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**Dissertation Submitted in Partial Fulfillment of the
Requirements for the Degree of Master in English**

Option: *Language and Communication*

***Investigating Critical Thinking and Writing Proficiency: The
Case of Master Students at the English Department of MMUTO***

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Dedication

To my dear family and parents

To all my friends

Nassim

To my parents and my brother and sisters: Samir, Lisa and Yasmine

To my friends: Lamia, Nadia, Nassim, Thiziri and Aghilès

Nawal

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Abstract

The present study is mainly concerned with the investigation of the relationship between the critical thinking ability and the writing proficiency of advanced EFL students: A case of Master students at the English Department of MMUTO. It attempts to determine the extent to which Master students rely on Critical Thinking strategies in their writing of examination essays and to glean some insight on the way they view Critical Thinking and its importance when writing their essays. The research goes deeper to detect the factors related to either promoting or obstructing the critical thinking capacity of Master students. As for the analytic categories of the study, they are borrowed from a theory put forward by Paul Richard and Linda Elder in their The Miniature Guide to Critical Thinking – Concepts and Tools (2008). A mixed-method approach is adopted, combining quantitative and qualitative procedures for data gathering and data analysis. In terms of data collection, the study takes a sample as a textual corpus made up of fifty Master examination essays. Besides, the research work relies on a questionnaire distributed to fifty Master students of different specialties. To analyze the data collected, our research adopts the rule of three and Excel software to process the quantitative data and Qualitative Content Analysis (QCA) for the interpretation of the qualitative data. The findings of our study indicate that Master students are aware of the importance of critical thinking in academia, and they partially integrate it – though in a very limited way - in their essay writing. The research work ends up with a brief examination of the main factors related to deficits in students' sense of criticality.

Keywords: Critical thinking, Master students, Writing, Essays

List of Abbreviations

- CT : Critical Thinking
- CTS : Critical Thinking Skills
- HOTS : Higher Order Thinking Skills
- LOTS : Lower Order Thinking Skills
- MA : Master of Arts
- MMUTO : Mouloud Mammeri University of Tizi-Ouzou
- QCA: Qualitative Content Analysis

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General Introduction

Statement of the Problem

Critical thinking is not only the fact of thinking clearly and rationally, but it also involves thinking independently. It involves the ability to reason well and the disposition to do so. In education, thinking critically is among the central requirements and desired skills in students' performance, and educators have long been aware of the importance of critical thinking as a fundamental element in developing the learners' writing skills. Recent research has identified critical thinking as one of several learning and innovative skills necessary to prepare students for higher education and for a professional career. A critical thinking class is a student-centered class, since students' view and way of thinking is of paramount importance while interacting and writing. Writing critically or independently includes the fact that the writer, while presenting their arguments on their writings, includes their way of perceiving things and reasoning in order to persuade the reader.

Students are required to implement critical thinking in their academic output, following some standards, such as accuracy and reasoning and by demonstrating related skills like selection, evaluation, analysis, reflection, questioning, inference and judgment. The aim of such an endeavor is to allow students to deal with their academic challenges critically and reasonably. **Unfortunately, written assignments for students often are not designed to reflect the critical thinking process. Most forms of testing and assignments, even essays, are designed to assess students' learning of the subject matter, not to evaluate critical thinking skills.** On his part, the educational expert John Dewey (1993) refers to critical thinking as reflective thinking, and proposes that it must be one of the aims of education. Master students, for example, are supposed to develop enough skills in order to be able to write their dissertations in a critical way. For doing so, students need to develop a significant process consisting of argumentation. Indeed, argument is regarded as the primary

expression of critical thinking in higher education (Richard Andrews, 1995, Mary Scott, 2000) and the defining feature of the essay (Elander *et al*, 2006).

Research on academic writing has increasingly questioned the value of critical thinking in English academic contexts, much of it focusing on the challenges facing students when developing and implementing a critical dimension in their writing. Critical thinking is therefore conceived as a self-evidently used skill, one that is desirable, beneficial and achievable, and most importantly universally valued (Vyncke, 2012). Angelo and Cross (1993 in Egege and Kutietkh 2004:79) state that the capacity to think critically is the main aim of general education and ought to be applied to virtually all methods of inquiry practiced in the academic disciplines. Accordingly, students need to be involved in the very process of thinking and be given practice in thinking critically. Hence, there is a need to create an environment in which critical thinking may flourish. According to Mathew Lipmann (1988), teaching critical thinking is similar to teaching moral values.

The literature cited above reveals that the subject of critical thinking and the writing proficiency of students have been the interest of various researchers. Studies, such as those conducted by Tarik Bounoua and Kamel Mehaddi, (2015), and Sabrina Toumi, (2016) at the Department of English of MMUTO, have tackled the integration of critical thinking in different contexts. As for Michelle Vyncke (2002), she has pointed at the importance of critical thinking in academic writing in Western universities. Accordingly, the present work seeks to investigate the relationship between the critical thinking ability and the writing proficiency of MA students in the Department of English at MMUTO. To our knowledge, no study has been conducted on critical thinking related to advanced learners' writing skills.

Research Questions and Hypotheses

To investigate the issue, the following questions are raised:

Q1: To what extent do MA students rely on critical thinking strategies in their writing of short essays set in examinations?

Q2: How do MA students view the importance of critical thinking when writing their essays?

In an attempt to answer the questions above, the following hypotheses are set:

H1: MA students integrate critical thinking norms in their essays and dissertations.

H2: Master students consider critical thinking as crucial for their written compositions.

Aims and Significance of the Study

The ability of students to think critically—to make sound judgments based on careful weighing of evidence—is one of the most important student learning outcomes for all university teachers. Critical thinking is of utmost significance in modern education, and nowadays many teachers are interested in developing and encouraging critical thought in their classes, and the present study is an attempt to scrutinize critical thinking in MA students' writing. Besides, it attempts to sort out students' considerations on critical thinking within their written productions, focusing on how they understand, perceive and engage with the concept of critical thinking. It also examines their mental representation of criticality, reasoning and analyzing, because promoting critical thinking may lead to the promotion of essential changes in education and in society by cultivating impartial critical thinking, a thought which is predisposed to empathy, humility, perseverance, integrity and responsibility. A rich intellectual environment is only possible if critical thinking is the basis of education, because students will not be able to apply to real life what they are learning if they do not learn to think deep and substantive. Moreover, in a world of accelerated changes, intensified complexity and expansion of independence, thought is currently a prerequisite for economic and social survival.

Important changes can be seen in the field of education during the last few decades. Earlier, the teacher was at the center of the curriculum and their learners were passive

recipients waiting to be filled with knowledge with emphasis on what to think. Today's education, on the contrary, puts the learner at the center of the teaching/learning act, and the focus is on how to think and in particular how to be a critical thinker. In addition, whereas earlier learning was considered as rote training, nowadays, learning is conceptualized as a constantly evolving process of discovering, questioning and reformulating hypotheses (Alastair Pennycook, 1994). These changes are necessary because, in our challenging and ever-changing world, developing special abilities such as decision making and problem solving are basic for students' success in their academic life and even later in life.

On the other hand, following the world's improvement in the field of education, Algeria has recently introduced a curriculum of a second generation based on the Competency-Based Approach as a new approach to teaching and learning. Hence, thinking critically is a learned ability that must be taught by trained and knowledgeable teachers (Divyesh M. Patel, 2013). It is worth considering that implementing critical thinking skills becomes a priority for course designers and specialists of education, as Steven D. Schafersman (1991) states: teachers are required to be informed about the importance of CT skills and techniques and try to identify different classroom areas as the proper place to emphasize and teach these skills. Accordingly, the other objective of the present study is to raise the awareness of both teachers and MA students on the importance of critical thinking.

Research Techniques and Methodology

The present work aims at investigating the critical thinking ability and the writing proficiency of advanced MA students in the Department of English at MMUTO as well as the factors included in writing analytical compositions referring to critical thinking standards underpinning academic writings. For this purpose, Paul Richard and Linda Elder's criteria are adopted as a theoretical framework in order to evaluate students' reasoning. P. Richard focuses on the importance of explicating intellectual tools for analyzing and assessing

reasoning in his 1968 dissertation. His work paved the way for a critical thinking theory that can now be used in every day of human life. The criteria for evaluating reasoning are developed to provide a reasonable way to pre-and post-test students to determine the extent to which they have learned to think critically within a discipline and to provide a test instrument that stimulates the faculty to teach their discipline in order to foster CT in students. The corpus of the study is composed of 50 exam papers submitted by master students specializing in two major subjects (Linguistics and Literature). In addition, it adopts a mixed-methods approach combining quantitative and qualitative methods for data collection and data analysis. Besides, the research relies on data gathered by means of a questionnaire administered to fifty (50) MA students from two specialties: Linguistics and Literature. The study is accomplished through both analyzing the corpus consisting of examination papers and referring to the views of the informants on the notion of critical thinking and its implementation within their written works.

Structure of the Dissertation

The present dissertation is structured following the traditional-complex model. It consists of a General Introduction, four chapters and a General Conclusion. The first chapter, entitled "Review of the Literature", is devoted to the different views put forward about critical thinking, and these views are to serve as a background for the discussion of the results. The second chapter, called "Research Design", presents the procedures of data collection and data analysis. The third chapter, labeled "Presentation of the Findings", provides the results of our study including the data gathered and the textual corpus analyzed. As for the fourth chapter, it is entitled "Discussion of the Findings", and it concerns the interpretation and analysis of the results gathered throughout the investigation. Finally, the general conclusion provides a summary of the main points treated all along the research work and some suggestions related to the development of critical thinking in learners.

Review of the Literature

Introduction

This chapter is designed to review the literature that revolves around the topic investigated in the present research: investigating critical thinking and writing proficiency of EFL students. The first part provides a historical overview of CT and its nature by focusing on the approaches underlying the concept of CT. It explains the relationship that lies between critical thinking and motivation to develop student's critical thinking capacity. Besides, it explores the correlation between CT and creativity followed by an explanation of the development of CT as a basic requisite for education. Then it tackles the role of assessment in critical thinking, as some challenges come to interfere in student's criticality. Also, it provides an insight on writing as a fundamental element in higher education. In addition, it highlights the link that lies between CT and different EFL contexts as well as Faicone's expert consensus about critical thinking. Lastly, it presents Paul Richard's and Linda Elder's theory on CT that will serve as a theoretical framework for the present study.

1- Critical Thinking

1-1- The History of Critical Thinking

The intellectual roots of critical thinking are as ancient as the teaching practice and view of Socrates 2500 years ago who discovered, by probing questioning, that people could not rationally justify their confident claims to knowledge. He demonstrated that a person may have power and high position and yet be deeply confused and irrational. He established the importance of asking deep questions that probe profoundly into thinking before we accept ideas as worthy to belief. His method of questioning is now known as "Socratic Questioning" and is the best known critical thinking teaching strategy. In his mode of questioning, Socrates highlighted the need of thinking for clarity and logical consistency. Later Socrates' practice was followed by the critical thinking of Plato, Aristotle and the Greek skeptics, all of whom

emphasized that things are very different from what they appear to be and that only trained mind is prepared to see through the way things look to us on the surface to the way they really are beneath the surface (the deeper realities of life). Paul, R *et al* (1997, cited in Vardyan Adriana and Asadyan Zhanna). In the Renaissance (15th and 16th centuries), a flood of scholars in Europe began to think critically about religion, art, society, human nature, law and freedom. One of them was Francis Bacon, in England, who recognized that the mind cannot safely be left to its natural tendencies. He laid the foundation for modern science with his emphasis on the information-gathering processes. His book “The Advancement of Learning” could be considered one of the earliest texts in critical thinking. Some fifty years later in France, Descartes wrote the book “Rules for the Direction or the Mind”, which can be called the second text in critical thinking. He developed a method of critical thought based on the principle of systematic thought. He argued that every part of thinking should be questioned, doubted and tested. In the same time period Sir Thomas Moore developed a model of new social order, “Utopia”, in which every domain of the present world was subject to critique. The critical thinking of these Renaissance and post Renaissance scholars opened the way for the emergence of science and for the development of democracy, human rights, and freedom of thought. Another significant contribution to critical thinking was made by the thinker of the French Enlightenment: Bayle, Montesquieu, Voltaire and views had Diderot. They all valued disciplined intellectual exchange in which all views had to be submitted to serious analysis and critique. (ibid).

In the 19th century, critical thought was extended even further into the domain of human social life by Comte and Spencer. Applied to language, it led to the field of Linguistics and many deep probing of the functions of symbols and language in human life. In the 20th century, our understanding of the power and nature of critical thinking has emerged in increasingly more explicit formulations. W. G. Sumner recognized the deep need for critical

thinking in life and in education. He said: "Criticism is the examination and test of propositions of any kind which are offered for acceptance, in order to find out whether they correspond to reality or not. Critical thinking is a product of education and training. It is a mental habitant power." The history of critical thought is that the basic questions of Socrates can now be much more powerfully framed and used. In every domain of human thought, and within every use of reasoning within any domain, it is now possible to question. In other words, questioning that focuses on these fundamentals of thought and reasoning are now baseline in critical thinking. Paul, R *et al* (1997, in Vardyan, A and Asadyan, Z).

1-2- The Nature of Critical Thinking

The word "Critical Thinking" carries ambiguity and uncertainty about what it covers and the way in which it is manifested. The idea is the result of multiple definitions provided as an attempt to simplify and illustrate the concept of "Critical Thinking". Indeed, critical thinking is viewed as "a cognitive skill" associated with rational judgment and defined by Siegel (1988 in Jones 2005) as "the educational cognate of rationality". Moreover, the word critical thinking is related to "reflexive skepticism" (Mc Peck 1981); it is explained by (Barnett 1997 in Tapper 2004:201) as "Critical self-reflection". In addition, scholars like Toulmin, Riecke and Janik (1984 in Andrews 2000:5) relate CT to reasoning, used for "the central activity of presenting reasons in support of a claim".

Academically speaking, CT is defined in terms of abilities and skills, such as selection, evaluation, analysis, reflection, questioning, inference and judgment (Tapper 2004). Despite the variety of views on CT, there is still an agreement that critical thinking is manifested through the student's abilities to "identify issues and assumptions, recognize important relationships, make correct inferences, evaluate evidence or authority, and deduce conclusions". (Tsui 2002:743).

1-2-1- Philosophical Approach

The writings of Socrates, Plato, Aristotle, and recently, Mathew Lipman and Richard Paul, illustrate the philosophical approach to critical thinking. This perspective emphasizes the idea of “a hypothetical critical thinker” focusing on the qualities and characteristics of this person rather than on their behaviors or actions they can perform (Lewis and Smith, 1993; Thayer Bacon, 2000 in Emily R. Lai, 2011). Sternberg (1986, in Lai, R. E, 2011), on his part, states that this school of thought advances the critical thinker as an ideal type, basing on what people are able to do under the best circumstances. The philosophical tradition also emphasizes the qualities or standards of thought. For instance, Bailin (2002, in Lai, R. E, 2011) defines critical thinking as thinking of a particular quality, essentially good thinking that deals with specific criteria of adequacy and accuracy. In addition, the philosophical approach has traditionally centered its interest on the application of formal rules of logic (Lewis and Smith, 1993; Sternberg, 1986, in Lai, R. E, 2011). According to Sternberg, one weakness of the philosophical approach in defining CT is that it does not refer to reality. The philosophical approach has less contributed to determine the way in which people actually think, since its objective is to focus on the ideal critical thinker and only what people are able to do.

1-2-2- Cognitive Psychological Approach

The psychological approach cognitive differs from the philosophical approach in two respects. First, cognitive psychologists tend to focus on how people actually think versus how they could think under ideal conditions (Sternberg, 1986). Second, rather than defining critical thinking by pointing to the characteristics of the ideal critical thinker, or enumerating criteria of “good thought”, cognitive psychology tends to define CT by the types of behaviors critical thinkers can adopt.

1-2-3- Educational Approach

Scholars who are working on the field of education have also taken part in studies concerning CT. Benjamin Bloom is the famous figure engaged in education and his taxonomy for information processing (1956) is one of the most widely known reference for practitioners of education in assessing and teaching higher order thinking skills. Bloom's taxonomy is hierarchical with "comprehension" at the bottom and "evaluation" at the top. The three highest levels (analysis-synthesis and evaluation) are frequently said to represent critical thinking (Kennedy *et al*, 1991 in Lai, R. E, 2011).

The benefit of the educational approach is that it is based on years of classroom experience and observations of student learning contrary to the psychological and the philosophical traditions (Sternberg, 1986 in Lai, R. E, 2011).

1-3- Critical Thinking and Motivation

CT is also related to motivation. Student's motivation is considered necessary and as a precondition for critical thinking skills and abilities. Most scholars view CT as including both skills and disposition. The ability to think critically has been defined as the "consistent internal motivation to engage problems and make decisions by using critical thinking" (Faicone, 2000:65). Halpern (1998) argues that effort and persistence are two of the principal dispositions that support critical thinking. Thus, motivation appears to be supporting condition for critical thinking in the sense that unmotivated individuals are unlikely to exhibit critical thinking. On the other hand, some studies suggest that challenging tasks, especially those emphasizing higher order thinking skills, may be more motivating to students than easy tasks that can be solved through the rote application of a pre-determined algorithm (Turner, 1995).

1-4- Critical Thinking and Creativity

Many researchers have made connections between CT and creativity (Bailin, 2002; Bonk and Smith, 1998; Ennis, 1985; Paul and Elder, 2006; Thayer Bacon, 2000 in Lai, R. E, 2011). CT and creativity might have little in common, or even to be mutually exclusive constructs. However, Bailin (2002, in Lai, R. E, 2011) asserts that a certain amount of creativity is necessary for critical thought. Paul and Elder (2006) claim that both creativity and CT are aspects of “good”, purposeful thinking. Hence, critical thinking and creativity are two sides of the same purpose. Thinking well requires the ability to stimulate intellectual products which are associated with creativity. It also requires the individual to be aware, strategic, and critical about the quality of those intellectual products. The authors state that "critical thinking without creativity reduces to mere skepticism and negativity, and creativity without critical thought reduces to mere novelty" (2006:35). Moreover; Paul and Elder (2006, in Lai, R. E, 2011) point out that, in application, the two terms are interrelated and developed in parallel. The scholars believe that both CT and creativity should be introduced in the teaching/learning process whatever the context.

1-5- Critical Thinking and Teaching

Critical thinking is a skill which should be cultivated in each student's mind. For doing so, many research works have been conducted to sort out hypotheses and theories on developing the CT skill in learners. In this respect, specialists assume that people’s CT is not an innate capacity, so it should be acquired from the world, and the skills encompassing critical thinking are teachable and learnable. One approach to critical thinking is seen in Bloom’s 1956 taxonomy of "learning domains" in approaching problems. The cognitive domain is especially relevant. Bloom and his team ranked learning in hierarchy, starting with simple knowledge at the bottom, the comprehension, application, analysis, synthesis, and evaluation at the top of a pyramid.

Critical thinking corresponds to the learning categories on the upper part of the pyramid. In contrast, in traditional science courses taught by the lecture method, the focus is on the lower part of the pyramid. Students are asked to remember facts, terms, and concepts. In contrary, the upper part of the pyramid which deals with application, analysis, synthesis, and evaluation, fits the critical thinking level. Hence, the Bloom's book provides a way for teachers to promote student's skills in these areas but as cognitive scientist Daniel Willingham (2009) points out, CT cannot be taught without abstract exercises. It must be taught in the context of discipline. In both school and social environment, it is crucial for students to have "skill in questioning, analyzing, comparing, contrasting, and evaluating; so that (they) will not become addicted to being told what to think and to do." (Freseman 1990:26). Putting into practice the findings from the thinking skills research can help schools to teach those skills and students to gain and use them.

1-6- Critical Thinking and Assessment

Assessing CT is a challenging task for teachers and instructors as many barriers come to interrupt the process of assessment. Norrisc (1989) shows the fact that the degree of domain specificity in CT remains unresolved makes assessment for critical thinking difficult because of the type of inferences a student is trying to make stays ambiguous for the teachers who cannot agree whether CT is general or subject specific. On the other hand, the difficulty to assess critical thinking is related to the transfer to other contexts which is mixed up within subject specific knowledge that is necessary for exercising CT. Silva (2008) noted that performance-based assessments creativity introduce, rather, subjectivity and error. In addition, the use of such performance tasks to assess the improvement of CTS over time remains confronted with difficulties as long as individual tasks communicate more noise than signal. (Moss and Koziol, 1991)

Publications on CT assessment are multiple, they include the California Thinking Skills Test (Faicone, 1990), the Cornell Critical Thinking Tests (Ennis and Millman, 1985), the Ennis_Weir Critical Thinking Essay Test (Ennis and Weir, 1985), and the Watson_Glaser Critical Thinking Appraisal (Watson and Glaser, 1980). These assessments are considered to be general critical thinking assessment rather than subject specific. Accordingly, scholars have made several propositions for designing assessments of critical thinking skills. First, open-ended problem types may be more appropriate for assessing CT than traditional multiple-choice forms. Assessment task should also reflect "authentic" problems contexts and performances (Bonk and Smith, 1998; Halpern, 1998). That is to say assessment should be based on simulations that refer to real world problems and issues.

Assessment of CT should go beyond the information in the task in addition to those problems which should have more than one plausible or defensible solution, and there should be enough information and evidence within the task to allow students to support multiple views (Moss and Koziol, 1991). Moreover, Fisher et al. (2009) demonstrated that certain types of tasks are more likely to elicit CT than others. Tasks requiring the exercise of judgment were better for assessing CT than tasks focused on simply understanding material presented in stimulus text. However, a task requiring examinees to either accept or reject a manuscript for publication elicited more questions of belief and checks of thinking than a task asking examinees to identify the main topic of a set of materials or to explain a scientific research described in stimulus materials. Another suggestion is that critical thinking assessments should make student reasoning well; Norris (1989) argues that testing validity for critical thinking requires that we observe an examinee's process of thinking. Silva (2008) argued that new assessment modes are needed to measure higher order skill, identifying several examples of recent CT assessments that use novel item formats. Critical thinking assessment should use ill-structured problems that require students to go beyond recalling or

restating learned information and also require from students to manipulate information in new or novel contexts. Assessing CT tasks ought to make students reasoning and analyzing visible through requiring students to provide evidence and logical arguments in support of judgments, choices, claims, or assertions. (Lai, 2011).

1-7- Critical Writing

In an academic context, critical thinking is applied through a significant process consisting of an argumentation by producing an argument when writing essays or dissertations. The word argument is defined as connected series of related ideas as the definition is provided by (Andrews 1995) as "intended to establish a position and implying response to another (or more than one) position".

Argument is regarded as the primary expression of critical thinking in higher education (Andrews 1995, Scott2000) and also the defining feature of the essay (Elander, *et al* 2006). Furthermore, any essay is considered unsuccessful unless it is well-argued as the idea is emphasized by Bonnett (2001) who asserts that "Your essay is your argument, everything else makes sense because of it". From a pedagogical point of view, descriptions of basic characteristics of essays demonstrating critical thinking are needed. Accordingly, Wingate (2011) has designed a series of argumentation consisting of three components, a three-step description of developing an argument. Those steps serve as norms for writing an effective argumentative essay. The first component is "analysis and evaluation of content knowledge". This component is related to the ability of selecting relevant information from the background knowledge to strengthen the writer's argument. The second component is "the writer's development of a position". In this step, the writer holds a certain position and brings an extension of his/her position. Last, the third component is "the presentation of writer's position in a coherent manner". This is linked to the organization of proposition at the structural level.

From the above data, critical thinking may be seen as a concept with a wide dimension, encompassing both a social movement and a mental operation. It, therefore, imposes itself in an essay through argumentation as the aim is not only reproducing knowledge but also building knowledge.

1-8- Critical Thinking in EFL Contexts

The term critical thinking started to be used in EFL literature in the 1990. In fact, a discussion of aspects of critical thinking in language learning probably began earlier than that, in the 1970s when the communicative approach was introduced to the field of English language teaching. Day (2003).

Critical thinking in the ELT context has emerged from the fact that the number of international students studying in English speaking countries were growing fast. In Australia (Thompson 2002, in Pezhman Zare, 2015) as in North America and the UK (Briggs 1999, in Pezhman, Z, 2015), international students needed a high level of language proficiency and they also needed to change their style of discourse to suite their new situations and cultural contexts. There was a need to apply their CT in different situations and with more linguistic and rhetorical conventions to consider. Students may have a wide vocabulary and theoretical background but they may not be able to construct grammatically correct sentences. This is related to problem at the linguistic level.

Students use the L2 to present their ideas and feelings and are required to think critically as well as to master linguistic skills. Some challenges are facing students when practicing CT in L2 context, starting from the socio-cultural perspective when they express their thoughts in L2, either through spoken or written language. In this case, they are not only translating their thoughts from L1 to L2, but also reconsidering their identities (Lantolf, 1993; Kramersch and Lam, 1999, in Pezhman, Z, 2015).

1-9- Faicone's Expert Consensus about Critical Thinking

In 1990, the American philosophical association constructed a research work for determining core CT founded on the consensus of experts within the US and Canada, representing disciplines in the humanities, sciences, social sciences and education. The APA (American Philosophical Association) Delphi Report defines CT as "the process of purposeful, self-regulatory judgment. This process reasoned consideration to evidence, contexts, conceptualizations, methods, and criteria". The six core CT skills according to the consensus are inference, explanation, evaluation, self-regulation, interpretation and analysis. A person disposed towards CT has "positive critical spirit, a probing inquisitiveness, a keenness of mind, a zealous dedication to reason, and a hunger or eagerness for reliable information". The experts argued that critical thinkers "approach specific issues, questions, or problems "with" clarity in stating the question or concern, orderliness in working with complexity, diligence in seeking relevant information, reasonableness in selecting and applying criteria, care in focusing attention on the concern at hand, persistence though difficulties are encountered, precision to the degree permitted by the subject and circumstances". The learning objectives set by the experts developing the APA Delphi allow students to identify the core critical thinking skills classifying statements as exhibiting CT or not and determine the method used for reaching expert consensus. (Faicone, 1990).

Illustration of Faicone's Expert Consensus about CT

Core Critical Thinking Skills

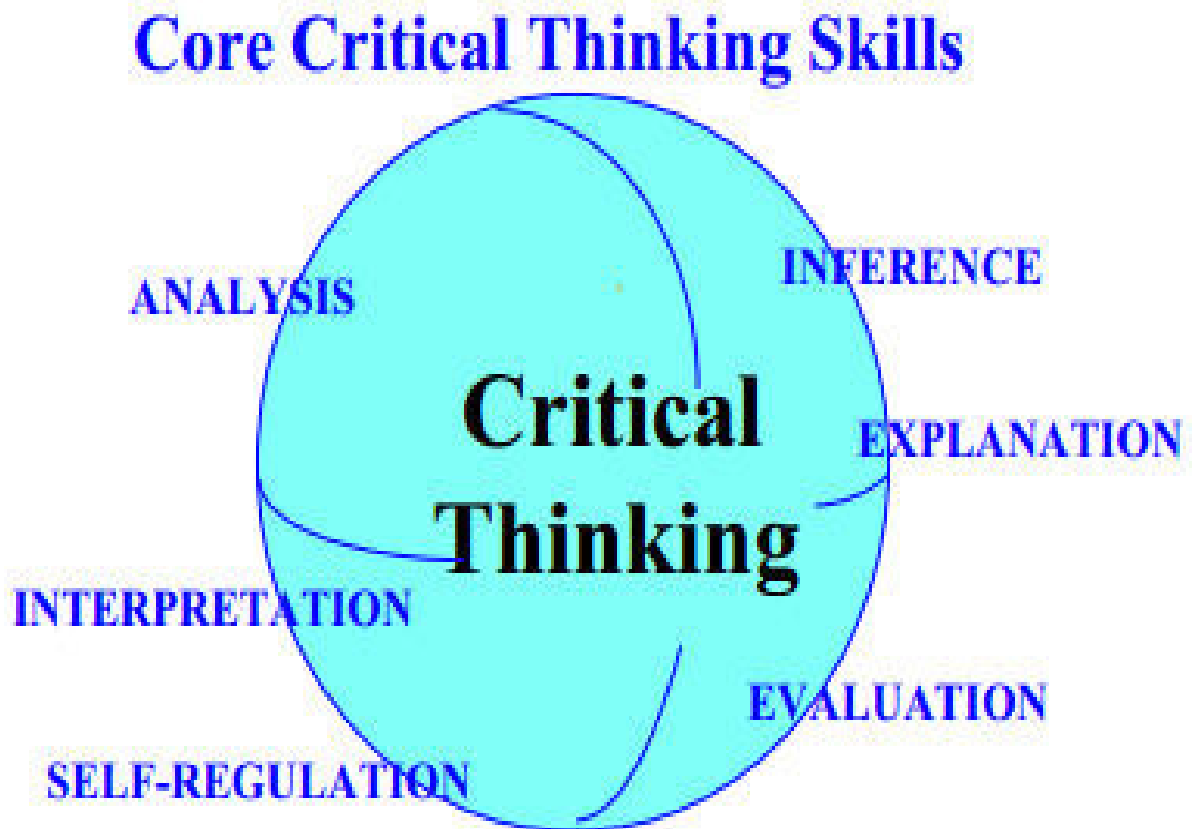


Image source: <http://ctac.gmu.edu/documents/facione%20what&why2007.pdf> by Peter Facione, in Critical Thinking: What It Is and Why It Counts.

2- P. Richard's and L. Elder's Framework of Criteria for Evaluating Reasoning

As every research work should rely on a theoretical framework, the present study is based on theoretical plinth proposed in 2008 by the director of research and professional development at the center for Critical Thinking Dr Richard Paul and the educational psychologist Dr Linda Elder who is a prominent authority on critical thinking and president of the foundation for CT. This framework is taken from the Miniature Guide to Critical thinking Concepts and Tools published in July, 2008 announcing the 28th Annual International

Conference on Critical Thinking. These criteria serve as norms for evaluating and assessing student's reasoning as Richard Paul and Linda Elder argue that "critical thinking is the art of analyzing and evaluating thinking with a view to improving it" (2008:2). Students need a framework to guide them when coming to use CT in their respective writings. Hence, P. Richard and L. Elder provide for both students and instructors a list of criteria to follow in order to well critically writing and to help teachers in assessing their students critically. Indeed P. Richard and L. Elder added that:

Critical thinking is, in short, self-directed, self-disciplined, self-monitored, and self-corrective thinking. It requires rigorous standards of excellence and mindful command of their use. It entails effective communication and problem solving abilities and a commitment to overcoming our native egocentrism and socio-centrism. (ibid).

The criteria for evaluating reasoning that shape Richard Paul and Linda Elder framework can be illustrated as follows:

1. Purpose

What is the purpose of the student? Is their purpose clearly stated or clearly implied?

Is it justifiable?

Thinking Points:

- What is the object of the student's reasoning?
- Does the student's reasoning focus through on her/his goal?
- Is the student's goal realistic?

Example Questions:

- What are you trying to accomplish?
- What is your central aim? Purpose?
- Can you state your purpose clearly?

2. Question

Is the question at issue well-stated? Is it clear and unbiased? Does the expression of the question do justice to the complexity of the matter at issue? Are the question and purpose directly relevant to each other?

Thinking Points:

- Can the question be divided into sub-questions?
- Does the question only have one right answer, or are can there be more than one reasonable answer?
- Does the question require judgment rather than facts alone?

Example Questions:

- What question are you raising? What question are you trying to answer?
- What questions are you addressing?
- Are you considering the complexities of this question?
- Are there other ways to think about the question?

3. Information

Does the student cite relevant evidence, experiences, and/or information essential to the issue? Is the information accurate? Does the student address the complexities of the issue?

Thinking Points:

- To what extent is the student's reasoning supported by relevant data?
- Do the data suggest explanations that differ from those given?
- How clear, accurate, and relevant are the data to the question at issue?
- Has the student gathered data sufficient to reaching a reasonable conclusion?

Example Questions:

- What information are you using to come to her/his conclusion?

- What experiences did you use to support your claim?
- What information do you need to settle the question?

4. Concepts

Does the student clarify key concepts when necessary? Are the concepts used justifiably?

Thinking Points:

- What key concepts and theories are guiding the student's reasoning?
- What alternative explanations might be possible, given these concepts and theories?
- Is the student clear and precise in using concepts and theories in her/his reasoning?

Example Questions:

- What is your main idea here?
- Can you explain the idea?

5. Assumptions

Does the student show any sensitivity to what he or she is taking for granted or assuming? (Insofar as those assumptions might reasonably be questioned?)

Thinking Points:

- Is the student making assumptions? What are they?
- How are the student's assumptions shaping her/his point of view?
- Which of the student's assumptions might reasonably be questioned?

Example Questions:

- What are you taking for granted?
- What assumptions have led you to your conclusion?

6. Inferences

Does the student develop a line of reasoning explaining well how s/he is arriving at her/his main conclusion?

Thinking Points:

- To what extent do the data support the student's conclusions?
- Are the student's inferences consistent with each other?
- Are there other reasonable inferences that should be considered?

Example Questions:

- How did you reach your conclusion?
- Is there another way to interpret the information?

7. Point of View

Does the student show a sensitivity to alternative relevant points of view or lines of reasoning? Does s/he consider and respond to objections framed from other relevant points of view?

Thinking Points:

- What is the student's point of view? What insights is it based upon? What are its weaknesses?
- What other points of view should the student consider in reasoning through the problem?
What are the strengths and weaknesses of these viewpoints? Is the student fair-minded considering the insights behind these viewpoints?

Example Questions:

- From what point of view are you looking at the issue?
- Is there another point of view you should consider?

8. Implications

Does the student show a sensitivity to the implications and consequences of the position s/he is taking?

- What implications and consequences follow from the student's reasoning?

- If the student's line of reasoning is accepted, what implications or consequences are likely?

Example Questions:

- If someone accepted your position, what would be the implications?
- What are you implying?

Conclusion

The present chapter has provided an overview of the literature that revolves around the topic of study: investigating critical thinking and writing proficiency of advanced EFL students. It is divided in two sections. The first section is concerned with a historical background of CT and its nature, emphasizing the approaches encompassing the concept of critical thinking. It has explored the relationship that lies between CT and motivation and the correlation between critical thinking and creativity to enhance student's critical thinking ability. In addition, it has dealt with the link between CT and its teaching as a basis for education and the challenges that are to be faced when assessing student's critical thinking. Also, it has tackled the relation existing between writing and critical thinking followed by an explanation of critical thinking within EFL contexts. Then, a brief insight on Faicone's expert consensus on CT is provided to widen the scope of the research work. As for the second section, it has presented the theoretical framework underpinning the study.

Research Design

Introduction

This chapter is methodological. It deals with the research design of the present work as it describes the techniques and procedures of data collection and data analysis used in our study. The adoption of a mixed–method approach seems to fit the issue of our research: To investigate the critical thinking ability and the writing proficiency of advanced EFL students. This part of the research paper consists of two sections .The first section provides an insight on the corpus of the study as well as the instrument used to gather data by means of a questionnaire. As for the second, it explains the procedures of data analysis in which the quantitative data are presented in statistical formats using the Excel software and the rule of three. As for the qualitative data, they are explored by means of the Qualitative Content Analysis (QCA) method.

3. Corpus of the Study

The research work relies on the analysis of a corpus of fifty (50) examination papers of students enrolled in Masters One and Two in two different fields (Linguistics and Literature) submitted in 2016 in the Department of English at MMUTO. The choice is done on a list of subjects (modules) encompassing three options of the fields mentioned above, respectively Language and Communication, Social Semiotics and Media Studies.

The selection of those particular disciplines is made advisedly to broaden the scope of our investigation through dealing with the implication of CT on the two available specializations in our Department.

It should be mentioned that due to time constraints and the absence of some examination papers in the Department of English, the present work relies only on three options from the five existing in our Department. As for the selected essays, they have been anonymously investigated according to the theoretical framework of our study.

Table 1 below enumerates the five subjects through which the essays are selected and their respective disciplines.

Subject n°	Number of Copies Analyzed	Title of the Subject	Specialty
1	10	Critical Discourse Analysis	Language and Communication
2	10	Inter-Cultural Studies	
3	10	Applied Linguistics	Social Semiotics
4	10	Cultural Theory	Media Studies
5	10	American Literature	
Total	50		

Table 1: Titles of Essay Subjects and their Specialties.

3.1 Procedure of Data Collection

3.1.1 Student's Questionnaire

The present research relies also on a data gathered instrument by means of a questionnaire. The Questionnaire is an important data collection tool which can be self-administered and can reach a large number of respondents at one time. Questionnaires are coherent tools that enable the researcher to obtain different perspectives to the same question. It is argued by Dörnyei Zoltan (2003) that the questionnaire is the suitable tool for second language research because of time constraints, the researcher's efforts as well as the financial resources. The designed questionnaire consists of seventeen (17) items, classified into closed-ended questions suggesting to the participants a list of responses to select, in addition to open-ended questions in which the respondents are required to provide an answer with their own words.

The questionnaire is made up of two main sections. The first part is concerned with the essay's questions whereas the second section seeks to determine the student's views on CT. Researchers like Bell (2010) always advise to test a survey questionnaire before using it to

collect data so as to strengthen its reliability and credibility. Hence the present questionnaire was piloted on a sample of ten (10) MA students.

The questionnaire was then revised according to their feedback. It was administered in June 2017 to fifty (50) students who were present in the Department of English at MMUTO. It is important to note that no specific criteria of selection were taken into consideration concerning the choice of our informants, it is therefore based on their availability in the institution, i.e., the Department of English.

3.2. Procedure of Data Analysis

3.2.1. Statistical Analysis

Concerning the analysis of the quantitative data gathered through the questionnaire, the outcomes are presented by means of histograms illustrating the number of answers and their percentages. The closed –ended questions reflecting numerical data are calculated by using a software program called Excel and the rule of three. This software is known for its ability to calculate large quantities of data and to transform them into statistics in addition to its capacity to present the results in the form of multiple kinds of diagrams

3.2.2. Qualitative Content Analysis

The study relies also on qualitative analysis opting for Qualitative Content Analysis (QCA) as a procedure for analyzing the textual corpus consisting of the exam’s essays as well as the data generated from open-ended questions of the questionnaire.

The Qualitative Content Analysis is defined by Dörnyei Zoltan (2007: 24) as the qualitative research that “involves data collection procedures that results primarily in open –ended non numerical data which is then analyzed primarily by non-statistical methods” This method seeks to interpret the data raising from student’s perception and reflection of our study’s issue.

Conclusion

The present chapter has described the research methodology adopted to investigate the issue of our study: investigating the critical thinking ability and the writing proficiency of advanced EFL students. It has provided the textual corpus of the study as well as the data collection tool by means of a questionnaire. In addition, it has presented the procedure of data analysis in which the quantitative data are illustrated by using Excel computer software. On the other hand, the qualitative data are provided following the Qualitative Content Analysis (QCA) as a technique to analyze the textual corpus and the open-ended questions contained in the questionnaire.

Presentation of the Findings

Introduction

The present chapter is empirical. It presents the results obtained from the analysis of the corpus made up of fifty (50) examination papers. In addition, the outcomes that emerged from the data elicited by means of a questionnaire administered to fifty (50) master students. The aim of this chapter is to highlight the relationship that lies between critical thinking and writing proficiency of advanced EFL students. The results are presented in percentages and displayed in diagrams. The chapter is divided into two sections. The first section deals with the findings obtained from the analysis of the essays relying on Qualitative Content Analysis (QCA) and Richard Paul and Lynda Elder framework of criteria for evaluating reasoning. The second section is devoted to the presentation of the findings of the questionnaire.

1. Results of the Corpus Analysis

The fifty (50) essays which have been selected for the study have been analyzed following QCA and the theoretical framework of the study. The criteria that refer to Richard Paul and Linda Elder framework have been examined and presented in the form of numbers and percentages according to each criterion.

Criteria	Number of Essays	Number of Occurrences
Purpose	50	20
Question	50	15
Information	50	25
Concepts	50	40
Assumption	50	30
Inferences	50	35
Point of View	50	30
Implication	50	15
Total	50	210

Table 2: Number of Applications of Criteria for Evaluating Reasoning in the Essays

The table above illustrates the number of applications of the criteria for evaluating reasoning making up the theoretical basis of the study, namely "Purpose", "Question",

"Information", "Concepts" as well as "Assumptions", "Inferences", "point of view" and "Implications" in the fifty essays. As demonstrated in the table "Concepts" come in the first position with forty (40) out of fifty students who have well applied the criterion. It is followed by "Inferences" with thirty- five (35) applications out of fifty essays, then "Assumptions" and "Point of View" by thirty (30) applications for each. It is clear that the applications of "Information", "Purpose", "Question" and "Implications" are lower than the number of applications of the previous mentioned criteria.

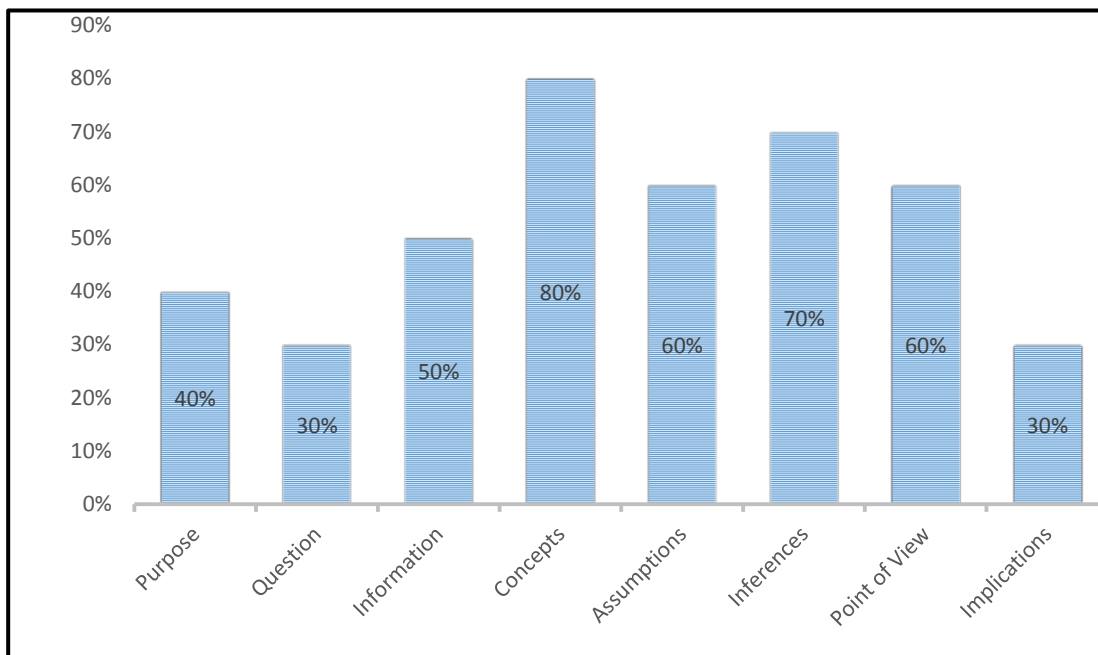


Diagram 1: The Presence of Criteria for Evaluating Reasoning in the Essays

This diagram presents the findings corresponding to the presence of the eight criteria for evaluating reasoning that have been detected in the essays. It indicates that the percentage of "Concepts" ranks first with eighty percent (80%). Then it is followed by "Inferences" with seventy percent (70%) in addition to "Assumption" and "Point of View" with sixty percent (60%) for each criterion. Moreover, "Information" ranks at the fifth position with fifty percent (50%), followed by "Purpose" with forty percent (40%) and last "Question" and "Implication" with thirty percent (30%) for each on the basis of the fifty essays analyzed.

2. Presentation of the Results of the Questionnaire

This part deals with the presentation of the findings gathered by means of the questionnaire. The questions are divided into closed- ended which have been calculated using the rule of three. The rule of three is applied as follows:

$$X = \frac{Z \times 100}{Y}$$

X is the calculated percentage, Z is the value of the similar answers, and Y is the total number of the participants. The diagrams are designed by Excel software. The open-ended questions of the questionnaire have been treated through QCA.

Section One: Essay's Questions

Q1- “Do you like writing essays?”

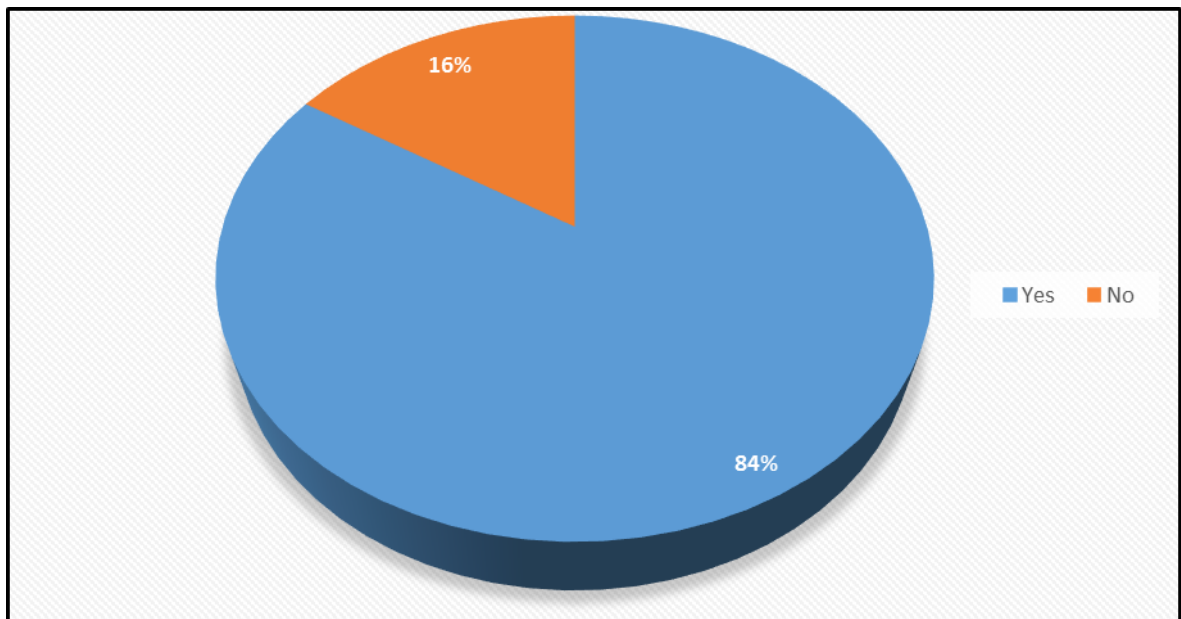


Diagram 2: Students’ Preferences in Essay Writing

The first question is about the percentage of student's preferences on writing essays. As illustrated in the diagram above, the majority of participants that is eighty-four percent (84%) which stand for forty-two (42) students asserted that they are motivated to write essays. Only sixteen percent (16%) which represent eight (8) students affirmed that they are not motivated to write essays.

Q2- “How many essays do you write per month?”

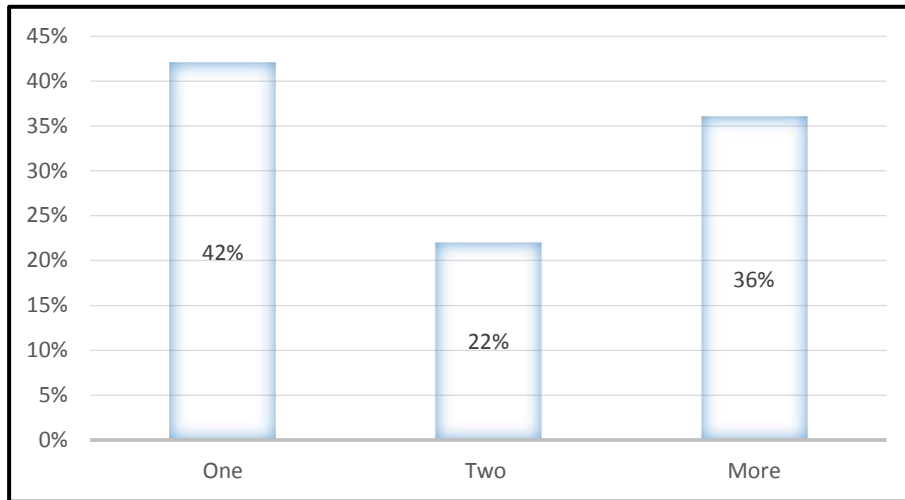


Diagram 3: Number of Essays Students Write per Month

Through this question, we intended to know the quantity of essays students write per month. The statistics of the diagram indicate that forty-two percent (42%) of the respondents write only one essay per month. Others namely thirty-six percent (36%) write an average of more than two essays per month whereas twenty-two percent (22%) indicate that they write about two essays per month.

Q3- “During workshop, do your teachers guide you to write your essay?”

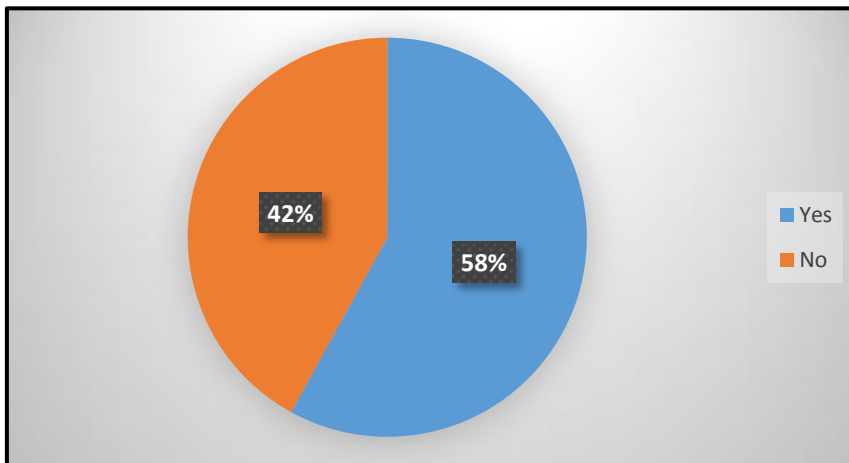


Diagram 4: Teachers’ Guidance of their Students in Writing their Essays

As indicated in the diagram 4, the majority of the participants representing fifty-eight percent (58%) claim that they receive guidance from their teachers to write their essays during workshop. Other students (42%) affirm that they do not receive any help from their teachers to write their essays.

Q4- “How do you proceed in writing your essay?”

Categories	Number of Answers	Percentage
Introduction, development and conclusion.	21	43.75%
First by focusing on the essay’s question, underlining key words of the question then starting to write.	10	20.83%
Making a well-organized plan before starting to write.	9	18.75%
Determining the main points on a draft.	5	10.41%
Other	3	6.25%
Total	48	100%

Table 3: Students’ Procedures in Writing Essays

Note: Two (2) students did not answer the question.

Based on the results, the majority of the respondents (43, 75%), who represent twenty one students, argue that they use the traditional method consisting of an introduction, development and conclusion when writing their essays. Others (20, 83%) affirm that they focus on the "essay's question, underline the key words then they start writing". Nine students representing (18, 75%) argue that their method consists of «making a plan before starting to write" whereas a minority of five students standing for (10, 41%) indicate that they " sort out the main points on a draft" before writing.

Q5- “Do you find any difficulty in dealing with essay questions?”

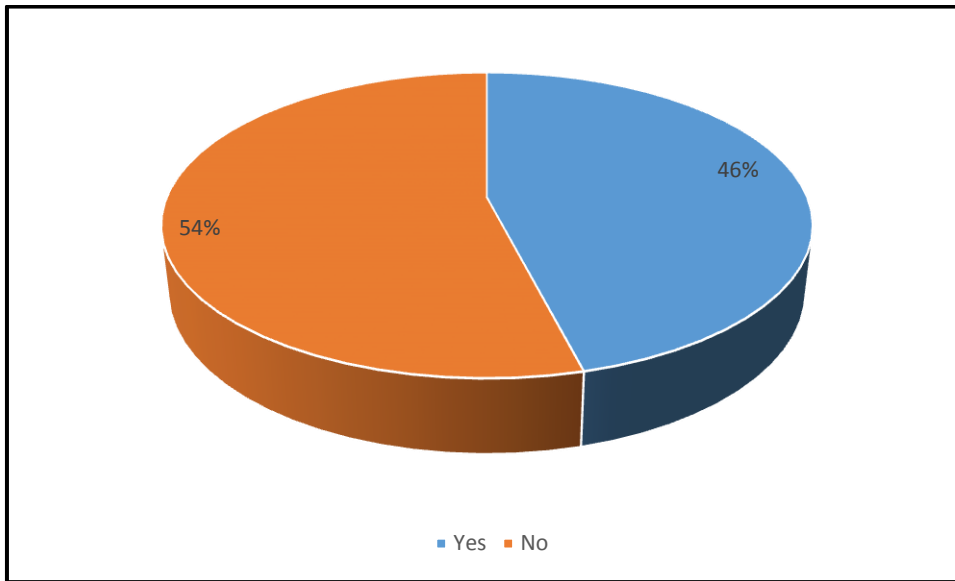


Diagram 5: Students’ Facing Problems with the Essays’ Questions

The results gathered in diagram 5 show that fifty-four percent (54%) of the informants do not meet difficulties in understanding essays’ questions. Nevertheless, forty-six percent (46%) of them claim that they find some difficulties in dealing with essays’ questions.

Q6: «If yes, what kind of difficulty do you meet?»

Categories	Number of Answers	Percentage
Difficulty of understanding the question.	11	47.82%
Difficulty in finding the right vocabulary related to the topic.	6	26.08%
Insufficient background information on the topic.	4	17.39%
Other	2	8.69%
Total	23	100%

Table 4: Types of Difficulty Encountered by Students

Note: Only twenty-three (23) students have indicated that they meet problems with essay's questions.

As shown in the table above, the majority of informants (47, 82%) affirm to find difficulties in dealing with their essays' questions because of not understanding the question. Others (26, 08%) assert that the difficulty arises from the fact of not finding the appropriate vocabulary related to the topic. As for the others standing for (17, 39%), the difficulties are related to a lack of background information concerning the topic.

Q7- "How do you think you are doing on your essays?"

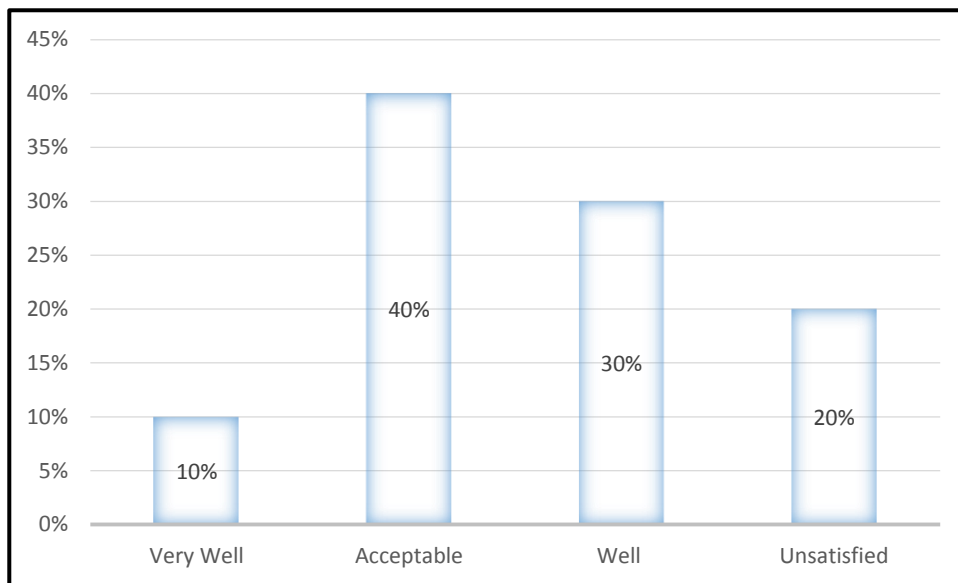


Diagram 6: Students' Performance in Essay Writing

As shown in diagram 6, forty percent (40%) of students evaluate their performance in writing essays as "acceptable". Others (30%) claim that they are doing "well" with the essays and twenty percent (20%) measure their output as "unsatisfied". Ten percent (10%) of the participants assert that they find their performance on writing essays as "very well".

Q8: - “What do you learn when you write your essay?”

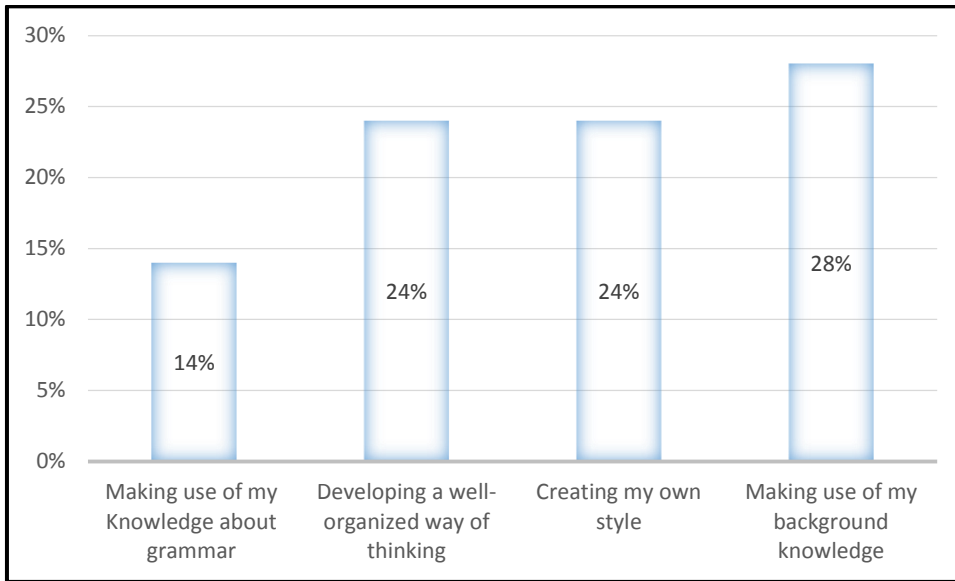


Diagram 7: Students’ Skills in Essay Writing

The results presented in diagram 7 demonstrate that twenty-eight percent (28%) is the percentage corresponding to the participants who "make use of their background knowledge" when they write their essays. Also, twenty-four percent (24%) of students' answers indicate that they write essays in order to "create their own style" and other twenty-four percent (24%) claim that they write so as to "develop a well-organized way of thinking. As for the rest of participants, representing fourteen percent (14%), they assert that they learn how to "make use of their knowledge about grammar" by writing essays.

Section Two: Students’ Views on Critical Thinking

Q9: "How would you define critical thinking?"

Categories	Number of Answers	Percentage
The application of logical principles to the analysis and discussion of claims.	13	26%
Considering things from different points of view.	8	16 %
The ability to think rationally.	7	14 %

Finding solutions to different problems.	6	12%
The objective analysis of facts to form judgments.	5	10%
The ability to engage in reflective and independent thinking.	5	10%
It is to provide a judgment in your own ideas, thoughts and experience.	3	6%
Other	3	6%
Total	50	100%

Table 5: Students' Views about Critical Thinking

As indicated in the table above, several definitions of critical thinking have been provided by students as most of the participants (26%) defined it as "the application of logical principles to the analysis and discussion of claims". For others (16%), critical thinking refers to "considering things from different points of view". In addition, some other respondents (14%) view it as "the ability to think rationally". Six other participants standing for (12%) perceive critical thinking as "finding solutions to different problems", whereas others (5%) suggest that it is "the objective analysis of facts to form judgments".

Q10: “Do you think you have reached such a level of thinking?”

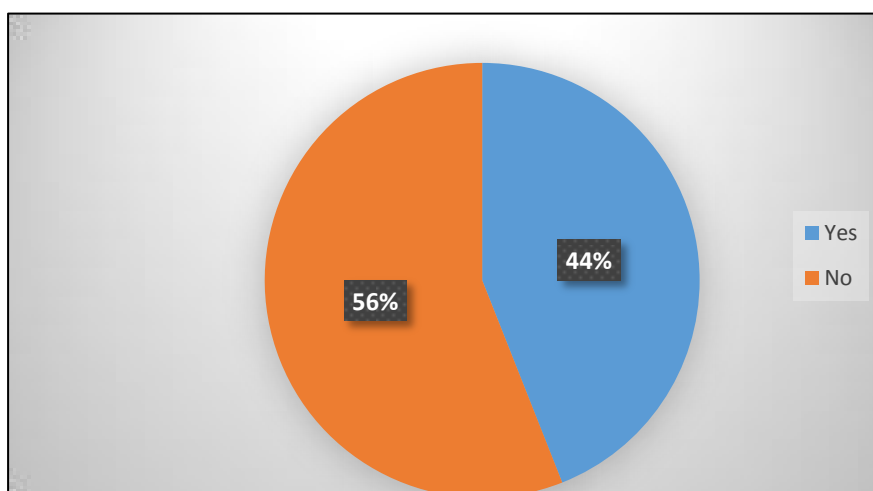


Diagram 8: Students' Estimation of their Level of Thinking

Diagram eight represents the students' estimation of their level of thinking. Thus, fifty-six percent (56%) of the respondents affirm that they have not yet reached the level of thinking critically. Others (44%) estimate that they have already attained a level of critically thinking.

Q 11: "How would you define critical writing?"

Categories	Number of Answers	Percentage
The ability to criticize a written piece of work without being influenced by the author's ideas.	10	21,73%
The ability to engage in reflective and independent thinking when writing.	5	15,21%
The evaluation and analysis of information obtained from different sources.	7	10,86%
Analyzing, commenting and explaining when writing essays.	17	36,95%
The application of critical thinking on writing.	3	6,52%
Expressing views about others' ideas in a critical way through providing an evidence and argument.	2	4,34%
Other	2	4,34%
Total	46	100%

Table 6: Students' Representation of Critical Writing

Note: Four (4) participants have not answered the question.

Table 6 indicates that the respondents provided different definitions of critical writing. The majority (36, 95%) of students view critical writing as "analyzing, commenting and explaining when writing essays" and others (21, 73%) define it as "the ability to criticize a written piece of work without being influenced by the author's ideas". For some other students

(15, 21%), critical writing implies "the ability to engage in reflective and independent thinking when writing". Five students representing (10, 86%) define critical writing by referring to "the evaluation and analysis of information obtained from different sources. A minority of three (3) respondents answered that critical writing is "the application of critical thinking on writing".

Q12: "How would you consider critical writing?"

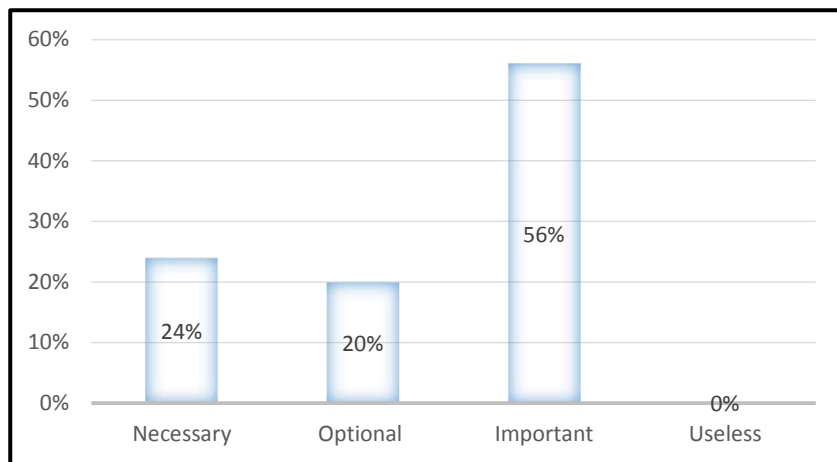


Diagram 9: Students' Considerations of Critical Writing.

Diagram 9 denotes that the majority of the participants standing for fifty-six percent (56%) consider critical writing as "important". Others (24%) argue that they find critical writing "necessary". However, a minority (20%) of the respondents affirms that critical writing is "optional" for them.

Q13- "How often do teachers encourage you to think critically when writing your essays?"

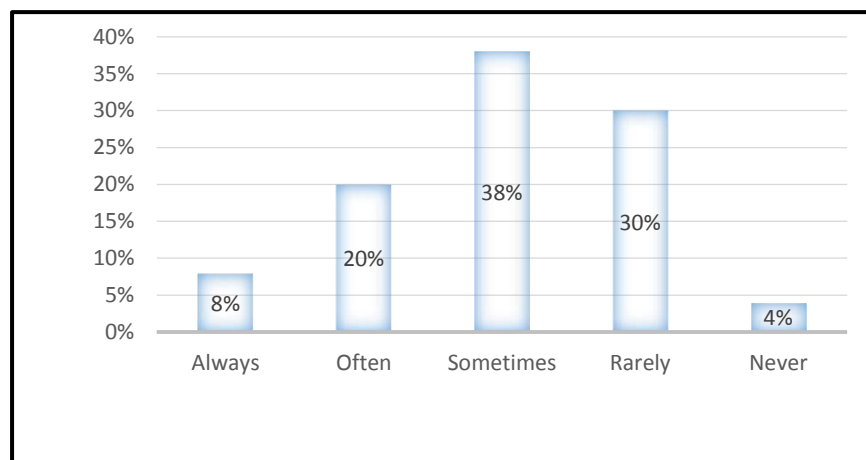


Diagram 10: Teachers' Encouragement of Students to use Critical Thinking

As seen in the diagram ten, the outcomes related to teachers' encouragement of students to use critical thinking indicate that out of 100% answers, thirty-eight percent (38%) of students "sometimes" receive encouragement from their teachers to think critically when writing essays. Others standing for thirty percent (30%) claim that they are "rarely" encouraged to think critically and twenty (20%) percent are "often" encouraged. However, only eight percent (8%) of the participants claim that they "always" receive encouragement to think critically when writing essays. As for the rest, a minority of four percent (4%) indicates that they have "never" received encouragement.

Q14- “When writing your essays, do you think the cognitive levels such as evaluation, inference, analysis and reasoning should be stressed?”

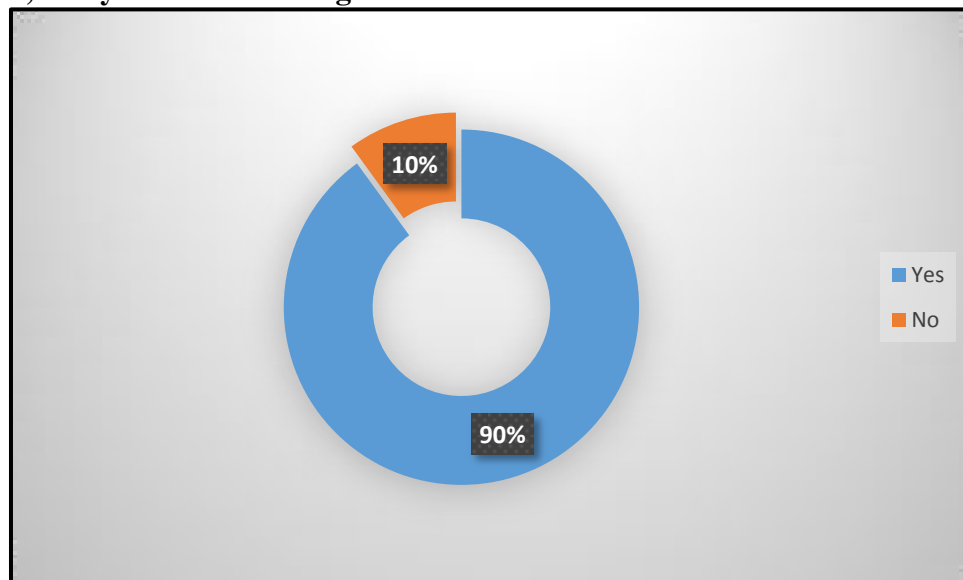


Diagram 11: Students’ Considerations of the Cognitive Levels

As illustrated in the diagram above, a high percentage that is ninety percent (90%) of participants point out that the cognitive levels such as evaluation, inference, analysis and reasoning have to be taken into consideration when writing essays. However, a minority of ten percent (10%) consider that such levels should not be stressed.

Q15- “Do you make any difference(s) between discussing, commenting and illustrating?”

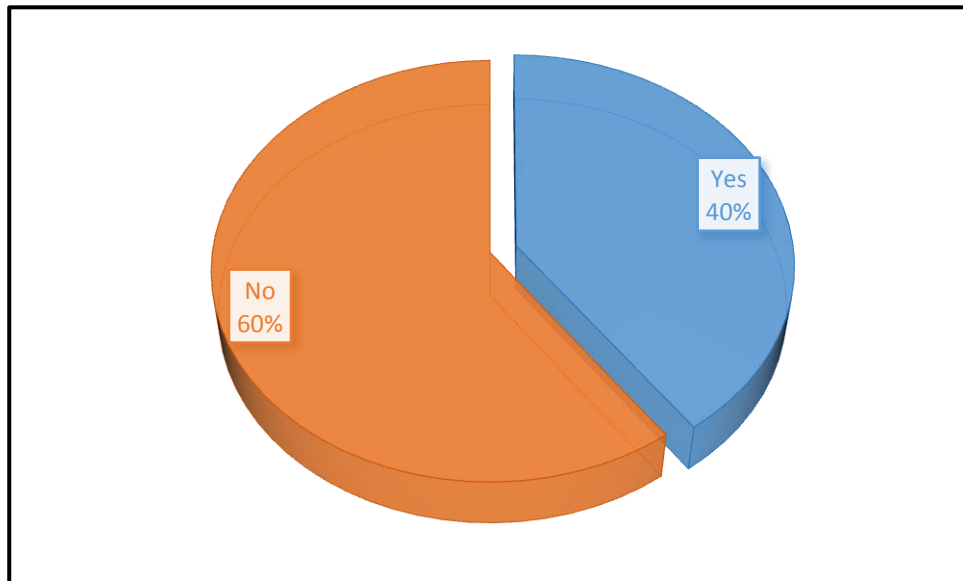


Diagram 12: Students’ Perception of the Concepts of ‘Discussing’, ‘Commenting’ and ‘Illustrating’.

Relying on the results, sixty percent (60%) of the respondents claim that they ignore the existence of any difference between the concepts of discussing, commenting, and illustrating generally used to ask essays' questions. Nevertheless, forty percent (40%) of them affirm to make a distinction between the three terms.

Q16: "If yes, how would you define each of them?"

Note: *Only twenty (20) respondents answered that they made a difference between discussing, commenting and illustrating.*

Categories	Number of Answers	Percentage
Discussing is to develop our ideas about a given topic and answering the question.	7	35%
Commenting is to agree or disagree on a given topic.		
Illustrating is to give concrete examples to support our arguments.		
Discussing is to explain something without giving our point of view.	5	25%
Commenting is to give our point of view and to support it.		
Illustrating is to explain and support our arguments with examples.		
Discussing is the process of writing essays to present a balanced argument.	5	25%
Commenting is expressing an opinion or reaction.		
Illustrating means to show or demonstrate something clearly.		
Other	3	15%
Total	20	100%

Table 7: Students' Definitions of Discussing, Commenting and Illustrating

From the results, participants show that they perceive differently the three concepts of discussing, commenting and illustrating. Most of them (35%) define discussing as "developing our ideas about a given topic and answering the question" and commenting as "agreeing or disagreeing on a given topic" whereas illustrating is perceived as "giving concrete examples to support our arguments". Other respondents (25%) assert that discussing means "to explain something without giving our point of view" and commenting is "to give

our point of view and to support it"; in contrast, illustrating is perceived as "explaining and supporting our arguments with examples".

Q17- “Do you think university curricula help you to think critically?”

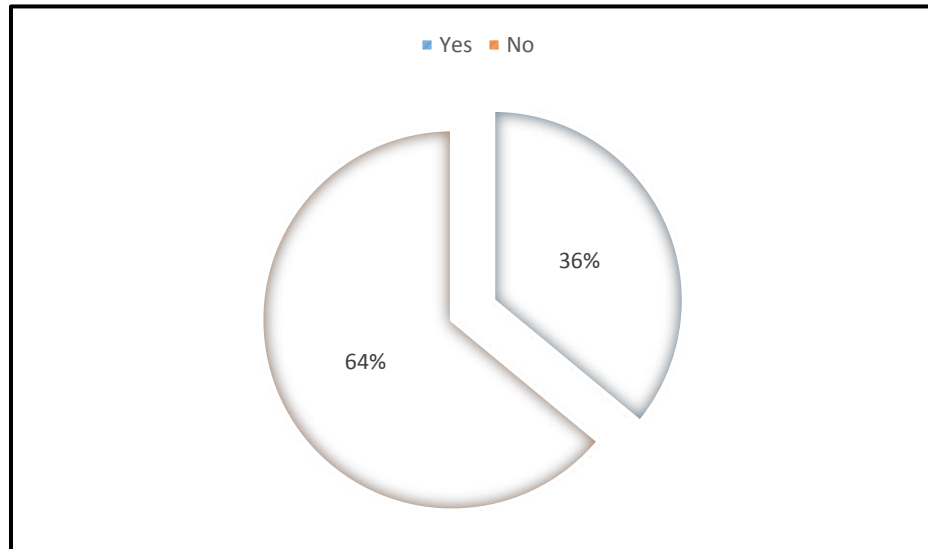


Diagram 13: University curricula and Critical Thinking

As for diagram 13, the results clearly show that sixty-four percent (64%) of the students indicate that university programs do not provide any help for students to think critically. In contrast, thirty-six percent (36%) remaining consider that university curricula encourage students to use their critical reasoning.

Conclusion

The present chapter has provided the different findings of both the analysis of the textual corpus consisting of fifty examination essays and the questionnaire administered to fifty Master students. The results are displayed in charts and tables. The data gathered throughout our investigation will be interpreted in Chapter Four.

Discussion

Introduction

The present chapter is devoted to the discussion as well as to the interpretation of the findings of the study. It provides the discussion of both the results obtained from the analysis of the corpus made up of fifty essays and the interpretation of the outcomes obtained by means of a questionnaire administered to fifty MA students. The findings are interpreted according to the theoretical framework we have adopted in an attempt to bring answers to the research questions of our study. The chapter is divided into two main sections. The first section is devoted to the interpretation of the results of the corpus whereas the second part deals with the discussion of the results obtained by means of the students' answers to the questionnaire items.

I. Corpus Analysis

1. Interpretation of the Results of the Corpus

The primary underlying concern of this section is to find out the extent to which Master students develop their critical thinking abilities. The analysis of the findings reveals that the majority of the students have fairly introduced a critical dimension in their essays. This is noticeable by the results of the corpus analysis reflecting the presence of criteria for evaluating reasoning on the students' essays. Despite the difference in the number of occurrences of each criterion, the total of their applications indicate that the whole essays are in accordance with the criteria composing the theoretical plinth of the study (see table 2 and diagram 1). The results displayed in diagram (1) show that 80% of the students have rightly included the "*Concepts*" in their essays. In fact, this high percentage reflects the awareness of Master students concerning the introduction of the right concepts which fit the issue raised in the essay. Paul and Linda emphasize the importance of words as they claim that "to figure out

the proper use of words, the proper way to conceptualize things, events, situations, emotions, abstract ideas, it is important to first achieve a true command of the uses of words". (2002: 120). From the results, it is clear that students have well integrated "*Inferences*" in their writings. The bar-chart clearly indicates that 70% of the essays develop a line of reasoning explaining how the students reach their conclusions. The students' inferences are consistent with each other as they are in conformity with the theoretical framework requirements. The latter states that "Inference" occurs in the mind and is considered as "an intellectual act by which one concludes that something is true in the light of something else's being true, or seeming to be true". (Paul and Linda, 2015).

In addition to what has been said above, one can say that the results displayed in diagram (1) indicate that 60% of the students have inserted "*Assumptions*" on their essays. This reflects the sensitivity to what students are assuming as the criterion is explained as "something we previously learned and do not question" (ibid). This view is confirmed by the Roseta Stone of Knowledge Management in relation to Bloom's Taxonomy which relates assumptions to (HOTS) Higher Order Thinking Skills. Indeed, analysis goes hand in hand with assumptions; however, the document claims that "Analysis skills can be tested by asking for important unstated assumptions". (2008).

Similarly, students are aware of the implication of "*Point of View*", as diagram (1) shows: 60% of them have referred to alternative points of view or line of reasoning and clearly stated their points of view concerning the issue. Point of view is of great importance as it is distinguished by its subjectivity. This view is supported by William F. Ekstrom (2010) who points out that "no one is completely objective or unbiased. Every researcher has a particular point of view, as does every outside source." As already pointed out in the Review of the Literature, creativity is related to thinking, and Bailin (2002) asserts that a certain amount of creativity is necessary for critical thought.

The findings report that half of the fifty Master students (50%) questioned have applied “*Information*” on their essays, which is essential to the issue. Students seem to face difficulties in integrating the accurate information concerning the topic as the reason may be linked to a lack of background knowledge, confused information or totally different backgrounds. This goes with what is stated by Norman Herr (2007), a professor of Science Education in California State University, “Critical thinkers determine if the premises are reasonable and identify information that has been omitted or not collected. They determine if the implications are logical and search for potentially contradictory data.

The findings reveal that the majority of students have not clarified their “*Purpose*” when writing essays. Only 40% of them clearly stated their purpose. William F. Ekstrom (2010) puts forward that “a critical researcher regularly considers the purpose of the research: what is supposed to be achieved and why. Without a sense of what you plan to accomplish, you’re unlikely to have much success with your research.”

Students may not perceive the issue raised in the essay, so they are unable to determine its purpose. Brian Tracy (2017) relates that to a “lack of direction” and he states that “the first obstacle to creative thinking is the lack of clear goals and objectives, written down, accompanied by detailed, written plans of action”.

Finally, the lowest percentage is calculated for both the criteria of “*Question*” and “*Implication*” with 30% for each. Almost all the students have not well stated the question at issue and have not related it to the purpose. This reflects the total ignorance of the students of standards of writing essays. Paul and Linda (1996) point out that “the key to powerful thinking is powerful questioning. When we ask the right questions, we succeed as a thinker, for questions are the force that powers our thinking”. Identically, the majority of master students have failed to introduce “*Implications*” in their essays. As illustrated in the diagram,

only a minority of 30% have showed a sensitivity to the implications and consequences of the position they are taking. This low percentage may be explained by a failure in considering all possible consequences related to the topic. According to Linda Elder and Richard Paul “an implication is that to which our thinking is leading us. When you say things, you imply certain other things; e.g., if you make a promise, you imply that you will keep it”. (2009:28).

In short, the criteria for evaluating reasoning have showed that master students have integrated a critical dimension in their essays. The results of the corpus indicate that the students are, to some extent, aware that their writings should rely on critical thinking but it is still noticeable that they show a doubt on their total perception of critical thinking and the skills it entails. As indicated in the results, the percentages of the presence of criteria for evaluating reasoning within the essays analyzed are divergent in the sense that MA students show a lack in both subject knowledge and essay’s methodology. As already mentioned in the review of the literature, CT is applied through a significant process consisting of an argumentation. Argument is regarded as the primary expression of critical thinking in higher education (Andrews 1995, Scott 2000). In fact, MA students show that they have not yet perceived the notion of argumentation and almost half of them still reproduce facts and spoon-feeding knowledge. Besides, this does not mean that students have totally failed in their analyzes. Indeed, they are determined and aware to show traits of criticality in their essays. Gregory Tomso (1996) points out that “effective critical papers require complex, argumentative theses; clear and compelling significance for a general academic audience.”

Students' Questionnaire

1. Students' Perception of Essay Writing

The results displayed in diagram (2) reveal that the majority of the participants (84%) affirm that they like writing essays. In contrast, a minority of them (16%) indicate that they do not like writing essays. This reflects the motivation and determination of Master students to write essays for academic purposes. Indeed, the importance of writing lies in its objective. Some students lack the basic topical knowledge needed for critical thinking. They simply do not have the academic background (they lack basic foundational knowledge) to understand, let alone analyze, integrate, and apply the subject matter they are “learning.” According to Hyland (2003:69) “Writing is one of the main ways that we create a coherent social reality through engaging with others”. Thus, the importance of writing should not be neglected since it vehicles social relationships existing due to the students’ creation via discourse. Concerning its nature, writing is the most complex and difficult skill to master even for native speakers.

The diagram shows that a minority of the students (16%) have expressed their demotivation for writing. In this respect, one can deduce that some factors come to interfere with the students’ degree of motivation, such as the lack of an appropriate approach to teaching writing. However, the results displayed in diagram (4) indicate that 42% of the informants do not receive guidance in writing their essays. This view may be explained by the fact of ignoring the way in which students produce their feedback and focusing only on what learners need to learn. Of course, most university teachers wish to teach their students to think critically, but to do so is no easy task. Raimes (1994) stresses the importance of how to teach writing, not what to teach as a matter of fact. He sustains that there is no one answer to the question of how to teach writing in EFL classes. Thus, there exist many answers as there are many different teaching and learning styles.

The answers about the number of essays students write per month reveal that 42% of them write an average of one essay. Accordingly; one may say that our informants seem to write only for academic purposes, not for self-fulfillment. Part of the difficulty in effectively teaching critical thinking is recognizing that some students enter the classroom not only unprepared, but even ‘counter-prepared’ to learn how to think critically. Nothing in their personal or academic backgrounds has taught them to think critically or be prepared favorably towards learning how to think critically. And for some students, their personal and academic backgrounds have encouraged them not to think critically, especially in cases where students have learned to rely on the advice and judgment of others to direct their actions. Yet, the problem does not reside in the learners and teachers alone, but also in the curricula. The latter can be a source of hindrance for students in case they do not offer an opportunity for learners to write freely. Another reason that can be behind the fact that MA students do not write in a critical way is their disinterest in reading. The results derived from table (3) indicate that a great number of our informants (43.75%) use the traditional method to write their essays: ‘introduction’, ‘body’ and ‘conclusion’. This seems to be in line with the general requirements for the standard structure of an essay. On the other hand, it can be explained by the fact that students rely only on those norms to get high marks.

The fifth question of the questionnaire was intended to inform us about the difficulties that the students face with the instruction given by the examiner when they are set to write an essay in a given subject, and the findings show that 54% of them do not encounter any difficulty with this point. Yet, 46% of the respondents complain about facing several kinds of difficulty when they are to write an essay. The types of difficulty, as categorized in table 4, vary from one student to another, as the majority of them (47.82%) affirm to face difficulties in “understanding the question”. In addition, some students are accustomed to memorizing information rather than thinking about it. Memorizing facts and figures takes time and effort,

to be sure, but it does not require the uncertainty that goes with thinking critically, and that uncertainty can be the source of discomfort to some students.

The factors mentioned above are mainly related to both the teachers and the learners themselves, who are still under the influence of their mother tongue, which hinders the perception of the foreign language in context. According to Friedlander (1997:109) “writers do any of their work in their first language”. In other words, linguistic interference corrupts the students’ style and even sentence structure. Other difficulties students encounter are those related to word choice (finding the right vocabulary) and insufficient background information on the topic. Those difficulties can be matched to a lack of reading which, as a result, engenders a poor vocabulary stock for students. The lack of interest in the subject is another source of preventing students from writing correctly. In fact, students may not be motivated to learn on a specific subject; therefore, they write without a purpose in mind. In this way, it is obvious that writing is a difficult process which needs much more practice. The complexity of the skill requires well-trained teachers to help their students to write. In addition, students need to be strategic readers for better production. Byrne (1991:22) argues that “reading, of course, can be the goal in itself and in any case is likely to be a more important one than writing, but the two skills can and should be developed in close collaboration”.

As regards the students’ measurement performance of writing essays, the majority of them (40%) affirm that their performance in writing is “acceptable”. This goes in line with the fact that students are aware about their real level of writing and tend to know about the shortcomings of their performance. Others (30%) claim that they are doing “well” on their essays. In fact, this is an indication that those students are willing to write and seem to be satisfied about their output in written expression. In addition, motivation is a basic factor fostering students’ own writing. Writing requires special attention to motivational factors like promoting engagement using authentic writing tasks, providing context for writing and

creating a positive emotional environment. Thus, teachers should find ways to convene those conditions.

The results show that a minority (20%) view their performance as “unsatisfactory”. This reflects the difficulties mentioned in table 4, and overcoming them is possible through collaboration between teachers and students. The teachers of written expression are supposed to provide their students with the different techniques and rules governing the writing skill; hence they may use them in producing essays related to other fields of study. Students also should raise their awareness concerning the significance of writing as the mastery of writing techniques and conventions in addition to a higher motivation to write. As regards the students’ learning skills, diagram 7 indicates that 28% of the respondents tend to enhance their “use of background knowledge”, and others (24%) aim to “create their own style”. These results reflect the students’ efforts and consciousness to improve their writing productions. It confirms the fact that students seek to overcome the difficulties seen in table 4. On the other hand, the positive results reflect the efforts made by teachers to encourage students to write and to devote time to written expression. It is then clear that the teaching of writing is the task of all teachers in all subjects and not restricted only to teachers of written expression. Writing is a process that should be learned and practiced. Teachers should introduce the concept of critical thinking to their students during the first week of class and let them know that a central part of their course will focus on helping them develop their powers of critical thinking.

2. Students’ Interpretation of Critical Thinking

The information obtained by means of question 9 of the questionnaire indicates that the respondents have different representations of critical thinking. As shown in table 5, 26% of them define it as “the application of logical principles to the analysis and discussion of a claim”, and 16% view critical thinking as “considering things from different points of view”.

Fourteen percent consider CT as “the ability to think rationally” and others standing for 12% see it as “finding solutions to different problems”. As already mentioned in the review of the literature, critical thinking carries ambiguity and uncertainty and no general conventional definition has been provided concerning what it covers and the way in which it is manifested. This seems to be in line with the multiple definitions given by the informants, as they all revolve around the core notion of critical thinking. The participants’ answers show that they have fairly perceived and understood the notion of CT, on the one hand, and is an indication about the awareness of MA students concerning its importance, on the other.

Diagram 8 reveals that the majority of participants are not satisfied of their level of thinking. The majority, representing 56%, affirm that they have not reached the level of rational thinking. This means that even though students have provided approximately correct definitions of critical thinking, they do not master the skills it entails. The review of literature has relied on an important educational perspective classifying six skills depicting Higher Order Skills (HOS) and Lower Order Thinking Skills. Bloom’s Taxonomy divides the way students learn into three domains. One of these is the cognitive domain emphasizing intellectual outcomes. Through their answers, students seem not to master the Higher Order Thinking Skills consisting in analysis, synthesis and evaluation. In this respect, it is noticeable that critical thinking skills should be taught as an end in itself.

Critical thinking is a skill which should be developed in each student. Here, a crucial question arises: How to promote the development of critical thinking in teaching? Among the approaches to the teaching of critical thinking, depending on the specific context in which it is situated, the infusion, also known as the impregnation approach, seems to ensure the conditions of the transfer of learning in the most effective way. This approach consists in the in-depth teaching of a subject of study, in which we explain the general principles that underpin attitudes towards and capacities of critical thinking. In other words, in order to

promote the transfer of learning, the pedagogical act would be achieved in three steps: 1) contextualization, by the in-depth teaching of a subject of study; 2) decontextualization, by explicating the general principles of critical thought; (3) The recontextualization, through the use of critical thinking in new situations. (Boisvert in Revue québécoise de psychologie, 2015). In addition, Willingham (2009) points out that critical thinking must be taught in the context of discipline. As for Freseman (1990:26), he claims that students should have “skill in questioning, analyzing, comparing, contrasting and evaluating so that they will not become addicted to being told what to think and to do”. Students are aware of the necessity of critical thinking in their studies and social life and need training to stimulate their criticality. Lee Watanbe (2017) states that “teaching critical thinking skills doesn’t require hours of lesson planning. You don’t need special equipment or guest speakers. All you need are curious and open minds, along with a few strategies. The strategies meant by Watanbe may help students in developing their critical spirits.

In his book entitled *How we Think* (1993), the famous American educational philosopher John Dewey (1859-1952), specializing in applied psychology and pedagogy, proposes a reflection on the act of thinking and how to promote it. Dewey defines thought, a concept which we akin to critical thinking, as follows: "Reflective thought is the result of tight, prolonged, precise examination of a belief given or form hypothetical knowledge, examination in the light of the arguments that support them and the conclusions to which they end." (1993:15). This definition provides an opportunity to highlight other characteristics of the critical thinker. The latter is in a state of doubt, of perplexity, uncertainty, and the need to leave this state: this end gives an orientation to their act of thinking. This leads Dewey (1993:22) to summarize his thinking in the following way: “The problem delimits the goal of thought and the purpose of thought controls the process of the act of thinking."

Another factor which is in relation with the students' "failure" to attaining a better level of critical thinking is the habit of memorizing facts without questioning them. This behaviorist mechanical method of learning may hinder the student's critical thinking capacity, since it is based on memorization and restitution. Students need to be made active in the learning process to facilitate independent, critical and creative thinking. Hence, adopting new approaches like the Competency-Based Approach and putting students in problem solving situations may be a desirable solution to attain those objectives.

If one considers the different definitions displayed in table 6, one may say that most students seem to grasp the meaning of critical writing. "Analyzing, commenting and explaining when writing essays" ranks in the first position with 36.95% followed by another definition: "the ability to criticize a written piece of work without being influenced by the author's ideas" (21.73%). Although four participants have not answered the question, the majority of respondents have provided different comprehensive definitions that are in accordance with the meaning carried by the notion of critical writing. Other portions of students view critical writing as "the ability to engage in reflective and independent thinking when writing". In this respect, it can be deduced that those definitions are in line with the view of the University of Leicester, Learning Development Centre (2009) which states that critical writing requires "a refusal to accept the conclusions of other writers without evaluating the arguments and evidence they provide".

Argumentation, as indicated in the review of the literature, is the fundamental characteristic of critical writing. This idea is in conformity with the features suggested by the University of Leicester stating that critical writing stands for "a clear presentation of your own evidence and argument, leading to your conclusions, and recognition of the limitations in your own evidence, argument and conclusion". When asked about their considerations of critical writing, most students (56%) find it "important" for their academic writing. This

percentage reveals the awareness of students about the integration of the critical thinking skills in their writings. This idea is confirmed in the discussion of the corpus analysis (see the first section) in which the majority of students have fairly applied the criteria for evaluating reasoning representing the theoretical basis of our investigation. Other students (24%) consider critical writing as “necessary” and (20%) view it as “optional”. Those views are congruent with the Stages of Critical Thinking Development proposed by Paul Richard and Linda Elder who classify thinkers into stages starting at the bottom by an “Unreflective Thinker” in which the thinker is “unaware of significant problems in our thinking” and a “Master Thinker” at the top, whose “good habits of thought are becoming second nature” (2008:20). In this respect, Linda and Paul (2015) assert that “to develop as thinkers, students must pass through stages of development in critical thinking”. In the light of what has been said above, one may say that students should pass from the level of beginning thinkers into the level of challenging thinkers.

The results displayed in diagram 10 reveal that the majority of respondents (38%) are “sometimes” encouraged by their teachers to think critically when writing their essays. This percentage reflects the teachers’ awareness of and focus on the significance of critical thinking and its importance in higher education. Other informants (30%) affirm that they are “rarely” encouraged to integrate critical thinking in their writings and 20% are “often” encouraged. These percentages give an indication that depending on the type of teaching style, there are those who accept personal judgments of the students and those who do not. Browne and Freeman (2000) suggest a list of characteristics distinguishing classrooms which regularly encourage critical thinking from those that do not. Their purpose is to provide specific advice to educators and faculty members who are trying to incorporate critical thinking into their practice. According to them, educators can elicit critical thinking by incorporating certain design characteristics in their classes. These include frequent evaluative

questions, the encouragement of active learning and creating developmental tension. Another instance that indicates the students' awareness of the importance of critical thinking is their considerations of the cognitive levels.

Diagram 11 indicates that the highest percentage (90%) corresponds to the participants who consider that evaluation, inference, analysis, and reasoning should be stressed when writing essays. This assertion seems to be in line with Faicone's Expert Consensus about Critical Thinking cited in the review of the literature of our study. The learning objectives set by the experts developing the APA Delphi allow students to identify the core critical thinking skills. By question 15, we wanted to know the students' perceptions of the concepts of discussing, commenting and illustrating used to ask essay questions. These concepts generally carry ambiguity among students who seem not to distinguish between them. This idea is confirmed by the results displayed in diagram 12, in which the majority of respondents claim that they do not make any difference between the three concepts. This is an indication of dysfunction at the level of perceiving the essays' questions already discussed in the first section of this chapter.

The role of teachers is prominent in preparing their students to distinguish between the three types of questions regularly asked. Teachers are required to assess their students through essays because those items challenge students to create a response rather than to simply select a response. For this reason, designing well-structured essays and training students to respond to those questions are basic pedagogical aims. Although the majority of students do not make any difference between the three concepts of discussing, commenting, and illustrating, there are others (40%) who claim to figure out the three terms. This is noticeable in table 7, in which a minority of respondents have provided their definitions. To write a good essay, students firstly need to have a clear understanding of what they are expected to do. Looking at the essay question in close detail will help students to identify the topic and directive words

which instruct them how to answer the question. Indeed, the definitions provided by the participants go in accordance with the glossary suggested by the University of Leicester (2009) that defines commenting as to “pick out the main points on a subject and give your opinion” in addition to discussing as “a written debate where you are using your skill at reasoning, backed up by carefully selected evidence to make a case for and against an argument” and illustrating that is viewed as “a similar instruction to ‘explain’ whereby you are asked to show the workings of something, making use of definite examples and statistics if appropriate to add weight to your explanation”. The definitions encompass the critical thinking skills of the students, so the terms of discussing, commenting and illustrating are vehicles of the principles carried by the notion of CT. Furthermore, cognitive processing expresses the way that students learn or concerns the development of their thinking abilities such as analysis, inference, induction and evaluation, identified as key elements of critical thinking (Alder, 2000).

Finally, by the question 17 we intended to know the extent to which the university curricula enhance the critical thinking ability of students. The findings displayed in diagram 13 are surprising, since the majority of the respondents (64%) have answered that the university programs do not offer them an opportunity to develop their criticality. In fact, this result may be interpreted as a factor hindering the teaching of CT as a fundamental skill for students, and, as a result, a problem in expressing their personal judgments on their writings. Course designers should develop curricula that help students to question issues, facts and ideas. Students will improve their critical thinking when teachers use appropriate instructional methods and curriculum materials (Gazella and Masten, 1998; Halpern, 1993; Mc Millan, 1987). The critical thinking abilities of students can be improved when appropriate instruction is used. Of course, an instructional curriculum based on the cognitive approach to foster

students' critical thinking and CT teaching ability of teachers will motivate more students to create their own meanings through personal experiences.

Conclusion

This chapter has discussed the results so as to answer the research questions of the study that aims to investigate the relationship between critical thinking ability and writing proficiency of advanced EFL students in the Department of English at MMUTO. The first hypothesis we formulated regarding this issue states that most MA students have integrated critical thinking norms in their exam papers. The findings discussed in this chapter partially refute our hypothesis. The interpretation of the corpus results have shown that the criteria for evaluating reasoning representing the theoretical basis of our study are not totally integrated in students' essays. As for the second hypothesis stating that master students consider CT as crucial for their written compositions, the results of the questionnaire have confirmed, to some extent, the hypothesis since the results are incongruous in terms of opinions, attitudes and interpretations of the students concerning the issue. However, some factors are implemented with the students' views of critical thinking and the skills it requires. These factors include the students' motivation, the role of teachers in integrating CT, as well as the university curricula to foster students' critical thinking.

General Conclusion

The aim of the present study has been to explore the relationship that lies between critical thinking and MA students' writing proficiency. The research work has relied on a data collection tool which is a questionnaire administered to fifty (50) Master students enrolled during the academic year 2016/2017 and an analysis of 50 examination essays written by students of the same level. The criteria for evaluating reasoning put forward by Paul Richard and Linda Elder have been adopted as a theoretical framework in an attempt to bring answers to the research questions and the hypotheses set in the General Introduction. In terms of data analysis procedures, the study has adopted a mixed-method approach combining quantitative and qualitative procedures. Indeed, the essays of Master students have been analyzed using Paul Richard's and Linda Elder's framework as well as the Qualitative Content Analysis (QCA), whereas the quantitative data obtained by means of the questionnaire have been processed using the rule of three and Excel software.

Our investigation has been subject to many limitations that made it a difficult task to accomplish. The major shortcoming was time constraints and the delay observed in the starting of our investigation in May 2017. In addition, our study has relied only on three Master options because of the unavailability of some examination papers in the Department of English. Another limitation, which is still due to time constraints, has been the fact that we have not expanded our exploration of the issue by holding interviews with the pedagogical teams that are in charge of lectures and tutorials in the different Master specialties.

The findings derived from the corpus analysis show that, depending on the criteria, Master students have partially integrated the Critical Thinking Skills (CTS) into their

essays. The results obtained indicate that 80% of students have integrated “Concepts” in their essays, followed by “Inferences” with 70% in addition to 60% for both “Assumption” and “Point of View”. Then, “Information” stands for 50% and “Purpose” with 40%, as well as “Question” and “Implication” by 30% for each. More explicitly, the results indicate that students suffer from weaknesses in both subject knowledge and essay writing methodology. In addition, it is deducible that students are to a certain extent aware on the importance of critical thinking skills.

Concerning the students’ interpretation of critical thinking, the findings of the questionnaire have confirmed to a certain extent the hypothesis stating that Master students consider critical thinking as crucial for their written productions. In fact, the results show the interest conceded by Master students to critical thinking despite the difficulties encountered. These difficulties are linked to the existence of some factors influencing the students’ sense of criticality, students’ motivation being a major element in either fostering or hindering their critical thinking abilities. The major factor resides in students’ resistance to investing the time necessary to develop critical thinking skills, not only for laziness reasons but also because they think that such behavior may not be beneficial. Another factor is related to lecturers’ and tutors’ failure at providing learners with an adequate classroom environment in which critical thinking is expected to be the major aim to reach. Unfortunately, academia can be a demanding and time-consuming profession that often requires a delicate balance of teaching, service, and research. When time is scarce, teaching preparation may take a back seat to other, more pressing obligations. Last, but not least, factor resides in the university curricula in which there are only checklists of contents to teach without providing the teachers with any methodology to follow to develop critical thinking skills in their learners.

All in all, in the light of what has been said all along the present research paper, one may say that critical thinking does not hold the status it naturally deserves in the English Department at MMUTO, though it is a vector of choice in the quest for achieving a better and desirable type of education for any individual, particularly in the intellectual sphere. At university, the student must mainly learn how scientific knowledge is developed, to judge the rigor and relevance of the ideas presented, and eventually to be able to formulate strong and adequate discourse in their field of study. In other words, critical thinking should be the paramount objective to attain in higher education. An academic setting is expected to provide students with knowledge, job-related skills, and critical thinking ability likely to help them succeed in their academic endeavor, their professional career, as well as real-life situations, in general.

Research on master teachers has found that students appreciate teachers who tie classroom learning to everyday life (Buskist *et al.*, 2002). One does not just suddenly decide to teach critical thinking during the middle of the academic term and go from there: Teaching critical thinking must be planned in order to be maximally effective. As such, the earlier the planning can begin, the better, which means that teachers may wish to think carefully about how to build critical thinking into their courses long before the academic term starts.

As a conclusion, we express our hope that the results we have reached through the present work will open opportunities for further investigation in the same field of research by, as a suggestion, an empirical study on the same topic at a doctoral level, or by broadening the scope of research into other areas and case studies.

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APPENDIX

Students' Questionnaire

Dear students,

The present questionnaire is designed as part of an academic study investigating **critical thinking ability** and **writing proficiency** of advanced EFL students in the Department of English at MMUTO. Your contribution will be beneficial for the accomplishment of the present work. Hence, you are kindly required to answer the following questions. Note that your responses will remain entirely confidential.

Please put a cross (×) in the right box and provide statements wherever required.

- **Section One: Essay's Questions**

Q1: Do you like writing essays?

Yes No

Q2: How many essays do you write per month?

One Two More

Q3: During workshop, do your teachers guide you to write your essay?

Yes No

Q4: How do you proceed in writing your essay?

.....
.....
.....

Q5: Do you find any difficulty (ies) in dealing with essay's questions?

Yes

No

Q6: If yes, what kind of difficulty (ies) do you meet?

.....

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Q7: How do you think you are doing on your essays?

Very well

Acceptable

Well

Unsatisfied

Q8: What do you learn when you write your essay?

Making use of my knowledge about grammar.

Developing a well-organized way of thinking.

Creating my own style.

Making use of my background knowledge.

• **Section Two: Students' views on critical thinking**

Q9: How would you define critical thinking?

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.....

Q10: Do you think you have reached such a level of thinking?

Yes No

Q11: How would you define critical writing?

.....
.....
.....
.....

Q12: How would you consider critical writing?

Necessary Optional
 Important Useless

Q13: How often do teachers encourage you to think critically when writing your essays?

Always Often Sometimes
 Rarely Never

Q14: When writing your essays, do you think the cognitive levels such as evaluation, inference, analysis and reasoning should be stressed?

Yes No

Q15: Do you make any difference(s) between discussing, commenting and illustrating?

Yes No

Q16: If yes, how would you define each of them?

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Q17: Do you think university curricula help you to think critically?

Yes No

Please use the space below to provide your comments and suggestions

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Thank you for your collaboration

