind asking this question was to have a clear picture of the perception of students towards learning; this will demonstrate whether they are autonomous or prefer to regurgitate knowledge.

➤ *Section two*

Section two aims at investigating the attitudes of students towards their teachers' assessment practices; it comprises also five paramount questions. The first question concerns the students' opinions about their teachers' assessment, whether they like it or not. The second question addresses the extent to which they learn from their teachers' feedback. This is very important for the researcher in order to find out practical solutions to the issue of assessment. The third question aims at eliciting the perceptions of students concerning their teachers' assessment, whether they find it traditional, modern, or a mixture between the two. The fourth question aims at investigating whether teachers' assessment helps students develop their creativity and imagination. The last question examines whether teachers'

questions in the test or exam seek students' personal point of view, repetition of the content of the handout/lecture or a mixture between the two.

➤ *Section three*

The third section focuses on students' critical thinking skills; it is the longest section because of the researcher's both curiosity and willingness to develop a greater understanding of students' degree of criticality (low, average or high). It is based on eight important questions, and some of them require justifications from the students. The first question solicits students' ability to evaluate their teacher/classmates' ideas in the classroom, and here, they need to provide a justification to their answer. The second question is an attempt to understand students' capacity to summarise a text or speech and then make an analysis of it. The third question has to do with students' willingness to listen to their classmates when they express their opinion in the classroom. Question four examines whether students can accept an opinion even if it is in contradiction with theirs, and here too, justification is needed in order to know whether they have tolerance of ambiguity or not.

Question five investigates students' acceptance of criticism either from their teacher only, both teacher and students, or only the students they feel comfortable with, and justification in this case is important as well. The aim is to have a fair picture of their personality; it complements also the previous question. Question six reports students' ability to give comments, whether they do this only with their teacher, both their teacher and students or only the classmates they feel comfortable with, and justification is necessary here too. Question seven explores students' curiosity to discover the truth in order to see whether they like to be well-informed. The final question aims at discovering whether students feel comfortable when they express their own opinion by giving a justification. The purpose of this last question is to examine an essential element of critical thinking skills, which is 'self-confidence'.

➤ *Section four*

Section four seeks the attitudes of students towards the teaching of critical thinking skills; it includes only two questions. The first asks students whether they need some guidance on how to make effective judgements and solve problems. The second concerns students' preference of the type of mediation (interventionist or interactionist).

➤ *Section five*

This last section is an opportunity for students to suggest and express requirements related to teaching and learning in general. The aim is to explore their needs and interests concerning the way they prefer to learn and be taught/assessed.

2.2.5.1.2. Pre-test, Post-test 1/2. In any experimental research, the researcher has to undertake two tests, one before implementing the new strategy (Pre-test), and the other after the treatment process (Post-test) in order to examine the changes that occur within the experimental group. In the present thesis, the pre-test was conducted at the beginning of the academic year (October 2017) with both the control and experimental group. The purpose was to diagnose their ability to express themselves in the English language, as well as their weaknesses and strengths in argumentation. It also seeks to find out about the degree of scaffolding they need to go through before implementing the approach of assessment, which is 'DA'. Towards this purpose, the participants were asked to write a short paragraph in which they will answer a question that appears below:

Question. In the past, the baccalaureate exam used to be perceived as being hard to pass. As a consequence, only a few people used to succeed. According to you what are the major reasons for that?

Most researchers (e.g. Facione et al., 2000; Tiwari et al., 2006; Bensley et al., 2010; Tyler, 2011; Haynes et al., 2016) relied on the California Assessment Test (CAT); it is a standardised test that measures the basic academic skills; its weakness is that it consists of multiple-choice questions. Several scholars (e.g. Zeleznikov, 2005; Kim & Benbasat, 2006; Simon, 2008) based their studies on Toulmin's Argumentative Writing Model, others on Ennis-Weir Critical Thinking

Essay Test (e.g. Davidson & Dunham, 1997). The weakness of the two models is that they do not encourage students to go beyond the forms of arguments. To fill the gap of the previous studies, we, however, adapted a version of Cottrell's checklist of critical writing (Cottrell, 2005, p. 183). To this end, nine aspects of critical thinking were taken into account during the pre-test:

- a. Clearness of students' stance
- b. Logical order of reasoning
- c. Connection of arguments to the conclusion
- d. The objectivity of students' critical stance
- e. Strong evidence
- f. Cognitive maturity
- g. Reasonable conclusion
- h. Students' experiences
- i. Creativity

In addition, two post-tests have been adopted. Post-test 1 was used in January 2018 with both control and experimental group, whereas post-test 2 was implemented in May 2018 with experimental group only. In post-test 1, the question incites students' skills and concepts related to the techniques of learning. The two groups were both trained about those techniques; however, only the experimental group had been exposed to critical thinking skills and DA. For recall, the purpose was to examine the degree of argumentation (lower-order thinking skills) of these participants. In other words, we want to know whether the participants (i.e. experimental group) who had been exposed to critical thinking skills are more reasonable and better thinkers compared to participants who did not have this opportunity (i.e. control group). For instance, the aspects of critical thinking in post-test 1 were similar to the ones used in the pre-test. However, in post-test 2, one aspect of critical thinking, which is 'Evaluation', had been added in the evaluation grid because the aim of the test was to assess the higher-order thinking skill among the experimental group. Again, one aspect of critical thinking

(students' experiences) was omitted in post-test 2 because the participants were not required to speak about their experiences.

As a reminder, this doctoral thesis is based on a randomised experimental research design; the reason is that the participants were assigned randomly to the control and experimental group. The two structures of the experimental research design appear in Figures 2.4 and 2.5:

Structure One

Figure 2. 4. *The Classic Design: Two-Group Pre-test, Post-test 1* (Bernard, 2006)

	Time 1		Time 2	
	Assignment	Pre-test	Intervention	Post-test 1
Group 1 (EXP)	R	O ₁	X	O ₂
Group 2 (CNT)	R	O ₃		O ₄

As shown in Figure 2.4, the two groups were assigned randomly (R) and both undertook a pre and post-test 1; however, only the experimental group had been exposed to the intervention (X). The letter O refers to observation.

Structure Two

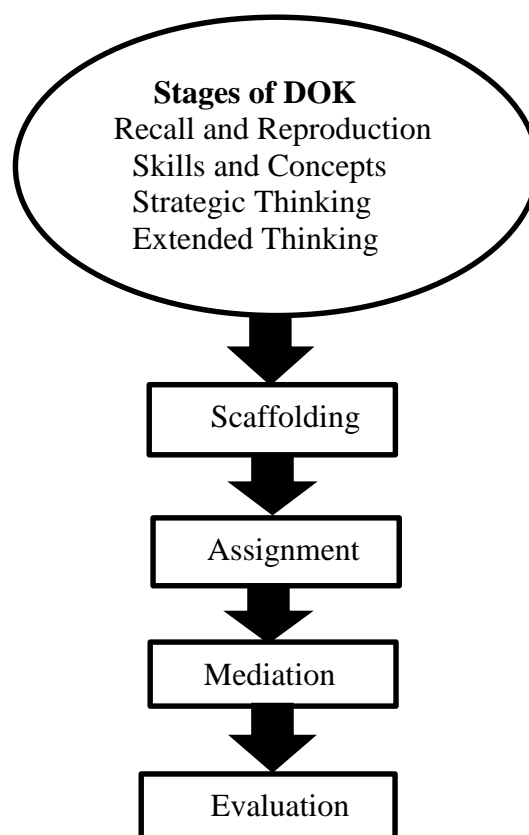
Figure 2. 5. *One Group Post-test 2* (Bernard, 2006)

	Time 3	
	Intervention	Post-test 2
Group 1 (EXP)	X	O ₅

In structure 2, the experimental group had been trained on extended thinking skills (synthesis and evaluation) and then undertook a post-test 2 to examine their ability to evaluate a paragraph using the strategies of critical thinking and research skills. Then, mediations have been provided to the experimental group to assist them in scaffolding their critical thinking skills. For recall, the

researcher followed four stages of scaffolding by relying on the Depth of Knowledge (DOK). The latter was developed by Webb (Webb, 1999). It is important to mention that DOK is adopted in this research because of its relevance to the topic under investigation since the focus is on scaffolding first year degree students' critical thinking skills through dynamic assessment. Figure 2.6 provides an illustration of the way the DA approach was implemented, illustration appears below.

Figure 2. 6. *The Process of DA Implementation*



2.2.5.2. Qualitative Instruments

2.2.5.2.1. Classroom Observation. One of the qualitative instruments used in the present research is classroom observation. Yount (2006) defines observation as a natural process in which the researcher observes people's actions in real situations. This is, of course, one of the advantages of this instrument, which is based on the researcher's efforts to collect data. However, its disadvantages as mentioned by Cohen (1998) are related to the difficulty to interpret data because of fear of bias, and the students' prestige in trying to show themselves in front of

the observer, and here we refer to the Hawthorn Effect. The observation was conducted on November 7th, 2017 and lasted until February 15th, 2018. Five teachers (All females) gave the researcher consent to observe their classes; however, others refused because of unknown reasons. We have observed different groups taught by the same teachers to see whether there are some changes in terms of teaching instruction or not. The researcher acted as a non-participant during the process of conducting the observation. She relied on a structured observation checklist, which contains the components of Feuerstein's Mediated Learning Experience (MLE) (for more details, see Chapter 1: Section 3, pp. 74, 75). The aim behind the use of observation as a complementary tool for data collection was to explore whether teachers in the setting under investigation use DA or not. The structure of the classroom observation is shown in Table 2.3 below:

Table 2. 3. *The Framework of Classroom Observation*

Classroom Observation		
Teachers	Period	Number of groups
T1	3 weeks	2 groups
T2	4 weeks	1 group
T3	3 weeks	2 groups
T4	4 weeks	2 groups
T5	1 week	1 group
Components of MLE	<ul style="list-style-type: none"> - Intentionality - Transcendence - Mediation of Meaning - Mediation of Feelings of Competence - Mediated Regulation and Control of Behaviour - Mediated Sharing Behaviour - Mediation of Individuation and Psychological Differentiation - Mediation of Goals - Mediation of Challenge - Mediation of an Awareness of the Human Being as a Changing Entity - Mediation of an Optimistic Alternative 	
The procedure of Classroom Observation	Observation checklist	

2.2.5.2.2. *Students' Reflective Personal Journal Writing.* A journal is a reflective piece of writing where students write about their personal feelings, opinions, and ideas concerning a given topic or issue. According to Everett (2013), 'one teaching/learning strategy used in first year seminars that may require students to engage in reflective thinking is journal writing' (p. 213). In other words, journal writing helps students to become reflective thinkers and autonomous learners. Unlike diaries, journal writing aims at recording mainly the learning strategies that are learnt, achieved, the lacks and the needs for future progress and cognitive development. Whereas in diaries, every individual records anything that happened to him/her, and most of the time, the purpose is to reduce stress and share happiness or sorrow. In the present thesis, journal writing was used at the end of the first semester (March, 2018) in order to encourage the participants to reflect upon the concepts learned on critical thinking skills, whether they found it beneficial, and here they are required to justify in both cases (Yes/No). In addition, they also need to report whether they appreciated the way they are assessed in class.

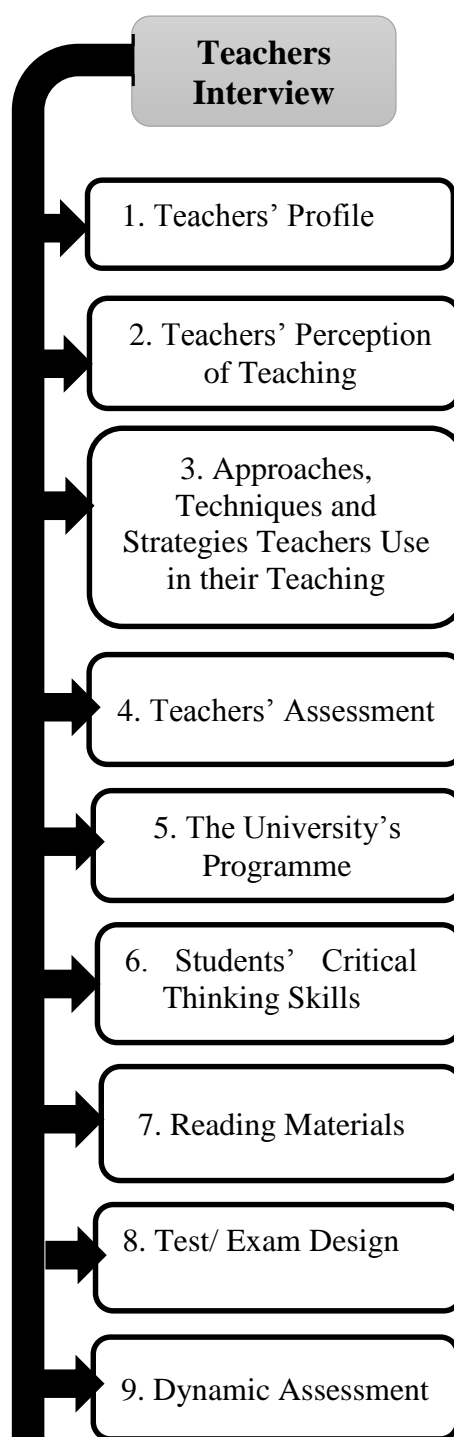
The use of journal writing is meant to help the researcher to discover whether explicit instruction (scaffolding) through DA has reached fruitful results or not. Participants were also asked to include some suggestions to improve the quality of teaching and learning. This is very important because in any research, the researcher has to make sure that s/he is following the right instruction, and that every tool, strategy or technique used is advantageous and beneficial for the participants. Besides, since we are dealing with critical thinking, we believe, it would be desirable to encourage the participants to self-assess themselves by getting an acquaintance to writing journals in order to have a greater understanding of their learning process. It is only through deep reflection that participants can make decisions about the appropriate strategies of learning, and the ways to achieve their goals to promote their future professional development.

2.2.5.2.3. *Semi-structured Interview.* Along with the instruments mentioned so far, interview is another tool that we have used to reach the goal of

the present research. Tierney and Dilley (2011) state that, ‘interviews are sites for discourse and social analysis for gathering data about educational practices and identities’ (p.3). There are different types of interview: Structured, unstructured and semi-structured interview. The first one is based on close-ended questions; the second relies on open-ended questions, and the last one is a mixture between the two. Patton (2014) distinguished between other types of interview such as informal conversational, general interview and standardised open-ended interview. For instance, the questions in the informal conversational interview are not planned in advance; they emerge naturally. In general interview, the interviewer designs the questions prior to the interview, then modifications are made during the course of the interview. As for standardised open-ended interview, the questions are designed systematically and all the interviewees are asked similar questions, respectively.

In this research, we have relied on two types of interview: General and standardised semi-structured interview. The first type of interview was conducted with participants (control and experimental). The objective was to delineate the participants’ profile; some participants were interviewed in class (the first meeting), others online (facebook messenger). The second form of interview with teachers; this interview is a mixture of open and close-ended questions. The rationale behind interviewing teachers was to explore their attitudes towards the use of DA as an alternative approach to formal assessment in the setting under investigation. It was conducted in April, 2018. Ten volunteers (three males and seven females) accepted to take part in the present research; most of them are permanent teachers except one. They are specialised in either literature, civilisation or Applied Linguistics (See chapter three, p 184 for more details). The researcher relied on both audio-recorder and note taking. Most of the teachers had received an email from the researcher before the day of the interview, except a few of them whom we met in the staff room and were invited to attend the interview. The teachers’ interview comprises eighteen questions (See Appendix J 1, p. 309), but the researcher divided them into nine thematic headings, they appear in Figure 2.7 on page 108.

Figure 2. 7. Components of Teachers Interview



2.2.6. The Intervention

Intervention in the present thesis consists in an explicit instructional framework that aims at scaffolding students' critical thinking skills through DA. It was conducted with the experimental group only starting from October 2017 until April 2018 in the module of study skills. We taught this module twice a week in

the second semester (3 hours), and we relied on an interventionist approach to DA. Based on the review of the literature, the majority of researchers agree that the interventionist approach is the least constraining when it comes to data analysis. According to Thouesny (2010), the interventionist approach to DA is based on a large-scale assessment, psychometric reliability and validity, both written and spoken, and the mediation is established in advance from implicit to explicit. Whereas, the interactionist approach can be used with a small number of students and in speaking only; it is time-consuming. In light of this, and for rigour purposes, the interventionist approach has been favoured in the present research.

The major elements that we have focused on in the experiment are the strategies for becoming a good critical thinker such as avoiding stereotypes, identifying premises, inferences and assumptions, avoiding enthymeme, tautology, and non sequitur, tolerance of ambiguity, line of reasoning, the overall summary of the argument, careful selection of facts, and evaluation of others' ideas and arguments (Cottrell, 2005). The concept of critical thinking and problem-solving were highlighted because, rationally speaking, the students need to understand first the meaning of the term in order for them to apply the strategies in their learning process in general, and their professional life in particular. As far as assessment is concerned, the experimental group was assessed through DA. At the end of each lesson, we give them homework to practise the main concepts studied in class, and then, we correct it by providing feedback to them (i.e. the experimental group). We ask them to redo again their homework in order for the researcher to evaluate their progress. Eight main tasks have been used during the intervention; they are examined in Chapter 3, p. 150.

2.2.7. Pilot Study and Validity of the Instruments

Validity and reliability are among the paramount qualities that a true researcher seeks to meet. Messick (1992) defined validity as an evaluative judgement and appropriateness of test scores. Whereas, reliability refers to the consistency as well as accuracy of test use (Leighton, 2012). In the literature review chapter, we clarified the most important categories of validity and

reliability, and we made sure they are well present in the practical part of the thesis. To start with, five types of validity are taken into account; these are content validity, face validity, consequential validity, convergent validity, and internal validity. The researcher designed each instrument based on the topic under investigation, i.e. the content of each tool is in harmony with the dependent (critical thinking skills) and independent variables (scaffolding and DA). In addition, when answering the questionnaire (i.e. factual, behavioural and attitudinal questionnaire), the majority of participants asked whether changes will be made in the future. In this regard, the questionnaire seems to have an effect on participants, and consequently, the future readers of the present work might also be influenced by the questionnaire and this is what we mean by consequential validity.

Furthermore, before administering any test, the participants (Control and Experimental group) were informed in advance about the criteria of test design in order to prepare them psychologically and physically and to make sure that the test is in harmony with the criteria set by the researcher (here we speak about face validity). Moreover, all the instruments complement one another and are highly correlated (i.e. there is convergent validity). Finally, there is a causal relationship between critical thinking, scaffolding, and DA, and the results can be generalised to the whole population of first year students at Algiers 2 University (internal validity). Concerning reliability, the researcher piloted all the instruments before their administration to ensure consistent reliability except for students' personal journals as the researcher made sure that the participants understood the questions being asked. For our theme to be significant, we checked for the presence of the research problem in the context under investigation (i.e. Algiers 2 University, the department of English) before delving into the implementation of DA as an alternative approach to formal testing. We wanted to know whether a lack of critical thinking exists within first year degree students. Because the researcher has been teaching this level of participants for three years, she felt the need to foster this crucial aspect. We want also to develop new ideas and obtain deep insights concerning the research problem to reach fruitful and novel findings.

2.2.8. Data Analysis Procedures

In any research, the procedure for analysing and treating data depends on the type of tool/s used. As far as the present study is concerned, the procedure taken for analysing the data obtained from the students questionnaires, pre-test, intervention, post-test 1/2, classroom observation checklists and students' personal journals is based on descriptive and analytic analysis. Whereas, we relied on thematic coding and categorising for analysing the semi-structured interview (Corbin & Strauss, 2008). Corbin and Strauss defined coding as the construction of concepts out of data and the aim is not just on paraphrasing and summarising the results obtained but on interacting with the data by asking questions and making comparisons.

Gibbs (2012) defines coding as 'a way of indexing or categorising a text in order to establish a framework of thematic ideas' (p. 2). In this definition, we can notice that three items are used to speak about codes; these are 'index' 'category', and 'themes'. In a similar vein, Gibson and Brown (2011) distinguished between two types of codes: Priori and empirical codes. The former is determined prior to data analysis, whereas the latter generates from the examination of data. Empirical coding is the one used in the present study. It is important to mention that coding is not a precise science but rather an interpretive act (Saldana, 2013). There is no actually an exact method or strategy on how to code a given text or transcript because this depends on the researcher's objective; for instance, we may have the same text given different codes and interpretations of meanings because we have different worldviews, personalities, and skills. Table 2.4 summarises the data analysis procedures (The illustration appears on page 112).

Table 2. 4. Data Analysis Procedures

1. Thematic Coding and Categorising	2. Descriptive and analytic Analysis
- Teachers interview Transcripts	- Students questionnaires - Classroom observation - Students pre-test, intervention, post-test 1/2 - Students' reflective personal journals

2.2.9. Data Interpretation Procedures

The present study develops along three stages: Description, analysis, and interpretation. The second chapter is concerned with the description of the materials used to conduct this research. The third chapter presents the results, and the fourth one interprets those results in accordance with the research questions. It is only in the last stage that the voice of the researcher is taken into consideration. Hence, in order to make an objective interpretation, we relied on triangulation. It is defined as the combination of different theoretical perspectives in a given research (Warren, 2011). Two types of triangulation are used in the present study: Methodological (between methods), and investigator triangulation. The first means that the results of each method are compared/corroborated/complemented with the findings of other methods. As for the second, the researcher relied on the findings of other scholars in order to make comparison and reach consistency as well as accuracy.

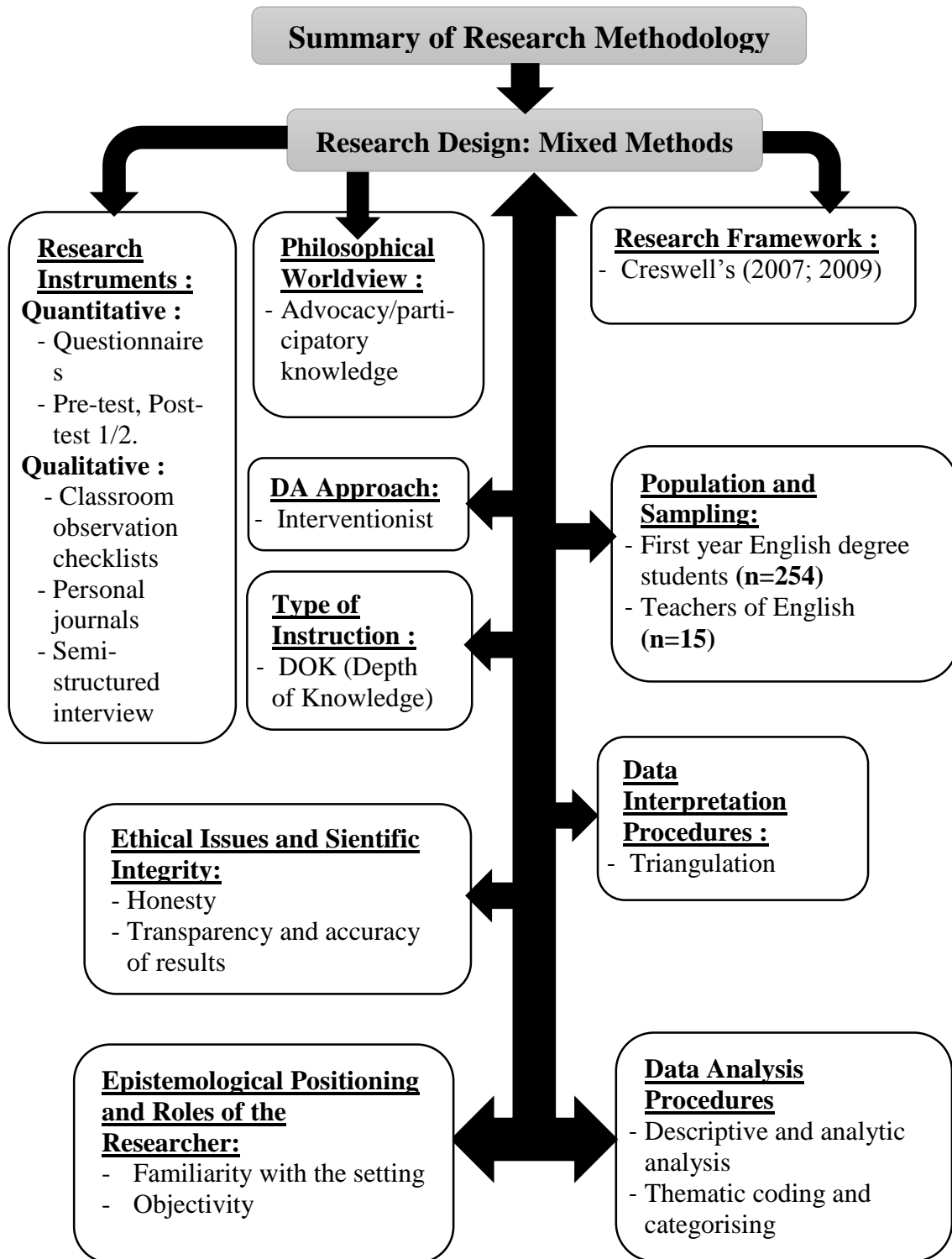
2.3. Epistemological Positioning and Roles of the Researcher

The researcher taught first year degree students for three years in the setting under investigation. This helped her understand the queries of those students as well as get in touch with the teachers to ask them to sit for the interview and give advice related to research as a whole. To fulfil our roles, we tried to respect the standards of scientific research, which is to remain objective with the participants and answer any questions that those participants ask in order to avoid any ambiguity and vagueness to remain in the line of scientific research.

2.4. Ethical Issues and Scientific Integrity

Ethics derives from the Greek word 'Ethos', which means 'character' (Dornyei, 2007, p.66). It is an essential concept that every researcher should consider in order to produce an effective scientific research. The majority of philosophers are struggling to provide a consent definition of the concept. For instance, some philosophers argue that truth could never be experienced and that morality is culturally determined (Greenfield, 2016). According to Walliman (2011), 'research, however novel its discoveries, is only of any value if it is carried out honestly. We cannot trust the results of a research project if we suspect that the researchers have not acted with integrity' (p. 42). Indeed, research can be valid and reliable when the researcher acts with rigour and consciousness. As for scientific integrity, it has to do with the responsibilities to the scientific community, and the public at large such as transparency and accuracy of results, the design of data analyses, the publication of findings, participants (their rights and protections), and obtaining consent (Kazdin, 2016). A summary of the chapter is illustrated in Figure 2.8 on page 114

Figure 2. 8. Summary of Research Methodology



Conclusion

In this chapter, we provided a description of the research design and framework adopted in the present study. The researcher followed a mixed-methods research design because it goes in line with the research aims, questions, and hypotheses. We mentioned that mixed methods research design emerged due to the paradigm war between quantitative and qualitative approaches, in which quantitative approach seemed to dominate the field of research. Social scientists and researchers felt the need to combine the two approaches in order to achieve validity and reliability of findings. Concerning the research framework, we relied on Creswell's (2007; 2009) framework because of its systematic presentation and description of the research procedures which make it clear for any researcher. The philosophical worldview is based on advocacy and participatory knowledge because the purpose is to make a change in assessment practices in higher education.

The sampling technique was based on probabilistic sampling which consists of 254 first year English degree students and 15 teachers at the department of English, University of Algiers 2, Algeria. In order to collect data, five instruments have been used such as students questionnaires, classroom observation checklists, pre-test, post-test 1/2, students' personal journals, and teachers semi-structured interview. Concerning data analysis and procedures, the researcher adopted both descriptive and analytic analysis, as well as thematic coding and categorising. Triangulation was used for interpreting data. In addition, an account of validity and reliability, epistemological positioning and roles of the researcher as well as ethical issues and scientific integrity have been emphasised in this chapter too. Now, we will shift to chapter three, which is devoted to the presentation and analysis of results.

Chapter Three: Presentation of Results and Data Analyses

Introduction

The previous chapter described the methodologies which have been selected to answer the research questions of the present thesis. This chapter will present the results of the data collected by means of quantitative and qualitative-based instruments. The chapter is divided into two main sections; section one provides an account of the results obtained during the preliminary study by means of a Likert Scale questionnaire, an account of the pilot study, students factual, behavioural and attitudinal questionnaire, in addition to pre and post-tests. Section two presents the findings of the intervention phase, classroom observation checklists, students' personal reflective journals, and teachers semi-structured interview. The gathered data were analysed in relation to the six overarching research questions that guide this doctoral thesis. The aim is to provide an exhaustive account of the procedures which have been adopted during the process of conducting the present research. The questions are stated as follows:

1. Are first year English degree students able to think critically in the English language?
2. What are the perceptions of first year English degree students towards their teachers' assessment?
3. What are the attitudes of students and teachers towards the use of DA in EFL classes?

3.1. Section One: Quantitative-based Data Analysis and Results

Introduction

The present section provides an account of the results of the preliminary study along with the results of the pilot study, students questionnaire, as well as pre and post-tests. A comparison between pre-test and post-test 1 has been highlighted in this section too.

3.1.1. Results of the Preliminary Study

Before starting the investigation of the present research, a Likert Scale questionnaire (adapted from Cottrell, 2005) was distributed to first year English degree students of the academic year (2016-2017), at the University of Abou El Kacem Saadallah (Algiers 2), and this as a preliminary study in order to point out areas of strengths and weaknesses in critical thinking. For recall, this category of participants are not the same participants who were concerned by the use of DA in scaffolding EFL students' critical thinking skills but they were expected to contribute, at a pre-study stage, in the following four ways:

- a) Find out the problems students encounter most in critical thinking.
- b) Explore whether they are knowledgeable about the concept.
- c) Suggest strategies to remedy to those problems.
- d) Planning the experiment to be implemented with first year English degree students of the academic year (2017-2018).

For recall, the Likert Scale questionnaire consists of eleven criteria and for each criterion, as previously mentioned in chapter 2, p. 98, the participant is required to agree, strongly agree, sort of agree, disagree or strongly disagree. The criteria under focus were as follows:

- a) Students' ability to focus on the exact requirements of an activity.
- b) Knowledge of the meaning of an argument in critical thinking.
- c) Knowledge of the meaning of the line of reasoning.
- d) Awareness of the effect of beliefs on their opinion.
- e) Recognising the signals used to indicate the stages in an argument.
- f) Easiness to separate key points from other materials.
- g) Reading between the lines.
- h) Assessing different points of view fairly.

- i) Understanding the structure of an argument.
- j) Spotting inconsistencies in an argument easily.
- k) Evaluation of source materials.

The collection of participants' answers (110 papers) took approximately two weeks (For more details, see chapter 2, p. 98). Table 3.1.1 below presents the results of the Likert Scale questionnaire:

Question: For each of the following statements, rate your responses as outlined below:

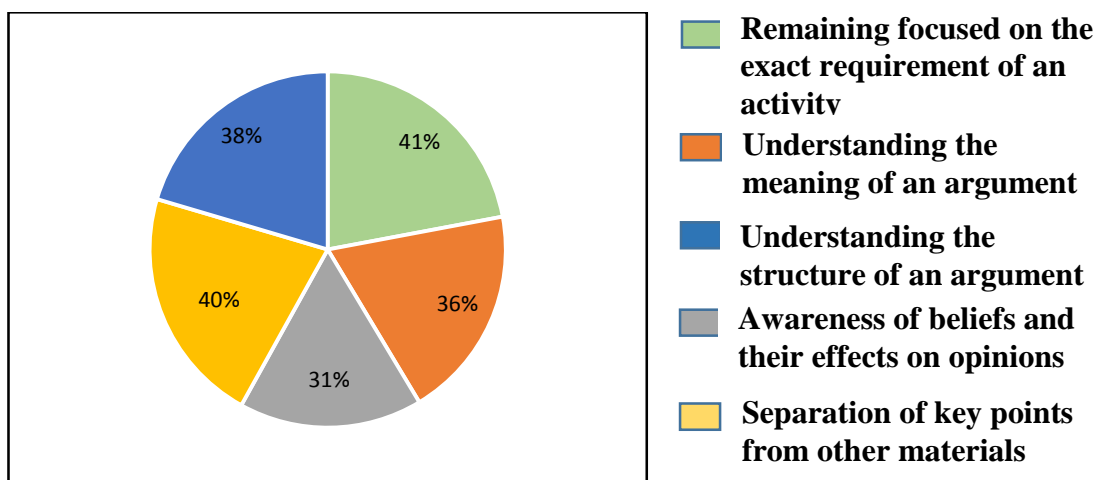
- a. Agree b. Strongly agree c. Sort of agree d. Disagree e. Strongly disagree

Table 3.1. 1. *Results of Students Likert Scale Questionnaire*

Criteria	A	%	B	%	C	%	D	%	E	%	NA	%
1. I can remain <u>focused</u> on the exact requirements of an activity.	46	41	13	11	29	26	12	10	3	2	7	6
2. I know the meaning of <u>'argument'</u> in critical thinking.	40	36	13	11	28	25	22	20	5	4	2	1
3. I know what is meant by the <u>line of reasoning</u> .	31	28	6	4	21	19	36	32	9	8	6	5
4. I am aware that my beliefs might affect my opinion of a given issue.	35	31	18	16	20	18	14	12	8	7	12	10
5. I am good at recognising <u>the signals</u> used to indicate the stages in an argument.	27	24	13	11	35	31	25	22	2	1	8	7
6. I find it easy <u>to separate key points</u> from other materials.	44	40	22	20	17	15	15	13	4	3	8	7
7. I am good at <u>reading between the lines</u> .	31	28	21	19	30	27	16	14	5	4	4	3
8. I find it easy <u>to assess</u> different points of view fairly.	31	28	11	10	36	32	12	10	5	4	13	11
9. I understand how <u>to structure an argument</u> .	42	38	13	11	32	29	16	14	1	0.9	7	6
10. I can <u>spot inconsistencies</u> in an argument easily.	19	17	8	7	30	27	31	28	3	2	13	11
11. I know how <u>to evaluate source materials</u> .	31	28	10	9	36	32	23	20	3	2	7	6

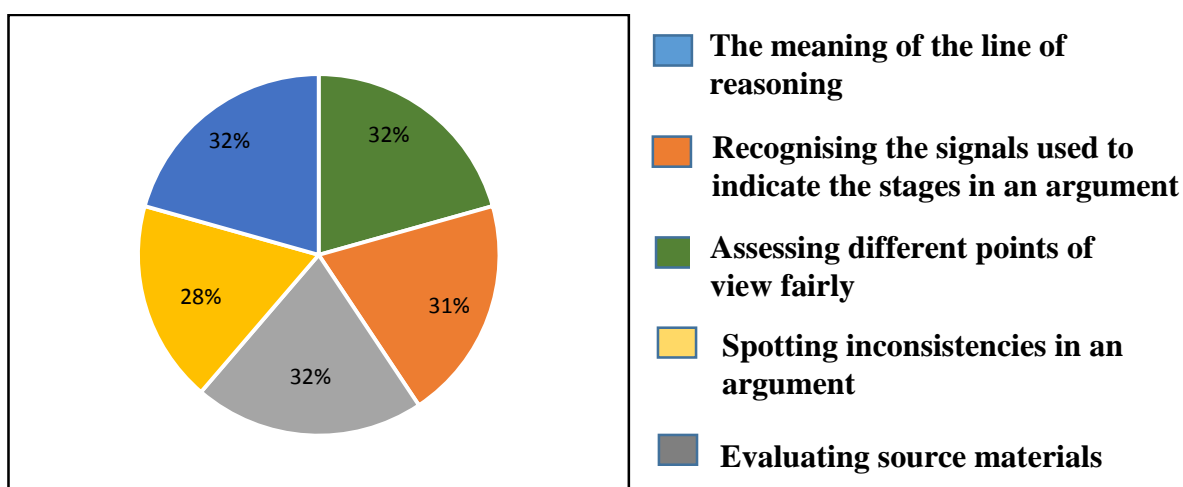
Based on the results of the Likert scale, the participants' responses were categorised under three thematic headings: Students' strengths, weaknesses, and controversial results. The categories appear in Figures 3.1.1, 3.1.2, 3.1.3 below:

Figure 3.1 1. Students' Strengths



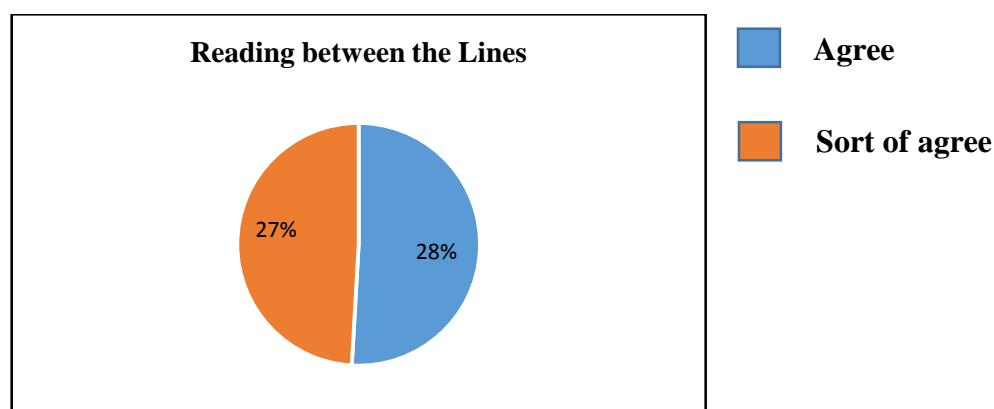
In Figure 3.1.1, 41% of respondents agree on the idea that they can remain focused on the exact requirements of an activity. A proportion of 36% understand the meaning of an argument and 38% are able to structure it. Some respondents (31%) seem to be aware that their beliefs might affect their opinion of a given issue; others (40%) find it easy to separate key points from other materials. Foremost, the first category shows that the strengths of first year English degree students are limited to the forms of an argument rather than complex thinking.

Figure 3.1 2. Students' Weaknesses



The results displayed in Figure 3.1.2 seem to be in line with one another. For instance, 32% of respondents opted for item 'd' (disagree) concerning the knowledge of line of reasoning. These participants (31%) sort of agree on their difficulty in recognising the signals used to indicate the stages in an argument and 32% also sort of agree on assessing different points of view fairly. Besides, a number of participants (28%) chose item 'd' (disagree) for spotting inconsistencies in an argument, and 32% sort of agree on evaluating source materials.

Figure 3.1 3. *Students' Controversial Results*



As we can notice in Figure 3.1.3, two opposing views were depicted. The first view (28%) agrees on the ability to read between the lines, whereas the second view (27%) sort of agree on the capacity to do that. Briefly, we can say that the results of the Likert Scale questionnaire demonstrated participants' strengths in what concerns the forms of arguments mainly lower-order thinking skills (e.g. the structure and meaning of argument, the separation of key points from other materials) ; however, they seem to find difficulties to deal with complex thinking skills (e.g. the line of reasoning, spotting inconsistency and evaluating source materials). For recall, the present research emphasises the training of both lower and higher-order thinking skills by relying on DA, which combines instruction and assessment. As we have mentioned in Chapter 1 (Section one, p. 16), we relied on DOK (Depth of Knowledge) as a form of instruction. Next, we shift into the analysis of pilot study, and to this, we now turn.

3.1.2. Results of the Pilot Study

For reliability and validity purposes, the pilot study has been conducted before implementing every tool of data collection except for students' personal journals since the researcher made sure that the participants understood the questions and the objective of the narrative journal.

After analysing the Likert Scale questionnaire of first year degree students of the academic year (2016-2017), the researcher prepared a pre-test for first year degree students of the academic year (2017-2018). The pre-test was piloted by two experienced female teachers (Tebessa University and ENS Constantine) who volunteered to check the consistency and relevance of the designed pre-test question to the theme under investigation. The first teacher said that the pre-test question was appealing and relevant to the target aim of the research, whereas the second teacher helped in reformulating the question. Concerning the classroom observation, the researcher designed the observation checklist based on two main objectives; first, the presence of MLE (Mediated Learning Experience) attributes among teachers; second, the elements of critical thinking among students. However, when the researcher started her observation of one class, she encountered difficulties to focus on the two objectives at the same time (i.e. MLE and critical thinking). For this reason, the emphasis was put forward on teachers only.

As far as the semi-structured interview is concerned, two experienced teachers (a female and a male, Algiers 2 University) assisted the researcher in reviewing the questions. According to the two teachers, the questions were clear; they could answer them without any difficulty. Finally, the questionnaire, which was administered to first year students of the academic year (2017-2018) was piloted with 10 participants. Seven said that the questionnaire was comprehensive and clear, and they liked it because it is well structured and targeted the current issues that the Algerian universities live in the present era; however, three participants gave a few remarks, which are illustrated in Table 3.1.2 on page 122.

Table 3.1. 2. *Students' Feedback on the Questionnaire during the Pilot Study*

Students' Feedback	Version 1	Version 2
- Shall we choose more than one answer?	- Not mentioned	- Put a tick on the right answer (N.B. you can choose more than one answer)
- They asked for more options concerning these questions: Q2, Q5, Q18?	- Q2: We selected four items for students to choose - Q5: We selected three items - Q18: we selected two items	- Q2: We added another item (e. others). - Q5: we added 2 items (d. none of them and e. others). - Q18: we added 2 items (c. none of them and d. others)

As we can notice in Table 3.1.2, only a few remarks were made about the questionnaire. Three participants were wondering whether they would choose only one answer or more. They also asked for more options as far as questions 2, 5 and 18 are concerned. In the second version, the researcher took into consideration the participants' feedback and added more items to help them answer at ease and express their opinions.

3.1.3. Results of Students Questionnaires (Factual, Behavioural and Attitudinal Data)

Part One: Background Information

Q 1: Age and Gender

1.1. Age:

Table 3.1. 3. *Students' Age*

Age Range	N/200	%
a- (17-20)	153	76.5
b- (21- 24)	40	20
c- (25-29)	4	2
d- (30-52)	4	2

As mentioned in Table 3.1.3, 76.5% of participants are aged between 17 and 20 years old; 20% range between 20 and 24 years old; 2% are categorised between 25 and 29 years old, and finally, 2% vary between 34 and 52 years old.

1.2. Gender:

Table 3.1. 4.*Students' Gender*

Gender	N/200	%
a. Males	32	16
b. Females	164	82
No Answer	4	2

Table 3.1.4 shows that the majority of participants (82%) are females, while males represent 16% of the respondents, respectively.

2. Was English your first choice? a. Yes b. No

Table 3.1. 5.*Choice for Studying English*

Options	N/200	%
a.	179	89.5
b.	16	8
No Answer	5	2.5

As reported in Table 3.1.5, most of the participants (89.5%) said that English was their first choice, whereas 8% stated no. 2.5% did not answer.

- If yes, did you choose it because you are:

- a. Motivated to study it
- b. You did not have any other appropriate choice
- c. Your parents advised you
- d. It is an international language
- e. Others.

Table 3.1. 6. Reasons for Choosing English

Options	N/200	%
a.	136	68
b.	10	5
c.	15	7.5
d.	70	35
No Answer	8	4

The results displayed in Table 3.1.6 suggest that a significant number of participants (68%) chose the English language because of their motivation to study it, and others (35%) due to the state of English as an international language. It seems that parents have little effect on students' future studies. Only 7.5 % of respondents want to major in the target language because of their parents' advice. However, the smallest category of respondents (5%) opted for it because they do not have any other choice. Further reasons appear below:

- 'I chose it because I love it and find it interesting.'
- 'My dream is to become a teacher of English.'
- 'I need it later in my future job.'
- 'I will add it to another professional training to enrich my CV.'
- 'I wish that I could travel to Europe especially England.'

3. Before you entered university, how do you evaluate your level in English?

- | | |
|----------------------------|-------------------------------|
| a. Beginner | b. Intermediate |
| c. Pre-intermediate | d. Upper-intermediate. |
| e. Advanced | |

Table 3.1. 7. *Students' Evaluation of Their Level in the English Language before Entering University*

Options	N/200	%
a.	34	17
b.	39	19.5
c.	54	27
d.	13	6.5
e.	44	22
No Answer	16	8

We can notice in Table 3.1.7 that in the context under investigation, five different levels deemed to be present. For instance, 27 % of respondents said they are pre-intermediate; 22% advanced; 19.5% intermediate; 17 % beginners, and finally, 6.5% saw their proficiency level as upper-intermediate.

4. After completing your first year at university, how do you judge your level now?

- a. Upper-intermediate b. Advanced c. Nothing changed

Table 3.1. 8. *Students' Evaluation of Their Level in the English Language after Completing their First year at University*

Options	N/200	%
a.	65	32.5
b.	84	42
c.	37	18.5
No Answer	14	7

After completing their first year at university, 42% of the participants selected option 'b', which suggests improvement in their English language level. Whereas, 32.5% of respondents changed into upper-intermediate. The last category (18.5%) concerns both the participants who said they were advanced at the beginning, including those who were either beginners, pre-intermediate or

upper-intermediate but nothing changed in their levels. 7% of participants did not answer this question.

5. How do you prefer to learn?

- a. Through handouts b. Group discussion c. Whole classroom debate
 d. None of them
 - Others:

Table 3.1. 9. *Students' Preference at Learning*

Options	N/200	%
a.	83	41.5
b.	68	34
c.	65	32
d.	8	4
No Answer	4	2

In Table 3.1.9 the results indicated that a significant number of respondents (41.5%) prefer learning through handouts. The other participants (34%) opted for either group discussion or whole classroom debate (32%). Only a few respondents (4%) did not choose the ones mentioned, but rather recommended the following suggestions:

- 'Learning alone.'
- 'I prefer to take my own notes, and I tend to revise individually.'
- 'Reading books, discussing the issues with the teacher, doing research and present it to the whole class, and by having learning activities made by university learning clubs.'
- 'I think it's better to learn through more developed means like online courses.'
- 'Research and reformulate the courses by my own.'
- 'Reading books.'

Part Two: Assessment Attitudes

6. Do you like the way (s) your teachers assess you?

- a. Yes, all of them b. some of them c. None of them

Table 3.1. 10. *Students' Attitudes of their Teachers' Way of Assessment*

Options	N/200	%
a.	16	8
b.	170	85
c.	7	3.5
No Answer	7	3.5

When it comes to students' attitudes to their teachers' way of assessment, Table 3.1.10 shows that a great number of respondents 85% do not appreciate all their teachers' way of assessment but some of them only. However, a few respondents (8%) said that they liked all their teachers' way of assessment. Surprisingly, 3.5% of respondents reported no appreciation concerning their teachers' way of assessment.

7. To what extent do you learn from your teachers' feedback?

- a. Always b. Sometimes c. Rarely d. Never

Table 3.1. 11. *Students' Attitudes of their Teachers' Feedback*

Options	N/200	%
a.	50	25
b.	118	59
c.	24	12
d.	1	0.5
No Answer	6	3

As we can notice in Table 3.1.11, the highest percentage of participants (59%) opted for 'b', which suggests that they sometimes learn from their teachers' feedback. Some participants (25%) chose 'a'; others (12%) said 'c', and finally, one (0.5%) replied 'd'. Six participants (3%) did not express their opinion.

8. How do you find your teachers' assessment?

- a. Traditional b. Modern c. Mixture between a+b

Table 3.1. 12. *Students' Attitudes of their Teachers' Assessment*

N/200						
Options	Some of them	%	All of them	%	None of them	%
a.	107	53.5	8	4	53	26.5
b.	105	52.5	6	3	56	28
c.	86	43	47	23.5	81	40.5
No Answer= 32						

Table 3.1.12 reports the rates obtained about students' attitudes to their teachers' assessment. For instance, a high proportion of participants (53.5%) stated that some of their teachers adopt a traditional method of assessment. Others (4%) reported that all their teachers assess them in a traditional way (i.e. during tests and exams only). However, 6% of respondents said that all their teachers use a modern assessment. Finally, 43% of the respondents pointed out that some of their teachers use a mixture of traditional and modern assessment practices.

9. Does your teachers' assessment helps you to develop your creativity and imagination?

- a. Yes, all of them b. Some of them c. None of them

Table 3.1. 13. *Teachers' Assistance in Developing Students' Creativity and Imagination through Assessment*

Options	N/200	%
a.	17	8.5
b.	148	74
c.	26	13
No Answer	9	4.5

In Table 3.1.13, most respondents (74 %) stated that only some of their teachers' assessment assists them in developing their creativity and imagination. Contrarily, other participants (8.5%) indicated that all their teachers' assessment

boosts their creativity and imagination. Surprisingly, 13% of participants reported that none of their teachers' assessment encourages their creativity and imagination.

10. Do you think your teachers' questions in the test or exam seek your:

- a. Personal point of view
- b. Repetition of the content of the handouts/lecture
- c. Personal point of view by relating it to some concepts from the handouts/lecture

Table 3.1. 14. *Teachers' Questions in the Tests and Exams*

N/200						
Options	Some of them	%	All of them	%	None of them	%
a.	136	68	0	0	22	11
b.	107	53.5	8	4	51	25.5
c.	136	68	19	9.5	10	5
No Answer= 32						

Table 3.1.14 aims at eliciting responses from participants concerning whether teachers' questions in the test or exam seek the students' personal point of view, the repetition of the content of the handouts/lecture or their personal point of view by relating it to some concepts from the handouts/lecture. As a result, similar percentages seem to be in line with item 'a' and 'c'. For instance, one category of respondents (68%) stated that some of their teachers seek their personal point of view in the test/exam. The second category, with a similar percentage (68%), said that some of their instructors incite both their personal point of view by relating it to some concepts from the handouts/lecture. However, 11% of participants pointed out that none of their teachers seek their personal point of view, and 5% of them said that none of their teachers encourage their personal point of view by relating it to some of concepts from the handouts/lecture.

Part Three: Students' Critical Thinking

11. Do you think you are able to evaluate your teacher/classmates' ideas in the classroom?

- a. Yes b. Somehow c. Not at all

Table 3.1. 15. *Students' Ability to Evaluate Their Teacher and Classmates' Ideas*

Options	N/200	%
a.	40	20
b.	122	61
c.	26	13
No Answer	12	6

We notice that in Table 3.1.15, most respondents (61%) answered 'b', which indicates that the participants are somehow able to evaluate their teacher and classmates' ideas. A proportion of 20% opted for 'a' and 13% of respondents chose 'c'. 6% of respondents did not answer the question. Some of the respondents' justifications are presented below:

- **Those who said 'Yes'**

- 'Because I like to compare my ideas to others and evaluate.'
- 'Because I am able to give my opinions and discuss them with my teachers and classmates.'
- 'Because I have the right to do that, I'm a student of English language and I think my level is advanced.'
- 'Because this is the best way to have discussion and exchange ideas.'
- 'In university, we must share ideas and correct others' mistakes to learn from them.'

- **Those who said somehow**

- 'I fell that sometimes I'm able to evaluate because I think that I can give my opinion.'
- 'It depends on one idea exactly If I have an opinion about it.'
- 'Because each one of us have a different ideas and opinions, which leads to debats.'
- 'Sometimes, I can evaluate my teachers and classmates' ideas if I have knowledge about the discussion topic, otherwise I check for them.'
- 'I manage to do that depending on my own understanding.'

- **Those who said no**

- ‘Because I’m not in the level that permit me to evaluate.’
- ‘Because the majority of people dislike critics.’
- ‘Because I’m always getting distracted.’
- ‘It’s not my duty to do it.’
- ‘I find a big difficulty in constructing correct sentences so I prefer to remain silent.’

12. Do you think you can summarise a text or speech and then make an analysis of it?

a. Yes

b. Somehow

c. Not at all

Table 3.1. 16. *Students’ Ability to Summarise and Evaluate a Text or Speech*

Options	N/200	%
a.	56	28
b.	109	54.5
c.	26	13
No Answer	9	4.5

Table 3.1.16 displays responses obtained about the participants’ ability to summarise and evaluate a text or speech. As the table indicates, the majority of respondents (54.5%) said that they somehow could do that. Interestingly, 28% of respondents stated their ability to do it, whereas 13% pointed their inability to achieve that.

13. Do you listen when your classmates express their opinion in the classroom?

a. Always

b. Sometimes

c. Rarely

d. Never

Table 3.1. 17. *Students' Listening to Their Classmates' Opinions*

Options	N/200	%
a.	119	59.5
b.	62	31
c.	11	5.5
d.	0	0
No Answer	8	4

In Table 3.1.17, 59.5% of respondents said they always listen to their classmates when they express their opinion; others (31%) stated sometimes. Some respondents 5.5% reported rarely, respectively.

14. Do you accept an opinion even though it is in contradiction with yours?

a. Always

b. Sometimes

c. Rarely

d. Never

Table 3.1. 18. *Students' Acceptance of Opinions*

Options	N/200	%
a.	82	41
b.	90	45
c.	12	6
d.	8	4
No Answer	8	4

Table 3.1.18 demonstrates that 45% of participants sometimes accept an opinion even though it is in contradiction with theirs, 41% of respondents answered 'a', while some respondents (6%) chose 'c', and the rest (4%) stated 'd', respectively. Some participants' justifications appear below:

- **Always**

- 'Because each one of us has his own point of view.'
- 'The fact that most of people have different thinking, they have different opinions cause they see things differently.'

- 'I accept it but if he can convince me with the arguments and proves.'
- 'I still only a student and I am learning, I accept everything that can help my English.'
- 'Each one of us have his own opinion, you just can't oblige him to think the same way as you.'

- **Sometimes**

- 'Sometimes, because others opinion can be true when they bring us proofs.'
- 'I find it hard to accept an opinion when I'm sure it is wrong.'
- 'I am, kind of, a cynical and bigot, but if the opinion is justifiable, I would take it into consideration.'
- 'I Sometimes accept because, sometimes some students are not aware of what they say and sometimes it is not logical enough.'
- 'Yes sometimes I accept it because it can be better to me.'

- **Rarely**

- 'Because there are some persons who contradict in aggressive way.'
- 'Their opinion don't convince me all the time.'
- 'If I am sure about something and have enough evidence I can't change my mind.'
- 'Because if I am not sure of my answer I won't answer, if I answer that means I'm sure.'

- **Never**

- 'That is how I am, I don't have any justification, sorry.'

15. Do you accept the criticism from:

- a.** Teacher only **b.** Both teacher and students **c.** Only the students you feel comfortable with

Table 3.1. 19. *Students' Acceptance of Criticism*

Options	N/200	%
a.	52	26
b.	120	60
c.	21	10.5
No Answer	15	7.5

When it comes to students' acceptance of criticism, Table 3.1.19 indicates that 60% of participants accept criticism from both teacher and students. Whereas, other participants (26%) seem to accept criticism from their teacher only. The last category of participants (10.5%) prefer rather criticism from the classmates they feel comfortable with.

- **Justifications (from the teacher only)**

- 'Because teachers know what I'm talking about and are older and have more experience than anyone in this room.'
- 'I already know how to evaluate myself so I only need the teachers' opinion due to their experience.'
- 'Because the teacher is the head of the class.'
- 'Because the teacher had always the right opinion.'
- 'Because I feel only the teachers are in such a high level to correct and guide me while students may lead a wrong idea or have a hard time explaining why they criticise me.'

- **Justifications (from both the teacher and students)**

- 'Everybody is free to give criticism.'
- 'Critics help me discover my negatives and flaws.'
- 'Criticism is the key to improving yourself because others can identify your strengths and weaknesses which is for my advantage.'
- 'Since I am a student, I'm obliged to accept both teachers and students' criticism.'
- 'The teacher is an important source of learning and clever students also could have good ideas.'

- **Justifications (Only the students I feel comfortable with)**

- 'Because we are in the same level not all but the majority.'
- 'Because my friends if they see something wrong, they will tell me in a manner of friendship.'
- 'Because they will tell me the truth.'
- 'I don't like criticism, but I can take it as an advice if it's from a classmate I'm comfortable with.'
- 'Because the teacher is in a high level so I feel a shamed if he criticises me.'

16. Do you comment on the idea or opinion of:

- a.** Teacher only **b.** Both teacher and students **c.** Only the students you feel comfortable with

Table 3.1. 20. *Students' Comments on the Idea of Their Teacher and Students*

Options	N/200	%
a.	16	8
b.	124	62
c.	45	22.5
No Answer	18	9

The aim of question 16 is to know whether students comment on the idea or opinion of their teacher only, both teacher and students or only the students they feel comfortable with. Interestingly, the result shows that a significant number of participants (62%) answered 'b', 8% responded 'a', and 22.5% opted for 'c'. The respondents' justifications are outlined below:

• **Justifications (Teacher only)**

- 'Because the idea may help me to be better in my studies.'
- 'I like to exchange ideas and debate with teachers only because most of students don't interpret it well.'
- 'Because at the end, I'll be convinced by the result of the debate since it was with an experienced and a high level teacher.'
- 'The teacher knows more than the students.'
- 'I feel that it's more valuable.'

• **Justifications (Both teacher and students)**

- 'In order to make the person believe what I believe.'
- 'Because I like commenting.'
- 'To add something new.'
- 'It will enable me exchange meaning.'
- 'I like to give my point of view to ameliorate my English.'

• **Justifications (only the students I feel comfortable with)**

- 'They are more able to understand my point of view.'

- 'They will not be angry of me.'
- 'Because I'm shy, I feel comfortable with my friends only.'
- 'Because there teachers who do not accept comments from students.'
- 'I can't know the reaction of the students.'

17. Do you feel curious to discover the truth in order to:

- a. Gain culture for developmental growth or lifelong learning
- b. Have knowledge and use it in the exam only
- c. None of them
- Others

Table 3.1. 21. *Students' Curiosity to Discover the Truth*

Options	N/200	%
a.	154	77
b.	40	20
No Answer	19	9.5

As shown in Table 3.1.21, the majority of respondents (77%) feel curious to discover the truth in order to gain culture for developmental growth. Whereas, 20% of participants want to have the knowledge to use it in the exam only.

18. Do you feel comfortable when you express your own opinion?

- a. Yes
- b. Somehow
- c. Not at all

Table 3.1. 22. *Students' Comfortability in Expressing their Opinion*

Options	N/200	%
a.	86	43
b.	86	43
c.	15	7.5
No Answer	13	6.5

Considering question 18, similar percentages were given to 'a' and 'b' with a total number of 43% of participants, respectively. The rest of the respondents (7.5%) chose item 'c'.

- **Justifications (yes)**

- 'I feel comfortable when I try to explain my opinion and convince others about it.'
- 'Expressing my thoughts and opinions is part of my personality and education.'
- 'Because I trust myself and my opinion and I don't have any problem in sharing my opinion about any subject.'
- 'Because I believe that my opinion can make some difference.'
- 'Because I am just expressing my opinion and not passing an exam.'

- **Justifications (Somehow)**

- 'I don't know if it is right or wrong.'
- 'Some teachers are very harsh, they won't let us express our opinion without harshly judging us.'
- 'I feel nervous.'
- 'It depends on whom I'm talking to'
- 'There is lack of understanding and freedom of thought.'

- **Justifications (Not at all)**

- 'I don't like it when people try to make you think they are right at all costs, so I'd rather avoid conflict.'
- 'Giving an opinion can be a little bit difficult for me since I'm still struggling with self-confidence.'
- 'I am too shy.'
- 'I have difficulties in speaking.'
- 'I am not used on expressing my opinion so it is not comfortable for me.'

Part Four: Students' Attitudes about teaching Critical Thinking

19. Do you think you need some mediation (guidance) on how to make effective judgements and solve problems?

a. Yes

b. Somehow

c. Not at all

Table 3.1. 23. *Students' Needs of Mediation in Critical Thinking*

Options	N/200	%
a.	89	44.5
b.	73	36.5
c.	19	9.5
No Answer	19	9.5

We can notice in Table 3.1.23 that most respondents need some mediation on how to make effective judgements and solve problems with a percentage of 44.5% for those who said yes, and 36.5% for those who stated somehow. Only a minority of respondents (9.5%) said no.

20. What type of mediation will you prefer if your answer to question (19) is yes or somehow:

- a.** Interventionist (means the teacher intervenes and explains)
- b.** Interactionist (teacher-student interaction)

Table 3.1. 24. *Type of Mediation*

Options	N/200	%
a.	76	38
b.	80	40
No Answer	27	13.5

As far as question 20 is concerned, 40% of participants stated their preference to the interactionist approach of assessment while 38% of respondents favoured the interventionist one.

Part Five: Suggestions and Recommendations

21. If you want to add any further suggestions or recommendations, please feel free.

Different suggestions have been recommended by the respondents; these are stated on page 139.

- 'A teacher must not discourage his students by making fun of their level in English, instead, they should give them a piece of advice in order for them to improve.'
- 'Making club activity, such as public speaking or do competition on writing or reading.'
- 'The teacher has to give his best to students; he needs to be active, smart, comprehensive and spontaneous.'
- 'We should be allowed to express our opinions freely, and change the traditional method of teaching system for a modern one.'
- 'We need to use new materials and modern technology to facilitate learning.'
- 'All teachers should care about students' point of view and consider them.'
- 'Meeting with foreign teachers.'
- 'Good interaction between teachers and students to feel more comfortable and express our opinions freely.'
- 'Teachers need to be open-minded and help students by guiding and motivating them.'
- 'We need more debate not only by forcing students to speak but when we assist them to a debate that is interesting and give more importance to culture.'
- 'Having test before joining university, and adding activities to the programme like theatre, poetry, music...etc.'
- 'To put games in every session.'
- 'Students need more cultural and sport activities in order to discover and develop their skills.'
- 'Teachers need to be more severe during the lessons to avoid the disturbing elements in the classroom.'
- 'More art schools.'

3.1.4. Analysis of the Pre-test

The aim of the pre-test was to examine the degree of critical thinking among first year English degree students. It also seeks to explore the degree of scaffolding they need to go through before implementing the alternative approach of assessment, which is 'DA'. The pre-test was conducted during the beginning of the academic year (October 2017). We relied on students' writing paragraphs and assessed them based on the aspects of critical thinking skills as mentioned in the book of Cottrell (2005). Those aspects were categorised into nine salient categories

(as mentioned in Table 3.1.25) to fulfil the purpose and the requirements of the present thesis. Standardised tests (e.g. California Assessment Test, Toulmin's Argumentative Writing Model and so forth) were not used because they only assess the forms of arguments and do not fully examine the core aspects of critical thinking behind the form (Stapleton, 2001). For recall, the sample of the experiment consists of two groups (experimental and control group), and the number of participants in each group is 27. In Table 3.1.25, the items 'Yes' and 'No' mean present or not present and 'SS' refers to students.

The question of the pre-test is as follows:

Question: The baccalaureate exam used to be perceived as being hard to pass. As a result, only a few people used to succeed, according to you, what are the major reasons for that?

Table 3.1. 25. *Results of the Pre-test*

Aspects of Critical Thinking	Group 1 (27 SS)				Group 2 (27 SS)			
	Yes	%	No	%	Yes	%	No	%
1. Clearness of students' stance.	6	22	21	77	7	25	20	74
2. Logical order of reasons	8	29	19	70	8	29	19	70
3. Connection of arguments to the conclusion	4	14	23	85	5	18	22	81
4. Objectivity of students' critical Stance	23	85	4	14	24	88	3	11
5. Strong evidence	6	22	21	77	6	22	21	77
6. Cognitive maturity	5	18	22	81	4	14	23	85
7. Reasonable conclusion	4	14	23	85	5	18	22	81
8. Students' experiences	22	81	5	18	22	81	5	18
9. Creativity	3	11	24	88	2	10	25	92

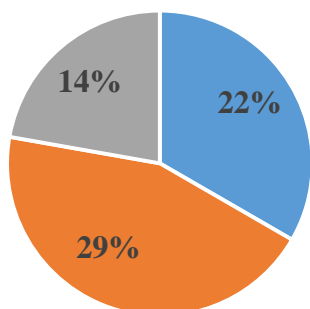
In order for the readers to understand better the results of the pre-test, the researcher of the present study divided the aspects of critical thinking into three categories; illustration of the pie charts appears on pages 141 and 142.

Category 1: Clarity of students' stance, logical order of ideas, connection of arguments to the conclusion

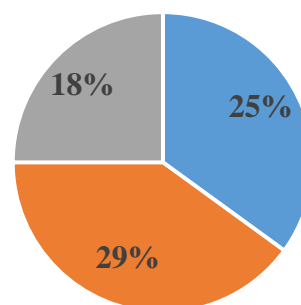
Category 2: Objectivity of students' critical stance, strong evidence, cognitive maturity

Category 3: Reasonable conclusion, students' experiences, creativity

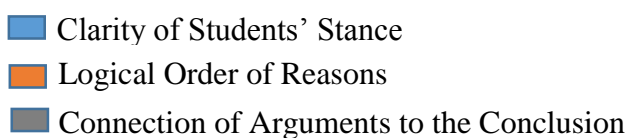
Category 1



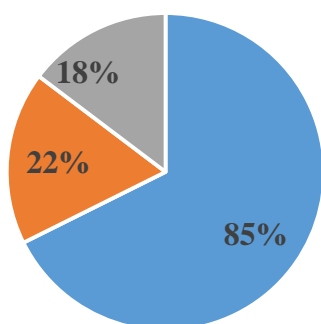
Group 1



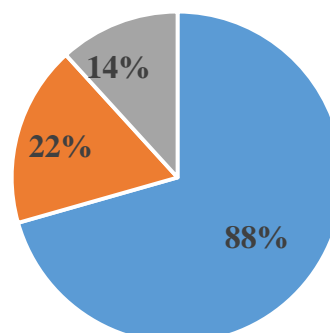
Group 2



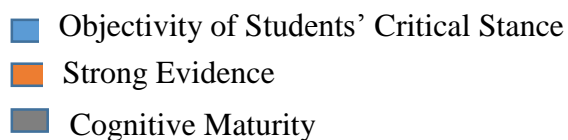
Category 2



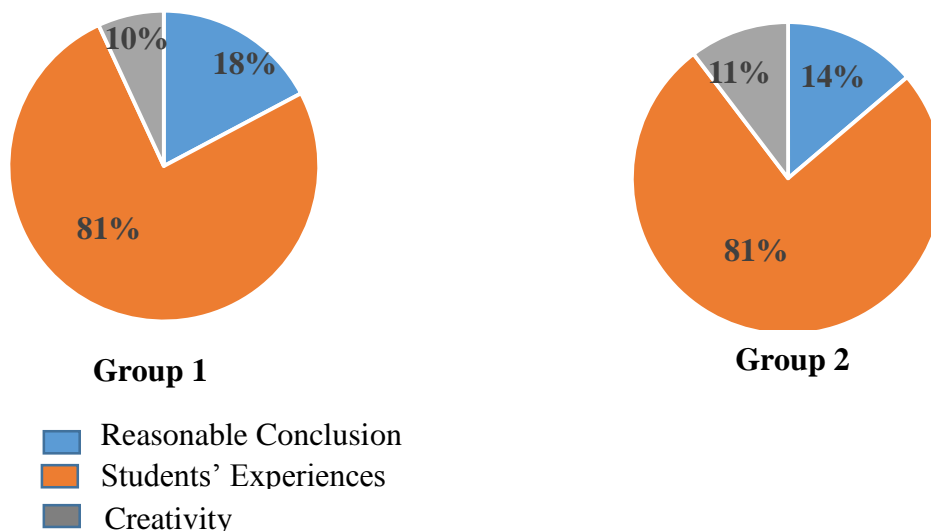
Group 1



Group 2



Category 3



The results of the pre-test showed homogeneity between group 1 and 2. In other words, both groups appear to have the same level in the English language. Besides, it seems that the participants have a low ability to think critically in English and this is why they need more instruction and scaffolding. For instance, the two groups find difficulties to express their stance clearly; their arguments are not linked to one another and to the conclusion. They also showed weak evidence, low cognitive maturity, and reasonable conclusion as well as creativity. Some participants used informal English like 'gonna, wanna,' and others provided isolated sentences with no introduction, body or conclusion. Some extracts are presented below:

Excerpt 1:

'They fail because they don't prepare theme selves corectly and don't study inaf for exams and they also misse classes. This is the reasons why they fail.' (Group 1)

Excerpt 2:

'In the past many people used to succeed in Baccalaurate exam. because in the past hadn't the tecnologies because people in the present lost many time in social media, people occupated of fashion and more of people don't go to the classroom.' (Group 1)

Excerpt 3:

‘The baccalaureate exam is very important in our life, very difficult because you have learning 3 year in high school for (...!!)’ **(Group 2)**

Excerpt 4:

‘In the past, the baccalaureate exam used to be perceived as being hard to pass. As a consequence, only a few people used to succeed. and the major reasons for that is the topic of the exams used to be very hard and complicated and the education in Algiers had a high level.’ **(Group 2)**

Overall, we can say that the results of the pre-test permitted the researcher to diagnose, to some extent, the weaknesses (limited thinking skills and writing competence/y) of the participants who will take part in the experiment. Based on these findings, group 1 was chosen to be the experimental group and group 2 as the control one.

3.1.5. Analysis of Post-test 1

The aim of post-test 1 was to compare between the experimental and control group to examine whether critical thinking can be enhanced through DA or not. The question asked in post-test 1 is in a form of a statement in which the participants were required to explain the statement based on their experiences. For recall, the participants were instructed on the techniques for successful learning in general as part of the module of study skills. In this question, they needed to link critical thinking with their learning experiences in order to explain the statement of Freeman (1982). Table 3.1.26 (See on page 144) displays the results of students’ post-test 1; the experimental and control group have been abbreviated as **EXP** and **CNR**. Below, we illustrate the question of post-test 1:

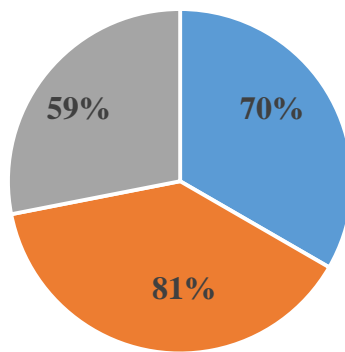
Question: It is said that success in study is not an accident, and that it comes from using effective learning techniques (Freeman, 1982). Explain this statement based on your own experiences.

Table 3.1. 26. Results of Post-test 1

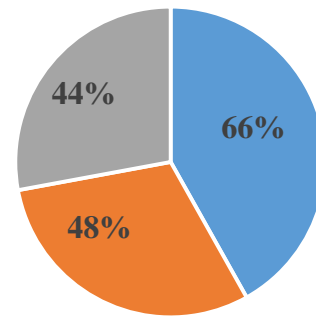
Aspects of Critical Thinking	Group 1 (EXP)				Group 2 (CNR)			
	Yes	%	No	%	Yes	%	No	%
1. Clearness of students' stance	19	70	8	29	18	66	9	33
2. Logical order of reasons	22	81	5	18	13	48	14	51
3. Connection of arguments to the conclusion	16	59	11	40	12	44	15	55
4. Objectivity of students' critical stance	20	74	7	25	26	96	1	3
5. Strong evidence	16	59	11	40	6	22	21	77
6. Cognitive maturity	10	37	17	62	9	33	18	66
7. Reasonable conclusion	16	59	11	40	12	44	15	44
8. Students' experiences	27	100	0	0	27	100	0	0
9. Creativity	16	37	11	40	12	44	15	55

As we can notice in Table 1.3.26, the experimental group improved compared to the control group except in what concerns the item 'objectivity of student's critical stance' in which the control group (26= 96%) achieved higher objectivity compared to the experimental group (20=74%). Similarly, participants' answers in post-test 1 were divided into three main categories as shown in the pie charts, which appear on pages 145 and 146. The purpose is to facilitate the analysis for the researcher on the one hand and make the findings comprehensible for the readers on the other hand.

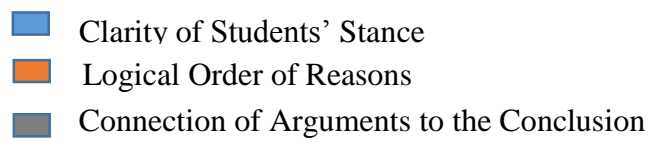
Category 1



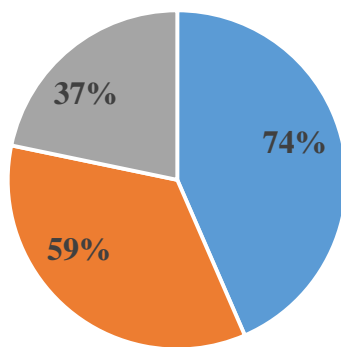
EXP



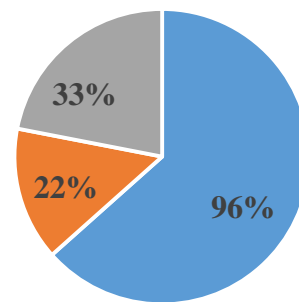
CNR



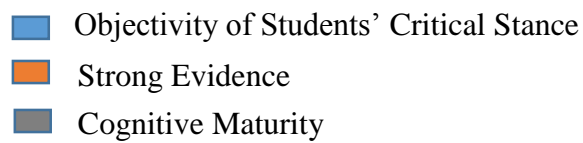
Category 2



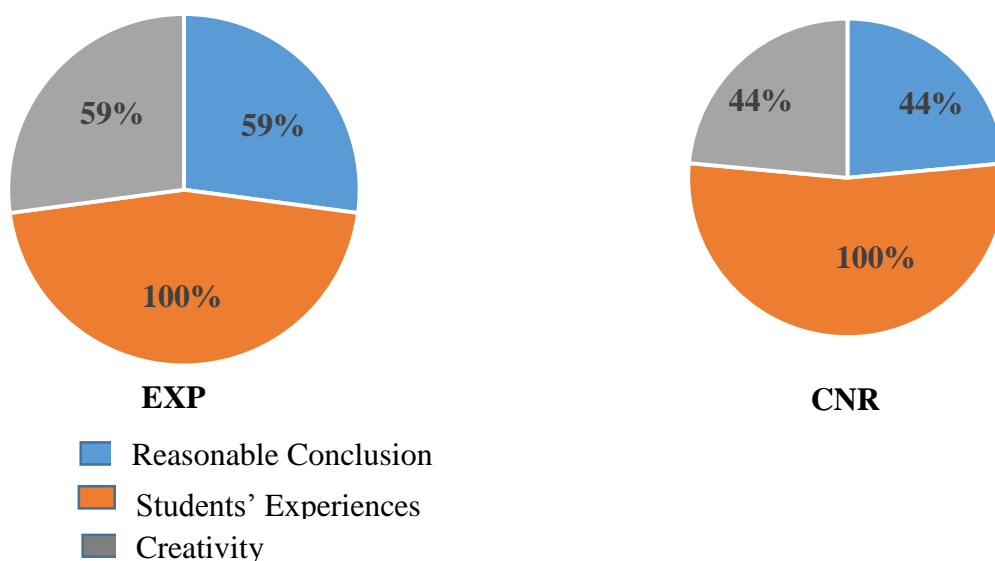
EXP



CNR



Category 3



3.1.6. Analysis of Post-test 2 (Experimental Group Only)

Post-test 2 aims at examining the progress of the experimental group and their ability to evaluate a paragraph, which is the last stage in critical thinking. Here, the researcher added one aspect of critical thinking which is 'evaluation skills' and deleted the other aspect 'students' experiences' since they were not focused in this stage. Table 3.1.27 (See page 147) shows the results of post-test 2, and the question that was addressed to the participants in post-test 2 appears below:

Question: Evaluate the passage below based on the strategies you studied on critical thinking as well as scientific research (Do it in a form of an essay)

The Text

Parents who push their children to study frequently end up causing their children to dislike reading, a recent study argues. The researchers studied 56 children in the sixth grade and found that those who reported the greatest dislike for reading were the ones whose parents frequently forced them to read. Alternatively, students who reported enjoying reading had less domineering parents. 'The more demanding the parents were with studying, the less likely the child was to enjoy reading on his or her own,' claim Stanley and Livingstone in the August issue of *Educator's War Chest*. The study was conducted at Little Greek elementary school in Phoenix, Arizona. The study found that if not forced to study, children were more likely to pick up a book in their free time. 'It seems that there a natural inclination to rebel against one's parents in children, and one way to manifest this inclination is to refuse to read if the child's parents force the child to study,' reported Stanley and Livingstone. (Extracted from the book of Neil Browne and Stuart Keeley (2007), 'Asking the Right Questions: A Critical Guide to Critical Thinking,' pp. 126-127).

Table 3.1. 27. Results of Post-test 2

Aspects of Critical Thinking	EXP GRP			
	Yes	%	No	%
1. Clearness of students' stance	21	77	6	22
2. Logical order of reasons	17	62	10	37
3. Connection of arguments to the conclusion	17	62	10	37
4. Objectivity of students' critical stance	21	77	6	22
5. Strong evidence	10	37	17	62
6. Cognitive maturity	21	77	7	25
7. Reasonable conclusion	17	62	10	37
8. Evaluation skills	17	62	10	37
9. Creativity	10	37	17	62

Table 3.1.27 reveals that in post-test 2, improvement has been noticed in the experimental group. For instance, 77% of participants gave a clear stance, had objectivity, and cognitive growth or maturity. Also, 62% of them connected their arguments to the conclusion. However, we noticed this time a few participants (62%) who had a logical order of reasons; 37% of participants provided strong evidence and 37% of them were creative which reduced compared to post-test 1. This aspect will be discussed in the forthcoming chapter. When it comes to evaluation skills, it appears that 62% of participants have developed the ability to evaluate others' writing which is a significant number, especially at this level.

3.1.7. Comparison between Pre-test and Post-test 1

In the pre-test, both the control and experimental group demonstrated a low ability to think critically in English. This has been inferred through the paragraphs they handed to the researcher such as the difficulty to express their stance clearly, no connection of arguments to the conclusion, weak evidence, low cognitive maturity, reasonable conclusion, and creativity. In post-test 1, both the control and experimental group developed clearness of their stance as well as the reliance on experiences compared to their results in the pre-test. However, it seemed that the experimental group progressed better in post-test 1 and 2 than the control group since the former were trained on critical thinking skills, which was

not the case for the latter as they were only exposed to the content of the module (study skills). It is worth mentioning that in post-test 2, the experimental group showed a decrease in three aspects of critical thinking such as 'logical order of reasons', 'strong evidence' and 'creativity' compared to post-test 1. An explanation and interpretation of this finding have been illustrated in Chapter 4, p. 196 which is devoted to the discussion of findings.

Summary

To summarise, this section highlighted the results and analysis of the quantitative data such as the students questionnaires, pre-test, post-test 1/2. For recall, the procedures adopted for analysing the quantitative data were presented based on the research questions of the present research. The aim is to assist the reader in understanding the path we went through before delving into using DA as an approach to assessing students' critical thinking in EFL classes. Before delving into an investigation of the present research, a preliminary study by means of a Likert Scale questionnaire has been adopted and the result has determined the choice of the strategy adopted in the present thesis. It has also demonstrated that first year students seem to encounter difficulties in critical thinking mainly in what concerns the structure of arguments, the line of reasoning, spotting inconsistencies in an argument and evaluating source materials. In addition, the results of students questionnaire (i.e. factual, behavioural and attitudinal questionnaire) revealed the participants' dissatisfaction of their teachers' assessment and their call for a change in assessment practices in higher education. Concerning the results of the post-test 1 and 2, the participants (i.e. the experimental group) demonstrated improvement in their critical thinking skills compared to the results of the pre-test.

3.2. Section Two: Qualitative-based Data Analysis and Results

Introduction

This section is devoted first to the analysis of the intervention data in which the researcher adopted DA to scaffold first year degree students' critical thinking skills. Second, the section displays the results of classroom observation checklists, students' personal journals and teachers semi-structured interview.

3.2.1. Analysis of the Intervention Data

The findings of the intervention phase have been presented based on the stages of scaffolding developed by Webb (See Section One of Chap 1, p. 16). The stages consist of recall and reproduction, skills and concepts, strategic thinking and extended thinking. The first stage 'Recall and Reproduction' was done as ice breaking before starting the experiment to make sure that the participants have assimilated the skills of critical thinking. Eight tasks have been emphasised based on the stages previously mentioned, these are as follows:

- i) Task one and two elicit skills and concepts.
- ii) Task three, four, five, and six incite strategic thinking.
- iii) Task seven and eight stimulate extended thinking.

Stage 1: Skills and Concepts

Task One: Students' Paragraphs

In this task, the participants were required to write a paragraph about the following question:

- What are the major adjustments you have had to make in your attitude, behaviour or use of time as you learn to become a more effective time manager? How has your pie of life changed since you began using time management? Explain

The aim of task one is to help the participants develop skills and concepts about time management and transfer those skills to their real-life experiences. In

this regard, only eight paragraphs have been selected in the present study due to the problem of space. However, it is important to mention that even if the rest of the participants' paragraph have not been selected, they have been taken into consideration during the analysis. For recall, the first intervention aims at scaffolding the participants' skills and concepts in general before moving to complex thinking. As mentioned in chapter 2, p. 111, the participants' paragraph have been analysed through descriptive and analytic analysis. To this end, the eight selected paragraphs have been assessed under six criteria, these are as follows:

- i) Clearness of the writers' stance.
- ii) Coherence of arguments.
- iii) Logical order of reasons.
- iv) Strong supporting evidence.
- v) Reasonable conclusion.
- vi) Creativity.

Table 3.2.1 gives detailed results of the participants' paragraph, the participants are referred to as pseudonyms: S1, S2 and so forth.

Table 3.2. 1. *Sample of Students' Paragraph Before/After Mediation*

Criteria	Sample of students' paragraph Before mediation	Sample of students' paragraph after mediation
Clearness of the writer's stance	<ul style="list-style-type: none"> - 'Everybody knows that it is so important that we develop effective strategies...so time management are valuable in many others aspects of life' (S1) - 'Since everyone is using time management...I had a small issues...making time management is effecting my life...' (S2) - 'Time management it is an interesting (...not clear).' (S3) 	<ul style="list-style-type: none"> - 'Everybody...so time management skills are valuable in many aspects...' (S1) - 'Since everyone is using time management, I wanted to try it out to have an organised life only to reach my goals and succeed' (S2) - 'Time management it is an interesting plan which change our lives positively and successfully.' (S3)

	<ul style="list-style-type: none"> - ‘As a type “B” person, it is really hard and difficult for me to be committed to a specific?...’ (S4) - ‘Well, to manage my time I have to be responsible...and seriouise .’ (S5) - ‘Actually time management is not something new for me...since I was on primary school...’ (S6) - ‘Usualy, some students have a lot of ideas and plans...’ (S7) - ‘Time is something so precious...’ (S8) 	<ul style="list-style-type: none"> - ‘Time is the most valued thing in a person’s life, and I personally find it difficult to make time for my daily objectives...’ (S4) - ‘Well,to manage...seriously.’ (S5) - ‘Actually...since I was a kid I learned from my mother the best way to organize my time...’ (S6) - Nothing changed (S7) - Nothing changed (S8)
- Logical order of reasons	<ul style="list-style-type: none"> - ‘Well, there are major adjustments...after that...in conclusion’ (S1) - ‘...because my entire life has its’ own events...so, unlike everybody...finally, to succeed...’ (S2) - ‘First of all, you have to be ambitious...plan a program... after this experience finally my pie of life developed...’ (S3) - No arguments (S4) - Present (S5) - Not clear (S6) - Not clear (S7) - ‘I have planned to wake up and sleep early also well eating I have written down...’ (S8) 	<ul style="list-style-type: none"> - ‘Well, to become a more effective time manager...first of all...then...after that...and finally...in conclusion...’ (S1) - ‘...when I first tried it...moreover...for example...so...finally...’ (S2) - ‘Finally, after this experience my pie of life developed with many advangtes...’ (S3) - No arguments (S4) - Present (S5) - Not clear (S6) - Not clear (S7) - ‘I have planned...also well eating.’ (S8)
- Coherence of arguments	<ul style="list-style-type: none"> - ‘...setting clear my goals, breaking my goals down...After that I used to organize my time, creating habits...’ (S1) - Present (S2) 	<ul style="list-style-type: none"> - ‘...first of all, I made a time calendar, then I created habits...after that I used to share tasks...’ (S1) - Present (S2)

	<ul style="list-style-type: none"> - ‘...you have to be sensible that you make decisions...after this experience finally my pie of life developed...’ (S3) - No arguments (S4) - Present (S5) - No coherence of arguments (S6) - Not clear (S7) - ‘...I used to waste my time ...with some determination ...you’ll reach the goal’. (S8) 	<ul style="list-style-type: none"> - ‘...I am ambitious and sensible...I make my decisions based on facts and reasons...’ (S3) - Present (S4) - Present (S5) - ‘So after a long day...than I do...and I revise... (S6) - Not clear (S7) - Nothing changed (S8)
<p>- Strong supporting evidence</p>	<ul style="list-style-type: none"> - Setting clear my goals, breaking my goals down into steps... (S1) - ‘... because it changed all what I’m used to do, also because my entire life has it’s own events without trying to fix things before they happened... (S2) - ‘...for example a to do a list or drawing a table with modules and times...(S3) - Not present (S4) - ‘ First, I need to sleep well, eat well, be positive...I need to highlight my goals...’ (S5) - ‘...I do my homeworks and revise what did I do in that day, and I continue this till the end of the week ...’ (S6) - Not clear (S7) 	<ul style="list-style-type: none"> - ‘First of all , I made a time calendar, then I created habits and avoided distractions...’(S1) - ‘...it made me confused and scattered to reach my appointments...when I make a programme for the week-end suddenly there will be another thing to do...’(S2) - Nothing changed (S3) - ‘First, developing a time management skill will allow me to focus on myself better and will provide a specific time for my daily needs such as; eating, sleeping, entertaining...’ (S4) - ‘First I need...and think positively...’ (S5) - ‘...I do my homeworks...I revise my lessons...I keep going with this method till the end of the week...’ (S6) - Not clear (S7)

	<ul style="list-style-type: none"> - ‘...I have written down all the things that I should do in a day...I used time calendar...’(S8) 	<ul style="list-style-type: none"> - Nothing changed (S8)
Reasonable conclusion	<ul style="list-style-type: none"> - ‘In conclusion, I have to say that since I began using time management my pie of life change completely a become better.’ (S1) - ‘Finally, to succeed in my life I always keep things go on their own...’ (S2) - Not clear (S3) - Not present (S4) - ‘Since I began to manage my time, I noticed that I’m more relaxed and satisfied about my life. That’s why I’ve decided to keep time managing for the rest of my life...’ (S5) - ‘ So at the end I can say that time management is part of my life because I see that it is very important to be an orderly (man/woman)...’ (S6) - Not clear (S7) - ‘ Finally I have learned how to be patient and take things seriously thanks to it’ (S8) 	<ul style="list-style-type: none"> - ‘In conclusion, honestly I have to say that sinceI began more organized and more serious...’ (S1) - ‘I prefer letting things go on their own...and living the moments without worrying about the future because all what matters is having faith.’ (S2) - Nothing changed (S3) - ‘Last but not least, I came to realise that by managing my time daily has helped me a lot more than I expected...’ (S4) - Nothing changed (S5) - ‘To finish with, I advise any student even in primary, middle or high school or even at university to organize their time, because it is very important and it’s part of our identity...’ (S6) - Not clear (S7) - Nothing changed (S8)
Creativity	<ul style="list-style-type: none"> - Present within S2, S5 and S8 	<ul style="list-style-type: none"> -Present within S1, S4, S5 and S8

As we can notice in Table 3.2.1, the selected participants' paragraph saw a great change after mediation. In the beginning, the participants' paragraph lacks clarity in terms of expressing their stance, logical order of ideas and the rest of the

elements of critical thinking (e.g. strong supporting evidence, reasonable conclusion, and creativity). However, it appears that some participants had not made yet changes in their paragraphs. An explanation to this result is provided in chapter 4, p.195.

Task Two: Cornell Note System

Another task that was given to the participants during the stage of skills and concepts is a text about Maslow's Hierarchy of needs. The participants were required to summarise the text by following the Cornell Note System. For recall, Cornell Note System is a template of note taking and making developed by Pauk, a professor at Cornell University. The question of the task is illustrated below:

- Read the text below, then summarise it by following the Cornell Note System. N.B. The text is not shown all because a copy is provided in Appendix D, p.248.

Maslow's Hierarchy

Maslow (1970) suggested that human behavior is influenced by a hierarchy, or ranking, of five classes of needs or motives. He said that needs at the lowest level of the hierarchy must be at least partially satisfied before people can be motivated by ones at higher levels. From the bottom to the top of Maslow's hierarchy, these five motives are as follow:

1. Physiological: such as the need for food, water, oxygen, and sleep.

2. Safety: such as the need to be cared for as a child and to have a secure income as an adult.

3. Belongingness and love: such as the need to be part of groups and to participate in affectionate sexual and nonsexual relationships.

4. Esteem: such as the need to be respected as a useful, honorable individual.

5. Self-actualization: which means reaching one's full potential...

Maslow's Hierarchy of Motives

Abraham Maslow saw human motives as organized in a hierarchy in which motives at lower levels come before those at higher levels. According to this view, self-actualization ...

Source: Bernstein, Nash. *Essentials of Psychology*, Houghton Mifflin Co., 2008, pages 320–321.

Sample of the participants' responses before and after mediation were illustrated in appendices G (p. 279) and H (p. 286).

In Table 3.2.2 below, we demonstrated the researcher's feedback about the participants' samples during the intervention.

Table 3.2. 2. The Researcher's Feedback

Sample of Students	Researcher's Feedback (Version 1 after mediation)	Researcher's Feedback (Version 2 after mediation)
Sample 1	<ul style="list-style-type: none"> - It is good, you should just organise it according to CNS; on the paper the researcher numbered the steps that the participant needs to follow in order to correct the first version of the work. 	<ul style="list-style-type: none"> - Very good - The researcher corrected the mistake the participant made (there is to there are)
Sample 2 +3 +4+5	<ul style="list-style-type: none"> - On the paper the researcher numbered the steps that the participant needs to follow in order to correct the first version of the work. 	<ul style="list-style-type: none"> - Very Good (Sample 2) - Good (Sample 3) but you missed some steps of the cornel system like asking questions, and the use of abbreviations and symbols. - Good (Sample 4) - Good (Sample 5)
Other samples	<ul style="list-style-type: none"> - Where is your note taking? - Good, you just need to add your critical stance too. - Some steps of the Cornell system are missing like reflection; you should ask questions and write keywords. - Very good, you just need to give your point of you concerning Maslow's hierarchy, whether you agree or disagree with Maslow 	<ul style="list-style-type: none"> - Very good - Very good - Personalise your work again

Concerning the second intervention (Note Taking/Making), mediations and feedback have been provided to assist the participants to make their own notes. The aim was to scaffold their analytical and comprehension skills in order to

construct their own understanding of any material they read. The results demonstrated the participants' improvement of their zone of actual development and ability to reflect upon Maslow's Hierarchy of needs by relating them to their own experiences.

Stage 2: Strategic Thinking

In this stage, the participants were required to apply the strategies of critical thinking in order to solve the challenging tasks. Four main tasks were emphasised; a task for the opening of the mind and three tasks for the logic of argument. The researcher was observing the participants while they were doing the tasks and took notes of participants' engagement, peer collaboration and evaluation, application of the strategies of critical thinking and their reactions towards the activities. An illustration of the tasks are shown below:

Task Three: Opening of the Mind

In this task, the participants were asked to identify the 'underbrush' that needs clearing out; the items are shown below:

- a. I do not like broccoli or spinach. I will not like asparagus.
- b. Vietnamese are gifted in math. Three of them got "A" in our calculus class.
- c. What a glorious tenor. He could only be Italian.
- d. Only believe people who have firm, incontrovertible evidence for their opinions.
- e. Everybody knows children should be seen and not heard.
- f. I do not know anything about art, but I know what I like.
- g. Right after Carl started using Odoroff Deodorant, Wanda agreed to go dancing with him. Odoroff does it again.
- h. The president should have the right to make national security decisions without media criticism.
- i. The threat of inflation caused the 1987 socked market crash.
- j. Drug abusers are mentally ill, my mother is a lawyer and has defended a lot of them, and she says so.

Task Four: The Logic of Argument

The aim of this task is to assist the participants in finding out the premises stated and implied. The passage is presented below:

- It is outrageous for Good Health Insurance Company to cancel insurance for 8,000 people on the ground that the policies did not pay for themselves. What further proof do we need that the health-care industry cares only about money? The state should provide coverage for all people at a cost proportionate to their income.

Task Five: The Logic of Argument

Concerning this task, the participants were expected to make inferences, and then say whether the inferences are strong or weak.

- a. At a grocery store checkout counter: “She is eighty-five and she has six shopping bags to carry to her car.”
- b. Only drink when you are alone or with somebody else. (Meredith Wilson, “Belly up to the Bar, Boys”).
- c. Persons attempting to find a motive in this narrative will be prosecuted; persons attempting to find a moral in it will be banished; persons attempting to find a plot in it will be shot. (Mark Twain, Adventures of Huckleberry Finn).

Task Six: The Logic of Argument

The purpose of this task is to help the participants understand the missing parts in an argument. In this regard, a series of enthymemes have been given and they were recommended to find out which part of each argument is missing, restore the missing part, and then determine whether the argument is valid. They need also to identify the arguments that do not really need the missing part. The statements of the task are illustrated below:

- a. Used-car salesman: “So you are a student. Well, here is a 1978 lemon. It is sort of beat up, but, heck, it runs, and it is cheap.”
- b. On a sports talk show: “What you need to win the Super Bowl is great passing, superb defence, and good special teams. That is why Denver is a lock on the bowl this year.”
- c. You know as much about embroidery as a pig does about rocket science.
- d. A truly desirable home is hard to find. So are the homes at Hidden Hollow Estates.
- e. Water pollution is everybody’s fault. That means it is your duty to help clean it up.

As for this stage, a whole classroom debate was used as a technique to share and exchange knowledge about the real-world problems. Every participant was asked to give his or her opinion and back up with evidence concerning the statement of each task, and this by applying the strategies of critical thinking skills. In task three, the entire participants could identify the underbrush that needed clearing out. For example, sentence 3 ‘What a glorious tenor. He could only be Italian’. In this statement, the participants understood that the meaning that is referred to was ‘stereotypes’, which means the overgeneralisation of something based on a positive or a negative experience. For the fourth task, the participants were required to identify the stated and implied premises. In this task, different opinions were expressed. The researcher listened to every participant’s argument and then, asked for peers’ feedback, i.e. whether they agree or disagree. The good thing is that everyone was paying attention and agreeing with one another in order to find the solution to the problem. For the fifth task, the participants succeeded in making inferences by comparing one another’s answer. In task six, the participants completed it at home. Finally, it is worth mentioning that, in this stage, transcendence was highly emphasised. The participants showed high engagement in the three activities and this was observed through their participation and questions.

Stage Three: Extended Thinking

The last stage of the intervention phase aims at scaffolding the participants’ complex thinking skills like evaluating other writers’ paragraphs or essays. In this stage, two tasks have been emphasised, and to this, we now turn.

Task Seven

In this task, the participants were asked to read three passages and then state whether the author’s position is clear or not, and find out the elements that make the author’s position clear or unclear. The passages are illustrated on page 159.

Passage 1

The brain of an elephant is five times larger than that of humans. Some people believe elephants are very intelligent but, even if that were true, are they really five times brighter than humans? But maybe we are looking at this the wrong way. After all, is it fair to compare the brain size of a large animal with that of a small creature? Perhaps it is relative size that matters? Human brains weigh as much as 2.5 per cent of body weight whereas elephants' brains are less than half of a percent of their total body weight. Proportionally, the brain of a human is ten times greater than that of an elephant. Maybe it is the ratio of brain to body size that matters? If that were the case, then the shrew, with its heavier brain, would be brighter than humans and elephants- and yet shrews do little more than eat.

Passage 3:

This report researched whether a new sports centre should be constructed in region X. Market research suggests that there is little popular demand for another sports centre in the area. However, very few people in the region use sports facilities to improve their health. The government is trying to encourage more personal responsibility for health and fitness. A sports centre would be useful in promoting this objective. People in the area are not aware of health issues and are not interested in sport. There may be government subsidies available.

Passage 2

Individuals have free will and so can control their own destiny. On the other hand, groups also have an identity. Research by Campbell (1984), for example, has shown that girls who mix with boys are more likely to have seen a fight and become involved in a fight than girls who mix mostly with girls. This suggests that aggressive behavior is affected by the social environment and isn't just about character. In everyday life, our sense of self is such that we believe we are making independent decisions. We are aware we have choice and we make decisions for ourselves. Groups can also force decisions upon members, sometimes without them realising.

The aim of the activity was to help the participants evaluate others' writing by paying attention to the (1) consistency of the writer's position; (2) the introductory sentences; (3) the final sentences; (4) the conclusion; (5) the overall line of reasoning; (6) the overall summary of the argument, and (7) the careful selection of facts so that the argument is not lost. To this end, the researcher gave 10 to 15 minutes to the participants in order to reflect upon the activity; then, she listened to some participants' answers. In the beginning, some of them said that the first paragraph was consistent and that the writer's arguments support his position because it is a scientific text, which means based on facts. Other participants disagree by saying that the paragraph does not contain references, so they cannot trust what is written. The researcher asked them again to reflect upon the paragraph mainly the writer's questions. After that, the participants understood that the paragraph was not consistent because the writer did not answer his questions.

Interestingly, for the second and third paragraph, it was a whole classroom debate. All the participants agree that the second paragraph was consistent because the writer supported his opinion with a piece of research evidence. One participant

related the paragraph to her own experiences, which is the aim of transcendence tasks. Finally, all the participants agree again that the third paragraph was not consistent because of the absence of the line of reasoning.

Task Eight

Task eight comprises an essay of five paragraphs; the participants were divided into seven groups. In each group, the participants were asked to read one paragraph, provide the main idea, share it with the members of the group, and then answer the evaluation checklist together. The result was that the participants succeeded in evaluating the essay by sharing ideas with one another. The essay and evaluation checklist were extracted from Cottrell (2005). The essay is shown below and the evaluation checklist on page 161.

Essay

'Stealing is always wrong.' Discuss with reference to unpaid downloading of music from the internet.

1. There are many forms of stealing. Although most reasonable people would agree that some forms of theft such as burglary or mugging are always wrong, other areas are less clear-cut. In this essay, I shall look at downloading music from the internet as a grey area.
2. Stealing has probably existed since the beginning of time, and certainly as long ago as the Old Testament, where it was banned by the commandments. All religions regard stealing as wrong, so you would think that there were universally understood principles about what is stealing and what is not. However, this is not the case. This is also true of many other types of ethical issue. Despite this long-standing agreement that stealing is wrong, many people steal. In fact, it is a very common crime, so it is worth considering why this has persisted for so long.
3. Before the internet became popular, people used to tape music from the radio. Lee (2006) says no one was bothered by this because it was impossible to catch people. Everyone knew that it happened but record sales remained high so it clearly had no real impact on artists and labels. Although home taping was technically illegal, only record companies who were worried about profits could really call it 'stealing'. Nobody knows how much music was copied and it still continues to this day.
4. Lee goes on to say that just because it is possible to catch people who download from the internet it doesn't make it any worse than people making copies from the radio. Carla (2006) agrees with Lee and says that downloading music from the internet is a 'useful service to music'. She states that without this service the world of music would be 'extremely bland and middle of the road'. Hibbs (2006) says that more and more people are downloading music without paying, and sharing it with their friends. Because everyone is doing it, it cannot be a bad thing and cannot be considered wrong.
5. The real reason downloading from the internet gets classed as stealing is because big music companies do not like to see big profits escaping from them. Spratt (2004) states that record companies are not even that bothered about ordinary people downloading from the internet. They are only worried about companies who make and sell pirate copies of their recordings. So why do they continue to prosecute file sharers?

N.B. The whole text is provided in Appendix D, p. 258.

Table 3.2. 3. Evaluation Checklist

Aspects of Critical Thinking	Yes	No	Comments
1. The writer's own position on the issue is clear.			
2. It is clear what are the reasons for the author's point of view.			
3. The writer's position is clear and based on the evidence.			
4. The reasons are presented in a logical order, as a line of reasoning.			
5. The argument is well-structured and easy to follow.			
6. Reasons are clearly linked to one another and to the conclusion.			
7. All the text is relevant to the assignment.			
8. The main reasons and key points stand out clearly to the reader.			
9. The author makes good use of other people's research as supporting evidence to strengthen the argument.			
10. Does the writer make a reasoned evaluation of other people's views especially those that contradict his or her point of view?			
11. Does the writer provide references in the text when introducing other people's ideas?			
12. Does the writer provide a list of references at the end of the essay?			
13. Has the writer removed any inconsistencies?			
14. Does the writing contain any inconsistencies?			
15. Are the writer's belief or self-interests unfairly distorting the argument?			

3.2.2. Analysis of Classroom Observation

The aim of classroom observation was to check whether teachers, at the University of Abou El Kacem Saadallah, Algiers 2, use DA or not. To reach this goal, the attributes of Feuerstein's MLE have been emphasised (the attributes have been extracted from Poehner, 2008). They consist of intentionality, transcendence, mediation of meaning, mediation of feeling of competence, mediated regulation and control of behaviour, mediated sharing behaviour, mediation of individuation and psychological differentiation, mediation of goals, mediation of challenge, mediation of an awareness of the human being as a changing entity and mediation of an optimistic alternative. The researcher acted as a non-participant during the process of conducting the observation. All the five observed teachers and their students were informed in advance that the observation was conducted for research purposes only. For recall, the observation was started on November 7th, 2017 and lasted until February 15th, 2018.

For ethical issues, the name of the observed teachers and groups were not mentioned; we used pseudonyms to refer to them (TA, TB, TC, TD, and TE) and (GA1/2, GB, GC1/2, GD1/2, and GE). In the observation checklist, the items ‘A1’ and ‘A2’ mean group 1 and 2, in other words, the researcher observed two groups (separately) taught by the same teacher. The aim is to find out whether the observed teachers adopt the same classroom procedures with different students or not. Concerning the items ‘Yes’ and ‘No’, they mean that the attribute is present or not present in the classroom. For recall, classroom observation was used as a complementary instrument for students questionnaires and teachers semi-structured interview. In the present study, every instrument addresses a specific objective and assists the researcher in understanding the assessment practices in higher education (specifically at the University of Algiers 2, Algeria) as well as students’ reactions towards those assessment practices, whether they encourage their critical thinking skills or the retention of the content being taught. The different recorded observation checklists appear on the following pages (pp. 163, 164, 165, 166, 167), and to this, we now turn.

Table 3.2. 4. Observation Checklist 1

Observer: Ms. Lydia Benmouhoub		Observed: Teacher (A)		
Level and Group: First Year/ G (A1, A2)				
Hour: 1h 30		Module: Study Skills		
Attributes to MLE	07/11/2017 G (A1)	28/11/2017 G (A2)/	05/12/2017 G (A1)	
1. Intentionality	No	No	No	
2. Transcendence	No	No	No	
3. Mediation of Meaning	Yes	Yes	Yes	
4. Mediation of Feelings of Competence	Yes	No	No	
5. Mediated Regulation and Control of Behaviour	No	No	No	
6. Mediated Sharing Behaviour	No	No	No	
7. Mediation of Individuation and Psychological Differentiation	No	No	No	
8. Mediation of Goals	Yes	Yes	Yes	
9. Mediation of Challenge	No	No	No	
10. Mediation of an Awareness of the Human Being as a Changing Entity	No	No	No	
11. Mediation of an Optimistic Alternative	No	No	No	

Table 3.2. 5. Observation Checklist 2

Observer: Ms. Lydia Benmouhoub		Observed: Teacher (B)			
Level and Group: First Year					
Hour: 1h 30		Module: Study Skills			
Attributes to MLE	08/11/2017	15/11/2017	29/11/2017	06/12/2017	
1. Intentionality	Yes	Yes	Yes	Yes	
2. Transcendence	No	No	No	No	
3. Mediation of Meaning	Yes	Yes	Yes	Yes	
4. Mediation of Feelings of Competence	No	No	No	No	
5. Mediated Regulation and Control of Behaviour	No	No	No	No	
6. Mediated Sharing Behaviour	No	No	No	No	
7. Mediation of Individuation and Psychological Differentiation	No	No	No	No	
8. Mediation of Goals	Yes	Yes	Yes	Yes	
9. Mediation of Challenge	No	No	No	No	
10. Mediation of an Awareness of the Human Being as a Changing Entity	No	No	No	No	
11. Mediation of an Optimistic Alternative	No	No	No	No	

Table 3.2. 6. Observation Checklist 3

Observer: Ms. Lydia Benmouhoub		Observed: Teacher (C)		
Level and Group: First Year/ G (C1, C2)		Module: Study Skills		
Hour: 1h 30				
Attributes to MLE	09/11/2017 G (C1)	16/11/2017 G (C2)/	28/12/2017 G (C1)	
1. Intentionality	Yes	Yes	Yes	
2. Transcendence	Yes	Yes	Yes	
3. Mediation of Meaning	Yes	Yes	Yes	
4. Mediation of Feelings of Competence	Yes	Yes	Yes	
5. Mediated Regulation and Control of Behaviour	No	No	No	
6. Mediated Sharing Behaviour	No	No	No	
7. Mediation of Individuation and Psychological Differentiation	No	No	No	
8. Mediation of Goals	Yes	Yes	Yes	
9. Mediation of Challenge	No	No	No	
10. Mediation of an Awareness of the Human Being as a Changing Entity	No	No	No	
11. Mediation of an Optimistic Alternative	No	No	No	

Table 3.2. 7. Observation Checklist 4

Observer: Ms. Lydia Benmouhoub		Observed: Teacher (D)		
Level and Group: First Year/ G (D1, D2)				
Hour: 1h 30		Module: Study Skills		
Attributes to MLE	06/02/2018	06/02/2018	13/02/2018	13/02/2018
	G (D1)	G (D2)	G (D1)	G (D2)
1. Intentionality	No	No	No	No
2. Transcendence	No	No	No	No
3. Mediation of Meaning	Yes	Yes	Yes	Yes
4. Mediation of Feelings of Competence	No	No	No	No
5. Mediated Regulation and Control of Behaviour	No	No	No	No
6. Mediated Sharing Behaviour	No	No	No	No
7. Mediation of Individuation and Psychological Differentiation	No	No	No	No
8. Mediation of Goals	Yes	Yes	Yes	Yes
9. Mediation of Challenge	No	No	No	No
10. Mediation of an Awareness of the Human Being as a Changing Entity	No	No	No	No
11. Mediation of an Optimistic Alternative	No	No	No	No

Table 3.2. 8. Observation Checklist 5

Observer: Ms. Lydia Benmouhoub Level and Group: First Year LMD Hour: 1h30	Observed: T (E) Module: Study Skills
Attributes to MLE	15/02/2018
1. Intentionality	No
2. Transcendence	No
3. Mediation of Meaning	Yes
4. Mediation of Feelings of Competence	No
5. Mediated Regulation and Control of Behaviour	No
6. Mediated Sharing Behaviour	No
7. Mediation of Individuation and Psychological Differentiation	No
8. Mediation of Goals	Yes
9. Mediation of Challenge	No
10. Mediation of an Awareness of the	No
11. Human Being as a Changing Entity	
12. Mediation of an Optimistic Alternative	No

The analyses of the five observation checklists revealed interesting findings. It seems that only TC relies on more parameters of MLE than the other observed teachers, for example ‘intentionality’, ‘transcendence’, and ‘mediation of meaning’, ‘mediation of feeling of competence’, and ‘mediation of goals’. Whereas, TA, TD, and TE focus more on the ‘mediation of meaning and goals’, which are restricted to the understanding of the content of the course and students’ success in tests and exams rather than on the promotion of their (i.e. students) cognitive modifiability and action learning. TB depends on the two characteristics previously mentioned (mediation of meaning and goals), including intentionality, which is also limited to the knowledge and comprehension of the concepts dealt in class. This shows that two kinds of mediation are practised within the setting under investigation. The first is the mediation of students’ active learning and thinking skills (the case of TC); the second is the mediation of students’ knowledge and understanding of the taught content. The former has a connection with the MLE

procedure, whereas the latter is related to direct learning. Further remarks concerning teachers' approach, techniques, instructional materials, classroom tasks, and feedback are worth mentioning too, they are briefly discussed below.

We noticed that TA, TB, TC, TE appear to adopt the same approach of teaching with all the classes, except TC. This teacher provides more mediations for G (C1) rather than G (C2) because of students' differences in level, as the first group seems less advanced compared to the second. Besides, in G (C2), the presence of many adult students appears to be an advantage for both the teacher and students. This is because of their contribution to the negotiation of meaning and elaboration of the discussed topic in class. Concerning the teaching techniques, TB relies on games and individual work; TA, TD, and TE adopt rather a whole classroom discussion. Whereas, TC emphasises on three techniques such as classroom discussion, individual and group work. When it comes to the instructional materials, three observed teachers (TA, TC, TD) appear to rely on handouts as a means of delivering the content of the course. Others rely on dictation (TB) or note taking (TE).

As far as teachers' feedback is concerned, all the five observed teachers provide positive remarks whenever somebody provides an interesting answer, suggestion or comment. They also focus on correcting students' grammatical mistakes, which is not the case of TE. Finally, the tasks do not seem to be challenging for the students or transferable to real-life problems, and this is the case for all the 5 observed teachers. In sum, classroom observation showed that the majority of teachers still follow the traditional method of teaching, which is knowledge-transmission. The assessment is restricted to giving feedback when students provide correct/incorrect answers.

3.2.3. Analysis of Students' Personal Journals

Students' personal journals were used at the end of the first semester (March 2018). The purpose was to examine and explore the attitudes of students (experimental group only) towards the use of DA as an alternative approach to

formal assessment and the benefits of scaffolding their critical thinking skills. To this end, nine selected participants' personal journals have been analysed according to the following questions:

- Q1. What did you learn in study skills during all this period at university?
- Q2. Did you find teaching critical thinking beneficial? Explain in both cases
- Q3. Did you like the way you are being assessed (Homework+Test/exam)
- Q4. Are there any suggestions you want to recommend in this module?

A presentation of the participants' answers was illustrated below. They were referred to as pseudonyms: Malia, Warda, Samah, Mina, Rima, Salma, Fadia, Amel, Zina. For recall, the participants' personal journals have been analysed by means of descriptive and analytic analysis.

Table 3.2. 9. *Results of Students' Personal Journals*

Students	Q1	Q2	Q3	Q4
Malia	'...I discovered that this module is really important especially that the things that we learn in this module we applicate them in all the modules, not only in studies but also in our daily life...'	'...my favourite one "critical thinking". This subject is really beneficial in many aspects...'	'I think that the self-assessment which include the test/exam and homeworks is also good. I like the way our teacher is organising the test and exams questions...'	'...there is no suggestions I want to recommend in this module because I find it easy...'
Warda	'...This module make me realized the New things that I should give them my time...'	'...how to be a critical thinker is a positive learning method...'	'...I do the way I've been assessed...'	'...I think some oral activities will be more beneficial for the student ...'

Samah	'...I learned how to be optimistic above all and no matter what happen I should keep trying...'	'...critical thinking was very beneficial for me...'	'...the way are being assessed is just right and work perfectly with the module...'	'...I would suggest adding unexpected fun things otherwise everything is okay.'
Mina	'I find this module that we learn at university very interesting, it gives us many ways to organise the time to succeed in the study...'	'...I find teaching "critical thinking" beneficial...'	'Actually, I did...'	'...there are no suggestions that I want to recommend in this module.'
Rima	'...I have learn in how to manage my time, and the important qualities of thinking...'	'...I can gain numerous benefits from mastering critical thinking skills...'	'Concerning the way I am assessed, I like it...'	No suggestions
Salma	'I have learned in study skills the correct method of note making and how to organize my thoughts on paper...'	'I did find teaching critical thinking beneficial because it made me more aware of what is surrounding me...'	Did not answer	No suggestions
Fadia	'...this modul make us aware about things that we did not aware befor...'	'Critical thinking is the most beneficial key in study skills...'	'...the teacher of study skills specifically make us almost every weekend busy doing the tasks and that what develop our writing...'	'...I would suggest to make the exams and the tests as a homework tasks...I will have time to do them without limiting me by time.'

Amel	‘study skills module has taught me many aspects and ways that opened my mind, expanded my way of thinking, and showed me how to look at ideas and information from a different perspective...’	‘...I really enjoyed this topic and find it very beneficial...’	Did not answer	...’I think this module can contain many other topics that we can discuss and deal with if we had the chance for that...’
Zina	Not clear	‘Learning critical thinking ...is of course beneficial to our brain, to become aware of some elements like stereotypes...’	‘The way I am being assessed I did like it, we do have interesting things to do and collaborate with classmates.’	‘There are no other suggestions I want to recommend in this module.’

The results displayed in Table 3.2.9 showed that the participants found the module of study skills interesting not just in their studies, but in their lives in general. All of them stated that they learned the correct method of note taking/making and the importance of time management and priorities. Besides, they noted that they became more aware of the things that surround them because of the elements taught on critical thinking (e.g. stereotypes, identifying premises, inferences and assumptions, avoiding enthymemes, tautology and non sequitur, tolerance of ambiguity, line of reasoning, the overall summary of arguments, careful selection of facts and evaluation of others’ arguments). Those elements, assisted the participants in becoming skeptical (i.e., they are asking questions and trying to understand) and confident when expressing their own arguments. They also enabled them to accept others’ arguments and listen to their ideas and suggestions. Furthermore, all the participants liked the way they were assessed, and for them, such assessment helped them improve their writing skills and

become more autonomous and hard workers. Some participants suggested adding extra topics to make the module more fruitful and enjoyable.

3.2.4. Analysis of Teachers Semi-structured Interview

The aim of the interview was to explore the teachers' attitudes towards the use of DA in EFL classes. It also seeks to highlight the way the interviewees design and implement tests/exams, and whether those tests target students' critical thinking or the retention of the taught content. In this interview, we generated nine thematic headings by means of coding and categorisation; in other words, the themes were an outcome of coding, categorisation and analytic reflection (See Appendix J 2, which illustrates teachers' transcripts and the codes were highlighted in red). For recall, we relied on Corbin and Strauss's (2008) methodological analysis of coding. These scholars state that 'coding means taking raw data and raising it to a conceptual level (Corbin & Strauss, 2008, p.66). For instance, we proceeded the analysis by first highlighting the major concepts and meanings from the transcripts, and then assigning conceptual names that stand for and represent the ideas obtained from the data; the researcher asked questions, made comparisons and brainstormed ideas during the analysis.

It is important to mention that for each theme, we presented its categories and subcategories. Each category is a conceptual name we have assigned based on the meanings obtained from the teachers' transcripts. Corbin and Strauss emphasised the idea that every researcher has his/her own way of generating codes based on the objectives of the research. In the present study, the categories have been divided into subcategories followed by an illustration of teachers' quotes. The nine thematic headings that were generated from the interview are presented below:

3.2.4.1. Teachers' Profile

3.2.4.2. Teachers' Perception of Teaching

3.2.4.3. Approaches, Techniques and Strategies Teachers Use in their Teaching

3.2.4.4. Teachers' Assessment

3.2.4.5. The University's Programme

3.2.4.6. Students' Critical Thinking Skills

3.2.4.7. Reading Materials

3.2.4.8. Test/ Exam Design

3.2.4.9. Dynamic Assessment

3.2.4.1. Teachers' Profile

To protect the confidentiality of the interviewees' identity, the researcher refers to them as pseudonyms (T1, T2 and so forth). It is important to mention that the interviewees have not been observed in their classes before. The teachers' profile appears in Table 3.2.10 below.

Table 3.2. 10. *Profile Matrix of Teachers*

Participants	Gender	Teaching Experiences	Academic Qualifications	Speciality
T1	F	3 years	MA (currently, a Ph.D. student)	Lit+Civ
T2	F	4 years	MAB	Linguistics
T3	M	1 year	MAB	Civilisation
T4	F	8 years	MAB	Linguistics
T5	F	11 years	MCB	Ling+Didac
T6	M	7 years	MCB	Lit+Civ
T7	F	18 years	MAA	Linguistics
T8	F	10 years	MCB	Lit+Civ
T9	M	4 years	MAB	American Civ
T10	F	17 years	MCB	Linguistics

As we can see in Table 3.2.10, most of the interviewees are females (7) and three are males. Their teaching experiences range between 3 and 17 years. As for their academic qualifications, four interviewees hold an MAB (Magister degree); three are MCB (Maître de conference B); one is MAA (Maître assistant A), and another has a Master's degree but currently pursuing her Ph.D. studies. Their specialities vary between Literature and civilisation, Linguistics/+ Didactics, and American Civilisation.

3.2.4.2. Teachers' Perception of Teaching

Table 3.2. 11. *Teachers' Perception of Teaching*

Categories	Subcategories	Transcripts Illustration
1. Gaining knowledge	Acquiring new information	<i>'For me teaching is passing on knowledge, and I have always wanted to pass on my knowledge, so this is the only opportunity I have.'</i> (T1)
2. Complex profession	Time consuming, tiring	<i>'A tough profession tiring, exhausting, And time consuming, and effort consuming.'</i> (T2)
3. Knowledge facilitating	Communication	<i>'Teaching, it is knowledge facilitating...we need to be able to communicate with the students.....'</i> (T4)
4. Humanistic	Dealing with psychological issues	<i>'Teaching is something you should like, a medical doctor, to have a human skill, to have patience...'</i> (T8)
5. An art	Creativity	<i>'Teaching is an art, I like this job, it was my choice.'</i> (T6)
6. Teaching-learning strategies	Metacognitive strategies	<i>'Teaching is noble but a complex profession, the task of the teacher is to simplify the information...to teach strategies...'</i> (T5)

As far as the first theme is concerned, we could generate six categories and subcategories. For instance, T1 considers teaching as a way of gaining knowledge; she always wanted to add some of her knowledge to benefit the students. T2 said that it is a tough profession, tiring, exhausting, time and effort consuming. T3, T4, and T7 agree on the idea that teaching is knowledge facilitating based on communication with the students, as well as the application of this knowledge in practice. T5 pointed out that teaching is noble, but a complex profession; it is based on contact with people (psychological part). According to this teacher, teachers need to use metacognitive strategies to assist students in

planning for their own learning objectives and self-regulate them. T6 perceives teaching as an art and that is why he likes this profession, and T8 conceives teaching from the humanistic approach in which the teacher needs to deal with students as humans, understand their needs and interests. T9 agrees with the previous teachers wherein teaching is not just the sharing of information, but training people to acquire new skills. The last interviewee (T 10) thinks that the task of the teacher is to simplify the information, to teach strategies, habits and to raise students' awareness of learning.

3.2.4.3. *Approaches, Techniques and Strategies Teachers Use in Their Teaching*

Table 3.2. 12. *Approaches, Techniques and Strategies Teachers use in Their Teaching*

	Categories	Transcripts Illustration
Approaches	1. Communicative approach	<i>'I'd like the communicative approach... but students don't show lot of interaction.. I don't know what's wrong with them...'</i> (T1)
	2. Eclectic	<i>... it depends on the module, it's eclectic, and it depends on the task...</i> (T3)
	3. PPP (presentation ,practice and production)	<i>'I follow the PPP, it is useful.'</i> (T4)
	4. Critical thinking	<i>'Critical thinking, it is difficult and something new for the students, they used to learning by heart, it is challengeable.'</i> (T8)
Techniques	1. Questioning and classroom discussion	<i>'Questioning is a frequent technique I use, because it is important to make them think, I observe also, I illicit information from body language, to develop their critical thinking, this is very important...'</i> (T2)
	2. Textual analysis	<i>'Textual analysis (to go beyond the text), previewing, viewing, and evaluating.'</i> (T8)

Strategies	1. Raising students' awareness of critical thinking and metacognition,	<i>'To raise students' awareness about the importance of the module... Building awareness, setting the objectives at the beginning of the year. It is diachronic and synchronic...'</i> (T5)
	2. Encouragement, informal speech, anecdotes	<i>'I rely on encouragement, informal speech, anecdotes.'</i> (T6)
	3. Creating situations	<i>'I use visual materials, create situations to introduce the topics and tasks.'</i> (T10)

The third theme generated four categories for the first concept (approach), two categories for the second concept (techniques) and three categories for the third concept (strategies). In the analysis of this theme, we noticed that only T 5, T8 and T 9 said that their approach to teaching is the one that fosters critical thinking. T4 stated that she follows the PPP approach (Presentation, Practice, and Production). The majority of the participants (T2, T3, T4, T5, T6, T7, T10) reported that the approach/es they use is/are useful and effective; however, T1, T8, and T9 reported of its difficulty because the majority of students are passive and not willing to study or work hard. Surprisingly, when it comes to the techniques, only four (T2, T 5, T 8, T 10) teachers could answer this concept, but without giving explanation or clarification for the reasons/s of its use in class. It seems that all interviewees agree on asking questions and classroom discussions as the major teaching/learning techniques. For the strategies, only four participants (T2, T5, T6, T8, T10) appear to understand the term. For instance, T 2 and T6 rely on encouragement; T 5 and T8 spoke of raising students' awareness of critical thinking and metacognition, and T10 creates situations.

3.2.4.4. Teachers' Assessment

Table 3.2. 13. Teachers' Assessment

	Categories	Subcategories	Transcripts Illustration
Type of Assessment	1. Continuous	Homework, group work	<i>'I like to assess them on a continuous basis, we rely on homework sometimes... when we don't have an overload work, I like to assess them continuously, and it also depends on the will of students...'</i> (T1)
	2. Classical	End of term, difficulty of ongoing assessment	<i>'I do not use a continuous basis; I follow the classical approach of testing and examining.'</i> (T2)
Purposes of Assessment	1. Importance of assessment to learning	Getting feedback	<i>'Because I believe that giving assessment and feedback is the most important way of learning, and written feedback is very important, and I have a sample of feedback.'</i> (T1)
	2. Ranking and grading students	Administrative purposes, seeing students' level	<i>'The first purpose for assessing my students is of course it is to grade and rank them, it is purely administrative but this does not mean , assessment for me as a teacher is important...'</i> (T2)
	3. Different objectives	Understanding the course	<i>'There are different objectives, to know whether they have understood, to see their level, whether they have improved their English.'</i> (T4)
	4. Evaluation of student's mastery of knowledge	Accomplishment of the teaching mission	<i>'The objective of assessment is to see whether they have understood the content being taught, and whether the mission is accomplished.'</i> (T9)

A body of research confirms that the type of assessment a teacher adopts in the classroom should go in harmony with the approaches, techniques, and strategies. The results of the present interview show a mismatch between some

participants' perception of teaching and their assessment practices. Most of the respondents pointed out that they assess their students only at the end of each term (T2, T4, T6, T7, T9), while others said continuously (T5, T8, T10) by using group work, giving students' homework, giving/asking for feedback during the classroom to check their understanding. Concerning T1, she said that it depends on the will of students if they like to be assessed continuously or at the end of each term. She reported that many of her students do not show much interaction or interest in studying the English language. T 3 indicated that in the first semester, he relied on traditional assessment (i.e., at the end of each term or year), but he did not find it fruitful and interesting; he changed to continuous assessment which brought him many interesting results. As far as the objective/s of assessment is/are concerned, varied answers have been highlighted such as the importance of feedback to learning (T1); grading and ranking students (T2); acquisition of knowledge (T3); seeing students' level (T4); part of teaching (T5); raising students' awareness (T6); evaluation of students' ability and mastery of knowledge (T7; T10); and students' understanding (T9).

3.2.4.5. *The University's Programme*

Table 3.2. 14. *The University's Programme*

	Categories	Subcategories	Transcripts Illustration
The University's Programme	1. Following the programme	Ambitious programme; simplifying the topics; week by week scheduling.	<i>'I try to follow the programme yes, sometimes it's a very ambitious programme because we don't have enough time, students sometimes don't come ready ... (T1)</i>
	2. Following the programme with modifications	Making changes; adding things; time management; priority; students' needs.	<i>'I follow the programme 90% because of time management, priority, students' needs and levels.' (T7)</i>

All the respondents said that they follow the programme assigned to them by the administration and that sometimes some modifications are made when necessary because it depends on time and students' understating as well as autonomy.

3.2.4.6. *Reading Materials*

Table 3.2. 15. *Reading Materials*

	Categories	Transcripts Illustration
Reading Materials	1. Always mentioning the references	<i>'Yes, I do. It's very important; I'm teaching study skills so it's part of that.'</i> (T9)
	2. Sometimes mentioning the references	<i>'Usually it's not but sometimes it's there mainly in literary genres, but in reading and writing I don't, it just slipped from my mind, I didn't think of it.'</i> (T3)
	3. Never mentioning the references	<i>'Honestly, I don't provide my students with references.'</i> (T4)

To this theme, three categories were generated; for instance, five participants (T1, T2, T8, T9, T10) maintained that they mention the references to their students because they believe they are very important in order to deepen students' knowledge and encourage them to do further research. However, others stated no, just because it skipped from their minds (T4, T6). T3 and T5 said sometimes, in some modules.

3.2.4.7. Students' Critical Thinking Skills

Table 3.2. 16. *Students' Critical Thinking Skills*

	Categories	Subcategories	Transcripts Illustration
Students' Level	1. Incompetent but willing to learn	Not well-prepared; not enough knowledge	<i>'Well, they don't come well prepared because they don't have enough knowledge ... but they are willing to learn...'</i> (T1)
	2. Some motivated others no	Inquisitive; no participation; hating tasks	<i>I'm teaching two groups ... One group is not motivated at all; ... For the other group, their level is average, and sometimes it is worse...'</i> (T3)
	3. Lack critical thinking skills	Inability to solve problems; not inquisitive	<i>'First year students struggle especially in linguistics, and it is a new field for them... they complain from literary streams in high schools, trying to explain abstract things to first year students is not an easy process.'</i> (T2)
	3. Very low	No linguistic level	<i>'Students' level is very low, no linguistic level to specialise in English few of them who are critical.'</i> (T9)
Attitude during the Session	1. Students' laziness	Not showing interest	<i>'Sometimes students are very lazy but I always try to relate topics to their interest, I try to choose topics from Pop culture, from what they know, according to the context of their time and generation...'</i> (T1)
	2. Positive feedback	Showing interest	<i>'Students show positive attitude towards the method.'</i> (T5)
	3. Psychological aspect	Motivation	<i>'Morning sessions, it depends, few students who are visible.'</i> (T6)

Students' Ability to Comment on Their Classmates	1. Depending on students	Good readers only	<i>'Not everyone, I notice that those who have a critical attitude, those who read a lot or quite read do have a good critical approach.'</i> (T1)
	2. Supporting peers	Helping them	<i>'Sometimes they support, sometimes they really criticise the negative points.'</i> (T4)
	3. Not able	Cannot evaluate	<i>'Students can't evaluate their classmates.'</i> (T8)

The seventh theme is concerned with students' critical thinking skills; it is composed of three sub-thematic headings: Students' Level, attitude of students during the session and students' ability to comment on their classmates. The first sub-thematic heading contains four categories and subcategories, whereas the second and third sub-thematic heading comprise three categories and subcategories. As we can see from Table 3.2.16, the majority of interviewees complain about the low level and lack of critical thinking of their students. When asking the participants about the attitudes of their students during their session, most of them said they show positive feedback, which means they are satisfied with their teachers' way of teaching. However, T1 and T2 noted that their students are very lazy and not interested and that only a minority interact and ask questions.

Concerning whether first year degree students are able to think critically and comment on their peers' arguments, all the teachers who teach this category of students reported that only a few who are critical thinkers, and this concerns the ones who read a lot. They explained that some students do show critical thinking skills because they are motivated and want to exchange knowledge and develop themselves as individuals; however, others do it to support their peers or for marks only. It is important to mention that even the other respondents who teach second year (T1), and third year (T5, T8), expressed the same opinion. T8 emphasised the fact that her students find teaching critical thinking very difficult because they are

not used to analysing and evaluating literary or scientific texts in the English language. Only T10 pointed out that her students have a good critical stance because they are advanced and active.

1.2.4.8. *Test/Exam Design*

Table 3.2. 17. *Test/exam Design*

	Categories	Subcategories	Transcripts Illustration
Question/s Design	1. Asking question	general One question of the main topic	<i>'Very often I try to ask one question when it's literature, study skill or any module, when it's literature I try to ask a question of the main topic, one question that is quite general.'</i> (T1)
	2. Depending on objectives	Following the syllabus	<i>'In terms of the objectives set in the syllabus, following the syllabus, for example if they have an objective that targets critical thinking, I would include in test and exam questions, activities targeting testing critical thinking; indirect questions, statements.'</i> (T2)
	3. Synthesis of the lesson	Asking students to analyse and synthesise two keywords	<i>'A synthesis of the lesson. Two key words and the students will analyse and synthesise and summarize with examples.'</i> (T5)
	4. Retrospection	Reviewing major points	<i>'It reflects the things taught in class (things in context), from authentic books.'</i> (T7)
Specific Aspects of Assessment	1. Form and meaning	Structure and context	<i>'I always focus on both meaning and form, I told them that the form is the visa to the content, if the form is not good, I won't be able to see the content.'</i> (T3)

Criteria for Marking Students' Performance	1. Do set criteria	Well-detailed barem; scores on content	<i>'I have a well detailed barem, my assessment is very well detailed; I assess the different parts, the mechanics, the content, overall coherence, and they are informed about that.'</i> (T1)
	2. Objective marking	No criteria	<i>No criteria for marking the students, it is based on objective marking.'</i> (T7)
	3. Mental scale	Organisation; content; English language	<i>'I rely on mental scale: 3pts on organisation, 3pts on content, and 3pts on English language.'</i>
Students' Familiarity with Test/Exam Design	1. Familiar	Knowledgeable	<i>'I feel it's their right to know, the purpose is not to surprise the students, my purpose is to transfer a certain knowledge, to make them know the type of evaluation to make it easier for them.'</i> (T3)
	2. Not Familiar	Not knowledgeable	<i>'No, I don't', I consider this as an insult.'</i> (T5)

The eighth item aimed to understand the way the interviewees design mid/end-term tests and exams. The participants expressed convergent answers. For instance, T1 said that she very often tries to ask one question of the main topic which is general and then asks students to write an essay and structure it according to the thesis statement (in the module of literature). For reading and writing, she stated that she relies on an already designed material from Cambridge or Oxford reading and writing references. T2, T3 and T4 reported that the design of mid/end term test or exam depends on the objectives and syllabus. T4 further adds that, in the design of tests or exams, she needs to respect what was taught; sometimes she relies on gap-filling or direct questions (in linguistics and phonetics) to see the content, and sometimes she asks her students to write a paragraph to evaluate their language mastery.

Interestingly, some respondents (T5, T9, T10) design tests and exams by asking students to synthesise the lesson (summarising, and analysing and then providing examples). For T5, she is trying to apply the things learned during the process of conducting her research on metacognition and learning strategies. Whereas, T9, since he studied abroad, so he tries to apply the things acquired there in his teaching process. Because T8 teaches critical thinking, she designs a test/exam based on text analysis. T6 said in the test, he gives students a quiz, however, in the exam, it is formal but did not give further explanation. Finally, T7 gives questions in which she asks students to apply the grammatical structures in context.

Concerning whether students are familiar with the type of test/exam their teacher designs and probes, six respondents said yes (T1, T2, T6, T8, T9, T10), whereas the others responded no (T3, T4, T5, T7). Surprisingly, some teachers consider it an insult when students ask about the type of questions that will be asked in the test or exam. As for the criteria of assessment, the majority do set criteria for marking the students' performance.

1.2.4.9. *Dynamic Assessment*

When it comes to answering whether teachers are familiar with DA, the results of the interview demonstrated that only two teachers knew the meaning of the term (T2, T10), whereas others did not (T1, T3, T4, T5, T6, T7, T8, T9). When informed about DA procedure/scheme, all the interviewees expressed a positive attitude towards its use in EFL classes provided they have smaller groups and time. Below is an illustration of some of the interviewees' responses:

T1: *'I would do that; that is absolutely the good way.'*

T3: *'Yes it's good.'*

T4: *'It can be useful for writing skills.'*

T6: *'Yeah, it's a good idea.'*

T7: *'Yes, if the students are not numerous.'*

T10: *'It is good but time consuming.'*

Summary

In a nutshell, the focus of this section was on the analysis of qualitative data which have been obtained by means of students' samples of tasks (i.e. intervention data), classroom observation checklists, students' personal journals, and teachers semi-structured interview. For instance, in the intervention phase, eight tasks have been emphasised based on the stages of DOK (Skills and concepts, strategic, and extended thinking). The result of this finding demonstrated the participants' interest in the tasks and development of their critical thinking skills. The majority of the participants applied the strategies of critical thinking during the accomplishment of the tasks. As for the analysis of classroom observation checklists, the result showed that the attributes of MLE (Mediated-learning Experience) are not all present within the five observed teachers but only in a few of them (e.g. TC). The majority of the observed teachers still follow the traditional method of teaching and their assessment seems to be limited to providing feedback for correct/incorrect answers.

Concerning the analysis of students' personal journals, the result revealed the participants' interest in critical thinking because, according to them, it helped them develop many strategies (e.g. stereotypes, line of reasoning, tolerance of ambiguity), as well as gain confidence in expressing their arguments freely. They also mentioned their appreciation towards the way they are being assessed. Finally, the results of teachers semi-structured interview complemented the results of the research instruments used in the present study. The ten interviewees showed different perceptions towards teaching and assessment. However, all of them expressed a positive attitude towards the use of DA in EFL classes. .

Conclusion

In this chapter, major findings have been analysed in accordance with the research questions. The data obtained were analysed both quantitatively and qualitatively based on the instruments used which consisted of students questionnaires, pre-test, intervention, post-test 1/2, classroom observation checklists, students' personal journals and teachers semi-structured interview. The results point to first year degree students' low competency in critical thinking. This was confirmed by their difficulty in expressing their opinions clearly and most of their writing productions during the pre-test were full of informal language. After diagnosing the students' weaknesses and strengths, the researcher of the present study proceeded directly in the intervention, i.e. DA has been used as an alternative approach of formal assessment in order to scaffold students' critical thinking skills. Concerning the teaching instruction, DOK (Depth of knowledge) has been used because it takes into account three important criteria; these are assessment, learning objectives and students' expectations. The analysis of the intervention data and students' personal journals revealed the participants' development in critical thinking and their positive attitude towards DA because it helped them (according to the participants) diagnose their weaknesses and remedy them through constant practice. More importantly, the findings in this chapter pinpointed issues of assessment practices in the setting under investigation and the need for action based on the responses of participants in the questionnaire. The majority of them were not satisfied with their teachers' assessment and reported their difficulty to think critically because of shyness, lack of language proficiency, teacher dominance, and topic knowledge.

As far as the results of classroom observation checklists are concerned, the majority of the observed teachers still follow the traditional way of teaching and the attributes of MLE are rarely present within all the observed teachers classes. In addition, the results of classroom observation checklists corroborate with the results of the teachers semi-structured interview in which we found that the interviewees' perception of teaching were not in harmony with their teaching

practices. The majority of interviewees think that teaching is based on communication with the students, whereas when it comes to their assessment practices, most of them assess their students at the end of each term. The results of the semi-structured interview revealed the interviewees' positive attitude towards DA provided they have suitable conditions for its implementation such as having smaller groups and time. The next chapter is devoted to the discussion of findings and includes a set of account of sound pedagogical implications, the limitations encountered and then directions to further research.

Chapter Four: Discussion of the Findings

Introduction

The previous chapter reports the results obtained after analysing the data collected via the instruments selected to conduct the present study. This chapter will discuss the findings in relation to the research questions, and then present a number of pedagogical implications related to the development of critical thinking and assessment practices in higher education. It also provides some limitations encountered as well as directions for further research.

4.1. Research Question One: First Year Degree Students' Critical Thinking Skills

The first research question was meant to investigate whether first year degree students possess critical thinking skills or not. The findings that emerged from the Likert Scale questionnaire data, and which was addressed to first year degree students of the academic year (2016-2017), revealed that this category of participants needed instruction on critical thinking. For instance, the majority need instructions on how to draw a line of reasoning, recognise the signals used to indicate the stages in an argument, assess different points of view fairly, spot inconsistencies in an argument and evaluate source materials. Overall, the results of the Likert Scale questionnaire suggest that the methods used to assess students in the setting under investigation need revision and reconsideration. Despite the fact that the participants claimed their knowledge of the meaning and the structure of an argument, and the awareness of the effects of their beliefs on the construction of opinions, they still appear to not fully control them. This might be due to the absence of practical exercises and strategies on how to transfer the skills taught into academic, professional and authentic life contexts.

The same results were found in the students of the academic year (2017-2018) who took part in the pre-test and post-test 1/2. Their paragraphs lacked the main elements of critical thinking, and this might be due to the content of the educational system at middle and secondary schools, as pupils are not encouraged to paddle their own canoe but instead to be containers waiting to be filled by their

instructor. This seems in support with Voss, Perkins, and Segal (1991) who maintained that ‘large numbers of students complete their years at secondary education without having developed sufficient proficiency in reasoning to cope with citizenship and work responsibilities in an increasingly complex world’ (as cited in Kanik 2010, p. 5).

Moreover, the results obtained from students questionnaire (i.e. factual, behavioural and attitudinal data) corroborate with the findings of the Likert Scale (i.e. ordinal data) and pre-test. This questionnaire (i.e. factual, behavioural and attitudinal data) was distributed on purpose at the end of the year (From April 9th, 2018 till May 9th, 2018) to explore the presence or absence of critical thinking skills among first year degree students, at the department of English, University of Abou El Kacem Saadallah, Algiers 2. For instance, 61% of respondents said they could somehow evaluate their teachers and classmates’ ideas because it depends on their capacity and understanding as well as the persons they are addressed to. Whereas, 20% of participants reported their capacity to do that because of their confidence, knowledge, and motivation to learn. Some respondents (13%) declared their inability and unwillingness to evaluate their teacher or classmates because this is not their duty. Besides, some respondents like to comment on the idea of their teacher only or the classmates they feel comfortable with, others both the teacher and students.

Three possible explanations can be drawn from the three divergent answers. First, autonomous students know exactly their objectives in life and the importance as well as the true value of critical thinking. Whereas, less active students might still think that the teacher is the source of knowledge and the one who possesses power in the class. Second, language incompetence and the absence of cross-cultural understanding might be a source of an impediment for students since evaluating others' arguments require some skills and among them the mastery of the language, as well as an awareness of and respect to cultural differences. The third explanation can be linked to students’ personality on the one hand, and the kind of feedback they use to receive in class on the other hand. In other words,

students who deem to have a strong personality do not care about their mistakes and others' criticisms because they are well aware that they are just expressing their point of view and not sitting for an exam or a test, which is not the case compared to those who have low self-esteem. In addition, the kind of feedback students receive from their teacher might affect them either positively or negatively. For instance, some students maintained their avoidance to express their stance because of their teachers' negative feedback and the lack of freedom of thought in class.

Furthermore, it seems that the majority of participants want to discover the truth to gain culture for developmental growth or life-long learning. The question we are asking here is what kind of culture and learning these participants want to acquire? Is it the culture of dialogue? If so, have they been instructed on the right thinking process? Questions that require further investigations from future researchers who wish to replicate the present study. Finally, the results of the questionnaire confirmed students' need for guidance on how to scaffold their critical thinking skills and their preference for both the interventionist and the interactionist approaches of assessment. These results corroborate with the findings of other researchers such as Davidson and Durham 1997; Stapleton, 2001; Bensley et al., 2010; Kanik, 2010; Letseka and Zireva, 2013; Wagley, 2013; Arar, 2015; Wilson, 2016; Melouah, 2016. All these scholars agree on the importance and effectiveness of teaching critical thinking skills. Indeed, when we have first year degree students, we need to show them the necessary strategies of metacognition by making them aware of the different fallacies displayed on media discourse and political speech.

4.2. Research Question Two: Students' Perceptions of Their Teachers' Assessment

The second research question of the present thesis addresses the perceptions of students towards their teachers' assessment. For instance, the questionnaire data revealed that the majority of participants expressed a negative perception of their teachers' assessment. A possible explanation to this can be related to students' different educational backgrounds and confidence or anxiety as they undertake the assessment tasks or activities. It may also be related to their

discontent with formal assessment because they might think that such type of assessment practice does not reflect their competence or intelligence. However, some respondents expressed a positive perception towards their teachers' assessment because they use a modern method of assessment and others a mixture between traditional and modern ones. In fact, the method of assessment a teacher adopts depends on his/her belief towards teaching and learning. In addition, motivation and perseverance are crucial in order to make changes and come up with innovative and updated types of assessment, by using creative and effective strategies and techniques to harness his/her assessment practices. In support, Struyven, et al. (2005) declared that students' perceptions of assessment have a greater influence on their approaches to learning and studying. Indeed, the perception they have developed does not come alone but through experience in the context, they are studying.

Furthermore, the participants pointed out that not all their teachers' feedback helps them to develop their creativity and imagination, and as a result, the majority do not consider themselves as critical thinkers because they find difficulties to comment, summarise, synthesise and evaluate others' ideas and opinions. A possible interpretation of this issue can be linked to the quality of exams as most of them target students' retention of the content being taught, which encourages rote learning rather than meaningful and active research. When students mistakenly believe that their creativity is less important than their ability to repeat the content they have been taught, they (students) will base their answers in exams or tests on what their teacher wants them to write or say. In fact, the feedback of the teacher has an important role in the learning pedagogy of the students. Carvalho et al. (2014) state that, 'many teachers claim to provide their students lots of feedback, however, the real question is whether the students receive, understand, and act on it...different students can interpret teachers' feedback in different ways' (p. 170). This is what we are also questioning in the results obtained in the present study concerning students' perceptions of their teachers' feedback. Do they really understand the way they are being assessed or try to act and make changes based on their teachers' feedback? Carvalho et al.

(2014) provided in their research nine elements for effective teacher's feedback (p. 171); these are as follows:

- The teacher explains what is expected to learn in the discipline.
- The forms of assessment in the discipline are presented clearly.
- The teacher makes specific comments to help complete the task.
- The teacher gives opportunities to improve the work.
- The assessment grades are communicated and explained to each student.
- Different forms are used not only written tests.
- The teacher makes suggestions for improving the task.
- The teacher asks questions that help students reflect on the quality of the work.
- The teacher's facial expression and tone show his belief in students' improvement.

As we can see, the teacher's feedback is paramount in education; it will reflect the quality of the teaching and learning process. According to Macmillan (2003, p. 35), 'effective teachers practise purposeful reflection by being aware of how their theories and beliefs about learning interact with sociocognitive academic and non-academic events, and cues in a particular context'. When it comes to questions related to assessment, it appears that most assessment practices in this study context need to be revised. Even if the LMD (Licence, Master, Doctorate) pedagogy is grounded on the Competency-based Approach, which subsumes that the teacher is a guide and students are active participants in the classroom, still some assessment practices do not seem to be in line with it. The participants' appreciation of the questionnaire suggests, in fact, their interest in assessment and critical thinking and the need for a change and innovation in Algerian universities in general and Algiers 2 in particular.

In brief, assessment practices in higher education do not appear to meet the expectations of students nor prepare them for the workplace. There is no doubt that such kinds of assessments will push students to think of only the tests and exams in order to get good marks for admission to the next level.

The findings of classroom observation checklist showed the presence of two kinds of mediation. The first concerns the mediation of students' learning and thinking skills, the second focuses on students' knowledge and understanding of the taught content. The latter is the one that dominates the EFL classes within the setting under investigation. This suggests that these teachers still prefer the traditional method of teaching and assessment as it is less effort demanding. In addition, we noticed that most of their feedback is limited to the correction of grammatical mistakes rather than the mediation of students' cognitive development and thinking skills. The type of tasks given does not challenge students to solve problems or go beyond their actual knowledge. Some of the observed teachers do not give any tasks but focus mostly on knowledge transmission. Consequently, students' will regurgitate facts and recycle information.

In support, Afifah and Nurbarirah (2017) attributed the Malaysian students' lack of critical thinking to the absence of problem-solving activities and freedom of thought in education. Other researchers (case of Torff & Warburton, 2005) refer this to the perceptions of teachers towards their students' level. For instance, when teachers conceive their students as advanced, classroom critical thinking activities are encouraged; whereas, when it is the opposite (students are weak), here no exposure to such activities are permitted. This seems quite strange and we think that an investigation of the reasons behind such perceptions is highly needed.

The concept of critical thinking is rarely explained within the five classes observed. The module of study skills is meant, however, to promote this quality within students but still appears to be far from reality. The findings of classroom observation checklist support and complement the results obtained after analysing the questionnaires' data. We were able to observe the participants' way of speaking, and as a result of this observation, the majority of participants revealed low thinking skills in the English language. They produce isolated sentences and rarely comment on their teachers' questions, but instead accept everything that is

said or given. This may be due to their fear of teachers' evaluation or fear of being laughed at when making mistakes. It can also be linked to their carelessness to the importance of being skeptical. The fact that the majority of these students' mind is directed towards social media while the teacher is explaining the lesson. This is a major problem we have noticed (e.g. students use their smartphones when the teacher is speaking) in all the classes observed, which requires consolidation and awareness to improve the future learning of these students. It is, however, a reason why critical thinking should be taught explicitly to these students at this level of learning in order to build their sense of consciousness and leadership upon the real world.

The results of the pre-test indicated that first year degree students have a lack of critical thinking because the majority could not provide a clear stance or a link in their arguments to one another and to the conclusion. The use of informal English and isolated sentences were highly noticed in their papers. This finding complements the findings of students questionnaires. We refer this to the way/s they were instructed in middle and secondary schools. They were taught to learn by heart the functions of the language, but not to transfer them in real-life actions. Consequently, their writings lack formality and creativity; a problem we expected to encounter in the present study.

In the intervention phase, the experimental group was scaffolded on critical thinking through an interventionist approach to DA. The stages of critical thinking were emphasised like recall and reproduction, skills and concepts; strategic and extended thinking. The first stage was used for ice-breaking and brainstorming.

4.2.1. Skills and Concepts. The analysis of students' paragraphs and note-taking assignments demonstrated the development of students' skills and concepts as they started to reflect upon their mistakes, errors and correct them based on the mediations and feedback provided by the researcher. In the first assignment, the participants were asked to write a paragraph by answering the following question: 'What are the major adjustments you have had to make in your

attitude, behaviour or use of time as you learn to become a more effective time manager? How has your pie of life changed since you began using time management? Explain'. In this task, not all the participants could correct their mistakes. This could be due to the fact that these participants need more practice and time to understand the objective of learning at university in general. Even if the objective of the activity was explained right from the beginning and they were informed that they would be assessed dynamically, still some participants did not reconsider or correct their mistakes. This is actually the first intervention, and at this stage, improvement or development of critical thinking skills was not expected yet. It requires time, energy, attention, and practice from the participants, and their willingness to make changes in their current level to move to a higher stage in critical thinking.

4.2.2. Strategic Thinking. In strategic thinking, the participants were supposed to apply the strategies of critical thinking in order to complete the task such as identifying the underbrush that needs clearing out, the stated and implied premises, inferences, and enthymemes. As a result, all the participants showed interest in the activity by expressing their point of view and exchanging meaning with one another. Such interest is mainly due to the link they drew between the activity and their real-life experiences, which helped them to understand and become more cautious about what is surrounding them. In doing so, their previous thinking process might have changed thanks to the awareness of the factors that might have influenced them negatively in the past such as the phenomenon of stereotypes, pedagogical oppression, and the ideology of media and political discourse. According to Cipolle (2010), 'students become more aware of themselves as they classify their values through reflection, discussion and actions' (pp. 39-42). Indeed, authentic tasks have the power to shift students from the world of oppression to freedom of speech. The task given during this stage was a bit challenging as it requires higher-order thinking skills from the students. It made them mentally more active and competitive.

4.2.3. Extended Thinking. As for the last stage, the participants demonstrated the ability to synthesise, evaluate and extend their creative thinking by evaluating first a paragraph, and then a whole essay. This has helped them to reach maturity, the sense of belonging to the community of practice because their voice is heard which might change others' perspectives and perceptions of a given issue. At this stage, more autonomous learning was expected from the participants.

Concerning the results of post-test 1, the experimental group showed improvement over the control group. In post-test 2, the experimental group developed a clear stance, objectivity, cognitive maturity and connection of arguments to the conclusion; however, we noticed a decrease in the logical order of reasons, strong evidence, and creativity. This can be explained by the fact that in post-test 1, the question of the exam stimulated students' skills and concepts. The arguments provided by the participants reflect the experiences they lived and the changes that happened while being introduced to the techniques of learning. This means that the question incites lower-order thinking skills (i.e. knowledge and application). Whereas, in post-test 2, the question of the exam incites students' extended thinking; they were required to evaluate a paragraph which necessitates higher-order thinking and concentration. It seems that the participants require more training and time in order to develop the last stage of critical thinking (evaluation). It might also be related to the circumstances of the exam, since the participants sat for the exam in the afternoon; some might have been tired, stressed or ill. This finding supports the results of the researchers previously mentioned (e.g. Stapleton, 2001), and contradicts others (e.g. Atkinson, 1997) who think that critical thinking is learned and practised unconsciously.

4.3. Research Question Three: The Attitudes of Students and Teachers towards the Use of DA in EFL Classes

Question three addresses the attitudes of students and teachers towards the use of DA in EFL classes. Concerning the students' views towards DA, the researcher also asked the participants' opinions on the content of the module of study skills and suggestions in order to improve its content. The findings revealed that the module helped the experimental group in both their studies and lives. All

of them stated that they have acquired much knowledge on the correct method of note taking/making, the importance of time management and priorities as well as awareness of the things that surround them thanks to the strategies of critical thinking. They also developed many qualities such as skepticism, self-confidence, respect of otherness and tolerance of ambiguity. Similarly, they expressed a positive attitude towards DA because this type of assessment gives them the freedom to work at their pace and examine their weaknesses and remedy them. They admitted that it assisted them not just in developing their critical thinking skills but their writing as well. The study of Xhaferi and Xhaferi (2017) supports the results of students' personal journal in the present study. These scholars also relied on reflective journals to explore students' learning difficulties, learning strategies and the concepts learned in class. They concluded that this instrument helped students to reflect upon their learning experiences, the strategies they use and might use in the future.

What was noticed when analysing the attitudes of teachers towards the use of DA in EFL classes is that the data revealed a mismatch between teachers' perception towards teaching and their assessment practices. The majority believe that teaching is an active process and interactive, but most of them assess their students at the end of each term and the objective is to check their understanding of the taught content rather than promote students' critical thinking and developmental growth. Rationally, teachers' conception of the method of teaching and assessment has an important role in shaping their profiles as teachers at university. If we believe that teaching is an autonomous process, our assessment practices should reflect that and act upon it too.

Prosser and Trigwell (1997) argued that 'if we are to improve the quality of teaching and learning in higher education, we will need to take account of the perceptions teachers have of their teaching and learning' (p. 25). Indeed, the perceptions of teachers are rarely taken into consideration in higher education. Some coordinating meetings are scheduled mostly during the tests, exams or for revising the programme that will be taught during the whole year; however,

opinions about the assessment methods and procedures are rarely taken into consideration. The fact that during the interview with the teachers, the majority seem to have a lack of mine of information about assessment and some have even admitted about their little knowledge about it. This explains the reason behind the lack of studies on assessment practices in the Algerian context, mainly the concept of DA.

When it comes to answering whether teachers are familiar with DA, the results of the interview revealed that only two teachers out of ten know the meaning of the term (T2 and T10), whereas others did not (T1, T3, T4, T5, T6, T7, T8, and T9). When informed about DA procedure/scheme, all the interviewees expressed a positive attitude towards its use in EFL classes provided they have smaller groups and time. In fact, we agree with the teachers' responses when saying that DA is useful when we have a small number of students in the class. However, it is not impossible to adopt it with larger classes if we use the interventionist approach of assessment (as the one used in this study). Our research validates the study of Nazari (2015) who investigated the English language lecturers' views on DA and its potential in higher education. This scholar also confirms the idea that few studies explored the perceptions or attitudes of teachers towards DA at tertiary education. As far as the results in his study are concerned, the participants expressed an ambivalent feeling about DA and its potential application to the English language assessment in the UK higher education. Their justification was that DA encourages ownership among students, quality, transparency, equality, reliability and practicality issues, as well as a picture of students' abilities. They also admitted its challenging aspect and believed that such problems can be overcome when thinking about the potential benefits of DA. Moreover, Sardrood (2011) investigated the EFL Iranian teachers' familiarity with DA. The finding was that the majority of EFL Iranian teachers hardly know about DA both at the theoretical and practical levels.

4.4. Pedagogical Implications, Limitations and Directions for Further Research

4.4.1. Teachers' Conceptions of Teaching and Learning. Successful assessment in higher education implies the consideration of teachers' conceptions towards teaching and assessment. These conceptions may be linked to their beliefs, educational backgrounds and experiences, their objectives towards teaching, and age too. As a matter of fact, older teachers might have different conceptions than younger ones, since their experience differ from the younger teachers' era. This is what we have noticed throughout the findings of the teachers interview as well as other scholars who delved into the perceptions of teachers towards teaching and assessment in higher education. There may be those who see themselves better as transmitters of knowledge rather than as guides or facilitators. Consequently, we notice many types of assessment practised by these teachers, which make students confused about the way they should learn and what to focus on or to whom to listen. This might create an imbalance and unfair results in students' academic achievement because there is no pedagogical harmony between the teachers' assessment practices and their teaching approaches.

Hence, before starting the new academic year at university, policymakers, administrators, and teachers need to organise a coordinating meeting in order to discuss the opinions of teachers towards teaching and assessment, to finally arrive at one common consent about the appropriate teaching methods for assessing students' learning. Such coordinating meetings will encourage leadership and a sense of partnership between the teachers and the educational staff, as well as empathy and tolerance of ambiguity, which are the characteristics of civic education, and civic society.

4.4.2. Students' Objectives and Expectations. Many students choose to major in the English language because they have many objectives and expectations to achieve in the future. The responses of the students in the questionnaire showed that the majority want to specialise in English because of different reasons such as the status of English as an international language and their motivation to study it. Others because they had no choice except to major in English. Hence, it is essential

to consider the objectives of these individuals as well as their expectations in order to know the kind of materials needed to reach the target aims and expectations. This might be done through placement tests in which students will be placed according to their learning needs. A model of a placement test that the researcher suggests in order to explore the objectives and expectations of students is illustrated below.

A Model of a Placement Test

A Model of a Placement Test		
Student's Name.....		
Age.....		
Country.....		
Town (Current home living).....		
Marital status:	Married <input type="checkbox"/>	Divorced <input type="checkbox"/> Single <input type="checkbox"/>
Parents' Academic Situation:	Illiterate <input type="checkbox"/>	Partially Literate <input type="checkbox"/> Highly Literate <input type="checkbox"/>
Question1: Why do you want to major in the English language?		
a. To work in a foreign company		
b. To work in academic institutions (Schools or Universities)		
c. For tourism and hostelry		
d. To become a good writer		
e. To become a translator		
f. Others		
.....		
.....		
Question 2: What are your expectations from your teachers, educational staff, and yourself as a student at university?		
.....		
.....		
.....		

4.4.3. Training on Assessment. Most of the studies reviewed in the present research confirmed the evidence that EFL teachers lack knowledge of assessment because of the absence of training. As a result, the majority are still following the traditional and conventional assessment practices, which test only the actual level of the students. In this research, we do recommend practical training sessions for teachers in order to enhance the quality of their teaching and learning in higher education. Teachers need to be sensitised to the idea that their assessment practices should be in harmony with the needs of the 21st century by raising their awareness of the importance of stepping out from their comfort zone

and open the doors for change and innovation, a world of modernism and technology. They also need to be trained on conducting research in the field of assessment to broaden their conception of this field and come up with a new contribution to the area of teaching in general, and learning in particular. Furthermore, the training needs to encourage collaboration between teachers in order to find out solutions to the psychological factors that may affect the progress and the assessment practices in higher education and the ways to deal with them. For example, students' anxiety, individual differences, and motivation.

Besides training teachers on assessment, fostering students' assessment literacy is important too. Students need background knowledge on the objective of assessment in higher education as well as the criteria they need to take into account for building their confidence and developing their critical thinking skills as well as automaticity. Not to forget the administration staff too as they are also concerned with respecting the different regulations assigned to them by the Ministry of Higher Education. In so doing, every individual in education will be scaffolded at both pedagogical and practical levels concerning the assessment practices and procedures. It is only through these systematic instructions that Algerian universities will be enlightened and problems will be reduced if not eliminated.

4.4.4. Implementing DA in EFL Classes. Based on the findings of the present study, some implications are suggested for successful implementation of DA in EFL classes. First of all, having smaller classes is a primordial requirement. We do not proclaim the impossibility of adopting DA with larger classes; however, it will be time consuming for the teacher. Second, teachers need to have knowledge of students' zone of actual development (ZAD) in order to promote their ZPD. Third, the teacher needs to provide mediations depending on the needs of the students when needed. Fourth, assessment should be used as an instruction for learning rather than a means for marking the students. Since DA requires a change in the students' current level, teachers need to make sure that the students are doing the tasks assigned to them and correcting their mistakes. Fifth, this type of alternative approach requires professional expertise from the teacher and a good

mastery of educational psychology since it deals with the students' cognitive growth. This is one of the reasons that motivated the researcher to conduct the present study. The purpose was double: reach a deeper understanding of this area of research and also to fill the gap of the lack of studies on DA in the Algerian context. This was for the researcher a risk-taking journey and an opportunity to contribute to the development of assessment practices in Algerian tertiary education.

4.4.5. Development of EFL Students' Critical Thinking Skills. It is commonly acknowledged that the development of EFL students' critical thinking skills cannot be realised with the traditional method of teaching and assessment but only through action research and modernised approaches. Hence, we recommend in the present study to make critical thinking the objective of education in order to prepare students for life-long learning. We also recommend teachers to rely on Cottrell (2005) and Freire (1976)'s works. They can be used as instructional guides for developing students' problem-solving skills and self-regulation. Teachers can rely on reflective journals, which are widely used nowadays by the majority of researchers around the world. These journals will help students reflect upon their learning process and modify their learning experiences to link them with the new demanding world's needs. A witness we have experienced in the findings obtained from students' personal journals wherein these participants pointed out the advantages of teaching critical thinking skills through DA.

4.4.6. Study Skills. Study skills is one of the most essential modules at university. The one that develops students' awareness and understanding of the world of university as a community of practice. It teaches the students the techniques and strategies for succeeding in their studies and life. However, still the content of this module needs revision to include other creative and inspiring activities for enhancing students' critical thinking skills. In order to promote this module, the researcher of the present study suggests some interesting topics, activities as well as techniques that EFL teachers can use in their classrooms.

Topics

Part One: Psychology

- Maslow's hierarchy of needs.
- The pedagogy of the oppressed
- Strategies of critical thinking skills
- Individual differences
- Student engagement and motivation
- Culture and society
- Stress and anxiety management
- Self-regulation strategies
- Autonomy
- Behaviour problems
- Learning styles

Part Two: Strategies of Learning

- Note taking/making strategies
- Strategies of listening, speaking, reading and writing
- Cooperation and collaboration
- Self/peer assessment
- Reflective journals

Part Three: Research Skills

- Introduction to scientific research
- Characteristics of a good researcher
- Components of a research proposal
- Plagiarism and ethical issues

Activities

- Which among the Maslow's hierarchy of needs you can get detached from? Justify your answer
- Do you think that women in your country are still oppressed?
- Imagine you travelled in a foreign country and that you experienced some forms of negative stereotypes, what would be your attitudes, reactions, and strategies to overcome that?

- How can individual differences affect positively or negatively your learning process at university?
- Are you with the position which says that motivation is culturally and socially transmitted, or with the one that believes in the idea that motivation is self-regulated?
- In your opinion, do you think you belong to only one culture or many? Explain
- Are you an autonomous or a rote learner? Explain
- How can a teacher deal with behaviour problems?
- In groups, discuss the main strategies of a good speaker, listener, reader, and writer.
- Write a reflective journal in which you speak of your learning preferences and styles.
- Write a peer-reflective journal in which you assess the major advantages and disadvantages of this module.
- Write a self-reflective journal in which you assess your learning process, the teacher's method, and the university's environment.
- In groups, try to think of actual topics that need investigation and the reasons for choosing them.
- According to you, which countries are affected by the phenomenon of plagiarism? Justify your answer.

Techniques. Many techniques help to promote critical thinking skills in higher education; for example, debate clubs, e-forums, conferences and seminars, as well as art and theatre. These are shown below:

Debate Club. Debate club is a community of practice that debates about social, political or any topic in order to make changes and innovation. There are many formats of debate, among them the British Parliament Format. The latter consists of two teams; the government and the opposition team. The government team comprises four members; they consist of the prime minister, the deputy, the member of the government, and the whip. The opposition team comprises the same

members; however, the job of the latter is to refute the other team. Within the EFL classroom, the teacher can succeed in creating this debate club among his/her students in order to break the routine and create a vivid environment that understands the culture of dialogue and the meaning of applying civic values in their communication with others. The teacher can act as a mediator of knowledge by guiding the students and provide them feedback on their performance and the elements that need change or improvement. In the present study, the idea of debate club did not come to our mind, but just during the last stage of the Ph.D. journey, as well as our experiences in integrating into a debate club where we saw that the help of our mediators harnessed our thinking skills and knowledge of the right way to debate.

E. forums. Online discussion forum (ODF) is a web-based mediated application that group individuals together to share the same objectives and mindset. It helps to review the class material, discuss and reinforce it (Biriya & Thomas, 2014). This e-forum can be used to gain time and help introvert/ shy students participate and share ideas with their peers. The teachers will act as mediators of knowledge and students as active participants. It will make the application of DA easier for the teachers and students. Instead of doing the tasks at home or completing them in class, it would be better to do them through e-forums to reduce students' stress and increase their motivation, engagement, and self-regulation. In so doing, the teach to test will be eradicated and the focus will be on students' cognitive development. The Minister of Higher Education has to make sure that all the universities without exception are possessing such kind of materials. Universities should be a platform for action research, a place for integrating students in the job market and the requirements of the 21 century.

Conferences and Seminars. Besides debates and e-forums, conferences and seminars help to develop students' thinking and communication skills too. In this perspective, teachers need to encourage their students be it first year, second or master to participate in conferences and seminars and take part as organisers.

This will boost their sense of belonging to the community as well as spur their leadership.

Art and Theatre. Art and theatre need to be integrated into Algerian universities because they are part of students' culture. They have the potential capacity to foster students' imagination and creative skills. Art and theatre reduce students' stress and anxiety and instead build confidence in themselves and the world around them.

4.5. Limitations of the Study

This study is not without limitations. First, the concept of DA is a complex topic to understand and apply mainly in the setting under investigation because of the colossal number of students in the class. Second, students' absences are among the extraneous variables that affected the progress of the experiment and the analysis of data, as the researcher needs to examine the progress of each student to see whether a change in his /her cognitive development exists or not. Third, a few studies on DA either abroad or in the setting under investigation caused a hurdle to the researcher as no sample can be followed but only an effort made by her. Fourth, the researcher wished to interview many teachers in order to examine different points of views, however, only a few accepted to take part.

4.6. Directions to Further Research

This study can be considered as among the first studies to investigate the concept of DA in the Algerian context. For this reason, future researchers can complement this work by making further research in the same area. In the beginning, the researcher wanted to investigate the effect of gender differences on the development of critical thinking, however, because of time constraints and the lack of knowledge about DA, this was not possible. Hence, other researchers can take advantage of that. We also recommend future researchers to investigate the following topics:

- The role of debate clubs in enhancing students' critical thinking skills.
- The effect of cross-cultural differences on the teaching of critical thinking skills.

Conclusion

This chapter discussed the major findings in relation to the research questions. It also provided some pedagogical implications in order to harness the power of assessment practices in higher education along with limitations and directions for further research. The implications were suggested based on the findings, which confirmed the idea that assessment is a complex topic that needs careful considerations by educators and researchers. Besides, the findings in this chapter revealed that first year English degree students need guidance and instructions on how to scaffold their critical thinking skills. The majority of these participants expressed negative perceptions of their teachers' assessment because they do not seem to be in line with their objectives and expectations. The results of the present study showed also the absence of DA in the setting under investigation. However, the participants (both teachers and students) expressed a positive attitude towards the use of DA in EFL classes. The findings of this research point to the necessity to take into consideration the conception of teachers towards teaching, training on assessment, students' objectives and expectations, the development of students' critical thinking skills, and the revision of the content of study skills module. Some limitations have been mentioned in this chapter such as larger classes, students' absences, limited knowledge on DA and educational psychology. Finally, the replication of this study and the exploration of other variables (e.g. gender differences) are highly encouraged.

General Conclusion

We came finally to the last step, which is the ‘General Conclusion’ of a work that took years of hard work, patience, and perseverance in order to attain the wanted objective. Delving into investigating the effect of scaffolding first year degree students’ critical thinking skills through DA was a fruitful experience in one hand and a contribution to the field of English language teaching and learning on the other hand. In the present study, we undertook several major steps to gain a deeper understanding of assessment in higher education to finally opt for an alternative approach of formative assessment that would focus on students’ future learning development rather than their actual level. In this perspective, the present study develops around four chapters, which are: the literature review chapter, methodology chapter, presentation of results and data analyses chapter, and the last chapter is devoted to the discussion of the findings, pedagogical implications, limitations, and directions for further research. The thesis is also preceded by a general introduction and followed by a general conclusion.

In the literature review chapter, we provided a comprehensive account of three major concepts: critical thinking skills, scaffolding, and DA. We saw that the concepts have been identified in different ways with even opposing views (e.g. Atkinson 1997; Stapleton 2001). The first variable ‘critical thinking’ was defined as a cognitive skill that is based on reflection, creativity, and evaluation of arguments. Some scholars conceptualised it as a subject-specific discourse and others perceived it as a universal, generic skill that can be applied to all disciplines and domains, and the latter is the one we relied in the present research. In addition, we mentioned that a critical thinker has to possess important qualities such as open-mindedness, tolerance of ambiguity, analyticity and systematicity, inquisitiveness, truth-seeking, and cognitive maturity. Some major mistakes need to be avoided too such as appealing to origins, relativism, emotions and traditions, personalising reasons, privileging available evidence, and attacking the character of the person. More importantly, we have seen that critical thinking has many benefits for students such as gaining a critical picture of the world and making

powerful decisions and plans, solving problems, becoming aware of tautology and flawed arguments as well as identifying hidden agendas.

The second variable that was tackled in the present study is scaffolding. We conceptualised it as the stages a teacher goes through in order to construct students' areas of knowledge. Webb's Depth of Knowledge was the model we relied on during the process of conducting the experiment. It comprises four levels such as recall and reproduction, skills and concepts, strategic and extended thinking. The first and second levels were classified as lower-order thinking skills and the third and fourth levels as higher-order thinking skills. We mentioned that assistance could be withdrawn whenever students no more need it since they have reached full understanding and independence. The empirical studies we reviewed proved the effectiveness of instruction on developing students' critical thinking skills (e.g. Walqui, 2006; Poehner, 2008; Wilson, 2016). The third variable in the present work is DA, which originated in the work of Vygotsky and his concept of ZPD. We said that this type of assessment does not separate instruction from assessment; they occur simultaneously during the process of learning. We emphasised in the whole thesis that its focus was on change. It comprises two important approaches; these are the interventionist and interactionist. We stated that the former could be applied to larger classes and in both speaking and writing, whereas the latter is more feasible with smaller classes and in speaking mostly. The interventionist was the one we adopted because it suits better the objectives of the present study.

After having conceptualised the three main variables in our work, the next step was the planning of the research design and framework. Thorough readings about the research methodology in general and research methods, in particular, have been conducted in order to put this thesis under the line of scientific research. In so doing, we decided then to opt for first year English degree students and teachers at the department of English, University of Algiers 2, Algeria, and this was during the academic year 2017/2018. A randomised experimental research and exploratory case study have been adopted due to the present research's aims, which

put emphasis on both causality and teachers/students' actions in the classroom setting, students' perceptions of their teachers' assessment, and attitudes of both students and teachers towards the use of DA in EFL classes. The research instruments consisted of students questionnaires, pre-test, post-test, classroom observation checklists, students' personal journals which were analysed through descriptive and analytic analysis, and the last instrument used for data collection is a semi-structured interview which was analysed through thematic coding and categorising. The instruments complement one another and every tool addresses a specific objective.

The present study revealed significant and meaningful findings. The researcher could answer the three main research questions, which guided the research at hand. For instance, first year English degree students showed a lack of critical thinking skills in the English language. The majority expressed a negative attitude towards their teachers' assessment practices. Such a response was expected from the researcher, and she refers this to the disconnection of the assessment practices with students' objectives and the needs of the modern world. By this, we come to answer the first research question and confirm the first hypothesis, which states that teachers' lack of assessment literacy is among the issues that lead to students' lack of critical thinking skills. Even the studies we reviewed (e.g. Struyven et al., 2005; Carvalho et al., 2014) confirmed this statement too and stressed the notion of developing both teachers' and students' assessment literacy in order to harness the power of education.

The present study sought to explore whether teachers are using DA in their classes or not, and this by relying on the criteria of Feuerstein's Mediated Learning Experience. The latter consists of eleven attributes such as intentionality and reciprocity, transcendence, mediation of meaning, mediation of feeling of competence, mediated regulation and control of behaviour, mediated sharing behaviour, mediation of individuation and psychological differentiation, mediation of goals, mediation of challenge, mediation of an awareness of human being as a changing entity and finally mediation of an optimistic alternative. The conclusion

we have drawn was that the majority of the observed teachers emphasise mostly on the correction of students' grammatical mistakes, which is the only feedback they provide. This suggests that some teachers in the setting under investigation care much more on accuracy and knowledge transmission than critical thinking. During the observation process, the researcher acted as a non-participant.

When it comes to the role of DA in scaffolding EFL students' critical thinking skills, we confirm its usefulness in developing the participants' critical thinking skills based on the results of the intervention data and students' personal journals. In this regard, we confirm the second hypothesis, which is that the use of DA in EFL classes would help first year degree students develop their critical thinking skills. The third research question addresses the attitudes of students and teachers towards the suggested approach of formal assessment. Concerning the students, all of them expressed a positive attitude since they have developed the most important strategies which are necessary to function effectively in the 21st century. As far as the attitudes of teachers are concerned, they also expressed a positive attitude provided they have smaller classes and the appropriate materials as well as conditions to facilitate its implementation.

Based on the results of the present study, the researcher suggested six crucial implications. First, we recommended the consideration of teachers' conceptions towards teaching and learning and this by organising coordinating meetings to discuss issues related to teaching and learning in general and assessment more specifically. Second, students' objectives and learning expectations have to be given much concern and emphasis right from the beginning of the academic year in order to increase their motivation and autonomy. Third, we insisted on fostering teachers and students' assessment literacy through practical training workshops, seminars, and conferences. Fourth, we said that the implementation of DA in EFL settings implies smaller classes and teachers' knowledge of educational psychology as well as knowledge of their students' zone of actual development. Fifth, we stated that developing first year English degree students' critical thinking skills implies the presence of instructional guides, for

example, Cottrell (2005) and Freire (1976)'s works. In addition, the use of reflective journals sounds effective and constructive too. Finally, yet importantly, we recommended to reconsider the content of the module of study skills by adding interesting and attractive topics, activities, and techniques that will benefit students in their professional careers.

The researcher encountered many obstacles, which resulted in the presence of some limitations such as the difficulty to understand DA and critical thinking and the way to enhance the latter in the context under investigation. Besides, students' absences and teachers' reluctance to sit for the interview affected negatively the progress of the present fieldwork. Further interesting results would have emerged if we took into consideration gender differences; hence, future researchers can take this opportunity. The teaching of critical thinking was a beneficial experience for both the participants and the researcher as it helped to express her stance objectively by avoiding the mistakes of critical thinking during the process of writing the present doctoral thesis. It was said that the latter cannot be taught in a culture that is not practised socially. We could contradict this position and confirm its possibility to be taught and practised in the setting under investigation because this depends on individuals' personality, knowledge, motivation, and positive feedback.

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Appendices

Appendix A: Students Questionnaires

- **Appendix A 1:** Students Likert Scale
- **Appendix A 2:** Factual, Behavioural and Attitudinal Questionnaire

Appendix B: Classroom Observation Checklist

Appendix C: Pre-test

- Appendix C 1
- Appendix C 2
- Appendix C 3
- Appendix C 4
- Appendix C 5
- Appendix C 6

Appendix D: Sample of Courses Taught during the Experiment

- **Course 1:** Thinking, Reflection, and Problem-solving
- **Course 2:** Critical Thinking Dispositions
- **Course 3:** Analyticity in Writing
- **Course 4:** The Critical Sense
- **Course 5:** Motivational Self-regulation and Self-confidence
- **Course 6:** Clarity and Consistency
- **Course 7:** Evaluating an Essay
- **Course 8:** Acknowledging Sources

Appendix E: Post-test 1

- Appendix E 1 (Fadia)
- Appendix E 2 (Amel)
- Appendix E 3 (Massi)
- Appendix E 4 (Nissa)
- Appendix E 5 (Mina)

Appendix F: Post-test 2

- Appendix F 1 (Fadia)
- Appendix F 2 (Amel)
- Appendix F 3 (Massi)
- Appendix F 4 (Nissa)
- Appendix F 5 (Mina)

Appendix G: Students' Samples before Mediation

- Appendix F 1 (Rima)
- Appendix F 2 (Nihad)
- Appendix F 3 (Kawthar)
- Appendix F 4 (Salma)

Appendix H: Students' Samples after Mediation

- Appendix H 1 (Rima)
- Appendix H 2 (Nihad)
- Appendix H 3 (Kawthar)
- Appendix H 4 (Salma)

Appendix I: Students' Personal Journals

- Appendix I 1 (Malia)
- Appendix I 2 (Warda)
- Appendix I 3 (Samah)
- Appendix I 4 (Mina)
- Appendix I 5 (Rima)
- Appendix I 6 (Salma)
- Appendix I 7 (Fadia)
- Appendix I 8 (Amel)
- Appendix I 9 (Zina)

Appendix J: Teachers Interview

- **Appendix J 1:** Teachers Interview Questions
- **Appendix J 2:** A Sample of Teacher Transcript

Appendix A:

Students

Questionnaires

Appendix A 1: Students Likert Scale

Self-evaluation

For each of the following statements, rate your responses as outlined below.

a. Agree, b. Strongly agree, c. Sort of agree, e. Disagree, f. Strongly disagree

- I can remain **focused** on the exact requirements of an activity.
 - I know the meaning of **'argument'** in critical thinking.
 - I know what is meant by the **line of reasoning**.
 - I am aware that my beliefs might affect my opinion of a given issue.
 - I am good at recognising **the signals** used to indicate the stages in an argument.
 - I find it easy **to separate key points** from other materials.
 - I am good at **reading between the lines**.
 - I find it easy **to assess** different points of view fairly.
 - I understand how **to structure an argument**.
 - I can **spot inconsistencies** in an argument easily.
 - I know how **to evaluate** source materials
-

■

Appendix A 2: Factual, Behavioural and Attitudinal Questionnaire

Dear Students,

As a doctorate researcher, I would kindly ask you to devote some of your precious time to answer this questionnaire which is part of a research work I am conducting in order to examine students' critical thinking skills, as well as their attitudes and perceptions towards evaluation and assessment of ELT at the department of English, University of Algiers 2. All your answers will be analysed anonymously; please give honest and trustful answers. Thank you for your cooperation.

ELT: English Language Teaching

Critical thinking skills: the skills needed for making good judgments of others' ideas, works...etc.

- Put a tick (✓) on the right box, you can choose more than one answer

I/ Background Knowledge

1. Gender and Age:

- How old are you?

- Are you: a. Male

or

b. Female

2. Was English your first choice? a. Yes

b. No

- If yes, did you choose it because you are:

a. Motivated to study it

c. Your parents advised you

b. You did not have any other appropriate choice

d. It is an international language

e. Others:

.....
.....

3. Before you enter university, how do you evaluate your level in English?

a. Beginner

b. Intermediate

c. Pre-intermediate

d. Upper intermediate

e. Advanced

4. After completing your first year at university, how do you judge your level now?

a. Upper-intermediate

b. Advanced

c. Nothing changed

5. How do you prefer to learn?

a. Through handouts

b. Group discussion

c. Whole classroom debate

d. None of them

Others:

.....
.....

II/Assessment Attitudes

6. Do you like the way (s) your teachers assess you?

a. Yes, all of them

b. some of them

c. None of them

7. To what extent do you learn from your teachers' feedback?

a. Always

b. Sometimes

c. Rarely

d. Never

8. How do you find your teachers' assessment?

Criteria	Some of them	All of them	None of them
Traditional			
Modern			
Mixture between the 2			

9. Does your teachers' assessment helps you to develop your creativity and imagination?

- a. Yes, all of them b. Some of them c. None of them

10. Do you think your teachers' questions in the test or exam seek your:

Criteria	Some of them	All of them	None of them
Personal point of view			
Repetition of the content of the handout/lecture			
Personal point of view by relating it to some concepts in the handout			

III/Students' Critical Thinking**11. Do you think you are able to evaluate your teacher/classmates' ideas in the classroom?**

- a. Yes b. Somehow c. Not at all

Please, justify your answer

.....

12. Do you think you can summarise a text or speech and then make an analysis of it?

- a. Yes b. Somehow c. Not at all

13. Do you listen when your classmates express their opinion in the classroom?

- a. Always b. Sometimes c. Rarely d. Never

14. Do you accept an opinion even though it is in contradiction with yours?

- a. Always b. Sometimes c. Rarely d. Never

Please, justify your answer

.....

15. Do you accept the criticism from:

- a. Teacher only b. Both teacher and students c. Only the students you feel comfortable with

Please, justify your answer

.....

16. Do you comment on the idea or opinion of:

- a. Teacher only b. Both teacher and students c. Only the students you feel comfortable with

Please, justify your answer

.....

17. Do you feel curious to discover the truth in order to:

- a. Gain culture for developmental growth or lifelong learning

- b. Have knowledge and use it in the exam only

- c. None of them

Please, justify your answer

.....

18. Do you feel comfortable when you express your own opinion?

- a. Yes b. Somehow c. Not at all

Please, justify your answer

.....
.....

IV/ Students' Attitudes about teaching Critical Thinking

19. Do you think you need some mediation (guidance) on how to make effective judgements and solve problems?

- a. Yes b. Somehow c. Not at all

20. What type of mediation will you prefer if your answer to question (19) is yes or somehow:

- a. Interventionist (means the teacher intervenes and explains)

- b. interactionist (teacher-student interaction)

VI. Suggestions and Recommendations

- **21.** If you want to add any further suggestions or recommendations, please feel free.

Appendix B:

Classroom

Observation

Checklist

Appendix B: Classroom Observation Checklist



Observer: Ms. Lydia Benmouhoub
Level and Group:
Date:
Hour:

Observed:
Module:

Criteria	Description
1. Intentionality	<ul style="list-style-type: none"> ▪ Interaction (Teacher-student, student-student)
2. Transcendence	<ul style="list-style-type: none"> ▪ The shift from the interpersonal stage to intrapersonal
3. Mediation of Meaning	<ul style="list-style-type: none"> ▪ The teacher clarifies a concept or a task that is mystifying for the students.
4. Mediation of Feelings of Competence	<ul style="list-style-type: none"> ▪ The teacher demonstrates to students the extent to which they are competent.
5. Mediated Regulation and Control of Behaviour	<ul style="list-style-type: none"> ▪ The teacher monitors students' behaviour in order to develop their self-regulation.
6. Mediated Sharing Behaviour	<ul style="list-style-type: none"> ▪ The teacher communicates with students concerning their contribution to the task as well as their perception of its difficulty.
7. Mediation of Individuation and Psychological Differentiation	<ul style="list-style-type: none"> ▪ The teacher mediates students' psychological differences and the extent to which their abilities would benefit their peers.
8. Mediation of Goals	<ul style="list-style-type: none"> ▪ The teacher assists students in conceiving their goals, plan them as well as the way to achieve those goals.
9. Mediation of Challenge	<ul style="list-style-type: none"> ▪ The teacher provides students with tasks that are beyond their current ability.
10. Mediation of an Awareness of the Human Being as a Changing Entity	<ul style="list-style-type: none"> ▪ The teacher stresses the importance of modifiability among the students' learning behaviour.
11. Mediation of an Optimistic Alternative	<ul style="list-style-type: none"> ▪ The teacher provides students with supports that can shift them from their current knowledge to a more enriching and transferable one.

Appendix C: Pre- test

Appendix C 1

They fail because they don't
prepare them selvs careclly and
dont study inaf for Exams
and they also miss classes.
this ~~is~~ is the reasons why they
fail.

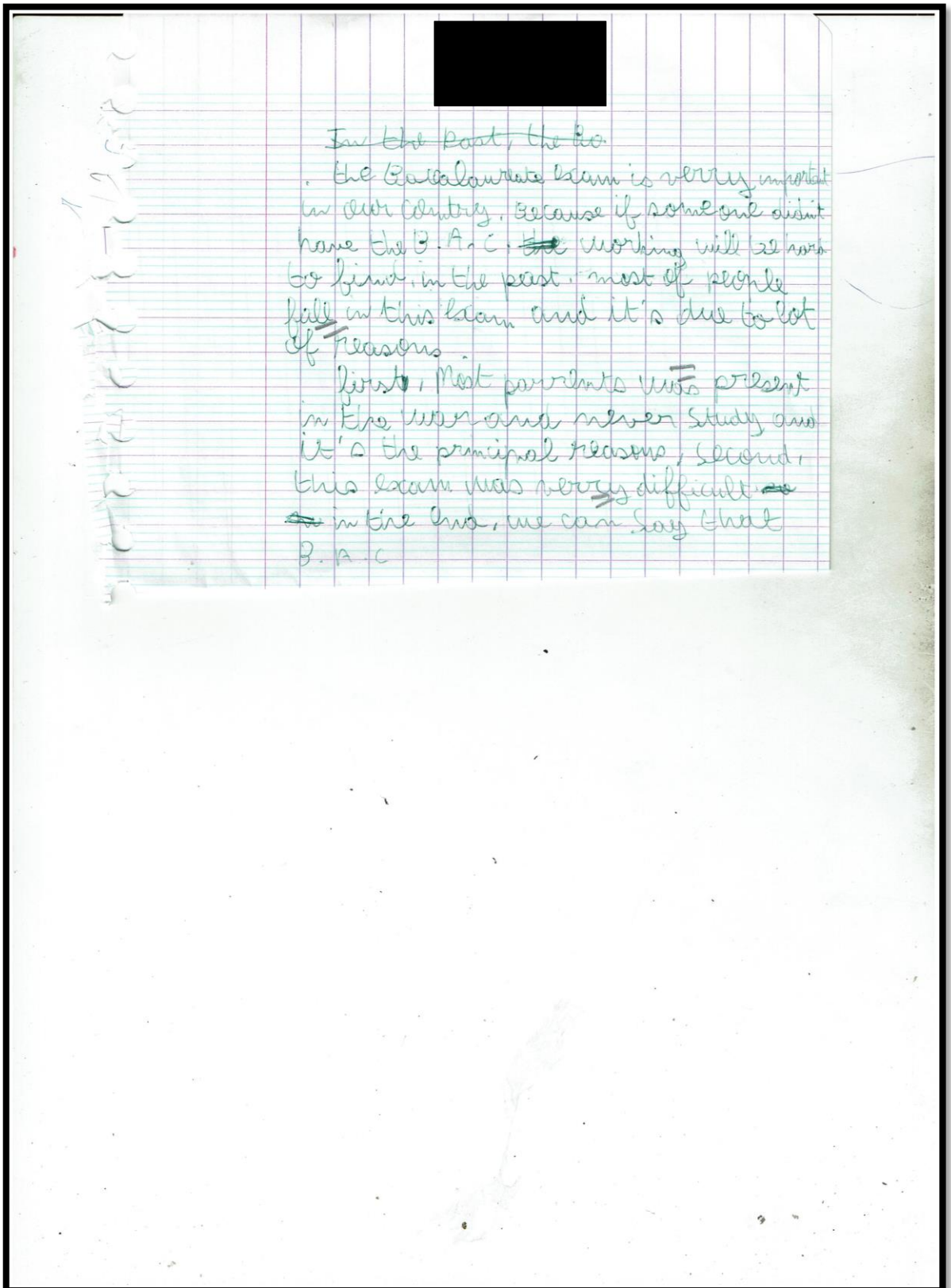
Appendix C 2

In the past, the baccalaureate exam
 used to be perceived as being hard to pass. As
 a consequence, only a few people used to
 succeed. ~~According to my~~
 There are many people said and I heard
 them when I was a child the baccalaureate exam
 of that's period so hard and not easy like the
 modern. I was learning more why they said
 that and I found some things about that
 like the life in the past so hard there's no
 technologies ~~and~~ for study
 Another thing, the transport doesn't enough to
 go and take a far places for study
 the most people who could take it
 are rich people have the money and
 live in the city.

Appendix C 3

well, according to me, the Major reasons for Making the Baccalaureat exam hard to pass is that it's the Most important exam in our life we can say that it's our door for the university and for our futur so we find that the Students get scared from it passing it and sometimes they can lose their self-confident so this caused their fail can caused their fail too.

Appendix C 4



Appendix C 5

In the past, only few people used to succeed in Baccalaurat exam, because the Ministry of Education take great major in the exam, and the programme was difficult.

Appendix C 6

In the past, the baccalaureat exam used ^{to} be perceived as being hard to pass. As a consequence, only a few people used to succeed. According to you, what are the major reasons for that?

I think that the major reasons for this issue was that ~~people~~ ~~schools~~ were so far, in another word ~~people have to~~ ~~go to~~ ~~college~~ ~~was~~ about it was so hard to study. Then, many people in the age of 14 and 15 years old used to work so they preferred getting money ~~or~~ ~~finally~~ ^{also}, they used to marry early. ~~in the age of 16 or 15 years old~~, ^{I mean} they focus more about ~~their~~ ^{the situation of their} kids and families so they left their studies ~~finally~~ ^{thereby}. Studies in ancient time were ~~difficult~~ difficult ~~than~~ because they used to search in their own ~~by~~ for instance they read books to find the information ~~so~~ and it was very hard ~~to~~. In the past, there was ~~an~~ not extra-classes so, they have to work and learn with no help ~~that's~~ that's why a few people used to succeed in their bac exam.

Appendix D:
Sample of Courses
Taught during the
Experiment

Researcher: L.Benmouhoub

Email: lydia.benmouhoub@univ-alger2.dz

Date: October 21, 2017

Duration: 1h30

Room: 06

Level: First Year LMD

Course 1: Thinking, Reflection and Problem Solving

Objective:

- To develop students' understanding of thinking, reflection and problem-solving as concepts

1. Thinking, Reflection and Problem-solving

1.1. Thinking: Dewey (1910, pp. 2-3) gave us three definitions for thinking:

- Everything that is in our head or that goes through our mind.
- Restricted thinking of what goes on beyond observation.
- The one which considers the basis and the consequences of a belief.

Examples:

- I think it would be preferable to read a book now.
- Many Algerian men still think that the job of any woman is to stay at home and do the cooking.

1.2. Reflection: Contrary to thinking, reflection refers to the thinking that is planned, deliberate and systematic. This means that before somebody does something, he/she sets first the objectives and the means for achieving the ends.

Example:

- You as students at university, some of you have chosen English after careful reflection. This means that, you thought first about the importance of English in our daily life; its value as well as the status it has gained in the whole world.
- In addition, some of you said that they want to become translators. You need to understand first what requires from you in order to become effective translators. For example, the mastery of more than one language.

1.3. Problem-solving: It means the ability to find solutions to problems based on reflective thinking.

To become reflective citizens, students need to follow the steps as mentioned in the figure below:

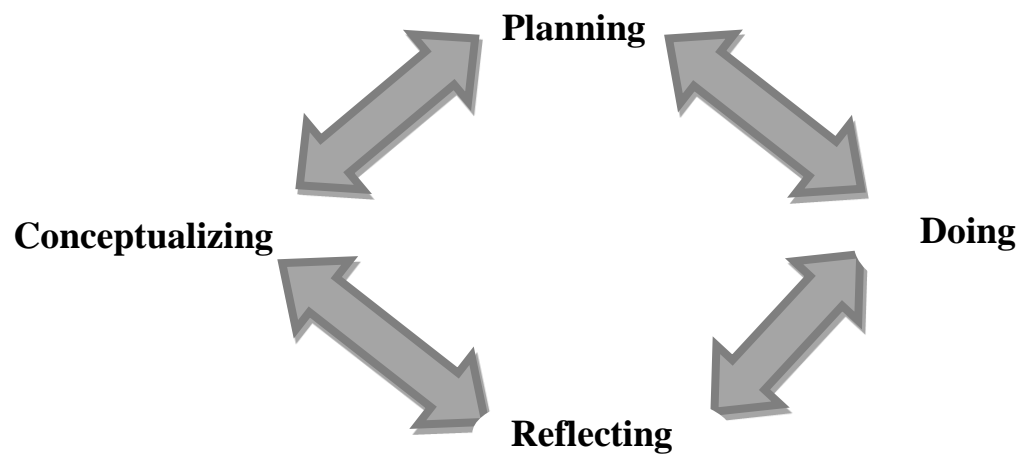


Figure 1. The process of Reflective Thinking

N.B. Before providing the experimental group with the definition of the concepts, we asked them first to think about the meaning of each and then give examples.

Reference: it was provided to students in order to help them elaborate on the lesson.

Jean Dewey, (1910). *How We Think*. New York: B. C. HEATH & Co.

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Date: October 28, 2017

Duration: 1h30

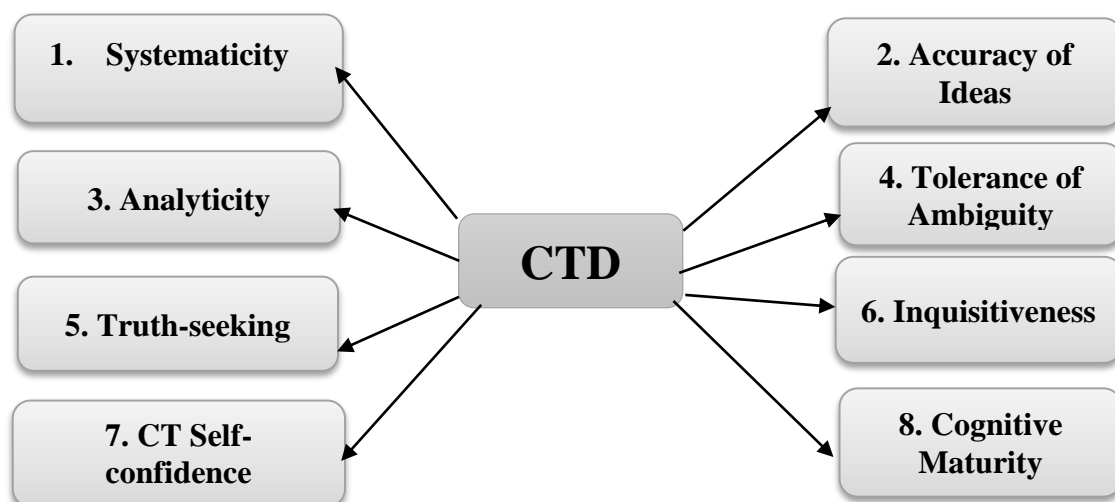
Room: 06

Level: First Year LMD

Course 2: Critical Thinking Dispositions (CTD)

Objectives:

- To make students aware of the critical thinking dispositions they need to take into account while speaking or writing.
- To help students practice in groups the CTD



- **Oral practice:** As a group, brainstorm the different learning styles or things you can do when you study that capitalises on each of the following modalities (Visual, auditory, kinaesthetic). Use your own experiences and ideas for study strategies.
- **Instructions:** Reasonably speaking, as far as I am concerned, as a matter of fact, chiming with, this consensus, to reflect upon, to solve a problem.
- **Written practice:** What are the major adjustments you have had to make in your attitude, behaviour or use of time as you learn to become a more effective time manager? How has your pie of life changed since you began using time management? Explain.

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Duration: 1h30

Room: 06

Level: First Year LMD

Course 3: (Analyticity in Writing)

Question: Read the text below, then summarise it by following the Cornell Note System.

Maslow's Hierarchy

Maslow (1970) suggested that human behavior is influenced by a hierarchy, or ranking, of five classes of needs or motives. He said that needs at the lowest level of the hierarchy must be at least partially satisfied before people can be motivated by ones at higher levels. From the bottom to the top of Maslow's hierarchy, these five motives are as follow:

1. Physiological: such as the need for food, water, oxygen, and sleep.
2. Safety: such as the need to be cared for as a child and to have a secure income as an adult.
3. Belongingness and love: such as the need to be part of groups and to participate in affectionate sexual and nonsexual relationships.
4. Esteem: such as the need to be respected as a useful, honorable individual.
5. Self-actualization: which means reaching one's full potential. People motivated by this need explore and enhance relationships with others; follow interests for intrinsic pleasure rather than for money, status, or esteem; and are concerned with issues affecting all people, not just themselves.

Maslow's Hierarchy of Motives

Abraham Maslow saw human motives as organized in a hierarchy in which motives at lower levels come before those at higher levels. According to this view, self-actualization is the essence of mental health; but Maslow recognized that only rare individuals, such as Mother Teresa or Martin Luther King, Jr., approach full self-actualization. Take a moment to consider which level of Maslow's hierarchy you are focused on at this point in your life. Which level do you ultimately hope to reach?

Maslow's hierarchy has been very influential over the years, partly because the needs associated with basic survival and security do generally take precedence over those related to self-enhancement of personal growth . . . But critics see the hierarchy as too simplistic. It doesn't predict or explain, for example, the motivation of people who starve themselves to draw attention to political or moral causes. Further, people may not have to satisfy one kind of need before addressing others; we can seek to satisfy several needs at once. Finally, the ordering of needs within the survival/security and enhancement/growth categories differs from culture to culture, suggesting that there may not be a single, universal hierarchy of needs. To address some of the problems in Maslow's theory, Clayton Alderfer (1969) proposed existence, relatedness, growth (ERG) theory, which places human needs into just three categories: existence needs (such as for food and water), relatedness needs (e.g., for social interactions and attachments), and growth needs (such as for developing one's capabilities). Unlike Maslow, Alderfer doesn't assume that these needs must be satisfied in a particular order. Instead, he sees needs in each category as rising and falling from time to time and from situation to situation. When a need in one area is fulfilled, or even if it is frustrating, a person will be motivated to pursue some other needs. For example, if a breakup frustrates relatedness needs, a person might focus on existence or growth needs by eating more or volunteering to work late.

Source: Bernstein, Nash. *Essentials of Psychology*, Houghton Mifflin Co., 2008, pages 320–321.

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Date: (Sequential)

Duration: Six hours (4 sessions)

Room: 06 /104

Level: First Year LMD

Course 4: The Critical Sense

Objectives:

- To help students understand the concept of critical thinking.
- Become aware of some critical thinking strategies: stereotype, premise, inference, assumption, enthymeme, tautology, and non-sequitur.
- Good consumers of ideas are always critical. By critical, we do not mean having disrespect for others, fault-finding, or carping over details. We mean a healthy scepticism, an unwillingness to accept something at someone else's evaluation, a willingness to postpone agreement or disagreement until after thorough analysis.
- We are all sceptical in some areas of life. As soon as an elected official opens his or her mouth, "Oh yeah?" "Who says" and "so what?" ready themselves for the asking. Each time we see an automobile commercial featuring a sleek cheetah, a brilliant desert landscape, a beautiful woman clad in flowing chiffon, and a virile-looking, handsome man, we feel a scoff coming on. We know that politics and commercials are notorious for humbug. Perhaps less obvious, humbug and sleights of hand exist throughout the world of ideas. A healthy scepticism uncovers less obvious humbug.
- Remember, also, that we manufacture ideas as well as consume them. That means we must try to be sceptical about our own thinking as well as that of others. We should watch ourselves as we think, be aware of our assumptions, and watch as we reason from A to Z.

1. Definition of Critical Thinking:

- As stated by Cooper and Patton (1946), critical thinking comes from the Greek word "Kriticos" and Latin "Criticus", which means discerning and separating. For Houston (2011), the term was originally a subfield of philosophy that hones in logic and the structure of arguments, and then, it extended to other disciplines such as psychology and education. For him, critical thinking is the discipline of thought and the validity of arguments.

2. Rationalism, Empiricism, and Positivism:

- According to the French philosopher René Descartes (1596-1650), the reason was the only mode by which one could arrive at the truth and assumed that valid knowledge can only be acquired if the correct reasoning process is used. However, the empiricists represented by the British philosophers like Jhon Locke (1632-1704) argued that experience is the basis for acquiring all knowledge.

- Auguste Comte (1798-1857) attempted to blend rationalism and empiricism in a new doctrine called “positivism”, a view which claims that reasoning is only authentic when it is verified through observations and measurements. His view was expanded by the sociologist Emile Durkeim (1858-1917) who elaborated on the principles of social sciences in the realm of scientific research.

3. Opening the Mind: Clearing out the Underbrush:

- The thinker about whom few of us are sceptical enough is our very own self. When we believe something, we assume we have it right. If we are not right, we would believe something different that was right. We certainly do not need to listen to conflicting views. We lock the doors of our minds.

- Yet all of us have been wrong and have had to change our minds. A candidate we vehemently supported turns out to be morally flawed. A policy or rule we opposed suddenly makes good sense. A behaviour we once hated now seems harmless. We have either learned more or listened to someone else who persuaded us otherwise. When we open our minds to new ideas and fresh insights, we gain a better understanding of the world.

4. Shedding Stereotypes:

- To stereotype means to judge another person according to some preconceived ideas about a group that person belongs to.

- Stereotyping assumes that all members of the group share the same set of fairly simple characteristics, frequently unpleasant and sometimes immoral. Examples:

- Fraternity men drink.
- Surely you are not consulting a woman lawyer (women lack reasoning).

5. Premise:

- When we reason, we start with some idea or fact or belief. That starting point is called a premise. A premise is an idea we do not try to prove. We assume it is true. When

we reason, we combine two or more premises and draw a conclusion based on their connection. For example:

Premise 1: Arsenic can be deadly.

Premise 2: My dog ate arsenic.

Conclusion: it may die.

Not all premises are stated. Some may be implicit or hidden. For example:

Premise: All living things require water.

Conclusion: A cactus requires water.

6. Inference:

- The process of moving from the premises, or reasons, to the conclusion is called an inference. Based on what we know or believe, we infer ideas about what we do not know. For example:

➤ People are standing in line in front of that movie theatre (Premise).

➤ They will attend the movie (inference).

7. Assumption:

- An assumption is a belief that we take for granted as a basis for an assertion. For example:

➤ Group work may boost students' self-confidence.

8. Enthymeme:

- An argument in which one part either of the premises or the conclusion is missing is called an enthymeme, a term based on a Greek word meaning "To hold in mind". For example:

➤ He did not teach (Major Premise).

➤ I know he is a competent person (Minor Premise).

9. Tautology:

- An argument that only repeats the same idea in different words. For example: The car does not work because something is wrong.

10. Non-Sequitur:

- The Latin phrase non-sequitur means "it does not follow". It applies to any argument whose conclusion simply has nothing to do with the premises. For example: War-making depended on horses, and horses ate barley.

11. Acknowledging Complexities:

- Almost any idea worth thinking about is complicated. If it were not, we would not have to think about it. Unfortunately, most of us try to fly over the complications. We seek a simple explanation, we ignore contrary evidence, we settle for the obvious. In short, we indulge in the logical fallacy called oversimplification. This latter takes many forms like:

N.B. Assuming that a problem has only one solution. E.g. if we want to improve education, we have no choice but to eliminate electives from the curriculum.

- Justifying a belief or a course of action on the basis of one single reason. E.g.
- Considering only the positive side of a proposition.

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Date: January 8th, 2018

Duration: 1h30

Room: 104

Level: First Year LMD

Course 5: Motivational Self-regulation and Self-confidence

Objectives:

- To enhance students' motivational self-regulation and self-confidence
- Training students for critical thinking by making them aware of Clement's Theory of Linguistic Self-confidence

Introduction

- As Bruner (1996, p. xi) notes, learning and thinking are made possible only by participating in a particular sociocultural setting. According to Ema Ushioda, if learning is about “mediated participation”, the motivation to learn is also in this sense socially and culturally mediated. It is not located solely within the individual, but is socially attributed; created within cultural systems of activities including the mediation of other human beings. As Good and Brophy (1997) interest reside in people rather than in topics or activities, and motivation develops as a result of interactions among persons, tasks, and the larger environmental context.

1. Towards Motivational Self-regulation

- Self-regulation is a function of the degree to which we are aware of ourselves as agents in the construction of the thoughts, beliefs, goals, and expectations that shape our motivation. Without our understanding of our role as agents in formulating goals, self-perceptions, and motivation, the stage cannot be set for the emergence of self-regulatory processes, that is recognition our potential to have control over what we think and thus control over our motivation. Failure to recognize the self as agents in controlling thoughts and thus motivation can lead individuals to become trapped in negative patterns of thinking and self-perception, which debilitate their motivation. Ema Ushioda argues that motivation that underpins autonomy must come “from within” and be self-regulated rather than regulated by others. Social interactive processes play a crucial role in encouraging the growth of motivation from within and its ongoing regulation by the learner. Motivation is a socially mediated phenomenon. Establishing a positive

motivational dynamic among learners in these circumstances can happen only in interaction with the development of their autonomy, and through their supportive interpersonal processes that encourage growth and regulation of motivation from within.

2. Three Phases of L2 Motivation Research

- L2 motivation research has been a thriving area within L2 studies with several books and literally hundreds of articles published on the topic since the 1960s? Its history goes into three phases.

2.1. The socio-psychological period (1959-1990). The initial impetus in L2 motivation research came from social psychologists working in Canada, most notably from Wallace Lambert, Robert Gardner, and their associates. They were interested in understanding the unique Canadian social situation characterized by the often confrontational coexistence of the Anglophone and Francophone communities. Gardner and Lambert (1972) viewed 2nd languages as mediating factors between different ethnolinguistic communities and thus regarded the motivation to learn the language of other community as a primary force responsible for enhancing or hindering intercultural communication and affiliation. It was only in the 1990s that psychologists started to show an active interest in the social context of motivation. Gardner and Lambert claim that unlike several other school subjects, a foreign language is not a socioculturally neutral field but is affected by a range of sociocultural factors such as language attitudes, cultural stereotypes, and even geopolitical considerations. This social argument has been accepted by researchers all over the world, regardless of the actual learning situation they are working in. Language, after all, belongs to a person's whole social being. It is part of one's identity and is used to convey this identity to other people. The learning of a foreign language involves far more than simply learning or a system of rules, or a grammar, it involves an alteration in self-image, the adoption of new social and cultural behaviours, and ways of being, and therefore has a significant impact on the social nature of the learner.

2.2. The cognitive-situated period (during the 1990s). Although the starting point of the CSP in motivation research is often seen as Graham Crookes and Richard Schmidt's (1991) influential article on "reopening the motivation research agenda", the need for a change was "in the air at the turn" of the 1980s and 1990s and several other publications from around the same time voiced a similar view of the CSP was characterized by two elements: a) the desire to catch up with the advances in motivational psychology and to extend our understanding of L2 motivation by importing some of the

most influential concepts of the 1980s. According to this approach, how one thinks about one's abilities, possibilities, potentials, limitations...etc. is a crucial aspect of motivation.

B) The desire to narrow down the macroperspective of L2 motivation (i.e, the broad view focusing on the motivational disposition of whole communities to a microperspective such a language classroom.

2.3. The process-oriented period. The CSP emerging in the 1990s soon drew attention to another rather neglected aspect of motivation. When motivation is examined in its relationship to specific learner behaviours and classroom processes, there is a need to adopt a process-oriented approach paradigm that can account for the daily ups and downs of motivation to learn that is the ongoing changes of motivation over time. Looking at it from these perspectives, motivation is not seen as a static attribute but rather as a dynamic factor that displays continuous fluctuations.

3. Clement's Theory of Linguistic Self-confidence

- The most important factor studied by Clement and his associates is self-confidence which in general refers to the belief that a person has the ability to produce results, accomplish goals or perform tasks competently. It was first introduced in L2 literature by Clement, Gardner, and Smythe (1977) to describe a powerful mediating process in multi-ethnic settings that affects a person's motivation to learn and use the language of the other speech community. Clement and his colleagues provided evidence that in contexts where different language communities live together. Linguistic self-confidence derived from the quality and quantity of the contact between the members of the L1 and L2 communities in a major motivational factor in learning the other community's language and determines the learners' future desire for intercultural and the extent of identification with the L2 group. Thus, linguistic self-confidence in Clement's view is primarily a socially defined construct.

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Date: February 4th, 2018

Duration: 1h30

Room: 104

Level: First Year LMD

Course 6: Clarity and Consistency

Objectives:

To help students understand how to construct the following elements:

- The introductory sentences
- The final sentences
- The conclusion
- The overall line of reasoning
- The overall summary of the argument
- Careful selection of facts so the argument is not lost

Question: based on the strategies you have studied on critical thinking; try to answer the following questions:

1. Is the author's position clear?
2. What makes the author's position clear or unclear?

The passages:

Passage 1

The brain of an elephant is five times larger than that of humans. Some people believe elephants are very intelligent but, even if that were true, are they really five times brighter than humans? But maybe we are looking at this the wrong way. After all, is it fair to compare the brain size of a large animal with that of a small creature? Perhaps it is the relative size that matters? Human brains weigh as much as 2.5 percent of body weight whereas elephants' brains are less than half of a percent of their total body weight. Proportionally, the brain of a human is ten times greater than that of an elephant. Maybe it is the ratio of brain to body size that matters? If that were the case, then the shrew, with

its heavier brain, would be brighter than humans and elephants - and yet shrews do little more than eat.

Passage 2

Individuals have free will and so can control their own destiny. On the other hand, groups also have an identity. Research by Campbell (1984), has shown that girls who mix with boys are more likely to have seen a fight and become involved in a fight than girls who mix mostly with girls. This suggests that aggressive behaviour is affected by the social environment and is not just about character. In everyday life, our sense of self is such that we believe we are making independent decisions. We are aware we have a choice and we make decisions ourselves. Groups can also force decisions upon members, sometimes without them realizing.

Passage 3

This report researched whether a new sports centre should be constructed in region X. Market research suggests that there is little popular demand for another sports centre in the area. However, very few people in the region use sports facilities to improve their health. The government is trying to encourage more personal responsibility for health and fitness. A sports centre would be useful in promoting this objective. People in the area are not aware of health issues and are not interested in sport. There may be government subsidies available.

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Date: February 10 th, 2018

Duration: 1h30

Room: six

Level: First Year LMD

Course 7: Evaluating an Essay

'Stealing is always wrong.' Discuss with reference to unpaid downloading of music from the internet.

- There are many forms of stealing. Although most reasonable people would agree that some forms of theft such as burglary or mugging are always wrong, other areas are less clear cut. In this essay, I shall look at downloading music from the internet as a grey area.
- Stealing has probably existed since the beginning of time, and certainly as long ago as the Old Testament, where it was banned by the commandments. All religions regard stealing as wrong, so you would think that there were universally understood principles about what is stealing and what is not. However, this is not the case. This is also true of many other types of an ethical issue. Despite this long-standing agreement that stealing is wrong, many people steal. In fact, it is a very common crime, so it is worth considering why this has persisted for so long.
- Before the internet became popular, people used to tape music from the radio. Lee (2006) says no one was bothered by this because it was impossible to catch people. Everyone knew that it happened but record sales remained high so it clearly had no real impact on artists and labels. Although home taping was technically illegal, only record companies who were worried about profits could really call it 'stealing'. Nobody knows how much music was copied and it still continues to this day.
- Lee goes on to say that just because it is possible to catch people who download from the internet it doesn't make it any worse than people making copies from the radio.⁵ Carla (2006) agrees with Lee and says that downloading music from the internet is a 'useful service to music'. She states that without this service the world of music would be 'extremely bland and middle of the road'. Hibbs (2006) says that more and more people are downloading music without paying and sharing it with their friends. Because everyone is doing it, it cannot be a bad thing and cannot be considered wrong.

- The real reason for downloading from the internet gets classed as stealing is because big music companies do not like to see big profits escaping from them. Spratt (2004) states that record companies are not even that bothered about ordinary people downloading from the internet. They are only worried about companies who make and sell pirate copies of their recordings. So why do they continue to prosecute file sharers? This can only be about greed, especially as it is the poorest people who have to download for free as they cannot afford to pay for legal download.
- Cuttle (2007) says that people should pay for the products that they consume and if they cannot pay then they should go without. He sees downloading music for free as stealing. Kahliney (2006) agrees with this. He says that small companies cannot afford to lose money through people downloading their music for free. Even a few copies have a bad effect on companies who only employ a few staff and they might have to make people redundantly. The type of music these companies produce tends to be quite obscure and unpopular so there is little effect on the majority of music listeners.
- Carla (2006) says that new bands are often overlooked by the major record companies and are only picked up by small, independent companies. These companies are often only able to distribute music on a limited basis. Many have a very small staff and resources and cannot get out on the road to sell the music to shops across the country, never mind worldwide. Bigger producers can employ sales teams to take the product out to the market, either promoting it in shops or even arranging tours to schools to promote the music to school children. School children buy records in the largest numbers so a band that is promoted well to children is likely to rise up the charts and become better known to the general public.

The Evaluation Checklist

Aspects	Yes	No	Comments
1. The writer's own position on the issue is clear.			
2. It is clear what are the reasons for the author's point of view.			
3. The writer's position is clear and based on the evidence.			
4. The reasons are presented in a logical order, as a line of reasoning.			
5. The argument is well-structured and easy to follow.			
6. The reasons are clearly linked to one another and to the conclusion.			
7. All the text is relevant to the assignment.			
8. The main reasons and key points stand out clearly to the reader.			
9. The author makes good use of other people's research as supporting evidence to strengthen the argument.			
10. Does the writer make a reasoned evaluation of other people's views especially those that contradict his or her point of view?			
11. Does the writer provide references in the text when introducing other people's ideas?			
12. Does the writer provide a list of references at the end of the essay?			
13. Has the writer removed any inconsistencies			
14. Does the writing contain any inconsistencies?			
15. Are the writer's belief or self-interests unfairly distorting the argument?			

Procedure: The students were divided into a group of 7; each one was supposed to read one paragraph and provide the main idea and then share it with the members of the group. In the end, after having gathered the seven arguments, each group will answer the checklist together and then compare it with the other groups to see the differences.

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Date: February 24 th, 2018

Duration: 1h30

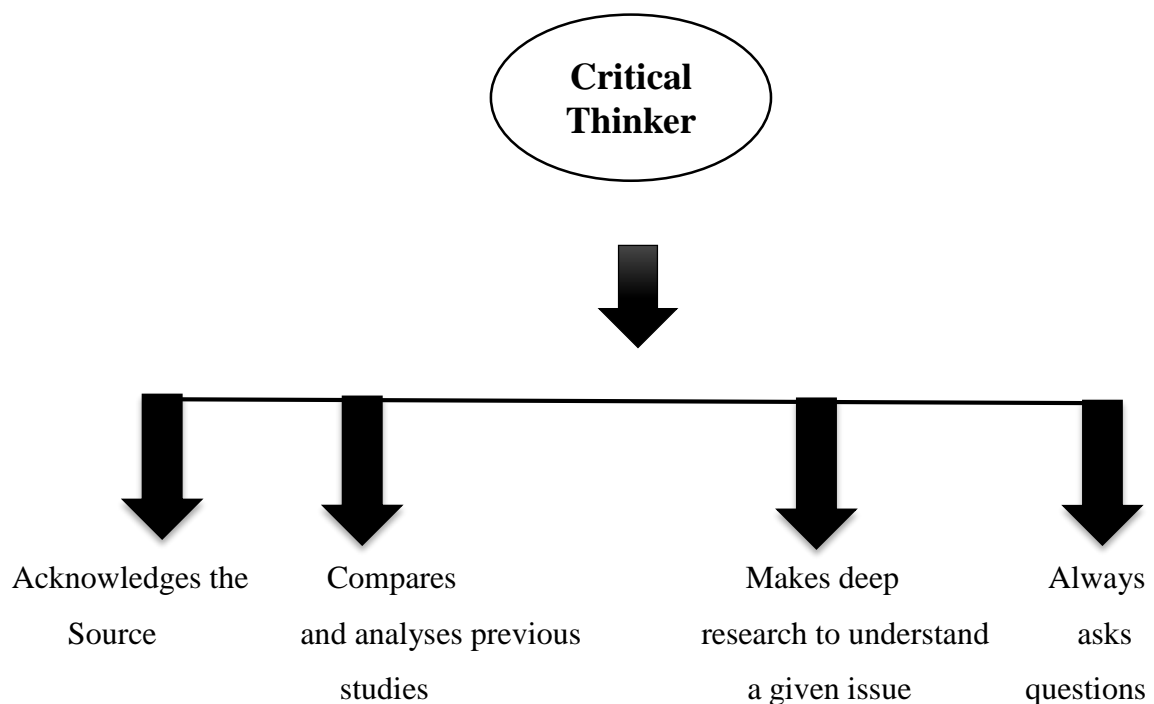
Room: six

Level: First Year LMD

Course 8: Acknowledging Sources

Objectives:

- Raising students' awareness about the importance of acknowledging sources to support their point of view
- Helping students understand the notion of "Literature Review"



Activity: After asking some students to read the excerpt above, we then distributed some books, journals, and articles in order to practice summarizing a piece of text and then acknowledge the source. In addition, they were asked to evaluate it by expressing their

personal point of view. We divided the students into groups, of either three, four or five. Some students preferred to work alone.

Example of a review of literature:

Source: From APA for Academic Writing (2016-2017)

When students learn more about the process of learning and begin to incorporate the use of specific strategies, self-monitoring, and self-reflection into their academic endeavours, they are more successful in reaching their goals. In their examination of students' acquisition of learning strategies, Simpson, Stahl, and Francis (2004) stressed that students will use a strategy if they understand how, why, and when to use it (p. 3). The researchers explained that learning this "procedural knowledge would help them understand the steps . . . and how to modify those steps" (p. 3). Simpson et al. argued that using the specific strategy taught in a course is often not as important as using the process the students learn of "selecting, summarizing, organizing, elaborating, monitoring, self-testing, reflecting and evaluating" when working on course content (p. 4). The researchers recommended that faculty teach students "how to decipher their own academic tasks" (p. 6). In addition, Lee (2007) argued that once students have acquired a repertoire of study strategies, they should be taught critical thinking skills to evaluate and modify their use of specific strategies (pp. 82–83). Acquisition of strategic learning is, as Hadwin et al. in 2001 explained, "enacted over time through a series of events" (as cited in Simpson et al., 2004, p. 3). P. Foley, a professor at North London University, observed that motivation is strongly linked to student use of learning strategies (personal communication, May 16, 2007). Motivation, in turn, can be influenced by students' beliefs about learning. Simpson et al. (2004) commented on such beliefs: [Many] college freshmen . . . believe that learning should be easy, completed quickly (i.e., the night before in a cramming session) and should happen to them because of what others do for them (i.e., the professor did not teach me to solve that problem). (p. 4)

Appendix E: Post- test 1

Appendix E 1 (Fadia)

People's Democratic Republic of Algeria
 Ministry of Higher Education and Scientific Research
 University AbouKacemSaadallah-Algiers 2
 Faculty of Foreign Languages
 Department of English
 Teacher: Ms. L. Benmouhoub



Student's Full Name: [REDACTED]

Group: [REDACTED]

Exam in Study Skills (Semester One)

Question: It is said that success in study is not an accident, and that it comes from using effective learning techniques (Freeman, 1982). Explain this statement based on your own experiences.

..... The success in study it comes from using methods in other words if we notice someone succeed, it means that the person is well organized and well prepared, that he followed certain methods and strategies that we should take in consideration like the (C.R.E.A.T. Strategies), it means... creative... using abbreviation, techniques that help you remembering less and with your own creativity, Reflection = your reflection about the lessons modules, critical thinking (asking questions), Effective = it occur on it the reflective strategies, also effective concepts such as studying in groups of work, preparing your self, managing your time, organize your self, Active = to be ensure that you are engaged in your studies morally and physically in order to be active person and participate on classroom, Motivation = thinking about why you are studying, that to enforce you will power. All what mentioned below occur in effective learning and to precise the effective study is to be a good time manager i.e. using calendar to fill the gaps from your free time in your weekly schedule in order to save time and not falling it, using the pomodoro technique = from 30 minutes to 30 minutes take rest of 5 minutes to relax, Set a to do list to check the tasks that you did and learn with digitized and emergency issue (start with the emergency task); In addition to be effective learner

15,21
90

Appendix E 2 (Amel)

People's Democratic Republic of Algeria
 Ministry of Higher Education and Scientific Research
 University AbouKacemSaadallah-Algiers 2
 Faculty of Foreign Languages
 Department of English
 Teacher: Ms. L. Benmouhoub



Student's Full Name: [REDACTED]

Group: [REDACTED]

Exam in Study Skills (Semester One)

Question: It is said that success in study is not an accident, and that it comes from using effective learning techniques (Freeman, 1982). Explain this statement based on your own experiences.

..... Success in study is indeed not just an accident, because it is known that it comes with hard work and planning, and in order to accomplish this goal, it is only done by managing time correctly and dividing the day based on the daily routines and duties. For me, I think it is very important to plan my time, as I specify late hours (from 7 p.m. to midnight) in the day to do my homeworks and revise my lessons, because based on my experience, my brain functions better during nighttime which helps it memorize more information during sleep. I think this really helped me since I find more time during daytime to practice my hobbies such as exercising, watching T.V., surfing the internet, going to hangout with my friends in order to release the stress of the classroom, or taking a nap. Moreover, this time management helped me during exams which gave me more time to relax and avoid the huge pile of unrevised or forgotten lessons. They say the day is only 24 hours and we approximately sleep for 7-8 hours, ~~so~~ there is no time to accomplish a lot of things, but I personally disagree with this excuse. The day is not short the person should intelligently

plan their time and do more various activities during this period. Time planning is one of the keys to success in every aspect of life, and is the perfect way to make you feel alive rather than just living pointlessly, it helps you afford more time that is usually wasted on laziness.

Teacher's feedback:

- a - 1
- b - 1
- c - 1
- d - 1
- e - 1
- f - 1
- g - 1
- h - 1
- i - 1

Content:

- a - +
- b - 1
- c - x
- d - x
- e - x

Form:

- a - 2
 - b - 3
 - c - 1
- *



Good Luck

Appendix E 3 (Massi)

People's Democratic Republic of Algeria
 Ministry of Higher Education and Scientific Research
 University AbouKacemSaadallah-Algiers 2
 Faculty of Foreign Languages
 Department of English
 Teacher: Ms. L. Benmouhoub



Student's Full Name: [REDACTED]

Group: [REDACTED]

10/20

Exam in Study Skills (Semester One)

Question: It is said that success in study is not an accident, and that it comes from using effective learning techniques (Freeman, 1982). Explain this statement based on your own experiences.

It's not a coincidence when we see a successful student or say that this person is lucky to get these high marks. It's a long process and a huge work and preparation takes a commitment. Person who is always motivated and thirsty to get knowledge (life time learner).

When we speak about learning techniques I have always been a lazy student in primary and middle school but after I went to high school I realized that I should change my mentality in my life in general and in my academic life in particular, so I started this process with managing my time between home and school. I decided that all what we do in class I should revise it at least one hour every day and get rest in weekend, to get things much easier each module I prepare summaries for every module (short handout with abbreviation etc...)

After that I started to see some good result so I decided that I should develop this method. I prepare my next lesson before coming to class even if I didn't understand it. I want to get a previous look (background knowledge).

After that I should prepare to test but it's a small revision because the whole work has been in the whole semester. In weekends and holidays I prefer to read book or hangout with my friends or going to stadium to

used twice (change it with another connector like: In addition etc)

Appendix E 4 (Nissa)

People's Democratic Republic of Algeria
 Ministry of Higher Education and Scientific Research
 University AbouKacemSaadallah-Algiers 2
 Faculty of Foreign Languages
 Department of English
 Teacher: Ms. L. Benmouhoub



Student's Full Name: [REDACTED]

Group: [REDACTED]

Exam in Study Skills (Semester One)

Question: It is said that success in study is not an accident, and that it comes from using effective learning techniques (Freeman, 1982). Explain this statement based on your own experiences.

Success in study is not something simple, and not an accident. Like (Freeman) said, see the question posed now, How students can realize this objective? is it easy or No? ✓

First, Human being have the capacity to realize many achievements. But according to following steps and strategies which must be perfect.

- For me the term success so deeply and need a study plan to get it, as the British philosopher John Locke "experience is the basis to acquire resonance knowledge". So through my experience, student have to work upon the two important sides, on the moral side and practice side, see:
 - we must to precise our objective without hesitating or scaping.
 - to balance our time (sleeping, eating, our even interesting, laboratory, ...) let to trace a calendar to organize our plan's time's managements, with prioritising the priorities, let to study - revising - cans
 - sleeping for 8 hours 22pm to 6am
 - take a break for doing a sport to drive away laziness and despondency.

- increase the level of concentration and decrease the level of stress and ~~desterling~~ mental by going to the library or researching on the internet for interesting subjects
- thinking in making ideas helping you to go forward = to take persons example in your life
- b: you must to be critical in thinking you need to be skeptical in thinking to manufacturing ideas as well as consume them
- like Rene Descartes said "reasoning only the mind to tend to be truth"



Teacher's Feedback:

- | | |
|----------|----------|
| a - 1 | f - 0.5 |
| b - 0.25 | g - X |
| c - X | h - 0.15 |
| d - 0.25 | i - 0.15 |
| e - X | |

Contact:

- a -
- b - 0.15
- c -
- d -
- e -

Good Luck

Form:

- a - X
- b - 0.15
- c - 1

Appendix E 5 (Mina)

People's Democratic Republic of Algeria
 Ministry of Higher Education and Scientific Research
 University AbouKacemSaadallah-Algiers 2
 Faculty of Foreign Languages
 Department of English
 Teacher: Ms. L. Benmouhoub



Student's Full Name: [REDACTED]

Group: [REDACTED]

6/20

Exam in Study Skills (Semester One)

Question: It is said that success in study is not an accident, and that it comes from using effective learning techniques (Freeman, 1982). Explain this statement based on your own experiences.

... Every one want to succeed in studies and the daily life, it is not complicated, you may use an effective learning techniques, that is: managing your time and identifying your learning skills. We have strategies and it help us to be more concentrate in our studies. First, learning skills like preparing lesson before the class, analyzing the text and making notes, making research about the topic, to have an general idea about it. During the lecture use the highlighters and colors in the text it helps to memorize the key words, listen carefully to the teacher. When you are home make a summary of what you learned and ask questions. Revise by computer (image, videos) it helps you to understand rapidly, or revise in a pair work or group it simplify the ideas because of the exchange of ideas, experiences, information and knowledge, it may help you to be more confident. Prepare the oral presentation with asking questions to your classmates. You can manage your time to reduce the stress and being organize. It is important to have a rest and not doing any work one day in week. Eat well and sleep well, because getting enough sleep helps you to have energy and this is important to study and focused more in it. Also, avoid noise and distractions when you revise.

As it is known, managing the time ~~it~~ is very important. you can do it to organize yourself and ~~the~~ strategies are:
 Making a plan or a schedule to organize your time, to have a set of priorities to do your activities (the work and revision is more important than having fun with friends or sleeping) or to be selective. Make a to do list.
 These strategies help you to be in ~~the~~ time and ~~do~~ every thing in a day without being confused or stressed.

Teacher's Feedback:

- a - 0.85
- b - X
- c - X
- d - 0.95
- e - 0.85
- f - 0.8
- g - X
- h - X
- i - 0.5



Content:

- a -
- b -
- c - 2
- d -
- e -

Form:

- a - 0.4
- b - 0.4
- c - 1

Good Luck

Appendix F: Post- test 2

Appendix F 1 (Fadia)

Student's Full Name: [REDACTED]

Age: [REDACTED]

Secondary School Stream: [REDACTED]

Mark: [REDACTED]

Grp [REDACTED]

08/11
20

Parents are examples for their children as well as they are the power and secret for their success but what if the good example fail raising up her or his child, with what parents suspected to be the good and perfect tool for higher education "Reading" Reading can lead into the opposite way and in fact the success of children.

The recent study shows a part from the dia advantages of reading and how reading can damage success of higher quality of education when the kids obliged to read by his or her parents; also the study argues that the child who does not enforce to read is more friendly and attractive to reading as well as they enjoy what it unlike the other who is obliged and that what stated Stanley and Livingstone in their research.

The main demonstrating the parents were with studying, the less likely the child was to enjoy reading on his or her own" Stanley & Livingstone, The August issue Educator's War Chest. Also, when we led the child free to read or not; so, we will keep it as his choice, he will read with his desires and willing for this free time automatically, the infant will read and pick up the book that what report Stanley and Livingstone "It seems that there is a natural inclination to rebel against one's parents in children, and one way to manifest this inclination is to refuse to read if the child's parents force the child to study" Stanley & Livingstone. Extracted from: Browne Neil Keeley, S. (n.d) Asking The Right Questions: A Guide to Critical Thinking (p. 126-127). this study shows how much the desire and child's feelings are important for parents. If the kids does not want to read we can not enforce him or her because the desire and willing are within the child. If he wants to read he will read surely.

Raising up the child is a picture of her or his parents. if the child have the spirit of a good reader, this means he raised up within an educated family that has the motivational spirit and high culture, the family that bring up her or his child by

making him engage in their cultural environment
step by step not by using power or force.

Good Luck

Appendix F 2 (Amel)

Student's Full Name: [REDACTED] Age: 18
 Secondary School Stream: Foreign Languages

Mark:

15/20

..... This passage examines the difference between children who are under parental control to read books forcefully, and the ones who willingly prefer to read based on their natural habitat.

..... Based on a recent scientific study of 56 children in the 6th grade, Stanley and Divingstone claim that children who detest reading are most likely the ones whom their parents oblige them to do so. While the other category who claim to find joy in reading in their spare time, face different treatment from their parents. August issue of Educator's View Chest. This study, in contradiction to what others thought would be better for the child, led Stanley and Divingstone to conclude that children would neglect reading due to parents' obligation. This research, done at little Greek elementary school in Phoenix, Arizona, also showed that there is an instinctive rebellness in the child's way of responding which comes against their parents' orders as reported by Stanley and Divingstone.

..... This paragraph shows an important point that is humans from an early age, start to develop a certain personality based on their preferences or the way they are treated, which must not be neglected by the parents who would force the child to follow a specific way of their preferences and kill their creativity hidden under the statement of "I am the adult, so I must know what is best for you."

Appendix F 3 (Massi)

Student's Full Name: [Redacted]
Secondary School Str [Redacted]

Age: 11

Mark:

13/20

..... In general we can't fight the fire with fire, we can't, we...
the power to force a person to do something that he doesn't want
to do it. Many parents these days want the best for their children
but they use the force sometimes to oblige them to do something...
as an example parents try to force their kids to read books.....

To resume the passage in a general idea: Kids who had been
forced by their parents to read will never like this activity...
because this is the human nature: we don't want to be
dominated, on the other side those children who had never
been forced to read are the real readers because they do something
that they actually love it "passion". Without the dominated power,
as a sort of revenge those who had been forced to read become
a rebels because nobody wants to be controlled.....

When we talk about the evaluation of this passage the author
has a certain credibility especially when he ~~put the~~ mentioned
sources of references to put some realistic flavour; when he
mentioned the names of the authors and their books pages,
on the other hand when it comes to the morphology
and the structure of paragraph the content was tremendously
clear especially the consistency of ideas and the links
between them, when he moved from an idea to another
he did it in a smooth way using some good arguments (studies,
statistiques, quotes...), however the introduction should be more
interesting and prepared the reader to the next informations (he used
a topic sentence in the beginning).

In addition
because
you are
not
opposing
anything

To conclude the topic the author knew how to write a
proper passage full of information, he gained it with
some really good informations with their sources and references
to pass the main message that "forcing children to do
something (or read) will never lead them to a good results"

Appendix F 4 (Nissa)

Student's Full Name: [REDACTED]
 Secondary School Stream:

Age:

Mark:

13.5
20

... This passage talks about the relation between children and reading as well as how parents affect on this behavior, but the passage lacks many important points which affect on the structure.

According to critical thinking strategies, the passage mixes many basic steps. First, the author presents an important information but his position becomes lost in the detail which affects negatively the structure of the passage because the author doesn't provide an introductory sentence as well as a conclusion based on evidence, and the arguments are not linked together as lines of reasoning and are not linked to the conclusion. Moreover, the author's point of view is not clear. However, the passage is relevant and the key points are clear to the reader.

According to scientific research strategy, the passage also lacks many necessary steps. First, the author doesn't apply the true methods of APA style specially his way of using references. Although he mentions references, but he doesn't use the true form of taking quotation such as the date, the page number and the author's name before each quotation. In addition to that he doesn't make a reasoned evaluation of his references.

In conclusion, both strategies of critical thinking and scientific research are very important in each kind of writing and should be applied by authors to achieve a methodical and systematic writing.

Appendix F 5 (Mina)

Student's Full Name: [REDACTED]
 Secondary School Stream:

Age:

Mark:

10
20

The education of childrens now a days is like forcing and obliging them to read books even if they didn't like this kind of books. However, all the parents and even teachers know that if they force their children to read they still refuse and this is a bad way to learn them how reading is good for them. On the other hand, scientists and psychologists prove that forcing childrens for reading is a way that can make children hating more the reading of books. Another study proves that the children who likes reading books are the ones which not are obliged the reading. All of us know how is necessary to read as it is good as we are not forced to do it. If his parents reactions are different he will end up disliking reading and he never approve the contrary. This quotations prove it: The more parents were with studying, the less likely the child was to enjoy reading on his or her own. It was said and agreed by the researchers "Stanley and Livingstone". This paragraph is an point of view of researches and the author's position is neutral he didn't agree or disagree but he give the quotes of other researchers because he wanted to convey that parents mustn't obliged children to study and of course there is many other ways to convey their studies. Then, The autor gives another point of view reported from "Stanly and Livingstone". At the end the author put the main source to prove that this examples of the others researchers are true and it is scientifically proved. This passages is taking from (Extracted from a book by Neil Brame and Stuart Kaley, "Asking the Right Questions: A Guide to Critical Thinking", page 126-127). The author did not give his point of view. Therefore,

Appendix G:
Students' Samples
before Mediation

Appendix G 1(Rima)

~~XXXXXXXXXX~~

~~XXXXXXXXXX~~

LECTURE NOTES

* Fill in the top.

Saturday 25. 11. 2017
 COURSE: Study Skills
 Level: 1st year LMA
 Teacher: Ms. L. Benneuhub

* Key concepts and Questions: → Ask

- what does the text talking about?
- who is Abraham Maslow and Clayton Alderfer?
- what are the main ideas and the important ones?
- what is the message that would Abraham Maslow let us to know about?
- what are the difficult words and the characters?

* Make notes.

* Summarizing the page

where is your note?
taking

Appendix G 2 (Nihad)

① the title Annotating -

- Maslow Hierarchy said that a human behavior is influenced by a hierarchy. 3

- lowest level of the Hierarchy must be at least Satisfied before people can be encouraged.

- From Top to lowest, ~~there~~ there are 5 motives
physiological → Food, Oxygen, rest.

Safety → A caring child, Secure adult.

Belongingness → person been part of Group and loved by his entourage.

Esteem → been respect full, use full.

Self actualization → Self enhancing.

Maslow's (ERG) theory → existence needs
relatedness needs.
growth needs.

① While Alderfer, he said that raising and falling from time to time and from situation to another.

④ → is missing.







you should apply the Cornell Note System,

Appendix G 3 (Kawthar)

- * Who is Maslow's abraham ?!
- * Who is clayton Alderfer ?!
- * What he talking about ?!
- * what is the five motives of Maslow's ?!
- * what is his point of view ?
- * Did clayton Alderfer agree with him ?!
- * what is the proposal of clayton ?! the three categories.

question

Key

-  → main ideas
-  → the theories
-  → important Names
-  → Sayings
-  → opinions
-  → examples.

Summarize Section

§ 1 = Maslow views about human behavior.

- the five motives of Maslow. (human motivation)
- clayton disagree with Maslow.
- the three categories of Alderfer clayton

(11) → Reflections

Appendix G 4 (Salma)

Good!

Name: [REDACTED]
 Mod: Study skills
 Gr: [REDACTED]
 Sub: Maslow's Hierarchy

Q=

Who is Maslow?

Who is Alderfer?

3/ why isn't self-act in the 3rd class according to it's imp as ind?

1/ According to Maslow humans are influenced by 1 needs.

- Physiological: eg: food - sleep - O₂ - ext.
- Safety: Feeling protected in soc.
- Belongingness + love: Being integrating in soc.
- Esteem: Having an impact in soc / Being respected
- Self-Actu: Auto-level

2/ Maslow's hierarchy's order is something impo. from the 1 to the 5

3/ Self-actu is the rarest in the hierarchy.

4/ the hierarchy Δ from a dupl to another.

5/ Clayton Alderfer's hierarchy:

- Existence need: water - sleep - ext
- Relatedness: eg: soc - interactions.
- Growth: self-level.

6/ According to Clayton there's no specific order and these needs are in a constant Δ.

④ → Reflection

to answer the question and in a total disagreement with Maslow I am working on my self-actu: it's more imp for me as an ind to feel completed, then I hope I'll reach the 3rd level.

it is good, you should just organize it according to the C.N.S.

Appendix H: Students' Samples after Mediation

Appendix H 1 (Rima)

LECTURE NOTE

Faculty of Foreign Languages
 Department of English
 Course: Study skills.
 Level: 1st year LMD
 Teacher: Ms Benmouhoub

Wednesday 20.12.2017
 [REDACTED]
 Grade [REDACTED]
 Session: TAKING NOTE
 Subject: MASLOW'S Hierarchy of needs

1/ ALL IN THE TOP

2/ KEY CONCEPTS AND QUESTS

- Hierarchy/needs/motives
- what does the text talk about?
- who are Abraham Maslow and Clayton Alderfer.
- what are the main ideas and the important one?
- what are the difficult words, vocabulary and the vocabulary?
- what the message that would Maslow let us to know about.

- * Hierarchy: A body of authoritative officials organized in needs rank
- * Abraham Maslow: American psychologist who derived human needs (motives) into 5 categories.
- * Clayton Alderfer: American psychologist who further developed Maslow's Hierarchy of needs by categorizing the Hierarchy into his own theory.
- * The text talk about the difference between Hierarchy and Clayton ERG
- * The 5 classes of needs suggested by Abraham Maslow are: Physiological - safety - Belongingness and love - Esteem - self-actualization
- * Clayton Alderfer's Hierarchy: Existence need - Relatedness - Growth.
- * ~~~~~: People Names/characters.
- _____ : vocabulary words
- | | | : main ideas.
- _____ : the needs that were proposed by Alderfer.
- _____ : the ordering of needs according to Maslow.
- * The American Psychologist Maslow in this text try to tell us about human behaviour is influenced by 5 classes of needs.

very good!

3/ Reflection or Summary:

In this text, Both American Psychologist Maslow & Clayton suggested a Hierarchy about the classes of needs of human's behavior. On one hand, Maslow suggested five classes of need, in the other hand Alderfer ordered 3 classes of needs. In order to answer the questions, I shine with Maslow's hierarchy. I am in a total agreement with his ordering of needs because he started from the \leftarrow to the \rightarrow , also there is an importance that Maslow's theory is based on 5 classes of needs.

Appendix H 2 (Nihad)

Summarize 3 Maslow's Hierarchy 20-12-2017

Maslow think that human behavior is influenced by Ranking of five Types [needs or motives] Such as: physiology (food, water, oxygen, rest). Safety (a caring child, secure adult belongingness (member of group); Esteem (respect, use full); Self actualization (self enhancing); essence of mental health. Maslow ask indirect question and my answer is Esteem.

Alderfer (1969) proposed ERG theory While never assume that must be satisfied in a particular order but upon Circumstances.

Taking notes

- Hierarchy → Ordering human characteristics.

- Safety
- Esteem
- Self Actualization
- Physiology
- belongingness.
- theory of ERG.

good. but you missed some steps of the Cornell system like asking questions, and using the abbreviations and symbols.

Appendix H 3(Kawthar)

Maslow's hierarchy =

STudy Skills
GT =

- question.
1. who is maslow's abraham?
 2. who is clayton Alderfer?
 3. what he talking about?
 4. what is the five motives of Maslow's?
 5. what is his point of view?
 6. Did clayton Alderfer agree with him?
 7. what is the proposal of clayton?
(the three categories).

- NOTS
- § 1 = Maslow's view about human behavior
- § 2 = The five motives of Maslow's (human motivation)
- § 3 = clayton disagree with Maslow
- § 4 = The three categories of Alderfer clayton.

Key.

- main ideas
- ☁ → the theories
- → important Names
- → Sayings
- → opinions example

Reflection:

Abraham Maslow an american psychologist has formulated a unique theory of psychology in which he focused on the human personality (human motivation) trying to establish an explanation for motives that drive human behavior and constitute it. In this theory, Maslow assumes that human needs are hierarchy order of priority. These five motives are as follow: physiological, safety, belonging and love, Esteem, self actualization. clayton Alderfer disagree with him when he suggested E R G theory. → where is your point of view?

Appendix H 4 (Salma)

very good

② Name: [REDACTED] Gr: [REDACTED]
 Mod: Study skills Sub: Maslow's Hierarchy

③

Self Actn = Auto dev

Esteem i.e having an impact in soc

Bel & love = integritism

Safety

Physi ex: food

◁ Maslow's Hierarchy ▷

Q: who is Maslow?
 why isn't self-actn in the 3rd class acco to it's imp on ind?

- According to Maslow, H-beings are usu influen by i needs, that must be satisfied (ing) from the < to the >.
- Few ppl can reach self-actn
- Maslow's hierarchy is exposed to many critics.
- the order of the needs of Maslow's H makes his theory disautable ∵ priorities ∞ from an ind to another ∵ it does not explain why ppl dispence some needs ex: why they starve themselves for causes.
- Needs Δ from cul to another ∵ while some areas complain from lack of safety others are focusing on growth.

Q:
who is Alderfer?

- ③
- According to Alderfer there ^{are} only 3 needs to H. beings:
 - Existence needs e.g. food, water ect
 - Relatedness = integrism
 - Growth needs = self-dev
 - Alderfer's theory ≠ Maslow's: there is no specific order in Alderfer's theory, it depends on the ind. his situ and envi.

- ④
- Personally, I do not agree with Maslow's hierarchy and I feel like Alderfer's theory is more appropriate.
 - Self-act is something that every one reaches not only few ppl: each one has his degree.
 - When some needs become priorities to inds they dispence otha which proofs that Maslow's H is not completely right.
 - For me self-act is my priority for now: I feel like it is more important to be completed as an ind before reaching Esteem.

Appendix I:

Students' Personal

Journals

Appendix I 1 (Malia)

University of Algiers 2 "Aboukacem Saadallah
Faculty of Foreign Languages
Teacher: Ms. L. Benmouhoub

Department of English
Course: Study Skills
Level: 1st Year LMD

Academic Year: 2017/2018

Personal Journal

Student's Full Name



Age: 18

Town:

Questions:

- What did you **learn** in **study skills** during all this period at **University**?
- Did you find teaching **critical thinking** **beneficial**? Explain in both cases (Yes/No)
- Did you like the way you are being **assessed** (Homework + Test/Exam?)
- Are there any **suggestions** you want to recommend in this **MODULE**?

As everybody knows, learning and knowledge are one of the most essential aspects of life, more important than earning money or job hunting, this is simply because learning is everything and without it we can do nothing or be nothing. Since I was a child, I had the dream of being at university for this reason and to make my goals becoming a truth, I worked a lot. After passing the Bac exam, I was eager to learn English and to know more about this language by studying in the Univ. of Foreign Languages. And during the period of selecting the disciplines of studying, I put English in the top which means in number one, but all my family members said to me that it is too hard, you can never succeed, inside of me, I knew that I will do the impossible to succeed and improve better. Well, October came, and it is the entry to school, I was eagerly waiting this opportunity to have an English class in Bouzareah University. But I didn't know that becoming an English teacher will be a little bit complicated, because the studies are really different from the middle school, so I had to work hard and concentrate only studying nothing else. I finally realize that my parents and family members' advices were true and to do what I wish, I have to work a lot.

As everybody knows, learning is one of the most essential aspects of life, more than earning money or job hunting, learning is everything and without it we can be nothing or doing nothing. Well, since I was a child, I had the dream of becoming an English teacher and my dream never stopped, so after passing the Bac exam, I have not to wait anymore to make my dream come true, I was eagerly waiting for this great moment, it was like all the doors were open by waiting for me to get my dream. After a long waiting, the entry in University came, I never had an opportunity

... Like this, I was extremely eager and happy to have English classes. But, honestly, I knew from the beginning that these studies will be hard, complicated but I didn't give up, simply because I have to face these difficulties by studying and doing all my best, which means doing the impossible to succeed and improve better. So I realized that I have much to do just I have to take it easy and simple. My love to English language encourage me a lot, well, studying English in the department of foreign languages in Bouzarjah is really different from the college. There is new methods and new modules, between all the module, "Study skills module" was my favorite. This module seemed to me difficult and complicated at the beginning, I didn't love it, also I find it boring a little bit, but after few days I started to love it, because I discovered that this module is really important. Especially that the things that we learn in this module we apply them in all the other modules, not only in studies but also in our daily life. So, from this module I learnt a lot of subjects or objectives, the most frequent ones is learning as "Time management" and the other one as "How to identify our learning skills, we have others such as: Classroom learning, Preparing for exams, motivation, critical thinking, Research strategies. And all these subjects we need them in our routine daily life with parents, family members, neighbours, people, specially the "line of reasoning" and my favorite one "Critical thinking". This subject is really beneficial in many aspects, it has many advantages for the person, I love the way when I use my critical thinking and start to ask questions and questions in my head. For me, I love the teacher method in teaching her students, because it is a simple and easy method, our best teacher can give the information so we can easily receive them without any doubt and for this reason, there is no suggestions I want to recommend in this module because I find it easy because of our perfect teacher. Finally, I find that the self assessment which include the test/exams and homeworks is also good, I like the way our teacher is organising the test and exams questions specially what concerns the homeworks which let us to be more motivated and hard workers.

Appendix I 2 (Warda)

University of Algiers 2 "Aboukacem Saadallah
Faculty of Foreign Languages
Teacher: Ms. L. Benmouhoub

Department of English
Course: Study Skills
Level: 1st Year LMD

Academic Year: 2017/2018

Personal Journal

Student's Full Name



Age:

19

Town:

Bordj

Questions:

- What did you learn in study skills during all this period at University?
- Did you find teaching **critical thinking beneficial**? Explain in both cases (Yes/No)
- Did you like the way you are being assessed (Homework + Test/Exam?)
- Are there any **suggestions** you want to recommend in this **MODULE**?

Study Skills is a helpful module for me. Actually I was lost at the beginning of the year. I felt weak and at the same time needed a hand to show me the way and then this module made me realize the new things that I should give them my time and know how to be fair enough to be awake in every module and this because of the time managing we learned, and how to except ideas of others and how to be a critical thinker is a positive learning method because it makes the student look for more and have a personal point of view, and adapted others ideas by a sense of logic according to the student.

yes, I do the way I've been assessed because it gives you time to prepare and to reach the goals. I like this mode but I think some oral activities will be more beneficial for the student to memorized the lesson.

Appendix I 3 (Samah)

University of Algiers 2 "Aboukacem Saadallah
Faculty of Foreign Languages
Teacher: Ms. L. Benmouhoub

Department of English
Course: Study Skills
Level: 1st Year LMD

Academic Year: 2017/2018

Personal Journal

Student's Full Name: [REDACTED]

Age: 17

Town: Bouira

Questions:

- What did you learn in study skills during all this period at University?
- Did you find teaching critical thinking beneficial? Explain in both cases (Yes/No)
- Did you like the way you are being assessed (Homework + Test/Exam?)
- Are there any suggestions you want to recommend in this MODULE?

I find that study skills module is the most important one in order to achieve good grades. While at the very beginning I was not sure and sometimes wonder whether I am not good (enough) enough? The module is useless but with time I started loving it. I learned how to be optimistic above all and no matter what happen I should keep trying, I learned how to discuss with others and how to listen and take notes and most importantly I learned how to organize myself at the time when I really needed it. Greatfully applying these techniques saved me, thanks to the module and to the teacher I finally could face people and talk with less shyness Besides that, critical thinking was very beneficial for me because I learned how to keep my idea and defend it more strongly but of course accept others ones.

University of Algiers 2 "Aboukacem Saadallah"
Faculty of Foreign Languages
Teacher: Ms. L. Benmouhoub

Department of English
Course: Study Skills
Level: 1st Year LMD

(for home work)

for the homework and the exams, the way we being ~~used~~ assessed
is just right and work perfectly with the module.

The module's strategy is good but I would suggest adding
unexpected fun things otherwise everything is okay

Appendix I 4 (Mina)

University of Algiers 2 "Aboukacem Saadallah
Faculty of Foreign Languages
Teacher: Ms. L. Benmouhoub

Department of English
Course: Study Skills
Level: 1st Year LMD



Academic Year: 2017/2018

Personal Journal

Student's Full Name: [REDACTED]

Age: 1996/06

Town: Algiers

Questions:

- What did you learn in study skills during all this period at University?
- Did you find teaching critical thinking beneficial? Explain in both cases (Yes/No)
- Did you like the way you are being assessed (Homework + Test/Exam?)
- Are there any suggestions you want to recommend in this MODULE?

I find this module that we learn ^{at univ} very interesting. It gives us many ways to organize the time ~~to~~ succeed in the study or maybe in the daily life like the lesson of how to organize our time. "Time management" it gives us strategies to improve our skills and to be determined. Similarly, I find teaching "Critical thinking" beneficial, it gives the students the opportunity to express their self and the way that they think. It has many elements and strategies like tautology, inference, assumption which non in logic and the structure of arguments. Actually, I did. I like the way our teacher explain the lesson and the interesting homeworks that she gives us, she is really doing her best to help us in a good way, to keep us motivated and have a positive way of thinking. However, there are no suggestions that I want to recommend in this module.

Appendix I 5 (Rima)

University of Algiers 2 "Aboukacem Saadallah
Faculty of Foreign Languages
Teacher: Ms. L. Benmouhoub

Department of English
Course: Study Skills
Level: 1st Year LMD

Academic Year: 2017/2018

Personal Journal

Student's Full Name: [REDACTED]

Age: 18

Town: Algiers

Questions:

- What did you learn in study skills during all this period at University?
- Did you find teaching critical thinking beneficial? Explain in both cases (Yes/No)
- Did you like the way you are being assessed (Homework + Test/Exam?)
- Are there any suggestions you want to recommend in this MODULE?

Study skills is a module which shows the techniques of good learning, during all this period at University, I have learn in this module how to identify my learning skills including personality skills which are "sincerity, motivation, curiosity, self-confidence, intelligence", and also speaking skills which are "planning, conceptualization, Articulation, ...". Furthermore, I have learn how to manage my time, and the important qualities of good thinking which are based on good arguments, objectivity, background knowledge, analytic, curiosity. And last but not least, I have learn how to do a good research.

Critical thinking is the ability to analyze the way I think and present evidence for my ideas, rather than simply accepting my personal reasoning as sufficient proof. I can gain numerous benefits from mastering critical thinking skills, such as better control of my own learning and empathy for other points of view.

Critical thinking skills teach a variety of skills that can be applied to any situation in life that calls for reflection, analysis and planning.

Learning critical thinking skills can also enhance my academic performance. A good critical thinker knows how to separate facts from opinion, how to examine an issue from all sides, how to make rational inferences and how to withhold personal judgment.

Concerning the way I'm being assessed, I like it because in the test everything is taking into consideration "homework, participation..."

Appendix I 6 (Salma)

University of Algiers 2 "Aboukacem Saadallah
Faculty of Foreign Languages
Teacher: Ms. L. Benmouhoub

Department of English
Course: Study Skills
Level: 1st Year LMD

Academic Year: 2017/2018

Personal Journal

Student's Full Name: [REDACTED]

Age: 18 years old

Town: Algiers

Questions:

- What did you learn in study skills during all this period at University?
- Did you find teaching critical thinking beneficial? Explain in both cases (Yes/No)
- Did you like the way you are being assessed (Homework + Test/Exam?)
- Are there any suggestions you want to recommend in this MODULE?

1/ I have learned in study skills the correct method of Note making and how to organize my thoughts on a paper as well as the techniques of time management and how to plan and organize my ideas in my daily life. Moreover critical thinking was a lesson that I really enjoyed. During these sessions I became more tolerant with other people and started to argue calmly with them. I also take in consideration the good aspects in their arguments and take benefits of it. Yet the most important acquirement is self confidence and questioning other people's thought no matter what is their social or financial status.

2/ I did find teaching critical thinking beneficial because it made me more aware of what is surrounding me in my daily life by realizing that most of the time the society is trying to take control on us with some received ideas that we were supposed to accept without questioning and that I should no longer accept this and make my own opinion on different subjects by making researches and debating with people. It also helped me gain confidence and to believe in my abilities. Now I am more receptive to new concepts and ideas too and I tend to try new experiences that I would always disagree to do.

3/ At first the teacher used a method which was available for all of the student but I think that having a scientific research as an exam was a little risky considering that it was our first try. However it was a kind of motivation for us.

Appendix I 7 (Fadia)

University of Algiers 2 "Aboukacem Saadallah
Faculty of Foreign Languages
Teacher: Ms. L. Benmouhoub

Department of English
Course: Study Skills
Level: 1st Year LMD

Academic Year: 2017/2018

Personal Journal

Student's Full Name: XXXXXXXXXX

Age: _____

Town: _____

Questions:

- What did you **learn** in study skills during all this period at **University**?
- Did you find teaching **critical thinking** **beneficial**? Explain in both cases (Yes/No)
- Did you like the way you are being **assessed** (Homework + Test/Exam?)
- Are there any **suggestions** you want to recommend in this **MODULE**?

Study skills is the key of other tools that we studied. This module actually is the most profitable module among others modules because this module make us aware about things that we did not aware before like the importance of time and formulated us to the right way of study as well as make us setting priorities in life.

Critical thinking is the most beneficial key in study skills. For a good reasoning. Although there is not many students who use this mental process but the teacher put the point on it and invite students to think critically and that what we should do actually "thinking critically" because we are in high level in study and we must improve ourselves further more, it help us as a students to be an open minded people and assisting others.

Exams and Home works require much time and efforts, the way of assessed it differs from teacher to other. The teacher of study skills specifically make us almost every weekend busy solving the tasks and that what cleave of our waiting and help us in solving ourselves. But what I really dislike is the exams because I have a phobic toward them and this is a big problem that I will overcome it soon with the help of this module.

As a student. In my point of view I would suggest to make the exams and the tests as a home work tasks because I will have time to do them without limiting me by time.

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Department of English
Course: Study Skills
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as well as it make me learn much because when we do
the test or exams at home we are oblige to take it
seriously and that what make us study harder. Moreover,
this will help us read and write. I prefer the tasks and
tests topics to be very difficult in order to read many
information and point of view to larger our informations and
teach us how to be selective.

Appendix I 8 (Amel)

University of Algiers 2 "Aboukacem Saadallah
Faculty of Foreign Languages
Teacher: Ms. L. Benmouhoub

Department of English
Course: Study Skills
Level: 1st Year LMD



Academic Year: 2017/2018

Personal Journal

Student's Full Name: [REDACTED]

Age: 18

Town: Algiers

Questions:

- What did you learn in study skills during all this period at University?
- Did you find teaching critical thinking beneficial? Explain in both cases (Yes/No)
- Did you like the way you are being assessed (Homework + Test/Exam?)
- Are there any suggestions you want to recommend in this MODULE?

Study skills module has taught me many aspects and ways that opened my mind, expanded my way of thinking, and showed me how to look at ideas and information from a different perspective. Critical thinking is one of my favorite topics that we have studied, it introduced me into a new way of analyzing ideas and look further and deeper into the given concept, which allows us as student to express our own point of view. This is why I really enjoyed this topic and find it very beneficial for our education journey in university, and even in the way we deal with other things in our social and private life. The way the assessments work in our university is sometimes unpleasant, because our exams and tests always ends up with a random schedule and a disorganised planning for all the modules, so I preferred your idea of counting our presentations as a test or exam instead of being stuck with an unofficial announcement from the administration. In addition, I think this module can contain many other topics that we can discuss and deal with if we had the chance, for that I would suggest theoretical points that will seem interesting for both the teacher and the students, to make researches about and give their different perspectives and beliefs in a proper and formal manner, such hypothesis derive from many domains which can include religion, traditions, social aspects and customs, different life facets, psychological aspects, & conspiracies which is one of my favourite especially

Appendix I 9 (Zina)

University of Algiers 2 "Aboukacem Saadallah
Faculty of Foreign Languages
Teacher: Ms. L. Benmouhoub

Department of English
Course: Study Skills
Level: 1st Year LMD

Academic Year: 2017/2018

Personal Journal

Student's Full Name: [REDACTED] Age: 1999/04/16 Town: Algieries

Questions:

- ①. What did you **learn** in **study skills** during all this period at **University**?
- ②. Did you find teaching **critical thinking** **beneficial**? Explain in both cases (Yes/No)
- ③. Did you like the way you are being **assessed** (Homework + Test/Exam?)
- ④. Are there any **suggestions** you want to recommend in this **MODULE**?

①② Study skills a module learn and motivate students how to organise their time in positive ways which make them develop in many things in order to improve their success. As we studied "Time Management" which help students with its strategies to follow them with determination and it is called improvement. Learning critical thinking with applying it, is of course beneficial to our brain to become aware of some elements like stereotype, premise and non sequitur, plus tautology, inference, assumption and enthymeme which hone in logic and the structure of arguments.

③ The way I am being assessed I did like it, we do have interesting things to do and collaborate with classmates. Indeed, our teacher is doing her best to help us to improve this module specially in writing work in order to keep us motivated with her positive energy.

④ There are no other suggestions I want to recommend in this module.

Appendix J:

Teachers Interview

Appendix G1: Teachers Interview Questions

1. How long have you been teaching at this department?
2. What do you think about teaching?
3. What is the approach you follow in your teaching? In your opinion, is it:
 - Useful
 - Easy
 - Difficult
4. Do you use any techniques or strategies? Explain
5. Do you assess your students at the end of each term or on a continuous basis? How?
6. Why do you assess your students?
7. Do you follow the programme assigned to you by this department? Explain
8. When you are using reading materials, do you provide students with references?
9. What do you think of your students' level?
10. What are their attitudes during the session?
11. Do you think they are able to comment on their peers' arguments?
12. How do you design a mid-term and end-term test/exam?
13. Are your students familiar with the type of assessment you design and probe?
Explain
14. Do you follow the same teaching approach and the same type of assessment with all the groups? Explain
15. What specific aspects does your test/exam address?
16. Do you set any criteria for marking your students' performance?
17. Are you familiar with dynamic assessment?
18. What is your attitude towards using it as an alternative approach of assessment at this department?

Appendix J 2: A Sample of Teacher Transcript

Q 1/ 3 years.

Q 2. For me teaching is **passing on knowledge**, and I have always wanted to pass on my **knowledge**, so this is the only opportunity I have.

Q 3. I'd like the **Communicative approach**, **I like to communicate** with my students, but students don't show **lot of interaction**, and they don't really... I don't know what's wrong with them, but they are **very passive**, so I try to encourage them a lot.

- It's quite difficult when you **don't have interactive students**, but when you have a few of them, I think it becomes a bit easier.

Q 4. Teaching techniques and strategies: like what? Materials? I adopt a **dialectical approach**; I like to **ask questions** very much because I think this is how you activate their level.

Q 5. I like to assess them on a **Continuous** basis, we rely on homework sometimes... when we don't have an overload work, I like to **assess them continuously**, and it also depends on the will of students, some students do bring their homeworks and others don't so I assess those who **accept assessment**.

Q 6. Why do you assess your students? Because I believe that giving **assessment** and **feedback** is the most important way of learning, and **written feedback** is very important, and I have a **sample of feedback** .

Q 7. Following the programme. I try to follow the **programme** yes, sometimes it's a very **ambitious programme** because we don't have enough time, students sometimes don't come ready especially in literature, sometimes they are not well prepared for certain **topics**, so I try to simplify but not oversimplify **the topics** because we don't have times.

Q 8. Do you provide students with references? Yes, for my **reading** classes I do provide some **handouts**, I even give **extra material** for someone who want to **deepen their knowledge**. Yeah I provide **a reference**.

Q 9. What do you think of your students' level? Well, **they don't come well prepared** because **they don't have enough knowledge** about the mechanics of the language, they

lack knowledge in grammar, tenses in almost everything. But they are willing to learn, I feel like they have a will.

Q 10. What are their attitudes during your lecture? Mmm sometimes students are very lazy but I always try to relate topics to their interest, I try to choose topics from Pop culture, from what they know, according to the context of their time and generation, sometimes they get a bit interested, of course those who are interactive.

Q 11. Do you think they are able to comment on their classmates' ideas? Not everyone, I notice that those who have a critical attitude, those who read a lot or quite read do have a good critical approach.

Q 12. Mid-term and end-term test/ exam design, very often I try to ask one question when it's literature, study skill or any module, when it's literature I try to ask a question of the main topic, one question that is quite general , so that students can write an essay and structure it according to the thesis statement. And for reading and writing I often rely on an already designed material from Cambridge or Oxford reading and writing references books.

Q 13. Are your students familiar with test design/ yes they are.familiar with that.

Q 14/ do you follow the same teaching approach. Yes, I like to give equal chances to everyone, and they are familiar with my assessment, because I always give the format of assessment not the content of assessment, but the format as a homework

Q 15. Specific aspects: I like to have critical questions to make them think and develop their own thinking.

Q 16. Set criteria for marking students. I have a well detailed barem, my assessment is very well detailed;I assess the different parts, the mechanics, the content, overall coherence, and they are informed about that.

Q 17. NO.

Q 18. I would do that, that is absolutely the good way.

صقل مهارات التفكير النقدي لطلاب السنة الأولى في اللغة الإنجليزية من خلال التقييم الديناميكي

ملخص

طريقة التفكير بدلاً من التفكير في التفكير يعتبر موضوع بحث بين علماء النفس التربوي والفلاسفة ونتيجة لذلك نشأت تعريفات مختلفة بسبب جملة من الآراء المتعارضة حول مفهوم التفكير النقدي، كما تم العمل على تطوير استراتيجيات عملية لمساعدة الأفراد على التفكير بشكل أكبر وأن يصبحوا مفكرين متأملين، ومع ذلك فإن كيفية تقييم مهارات التفكير النقدي لطلاب اللغة الأجنبية قد حظيت باهتمام ضئيل في مجال تدريس اللغة الإنجليزية، وتحديدًا على مستوى السياق الجزائري.

ولمعالجة هذا النقص فإن محتوى هذه الأطروحة يكمن في استكشاف تأثير صقل مهارات التفكير النقدي لطلاب السنة الأولى في اللغة الإنجليزية من خلال التقييم الديناميكي، هذا الأخير يجمع بين التقييم والتعليم في نشاط واحد.

ومن هذا المنظور اعتمدنا على عمق المعرفة كنوع من التعليمات في البحث الحالي، وتم استهداف هدفين رئيسيين هما: (أولاً: اكتساب فهم أعمق لممارسات التقييم في التعليم العالي بشكل عام) و(ثانياً: تجربة نهج بديل للتقييم من شأنه أن يساعد الطلاب في اكتساب مهارات التفكير النقدي في حياتهم الأكاديمية والمهنية).

ولتحقيق هذه الأهداف تكونت عينة الدراسة من 254 طالباً في السنة الأولى في اللغة الإنجليزية و15 مدرساً في قسم اللغة الإنجليزية من جامعة الجزائر 2 (الجزائر).

ونظراً لكون البحث مبني على: (السببية، التصورات والمواقف)، فقد تم اعتماد تصميمين للبحث وهما: (البحوث التجريبية، ودراسة الحالة الاستكشافية)، وتم استخدام خمس أدوات بحث رئيسية لجمع البيانات وتشمل: (استبيانات الطلاب، مراقبة الفصل الدراسي، المجالات الشخصية العاكسة 1/2 pre-test، intervention، post-test للطلاب، والمقابلة شبه المنظمة للأساتذة).

وكشفت النتائج عن صعوبة تفكير طلاب السنة الأولى بشكل نقدي باللغة الإنجليزية وعدم رضاهم عن ممارسات التقييم من طرف أساتذتهم، بالإضافة إلى ذلك ظهر أن التقييم الديناميكي له دور فعال في مساعدة القسم التجريبي على اكتساب مجموعة من مهارات التفكير النقدي.

وأخيراً أعرب المشاركون (الطلاب والمدرسون) في هذه الدراسة عن موقفهما الإيجابي اتجاه استخدام التقييم الديناميكي كنهج بديل للتقييم التكويني في تعليم اللغة الإنجليزية كلغة أجنبية، وأدت هذه النتائج إلى آثار حاسمة ومن بينها: مراعاة مفاهيم المعلمين للتدريس والتقييم، إدراج أهداف وتوقعات تعلم الطلاب، تدريب الأساتذة والطلاب على المعرفة التقييمية.

الكلمات المفتاحية: تقييم المعرفة؛ مهارات التفكير النقدي؛ عمق المعرفة؛ التقييم الديناميكي؛ صقل.