

**People's Democratic Republic of Algeria**  
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**For the Degree of Master in English**

*Students' Representation of Critical Thinking and the  
Application of Intellectual Standards: The Case of 3rd year  
Students in the Department of English at Mouloud Mammeri  
University of Tizi-Ouzou*

**Presented by:**

- Ms. Dendaouin Rachida
- Ms. Achour Ghania

**Supervised by:**

Mrs. ADEM Karima

**Board of Examiners:**

**Chair:** Prof. Mohammed Sadek Fodil, Mouloud Mammeri University of Tizi Ouzou

**Supervisor:** Mrs. ADEM Karima, MAA, Mouloud Mammeri University of Tizi Ouzou

**Examiner:** Mrs. Ammour Kamila , MAA, Mouloud Mammeri University of Tizi Ouzou

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***DEDICATIONS***

To,

*My beloved parents,*

*My sisters and brothers,*

*All my family,*

*Yasmine Bia,*

*All my friends, Dassine, Taous, Lilia, Lynda, Omar, Massi, Alaa-eddine,*

*Jugurtha, Mehenna*

*Rachida*

***DEDICATIONS***

To,

*My beloved parents,*

*My two brothers: Lyes and Younes,*

*All my family,*

*The memory of my grandfather,*

*All my friends, teachers and pupils*

*My Love Ali*

*Ghania*

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**ABSTRACT:**

*The present research seeks to learn more about the students' representation of critical thinking, and at the same time investigates the application of critical thinking intellectual standards in their exam papers. To achieve these objectives, papers of third year students in the field of literature and civilization have been taken as a sample. The research mainly relies on Paul Richard's Framework of intellectual standards of critical thinking. For the sake of empirically investigating the topic, a quantitative approach is adopted. It is used for data collection and data analysis. The study relies on a textual corpus made up of thirty students' civilization exam papers. Apart from the textual corpus, the research also makes use of a questionnaire administered to fifty participants. The data composed of 50 respondents answers are analyzed through Excel software and the qualitative content analysis. The findings of this research reveal that the informants are familiar with the concept of critical thinking and its importance while writing their essays. The results also demonstrate that students do not apply the intellectual standards of critical thinking in a desirable way.*

**Key terms:** Critical Thinking. Intellectual Standards. Paul Richard. University of Mouloud Mammeri of Tizi-Ouzou.

## List of Abbreviations

- CT: Critical Thinking
- HP: Hypothesis
- MMUTO: Mouloud MAMMERI University of Tizi-Ouzou
- Q: Question

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### 1/Statement of the Problem

Whenever we are dealing with human life, we are dealing with thinking. Thinking is the way in which the mind makes sense of the world. It tells us what our problems are, what is important from what is not. It also determines what we learn and how we learn, whether our learning is deep or superficial, and how things could be viewed from different perspectives. This can only occur and be achieved through analyzing, evaluating different issues or topics in different situations and this is the starting point of "*Critical Thinking*".

Critical thinking (CT) is a system of thinking that opens up all other systems of thinking, mainly in education since it provides the tools the students need to think critically. Bloom considers it as being a higher level cognitive skill that each student should possess. Critical thinking is very helpful in any academic skill such as reading, speaking, listening and writing. Thus, it has been seen as a necessary outcome.

To some scholars including Scriven (1985), training in CT should be the primary goal of education. Nowadays, all educators are conscious of the significance of equipping learners with critical thinking strategies and teachers make such efforts to teach these techniques in the most suitable way. Since, CT is significant in academics due to being significant in learning, it helps students in the construction of their basic ideas, principles and theories. However, still the majority of them have difficulties in constructing their own knowledge and thinking.

Critical thinking is also that mode of learning about any given subject, content or problem in which the student or the thinker enhances the quality of his thinking basing on solving problems, using evidence, compare making ideas together and at the end he will be able to defend his own point of view by making judgements..

It involves using criteria to make judgments or to support decisions. Criteria are needed for evaluating the arguments and positions of others for evaluating evidence. These criteria may come in the form of "*standards*". Paul Richard's intellectual standards are used in our research to assess 3<sup>rd</sup> year students' civilization exam papers in the Department of English.

These standards are cited in Paul's (1992:09)"perfections of thought". They communicate to students the qualities of thought they should strive to achieve "clarity, accuracy, precision, relevance, breadth, depth and logic". In his theory, Paul (1992) recommends being explicit about the intellectual standards.

Bloom (1956) defines critical thinking as the ability to gain knowledge through the exploration of ideas concerning the following six levels: *knowledge, comprehension, application, analysis, synthesis, and evaluation*. Knowledge, comprehension and application belong to the lower level of thinking skills, while the other elements belong to the higher level of thinking skills.

Education should aim to support the development of independent thinkers who are discerning problems, and can use a range of cognitive skills and strategies to solve problems. At University, the most common method of assessment through which students are expected to demonstrate critical thinking is *writing*. So, a major part of a formal education in recent years is, *Essays*. They are used to evaluate the mastery and comprehension of material. So, in essays students are asked to explain, comment on, or assess a topic of study.

Many works have been conducted concerning critical thinking at the Department of English in a general way. An illustration, Bounoua and Mehaddi (2015) dealt with the teaching of Critical Thinking in First year classes, and Sabrina Toumi (2016) was concerned with the implementation of Critical Thinking in the Discussion-of-the Findings Section of Master Dissertation. The same topic has been investigated by Michelle Vyncke (2012) entitled the Concept and Practice of CT in Academic Writing. Another research by Mansoor Fahiu and Pantea Hash (2012) dealt with the effect of CT on developing Argumentative Essays has been investigated. To the present state of our knowledge, Critical Thinking in students' essays in American Studies has never been investigated in the Department of English at MMUTO. This is why we wish to fill the gap.

### **2/ Aims and Significance of the study**

The purpose of this study is to discover how students view critical thinking, at the same time investigate the application of critical thinking standards in their essays. This research has been conducted at the English department at MMUTO, more specifically with 3<sup>rd</sup> year students concerned with American Studies. It relies on Richard Paul's model of critical thinking. It is used to instruct students in analyzing texts, so that they might develop abilities needed to think critically about civilization. For example, interpreting information from different sources and arguing a case to explain. We have opted for this research because of the importance that critical thinking enjoys in the LMD system and its significance in the teaching /learning process.

### **3/ Research Questions and Hypotheses**

The current study attempts to answer a number of questions in relation to students' representation of critical thinking in writing. The questions are as follows:

**Q1-** What are the students' representation of critical thinking?

**Q2-** To what extent are the standards of critical thinking applied by students in American Studies' essays?

To answer these questions the following hypotheses have been suggested:

**H1-** Most of the students are familiar with critical thinking.

**H2-** The standards of critical thinking are applied in students' essays.

### **4/ Research Techniques and Methodology**

The research questions led us to opt for a quantitative method for data collection and data analysis. The corpus of the

study consists of 30 essays written by 3<sup>rd</sup> year students in the Department of English in the subject of American Studies at MMUTO. Apart from the textual corpus, the research work makes use of data gathered by means of a questionnaire addressed to 30 participants.

### **5/ The structure of the dissertation**

In this dissertation, we have followed the traditional complex structure which consists in a general introduction, four chapters and a general conclusion.

*The General Introduction* has been written to introduce the whole study, by including the statement of the problem, its research questions and hypotheses, its objective and methodological design. The first chapter which relates to "*The Review of the Literature*" discusses the theoretical framework underlying the research study and the main key-concepts related to it. The second chapter focuses on "*Research Design*". It describes the participants involved in the study, the sources from which data have been collected, and the procedures used to collect and analyze the data. The third chapter that is entitled "*the Representation of the Findings*" exhibits the results of the study. The last chapter which is "*Discussion of the Findings*" considers the interpretation of the results by discussing in details how these standards are perceived at the same time, it brings answers to the research questions. Finally, *the General Conclusion* comprises a summary of the main points that have been discussed throughout the study.

## **Introduction:**

This chapter deals with the review of the major works related to the present research. It is intended to shed light on some key elements which are relevant to our work. It begins with a historical background of critical thinking. It moves to the definition of critical thinking by different approaches. Then, it presents the relationship between critical thinking and writing essays. Finally, it tackles the theoretical framework on which the present study is based:

*"Richard Paul's model of critical thinking".*

### **1.1. A Historical Background of Critical Thinking:**

The idea of critical thinking is not something new but it has come from the ancient philosophers. It is used in everyday domain of knowledge and belief (Richard, 2007). It has been considered as an essential element of a well-educated individual mainly in his professional life from an early age.

The idea goes back to 2.500 years ago. It is mainly related to its founder Socrates, who discovered by a method of investigation that humans cannot logically provide their confidence to knowledge. So, according to him, it is very important to ask deep questions that explore deeply into thinking before accepting the idea as admirable or value and belief (cited in Paul, R, 2004). His method is known as "*Socratic Questioning*" and it is the most known since it insists in the idea that thinking for clarity and logic is consistency.

Richard Paul (2004:01) in his "*Brief History of critical thinking*" credits Socrates as having :

*Set the agenda for the tradition of critical thinking, namely, to reflectively question common beliefs and explanations, carefully distinguishing those beliefs that are reasonable and logical from those which however appealing they may be to our native egocentrism, however much they serve our vested interests, or comforting they may be- lack adequate evidence or rational foundation to warrant our beliefs.*

In addition, the critical thinking of Plato, Aristotle, and the Greek skeptics have followed Socrates' investigation. All of them have agreed that things are different from the ways in which they appear, and only a critical thinker that can see these deep realities (Paul, 2007). During the middle ages, critical thinking witnessed further development with the work of Thomas Aquinas who emphasized in the fact that reasoning should be accompanied by cultivating in order to be examined.

Another period characterized by the development of critical thinking, is the Renaissance, at that time people start questioning everything around them. So, they began to think critically about religion, art, society, freedom, law...etc. One of them was Francis Bacon, his book can be considered as the earliest text in critical thinking (cited in Paul Richard, 2004). In his book Bacon argues that rational and scientific thinking must be based upon a systematic investigation of nature. A good thinker takes nothing as it is given but he examines it, because real knowledge comes only through reason or rationality and he recognizes that the human mind cannot be left to its natural tendencies (ibid)

Another important scholar who has contributed within the domain of critical thinking is Descartes some years later in France. He wrote the second book in CT "Rules for Direction the mind" in which he insists that every part of thinking should be tested and questioned (Vardyan Adriana, 2007). He supports the idea that *clarity* and *precision* are needed in thinking (ibid).

According to Paul Richard (2004) the critical thinking of these Renaissance and post Renaissance scholars have paved the way for the emergence of freedom of thought, human rights and democracy. Thanks to the scholars, later on critical thinking has been presented and applied into the domain of linguistics and language.

## **1.2. Definition of critical thinking**

It is the ability to use and manage intelligence and skills for tasks or goals across domains of knowledge. In the term critical thinking, the word critical (grec= kritikos) derives from the word critic and implies a critique. It identifies the intellectual capacity and the means "of judging", "of judgment", "for judging" and "of being able to discern".

There are numerous definitions of the term; however the literature on critical thinking has origins in two primary academic fields: *psychology* and *philosophy* (Lewis and Smith, 1993). Another researcher, Sternberg has also marked a third definition of critical thinking within the field of *education*. These movements have developed various approaches to define the concept of critical thinking. Each of these is explored more below.

### **1.2.1. The Philosophical approach:**

This approach can be seen in the works of many researchers such as Socrates, Plato, Aristotle, Lipman, and Richard Paul. *"It emphasizes on the hypothetical critical thinker, the enumeration of the qualities and characteristics of this person rather than the behaviors or actions the critical thinker can perform"*(Lewis and Smith, 1993). In addition to this, Sternberg (1986:05) has argued that this school of thought considers the critical thinker as "an ideal type" focusing on what people are able to do under the best of circumstances. Accordingly, Paul (1992:09) deals with critical thinker in the context of *"Perfections of thought"*. The ideal critical thinker is considered as someone who is curious, eager in nature, open-minded, flexible, fair-minded who wants to acquire knowledge and to be well-informed, understand different views (Facione:1990). Those philosophers focus on standards of thought like, Bailain (2002:362) who defines CT as thinking for a particular quality, especially good thinking which meets particular criteria of adequacy and accuracy. This approach has focused

on the application of formal rules of logic (Lewis and Smith, 1993; Sternberg, 1986).It is limited since it does not always correspond to reality (Sternberg: 1986).By considering the ideal critical thinker which focuses on people's capacities as basic elements, this approach may have less to contribute to discussion about how people actually think.

**These are some of the definitions provided by this school:**

- “the propensity and skill to engage in an activity with reflective skepticism” (McPeck, 1981:8)
- “reflective and reasonable thinking that is focused on deciding what to believe or do” (Ennis, 1985:45)
- “skillful, responsible thinking that facilitates good judgment because it 1) relies upon criteria, 2) is self-correcting, and 3) is sensitive to context” (Lipman, 1988, p. 39)
- “disciplined, self-directed thinking that exemplifies the perfections of thinking appropriate to a particular mode or domain of thought” (Paul, 1992:9)

**1.2.2. The Psychological approach:**

This approach contrasts with the former one in two essential ways: first , cognitive psychologists especially those influenced by the behaviorist tradition emphasize on how people actually think versus how they should think under different ideal circumstances (Sternberg:1986).Second, those psychologists try to define critical thinking by the kinds of performances or behaviors that critical thinkers do rather than dealing with some characteristics of the ideal critical thinker or listing standards of "good" thought. It consists of a list of different skills performed by critical thinkers (Lewis, Smith, 1993).

Philosophers have often criticized this aspect of the psychological approach as being reductionist.

**Definitions of critical thinking according to this approach:**

- “the mental processes, strategies, and representations people use to solve problems, make decisions, and learn new concepts” (Sternberg,1986:3)
- “the use of those cognitive skills or strategies that increase the probability of a desirable outcome” (Halpern,1998:450)
- “seeing both sides of an issue, being open to new evidence that disconfirms your ideas, reasoning dispassionately, demanding that claims be backed by evidence, deducing and inferring conclusions from available facts, solving problems, and so forth” (Willingham,2007:8).

**1.2.3. The Educational approach:**

Several researchers refer to this approach as Benjamin Bloom (1956) and his companions who are involved in this category. Bloom's work classified the objectives of an education system. This framework is divided into different parts with "Comprehension" at the bottom and "Evaluation" at the top. According to Bloom, the three highest levels (*analysis, synthesis and evaluation*) are frequently said to represent critical thinking (Kennedy et al, 1991). Each of Bloom's stage is represented with an explanation of meaning and function and ways to test for student mastery. Bloom's Taxonomy is seen as one of the most widely cited source for educational practitioners.

Although, there are some differences among these three schools of thought and their definition of critical thinking, there exist areas of agreement like,

- Analyzing arguments, claims , evidence (Ennis , 1985; Facione , 1990; Halpern, 1998; Paul, 1992)
- Using deductive/inductive reasoning in order to make inferences (Ennis , 1985; Facione, 1990; Paul, 1992)
- Evaluating judging ( Facione, 1990 )
- Making decisions, solving problems.

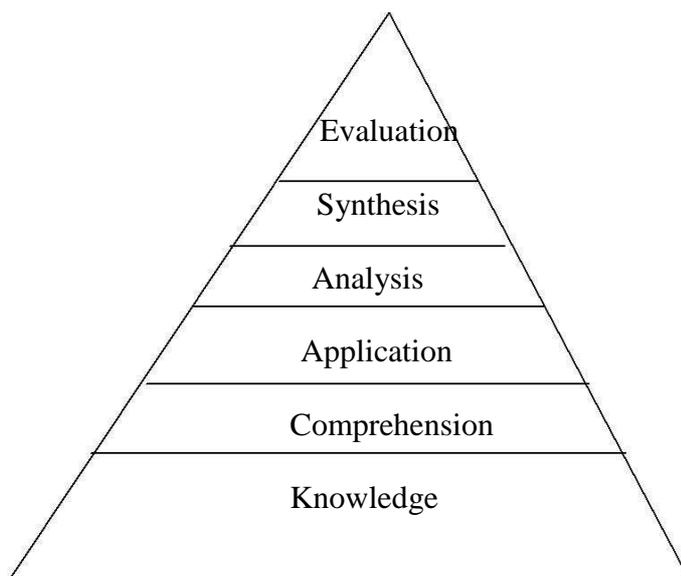
### 1.3. Bloom’s Taxonomy:

Benjamin Bloom (1956) has developed a classification of levels of intellectual behavior in learning. This taxonomy contains three overlapping domains: *the cognitive*, *the psychomotor* and *the affective*.

#### 1.3.1. The Classes of the Taxonomy:

The major classes of the taxonomy that mainly deal with the *cognitive* field are: “*knowledge*”, “*comprehension*”, “*application*”, “*analysis*”, “*synthesis*” and “*evaluation*”.

The figure below indicates how the six levels of this taxonomy are ranged from the simplest one that is “*knowledge*” to the most complex one that is “*evaluation*”. The last three levels are considered to be Higher Order Thinking skills (Critical thinking).



**Figure 01: Bloom's Taxonomy of the Cognitive Domain (Forehand, 2005)**

Here are some of Bloom's short explanations of these main categories from the appendix of *Taxonomy of Educational Objectives (Handbook One, pp. 201-207)*:

**1- Knowledge:** *“involves the recall of specifics and universals, the recall of methods and processes, or the recall of a pattern, structure, or setting.”* This means that students should show memory of previously learned facts by remembering the different events, dates, names of persons, assemblies...etc.

**2- Comprehension:** *“refers to a type of understanding or apprehension such that the individual knows what is being communicated and can make use of the material or idea being communicated without necessarily relating it to other material or seeing its fullest implications.”* At this level students should translate, interpret for instance: in a novel they have to explain the main character how does he/she felt in the first paragraph?.

**3- Application:** refers to the *“use of abstractions in particular and concrete situations.”* That is to say, the learners have to solve problems in new situations and different contexts by applying the acquired knowledge.

**4- Analysis:** represents the *“breakdown of a communication into its constituent elements or parts such that the relative hierarchy of ideas is made clear and/or the relations between ideas expressed are made explicit.”* Here, they should make inferences, find evidence and compare/contrast.

**5- Synthesis:** involves the *“putting together of elements and parts so as to form a whole”*.

**6- Evaluation:** engenders *“judgments about the value of material and methods for given purposes.”* It means to defend opinions by making judgements.

### **1.3.2. Role of background knowledge:**

The researchers working in the field of critical thinking agree on the great importance of *background knowledge*. Most of them see it as very essential, if students are to demonstrate their critical thinking skills (Case, 2005; Kennedy et al., 1991; Willingham, 2007).

Bailin et al. (1999) claim that knowledge is indispensable to critical thinking because the types of explanations, judgments, evaluations, and evidence vary from one field to another. Those who advocate critical thinking argue that knowledge is not transferable. It is not something that can be given by one individual to another. It cannot be taken from a book or from other's mind.

*Knowledge* is a distinctive construction that is made by the learner, something that issues from out of a rational use of mental processes.

#### 1.4. Critical thinking and Writing essay :

The skill of writing in higher education is very important .It is regarded as the means for students to explore, show and consolidate their understanding of the subject knowledge, or what has been taught in class, as well as a way for teachers to know their students' understanding and engagement with the subject.

In higher education, students need to do more than acquire and reproduce knowledge. That means students are asked to transform, recreate by using arguments, evidence, and analysis. These all should be organized in a logical manner in a form of essay. But without critical thinking the essay would be highly illogical (Cynthia, 2015). CT helps the students to go beyond the surface, influence, convince and express a point of view.

Cynthia (2015) states that critical thinking in writing is: "*The application of decision making, evaluating and problem solving*". All these help the student to write a great essay. Critical thinking is an involvement in an academic debate because it involves more discussion, analysis and evaluation. Thus, in this case students use their critical thinking to debate or to discuss any topic in related subject and don't take issues as it is. As it is confirmed by the University of Leicester (2013) "*a refusal to accept the conclusion of other writers without evaluating the arguments and evidence they provide*".

As it is mentioned above Cynthia (2015) proposes some ingredients that can make the students' essays **stronger** :

1. **Decision Making: it is an important skill in critical thinking because it requires the student to choose the topic or the thesis statement, then the organization of the essay and to determine which information is relevant .It also means to pick the best way to argue or to express the opinion.**

2. **Deductive Reasoning** : students use deductive reasoning every time when they are asked to write an essay .It helps the students how they should think logically about a given topic or aspects.
3. **Critical Analysis:***"is the ability to analyze materials and develop underlying judgment or opinion about it"*. Each time the student expresses an idea or an opinion he includes in critical analysis.
4. **Evaluation:** it is an important skill in critical thinking when the student gives arguments. He should relate it to facts and arguments.
5. **Problem solving** : problem solving is another critical thinking skill that the students need in essay writing .It involves breaking down a problem in order to figure out the best solution to that topic ,and examine it at the same time .

In addition to the above ingredients, writing can enhance critical thinking because the writing process requires students to make their ideas explicit to a given audience, that are teachers and to evaluate the tools needed for effective communication while writing. Thus, this can only be assured through "*coherence*" and "*cohesion*".

a) **Coherence** is defined by University of Washington as *"the connection of ideas at the idea level, it refers to the rhetorical aspects of writing which include developing and supporting arguments ranging from evidence and logic , synthesizing, organizing and clarifying ideas"*.

b) **Cohesion** is also an important aspect of academic writing is defined by University of Washington as *"the connection of ideas at the sentence level and at the paragraph level"*. So, the students are required to use this concept while developing their civilization essays.

## 1.5. Critical writing Vs. Descriptive writing :

1. **Descriptive writing:** in descriptive writing, the writer does not develop arguments but represents a situation as it stands without any analysis or discussion .It is very simple and easy to use. It provides description without transforming information, just reporting without going beyond (Cottrell, 2013).
2. **Critical writing :** critical writing is when the writer participates in the academic debate. It is a challenge and risking, the writer needs to use evidence and contributes with his own point of view (Cottrell, 2013).

### 1.5.1. The important differences between Descriptive writing and Critical thinking according to Stella Cottrell (2013)

<b>Descriptive writing</b>	<b>Critical writing</b>
<ul style="list-style-type: none"><li>▪ States what happens</li></ul>	<ul style="list-style-type: none"><li>▪ Identifies the significance</li></ul>
<ul style="list-style-type: none"><li>▪ Explains what a theory says</li></ul>	<ul style="list-style-type: none"><li>▪ Argues a case according to the evidence</li></ul>
<ul style="list-style-type: none"><li>▪ States the order in which things are happened</li></ul>	<ul style="list-style-type: none"><li>▪ Makes reasonable judgments</li></ul>
<ul style="list-style-type: none"><li>▪ States what something is like</li></ul>	<ul style="list-style-type: none"><li>▪ Evaluates strengths and weaknesses</li></ul>
<ul style="list-style-type: none"><li>▪ Says when something occurred</li></ul>	<ul style="list-style-type: none"><li>▪ Evaluates the relative significance of details</li></ul>
<ul style="list-style-type: none"><li>▪ Gives information</li></ul>	<ul style="list-style-type: none"><li>▪ Draws conclusion</li></ul>

**Table 01: Descriptive writing Vs Critical thinking**

## 1.6. The theoretical framework :

This research paper is based on the theory of Paul Richard (1992) concerning Critical thinking standards. So, according to Paul, R and Scriven, M (1987:09) critical thinking is defined as follows

*Critical Thinking is the intellectually disciplined process of actively and skilfully conceptualizing, applying, analyzing, synthesizing, and or evaluating information gathered from or generated by observation, experience, reflection, reasoning or communication as a guide to belief and action. In its exemplary form, it is based on universal intellectual values that transcend subject matter divisions: clarity, accuracy, precision, consistency, relevance, sound evidence, good reasons, depth, breadth, and fairness.*

### 1.6.1. Intellectual Standards:

Universal Intellectual Standards are standards which must be applied to thinking whenever one is interested in checking the quality of reasoning about any given problem, issue or situation. To think critically entails having these standards. To help students learn these standards, teachers should pose questions that probe students' thinking. There are a number of Universal Standards; the following are the most significant ones. According to Paul Richard, Universal Standards are defined in Foundation of Critical Thinking (2010:48) as follows:

**1- Clarity:** is the gateway standard. If a sentence is unclear, we cannot determine whether it is accurate or relevant. Indeed, we cannot tell anything about it because we do not know what it is saying. So, students should use concrete examples, metaphors analogy. For example the question "What can be done about the education system in America?" is unclear. In order to address the question clearly, it might be "What can educators do to ensure that students learn the skills and abilities which help them function successfully? ». ( Paul,2010:48)

These are the types of the questions that can be asked:

- Could you elaborate further on that point?
- Could you express that point in another way
- Could you illustrate more?

**2- Accuracy:** A statement can be clear but not accurate,. A statement should be free from errors, distortion.

- Is that really true?
- How could we check that?

**3- Precision:** A statement can be clear, accurate but not precise. To be precise is to give the necessary details for someone to understand exactly what is meant by the writer. It should be definite and exact

- Could you be more specific?
- Could you give more details?

**4- Relevance:** A statement can be clear, accurate, precise but not relevant to the question at issue. Something is relevant when it is directly connected with and bears upon the issue at hand. Something is relevant when it is pertinent and applicable to a problem we are trying to solve.

- How does this relate to the problem?
- How does that help us with the issue?

**5- Depth:** Thinking deeply means that we get beneath the surface of an issue, problem, to identify the complexities that inherent it. It is a measure of profoundness. The thinker should probe the issues sufficiently to explore the question.

- What factors make this a difficult problem?
- What are some of the difficulties we need to deal with?
- What are the complexities of this question?

**6- Breadth:** It encompasses different/multiple viewpoints. Any reasoning can be accurate, clear, precise, relevant and deep but it lacks breadth. Paul gives this example" in an argument from either the conservative or liberal standpoint which gets deeply into an issue, but only recognizes the insights of one side of the question"

- Is there any other way to look at this question?
- Do we need to consider another point of view?

**7- Logic:** When we think, we bring a variety of thoughts together into some order. When the combination of thoughts is mutually supporting and makes sense in combination, the thinking is "logical". When the combination is not mutually supporting, is contradictory in some sense or does not "make sense", the combination is "not logical".

- Does this really make sense?
- Does that really follow from what you said?
- Does your first paragraph fit in with the last one?
- Does what you say follow from the evidence?

### **1.6.2. Role of Intellectual Standards:**

The role of intellectual standards has been discussed by different critical thinking researchers especially between the philosophical trend and the psychological one, in which the philosophers keep the importance of these criteria, while the psychologists ignore the issue. Concerning the philosophical approach, CT includes using "*criteria*" to make evaluations or to support decisions (Case, 2005; Lipman, 1988). Criteria are needed for judging, evaluating others' thoughts and positions. These criteria may come in the form of *standards*. As Bailin et al (1999:291) argue:

*Standards for judging the adequacy of claims about meaning; the credibility of statements made by authorities; the strength of inductive arguments; and the adequacy of moral, legal, and aesthetic reasons*

They may communicate to students the qualities of thought they must follow. Thus, Paul (1992) requires being more explicit about these intellectual standards for judging students' work.

## **Conclusion**

The review of the literature allowed us defining critical thinking by different approaches, Bloom taxonomy, comparison between descriptive writing and critical writing. It has also permitted us to highlight the theory which this study is based on, "*Richard Paul's model of critical thinking*" which explains how the intellectual standards must be applied on students' essays. In addition, these standards have been explained in order to see to what extent they are applied in students' civilization essays.

## **Introduction**

The methodology section describes the research design followed throughout this investigation. Methods of data collection and data analysis used for the sake of answering the research questions are described and explained. This section contains two sub-sections; the first one deals with the data collection procedures and the second one explains the data analysis methods used for the conduction of the study.

### **II.1.Setting and participants**

The investigation has taken place in the Department of English at Mouloud MAMMERI University of Tizi-Ouzou. In a period of 3 weeks in June, 2017. The population of the study consists of sample of third year students of the English department.

#### **II.1.2.Sampling Method**

Fifty students (50) of third-year are chosen randomly out of a population of 108 students to answer the questionnaire.

#### **II.1.3.Data Collection Procedures**

Two main methods are used to collect data: A questionnaire and a corpus composed of (50 Student's exam papers).

##### **a) Questionnaire**

A Questionnaire is a set of questions used by researchers to collect facts or opinions from individuals. It is a very important strategy for data collection. According to Kothari

**(1990:96) :**

*This method of data collection is quite popular. A questionnaire consists of a number of questions printed or typed in a definite order or a form or a set of forms .It is mailed to respondents who are expected to read and to understand the questions and write down the reply in the space meant for the purpose in the questionnaire.*

### **Description of the questionnaire :**

A questionnaire of 22 elements (divided into open and closed ended questions) has been designed and distributed to the students of third year. It was used for data collection on the study of critical thinking in students' essays in the American studies. We distributed 50 and the same number was collected .The questionnaire had two sections: An overview about writing essays, and Students' view of critical thinking. The participants were asked to give information about their way of writing essays in the first part. The second part is the key part as it is related to our investigation.

The questionnaire was used to examine the students' presentation of the concept and the standards of critical thinking, and to check if they use critical thinking while writing their civilization essays during exam. To ensure reliability and the validity of the research, the questionnaire has been piloted on a sample of 8 students. According to the feedback the questions have been clear so, the questionnaire has not been revised.

### **b) Corpus (Students' exam papers).**

The second method of data collection that was used is the students' essays in the subject of civilization in order to analyze their answers. The students' exam papers were taken from the English department of Tizi-Ouzou on the 29<sup>th</sup> of May, 2017 after obtaining permission from the head of the department. Our research relied on 30 papers that were selected randomly in the subject of American Civilization Studies since, this module is very relevant and gives opportunity for students to use their critical thinking and to express their points of view.

## **II.2. Data analysis procedures**

To carry out our investigation, we have adopted a mixed-methods approach that combines the quantitative and the qualitative content analysis research tools, since it ensures reliability in reporting the findings.

This study is both descriptive and exploratory in nature .It is exploratory because it collects an important linguistic corpus which is very important in the domain of teaching and learning, and seeks to discover to what extent the standards of critical thinking are applied by students in their civilization exams .The data of the descriptive part of this study is collected through a questionnaire that combines closed-ended and open–ended questions that aim at measuring the students’ implementation of critical thinking.

### **II.2.1. Quantitative data**

A Quantitative method includes collecting data in a numerical way which can be put into categories or in rank order or measured in units of measurement that is analyzed by statistical methods. According to Dornyei (2007:29):

*Quantitative research was seen to offer a structured and highly regulated way of achieving a macro-perspective of the overarching trends in the world of the everyday realities of the world*

For the analysis of the data collected through the questionnaire, Microsoft Excel was used. It is defined by the Business dictionary as "*software developed and manufactured by Microsoft Corporation that allows users to organize, format, and calculate data with formulas using a spreadsheet system broken up by rows and columns*"

### **II.2.2. Qualitative data**

A Qualitative method in general includes gathering information that is not in numerical form that is analyzed by using non-statistical method. As it is defined by Dornyei (2007:29) "*Qualitative research was perceived to represent a flexible and highly micro-perspective of the everyday realities of the world*". In an attempt to interpret and analyze the qualitative data obtained from the students' questionnaire and the exam papers, Qualitative Content Analysis

(QCA) is adopted. QCA is defined by Heish and Shanon (2005:02) as: "*a research method for the subject interpretation of the content of text data through the systematic classification process of coding and identifying themes or patterns*". It is used in this research to explain and to interpret the data obtained relying on Paul Richard's theory.

### **Conclusion:**

This chapter has highlighted the techniques of data collection as well as the techniques of data analysis. The former deals with the questionnaire and the corpus (students' exam papers), whereas the latter presents Excel software and introduces the qualitative content analysis. All these methodological tools are used for the sake of analyzing the research questions.



## Introduction

This chapter aims at presenting the different findings obtained from 50 questionnaires as well as the findings obtained through corpus analysis of 30 American civilization exam papers. Its aim is to find out about the representation of critical thinking among third year students in the department of English. This chapter is arranged in two main parts. The first part illustrates the data gathered from the students' questionnaire. The second part presents the results obtained from the American civilization exam papers.

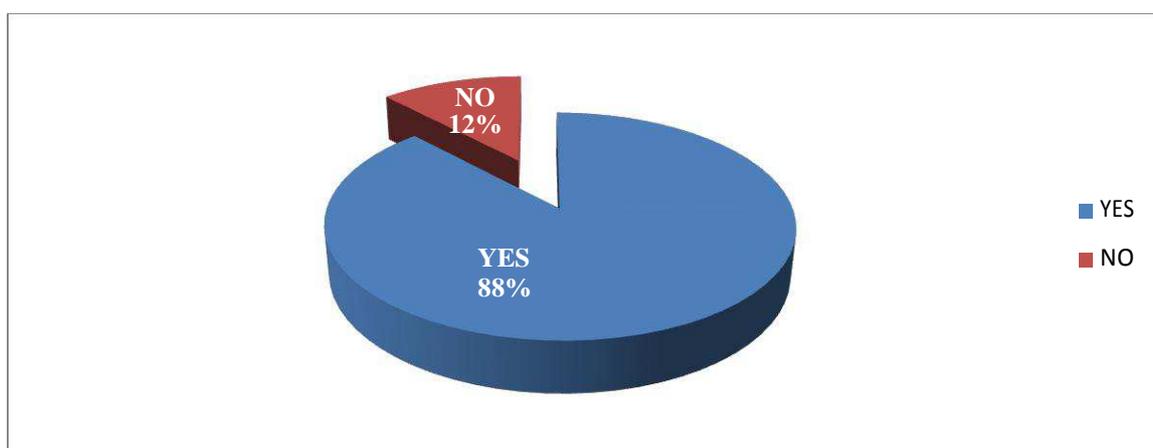
### III.1. Presentation of the Results:

#### III.1.1. Results of Students' Questionnaire

The first data collection tool used in our research is the questionnaire, which has been conducted with fifty (50) students of third year. This questionnaire helps us to bring more details to answer our research hypotheses and research questions.

#### Section One: An overview about writing essays

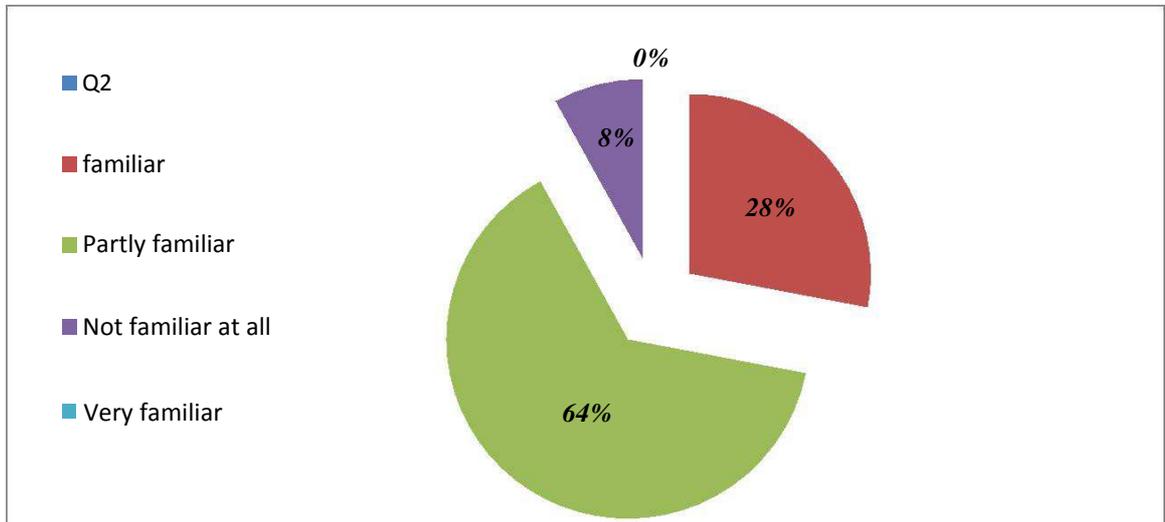
##### Q1: Have you learned how to write an academic essay in English?



**Diagram1: Students' Familiarity with writing an academic essay.**

In the first question, we want to know if the students have learned how to write an academic essay in English. The majority of them (88%) have answered by "yes", and just six of them (12%) have answered by "no".

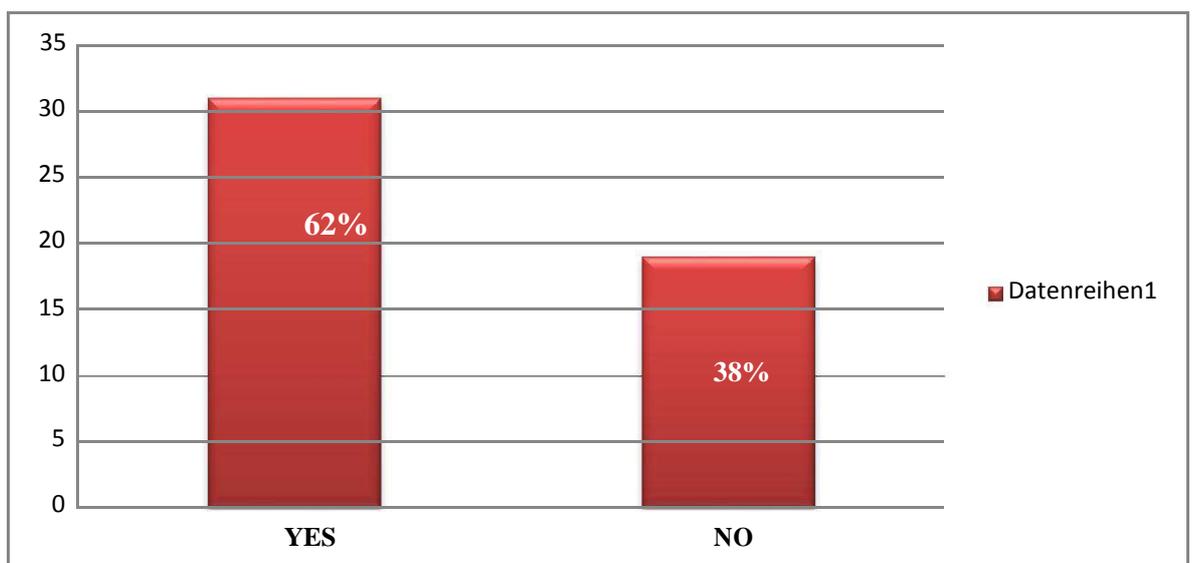
**Q2: Do you think you are familiar with essay writing in English?**



**Diagram2: Students' familiarity with academic essay writing in English.**

The purpose of this question is to know to what extent students are familiar with essay writing in English. As shown in **diagram2**, the majority of the students (64%) are partly familiar with essay writing, while 28% denote that they are familiar, and 8% are not familiar.

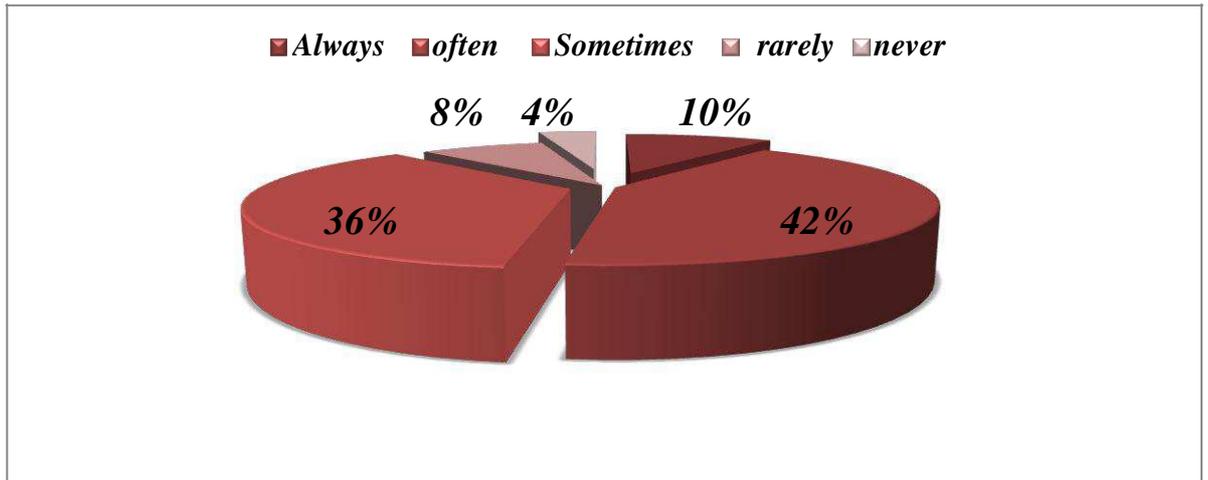
**Q3: Do you think you are good at essay writing in English?**



**Diagram3: Students' Mastery of writing an academic essay.**

The question is asked to know if the students are good at essay writing in English. The majority of students (62%) have responded by "yes", whereas 38% have responded by "no".

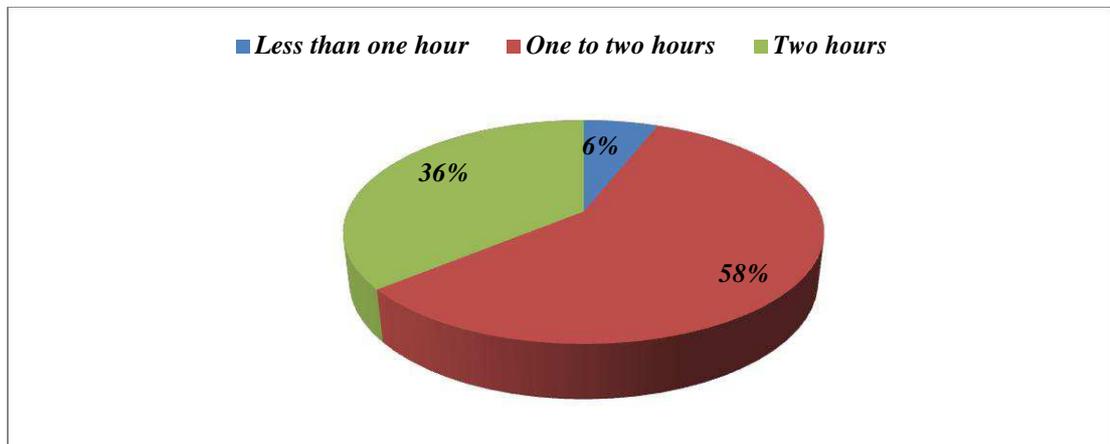
**Q4: How often do you brainstorm your ideas prior to writing your civilization essay during examinations?**



**Diagram4: Frequency of the students' brainstorming ideas during civilization exams.**

As for the frequency of the students' brainstorming when writing their civilization essays during exams, most of the respondents (42%) say that they "often" brainstorm their ideas. A few of them (36%) have answered by "always", four (10%) have answered by "sometimes" and (8%) said "rarely" and just two respondents (4%) answer the last proposition, which is "never".

**Q5: How much time do you spend in writing your civilization essay?**



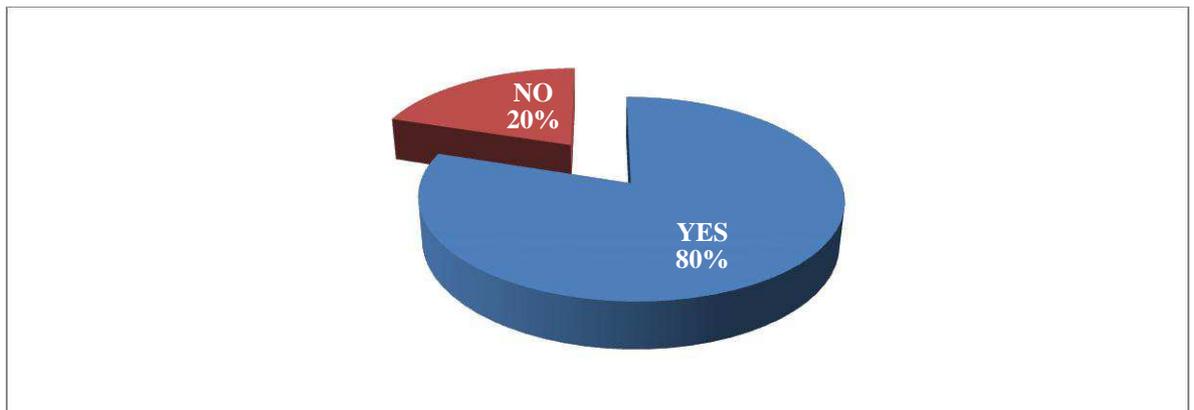
**Diagram5: Students' Time Management when writing civilization essays.**

The item is asked to know how much time the students spend in writing their civilization essays. The majority of the students representing 58% spend "one to two hours", whereas 36% spend "two hours", and just 6% of them "less than one hour" on an essay.

**Q6: How do you organize your essay?**

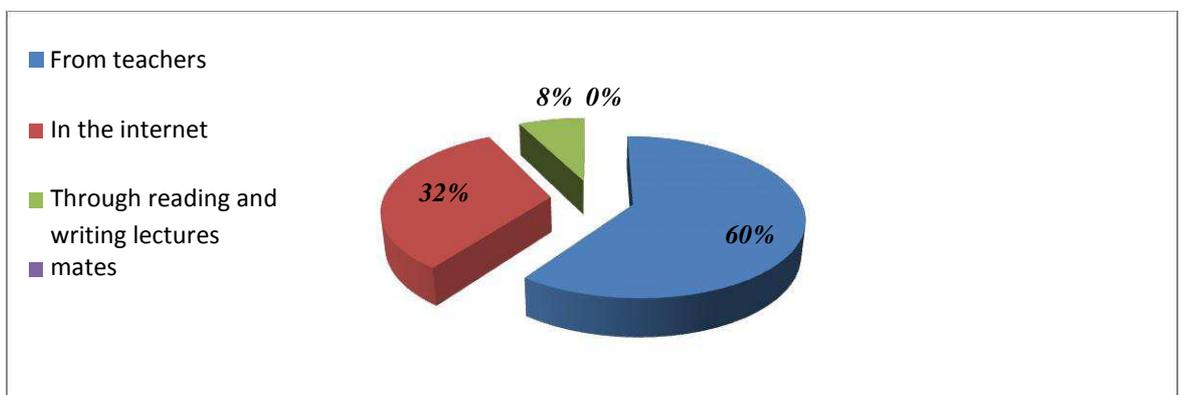
This question seeks to know how the students organize their essays. All of them say that they start by an introduction to the topic, then developing the main ideas in the body paragraph and finishing by a conclusion.

**Q7: Do you get any guidelines about the way to write your civilization essays?**



**Diagram6: Students' Acquirement of the way to write their essay.**

**If yes, from whom or where do you get them?**



**Diagram7: Sources from which students get guidelines.**

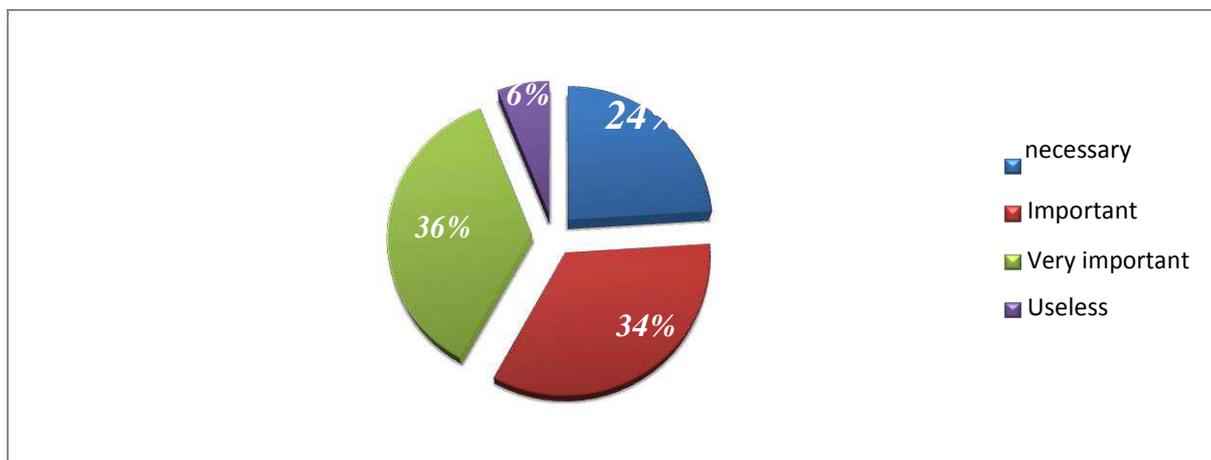
The aim behind asking this question is to know whether the students get any help when writing their civilization essay or not and from which source. The results show that the majority of the students (60%) announce that they get help from their teachers, whereas 32% from the internet. Three participants (8%) have answered that they get help through reading and writing lectures. No one of them has answered the last proposition that is "mates".

## Section Two: Students' view of Critical Thinking

### Q8: In your opinion what is Critical Thinking?

This question aims at knowing if the students really master the concept of CT. Most of the students have answered that it is to give a point of view and the ability to guess what is beyond the word and go further by analyzing and thinking clearly in a critical way, and a few of them have not answered the question, which means they are not familiar.

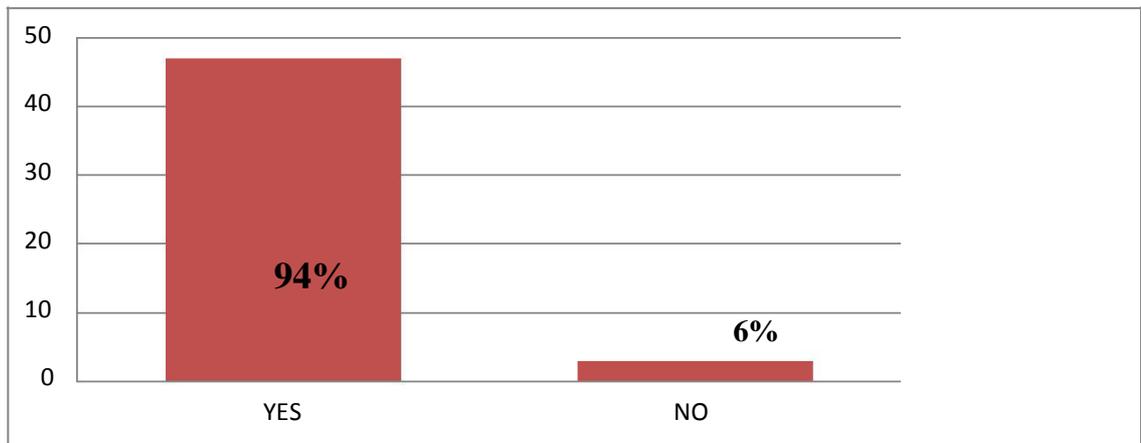
### Q9: How do you see CT?



**Diagram8: Students' representation of Critical Thinking.**

As seen in **diagram 8**, eighteen students (36%) perceive that CT is very important. Seventeen of them (34%) consider it as being "*important*". While 24% see CT as "*necessary*", and just a few (6%) view it as "*useless*".

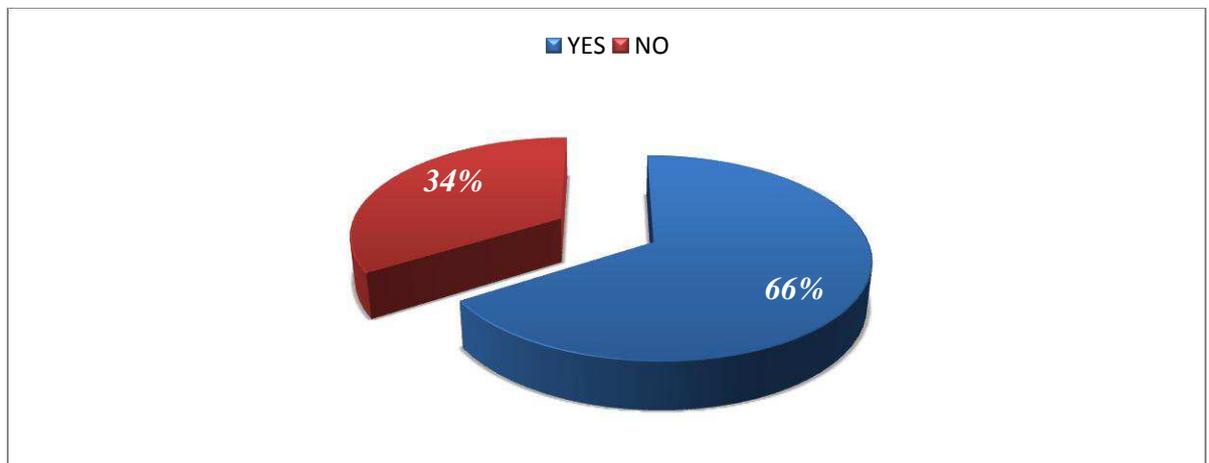
**Q10: Do you define clearly what you are talking about in your civilization essays during Exams?**



**Diagram 9: Students' identification of the civilization subject during exams.**

The result of this question illustrates that most of the students representing 94% have responded by "yes", whereas 6% by "no".

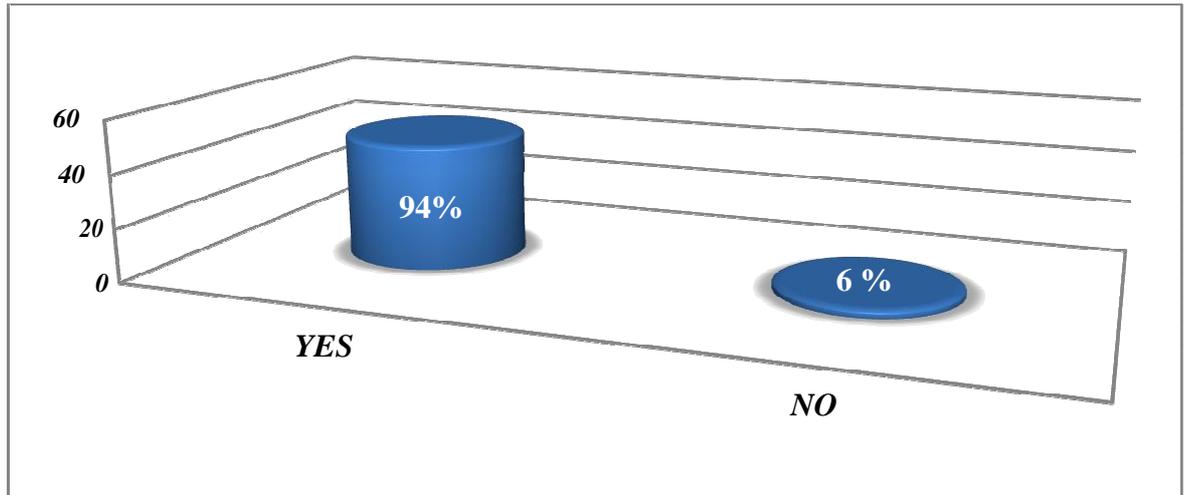
**Q11: Do you give your point of view when writing your civilization essays during exams?**



**Diagram10: Students' expression of point of view.**

The figure indicates that 66% of the students have answered by "yes", and 34% by "no".

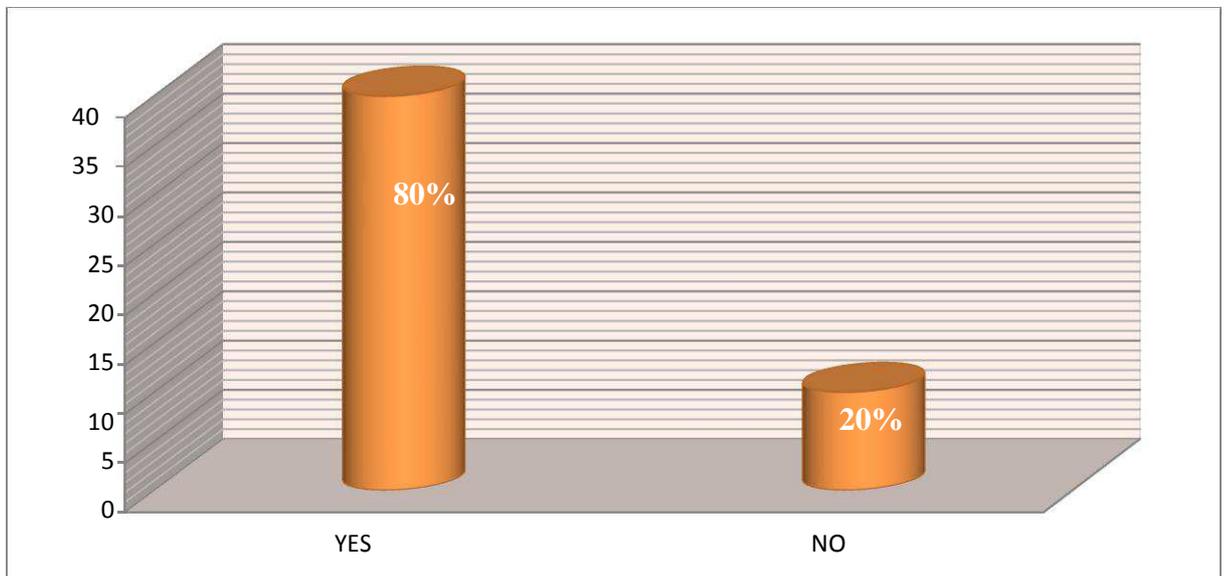
**Q12: Do you apply your background knowledge when answering civilization essays during exams?**



**Diagram11: Students' application of background knowledge.**

The purpose of this question is to know if the students use their background knowledge when writing their essays, the majority of the participants (94%) have replied by "yes", while 6% by "no".

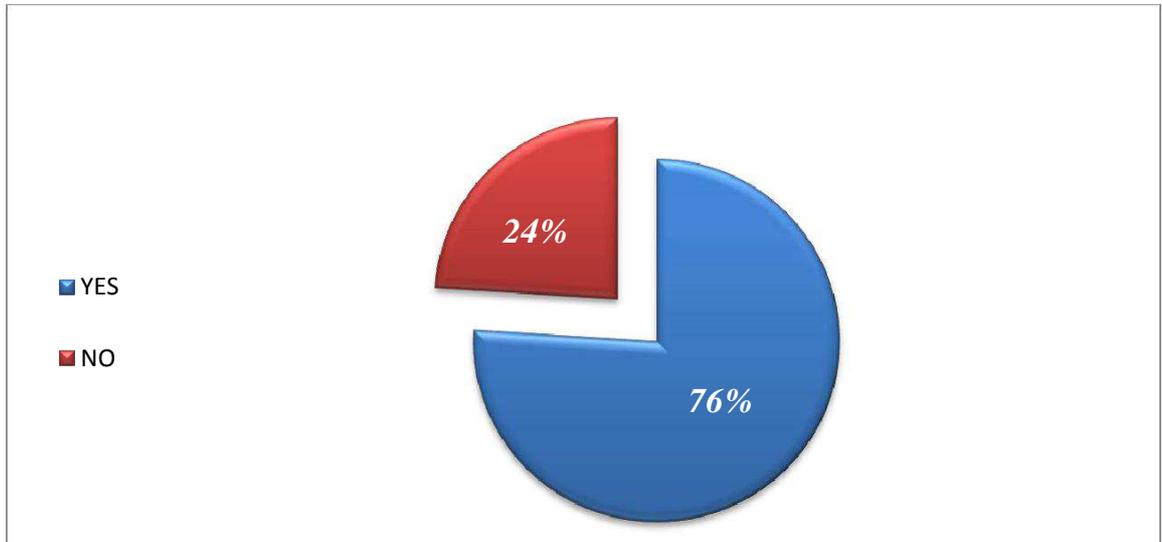
**Q13: Do you use illustration when you write your civilization essays?**



**Diagram12: Students' Use of illustration when writing civilization essays?**

This question is asked to discover if the students use illustration during exams, so 80% declare that they use illustration, whereas 20% declare no.

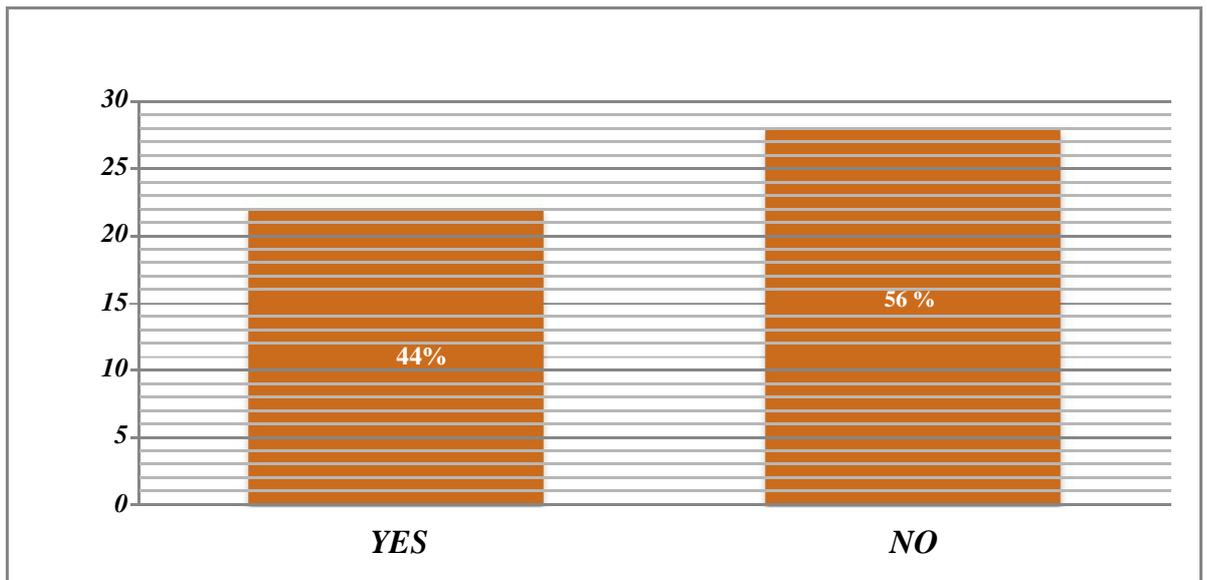
**Q14: Do your teachers ask you to be more specific?**



**Diagram13: Students' Precision in their analysis of the civilization subject.**

The aim of this question is to know whether teachers ask their students to be more specific when writing their civilization essays during exams. As shown in the diagram, the majority of the respondents (76%) have answered by "yes", and twelve (24%) of them by "no".

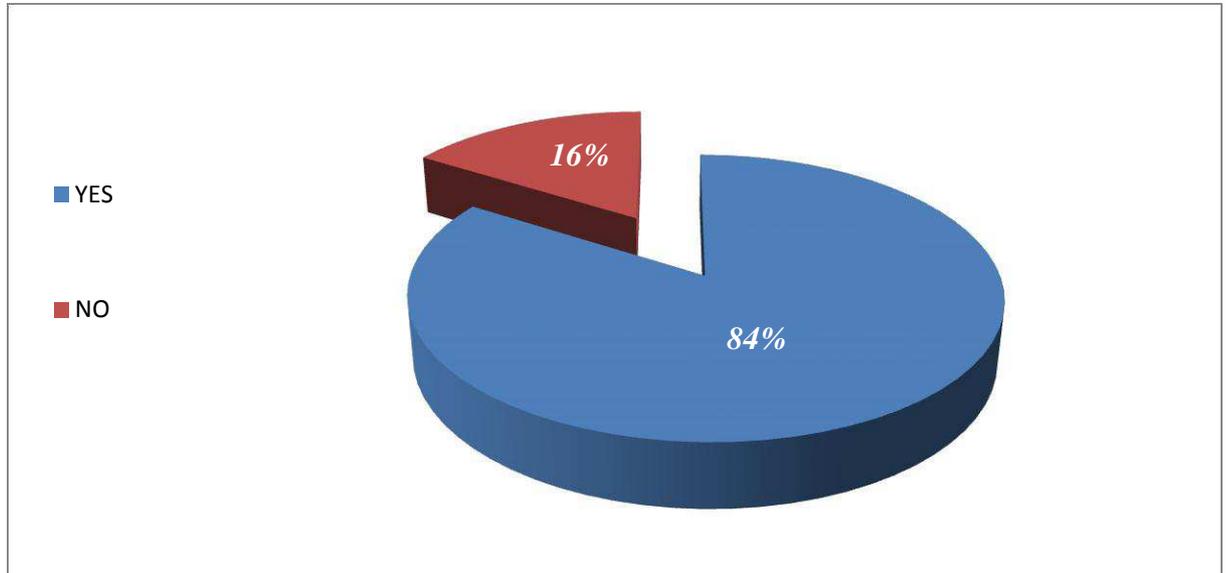
**Q15: Do you elaborate further when writing your civilization essays during exams?**



**Diagram14: Students' elaboration of arguments.**

The findings of this question show that 56% of the participants have answered by "yes", and 4% of them have answered by "no".

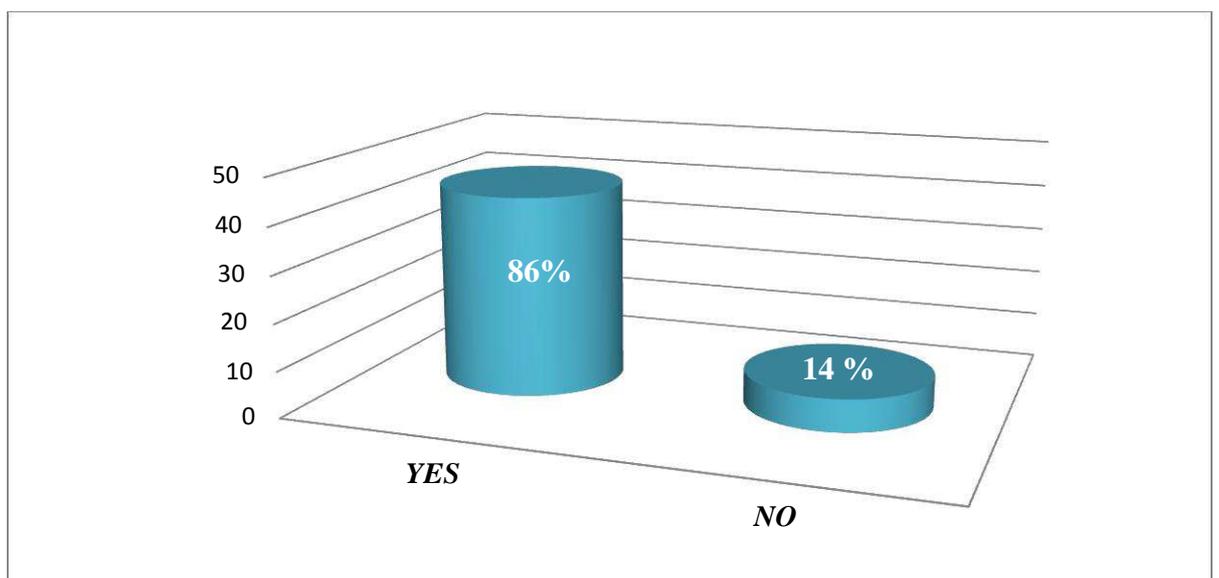
**Q16: Does what you develop range from logic?**



**Diagram15: Students' use of evidence.**

**Diagram 15** denotes that most of the students (84%) replied by "yes" and (16%) by "no".

**Q17: Are you coherent and cohesive when writing your civilization essays?**



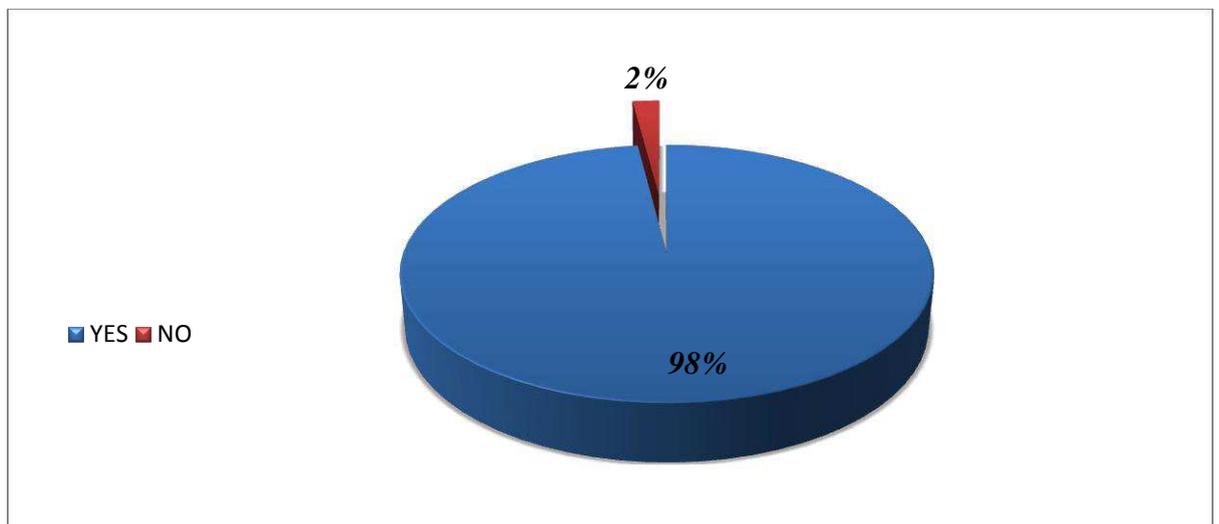
**Diagram16: Students' cohesion and coherence when writing civilization essays?**

The findings clearly demonstrate that forty three students (86%) declare that they are cohesive and coherent while, just seven of them (14%) say "no".

**Q18: Do you face any difficulties when writing your civilization essays during exams?**

The results of this question present that most of the students face some difficulties when writing their essays during exams. Thus, some of them find difficulties when moving from the introduction to the body paragraph and conclusion, sometimes in remembering the dates of events, the names of personalities and even the lack of information and knowledge of a given topic. Another difficulty that most of the students face is when the question of the exam subject is asked indirectly. For others, tenses and time management are of great problem for them two hours are insufficient to write an essay during exams (civilization). The results also show that students are not familiar with the way to write a commentary essay since their teachers have not taught them how to write a good civilization essay.

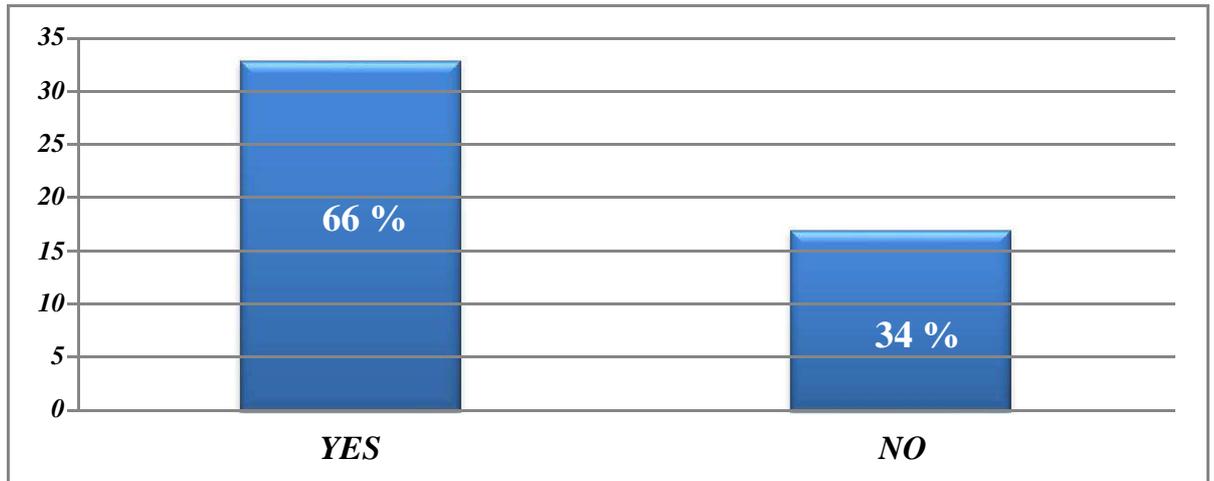
**Q19: Do you agree that clarity, accuracy, precision, logic are parts of critical thinking?**



**Diagram17: Students' Agreement on critical thinking skills.**

On the basis of the data gathered, the majority of the students (98%) give their answer by saying "yes", and just two of them (2%) say "no". They do not agree with the question.

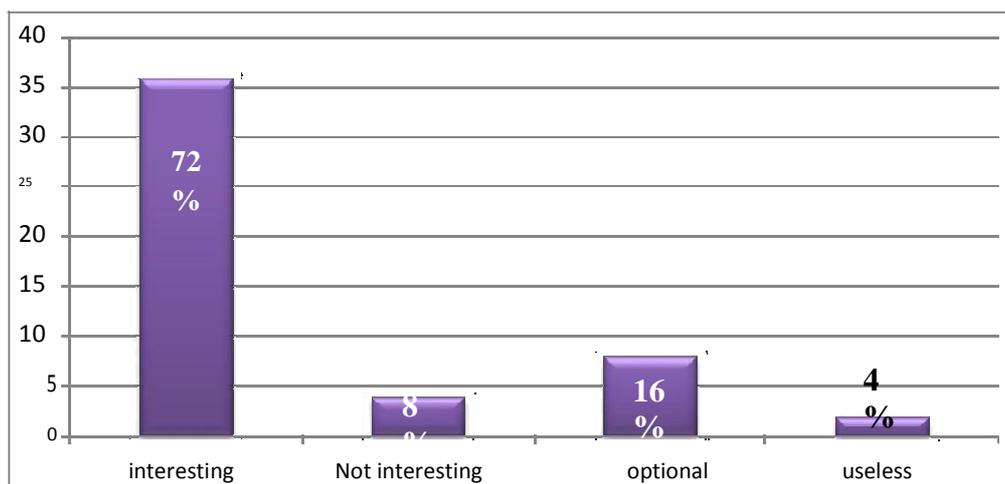
**Q20: Do your teacher ask you to use them in your essays?**



**Diagram18: Students' Use of critical thinking skills.**

The aim of this question is to know if teachers ask their students to use CT criteria when writing their civilization essays. **The Diagram** above shows that thirty-three students (66%) have responded by "yes» while seventeen of them (34%) declare "no".

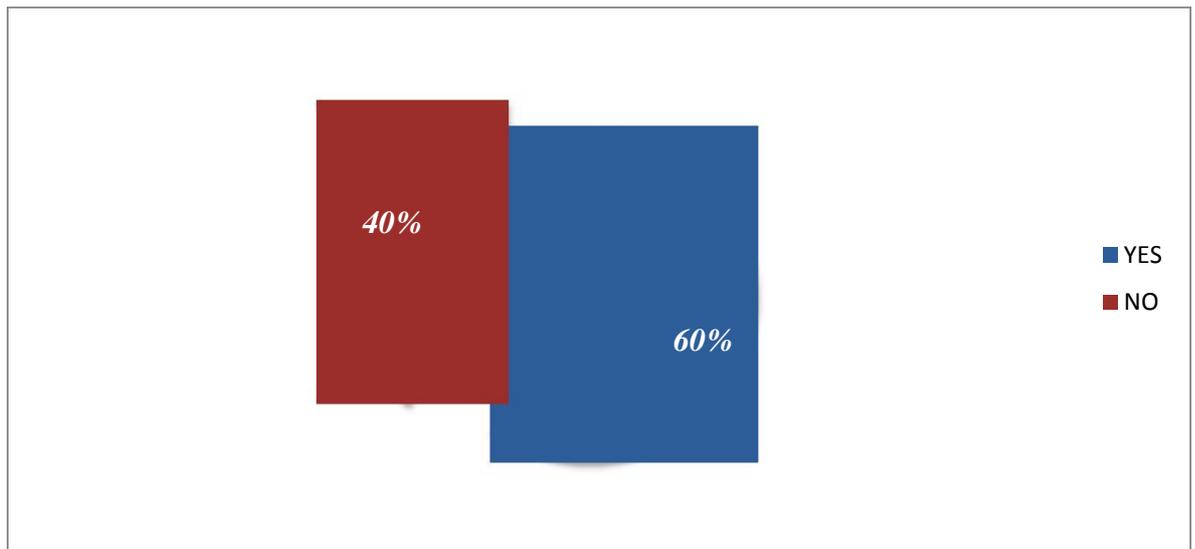
**Q21: How do you find the implementation of CT standards in writing your civilization essays?**



**Diagram19: Students' View of the implementation of CT standards in civilization essays.**

As indicated in **diagram 19** the majority of students (72%) have answered by "interesting" and 16% say that they find them "optional", while 8% declare that are "not interesting" and just 4% who say that are "useless".

**Q22: Do you think that you have reached such a level of thinking?**



**Diagram20: Students' level of critical thinking.**

The findings clearly show that the majority of the students (60%) have replied by "yes" and, the minority (40%) say "no".

### III.1.2. Presentation of the results of the essays (exam papers)

The thirteen civilization essays that have been selected for the study, have been analyzed under Paul Richard' theory of critical thinking

<b>Intellectual Standards</b>	<b>Number of essays</b>	<b>Number of Occurrences</b>	<b>Examples</b>
<b>1. Clarity</b>	<b>30</b>	<b>23</b>	1/ The new deal is a reaction towards the great depression, it is an urgent action during the first year of Roosevelt presidency....
<b>2. Precision</b>	<b>30</b>	<b>23</b>	2/ the first WW broken out between July 1914 and December 1918 *New deal 1920  *25 % of employed people within the period of new deal..
<b>3. Accuracy</b>	<b>30</b>	<b>12</b>	3/ Darwin theory *according to some scholars ...
<b>4. Relevance</b>	<b>30</b>	<b>20</b>	4/ the main reason which led to the first WW was the conflict between countries *many causes that led to the war as imperialism propaganda militarism
<b>5. Depth</b>	<b>30</b>	<b>3</b>	5/ but it was many hidden causes that should be mentioned in this great event *1920 was a period of contradiction and social tension
<b>6. Breadth</b>	<b>30</b>	<b>15</b>	6/ Roosevelt new deal has many advantages from the economic view point agriculture administration ...et
<b>7. Logic</b>	<b>30</b>	<b>3</b>	7/ the united states knew a radical change concerning their politics, social and religious issues which is reflected through the issue of nationalism prohibition

## **Conclusion :**

This chapter has displayed the different results that have been reached from the analyses of the corpus (civilization essays) as well as the answers of the questionnaire.

These same findings will be the main concern of the subsequent chapter in which they will be thoroughly discussed and interpreted as an attempt to bring answers to the research questions raised at the beginning of the research.

## Introduction

This chapter is devoted to the discussion as well as to the interpretation of the findings that we have obtained after designing a questionnaire to 3<sup>rd</sup> year students and after analyzing the textual corpus (civilization essays). It aims at highlighting the results of the study and provide answers to the research questions advanced in the general introduction, checking the validity of the previously postulated hypotheses. The results are going to be interpreted according to Richard Paul's theory of critical thinking.

### IV.1. Essays' Writing Overview:

This section is concerned with the general overview of essay writing in English. Since writing has always been considered an important skill in teaching and learning, it motivates students' thinking, organizing ideas, developing their ability to summarize, analyzing and criticizing. It strengthens students' learning, thinking and reflecting on the English language. Academic writing, as the name implies, is the kind of writing that students are required to do in college or university. Thus, the results of the questionnaire show that the majority (88%) of the students have learned how to write an academic essay in English, and they master the way to write it, as it is shown in **(diagram01,02,03)**. Janet Emig (1977:122) describes writing as “*a unique mode of learning*”. This shows the importance of writing in education at this time but now it is absolutely wrong since there are other skills as speaking, listening and reading.

Critical thinking begins with brainstorming. Brainstorming is a tool that can be used to develop CT. It is used to open up students to other perspectives; its objective is to produce as many ideas as possible that help to answer the question being asked.

As it is presented in the findings, when students are asked to what extent they brainstorm their ideas when writing their civilization essays, most of them (42%) provide answers that they often do it, as it is presented in **(diagram04)**. This makes a direct link to an



important concept in critical writing that is "*decision making*". Students select what is relevant from what is not relevant to their topic that also depends on the question being asked. As it is stated by Cappella University "*The three phases of writing are: prewriting, drafting and revising*"(p.09). Thus, the stage of prewriting where students before starting to write their essays, they brainstorm their ideas.

It is also concerned with the way students organize their essays. Almost, all the respondents agree on the same way to organize their essays during civilization exams moving from the introduction including thesis statement to the development of their ideas and finishing with a conclusion. **Diagram 06** indicates that 80% of the students get guidelines about the way they have to write their civilization essays. In relation to this question, we have asked students from which sources they get guidelines, their answers show that 60% of them get help from their teachers (**diagram07**). However, the analysis of the papers show that students do not really apply what they have said in the questionnaires, which means that some students ignore the way to write an essay, sometimes there is neither a thesis statement in the introduction, nor in the conclusion. Most of them do not know how to write a commentary essay.

#### **IV.2. Students' recognition of critical thinking:**

The results of the questionnaire indicate that most of the students are familiar with the concept of critical thinking. This is noticeable in the answers provided by students in which they relate CT to one of Paul's intellectual standards, by saying that is to give a point of view and the ability to guess what is beyond the word and to go further by analyzing and thinking clearly in a critical way. One of the students' definitions is "*CT is the ability to think clearly about what to do, and what to believe*". This is mainly related to one definition given by Ennis (1985:04) "*CT is reasonable, reflective thinking focused on deciding what to do and believe*".

Critical Thinking is a concept which is defined by a great deal of scholars as it is based on different important criteria.

The majority of the participants (36%) are aware of the necessity and importance of CT as it is shown in (diagram 8). As Lipman (1988:43) claims" *we want students to think for themselves and not merely to learn what other people have thought*".

### **IV.3. Students' application of critical thinking standards:**

Critical thinking intellectual standards are used when analyzing how people answer questions and to characterize the use of judgements and reasoning while trying to find knowledge. They allow us to measure the quality of an argument and thought by using the same skill and the same criteria. At the same time knowing the strengths and weaknesses of somebody's thinking.

Clarity is an important standard of critical thinking. Students must be clear in how they communicate their thoughts, beliefs and reasons.

The findings of the study indicate that 94% (**daigram09**) of the students define clearly what they are talking about in writing their civilization essays during exams that is presented in the questionnaire results. At the same time the standard that is "*clarity*" is highly presented when analyzing the textual corpus. Through the analysis, we have found out that 23/30 of students' exam papers include "*clarity*" but not in the most suitable way that is given by Richard and Elder (2010:48) in Foundation For Critical Thinking "*Clarity is the gateway standard*". This means that students are required to elaborate further on the point discussed during exams. Students also should use metaphors and analogies when answering **civilization exams**, at the same time they should use understandable arguments that means appropriate level of words and being direct to the point .From the analysis of the papers,

students just discuss the topic in a general way by giving one or two examples; they do not go behind what is asked. For instance, when the question deals with the First World War students answer just by giving short definitions as "*the first world war is an international war where the most powerful countries participated*", or "*New deal is a relationship between the American people and their government*".

Another important point that is related to critical thinking in general and to clarity in particular is "*elaborating further*" when writing civilization essays during exams or to go beyond what is asked. The results indicate that 56% of the students do not elaborate further when answering exam questions, as it is shown in **(diagram14)**, and this is remarkable when dealing with students' exam papers, what is justified by students' fear about losing their marks. Thus, there is no opportunity given to the students to express themselves. In addition to elaborating further, students are required to use illustrations when they write their civilization essays, as **diagram12** shows that 80% of students use illustrations when answering exam questions.

"*Precision*" is another intellectual standard that is focused in our research. By using this standard the students are required to give dates, names and places of events, historical names in other words the arguments should contain enough details about the issue.

As it is shown in **diagram13**, most of the students (76%) have said that their teachers ask them to be more specific when writing their civilization essays. This criterion is highly present in the students' papers but not in a desirable way. A statement can be both clear and accurate but not precise. It should be exact and definite. To be precise, it is to give more information needed for someone to understand exactly what is meant.

As presented in **diagram11** the majority of our informants (94%) apply their "*background knowledge*" when writing their civilization essays during exams. Background

knowledge is very important to discuss any given topic or comment on. It is the starting point of thinking where students are required to remember basic concepts, remembering events, dates and names of personalities. Thus, students should include it in their critical writing.

Many scholars deal with this concept, as Carside (1996: 215) points out "*Since it is possible to think critically about something of which one knows nothing, critical thinking is dependent on a sufficient base knowledge*". Another scholar who emphasizes on the great importance of *background knowledge* within critical writing is Bailain. He (1999:285-302) says "*Knowledge is indispensable to critical thinking*".

Bloom considers the concept of "*knowledge*" as the starting point in thinking. In order to achieve *comprehension, application, analysis, synthesis and evaluation*, it requires at least minimal "*knowledge*". This is essential for well-planned and realistic curricular designed to foster critical thinking skills, abilities and dispositions and it can't be achieved without the development of teachers' critical thinking. Bloom (1956:38) defines knowledge as "*exhibits previously learned material by recalling facts, terms, basic concepts and answers*".

"*Accuracy*" is another essential standard within critical thinking, which means that a statement can be free from errors and mistakes. It focuses on the extent to which students use different sources that is to say arguments should base on reliable and time sources because a statement can be clear but not accurate. To be accurate is to represent something in accordance with the way it actually is. The analysis of the papers shows that the students do not rely on very reliable sources where most of them use what has been done during classes without any support.

The fourth standard is "*Relevance*" which means that the students' arguments should be relating to the main topic or justification to the discussed issue. Something is relevant when it is pertinent or applicable to a problem we are trying to solve. The results obtained from the exam papers indicate that the majority of the students' statements are related to the

subject by using the relevant dates and appropriate supporting ideas according to the question of the exam.

"Depth" also is an important criterion in critical thinking. Thinking deeply is to get beneath the surface of an issue and identify the complexities inherent in it, thus dealing with these complexities in an intellectually responsible way. If the question is complex the answer will be deep, because for Richard Paul every problem is complex. This concept helps the students know how the answer should deal with the complexity of the question. The findings show that students do not master how to deal deeply with the question they just answer superficially.

Another issue related directly to CT is "Breadth" which means to examine the topic from different perspectives. As Paul, R and Elder, L (2010:48) in *Foundation for Critical Thinking* defines the concept as "*It encompasses different/multiple viewpoints. Any reasoning can be accurate, clear, precise, relevant and deep but it lacks breadth*". This concept is presented through the question that we have asked concerning students' providing their points of view, so 66% of the respondents have answered by "yes" (**diagram10**). From the analysis of the papers we have noticed that students do not include their views in the civilization essays. This standard is presented just in three exam papers (point of view) at the level of conclusion. This shows that students do not really master how and when to supply their writings with their points of view. The students who have chosen the first topic *Roosevelt new deal* have developed it from different perspectives as economy, **administration**, agriculture...etc. This disconfirms our second hypothesis that is "the Intellectual Standards are highly applied by students when writing their essays".

Critical thinking allows students to analyse, judge, and evaluate. It is mainly concerned with Higher-Order thinking skills (Bloom Taxonomy). The student can evaluate,

judge by giving his proof and evidence. It is confirmed by Bloom (1956:41) definition of "Evaluation" which the last element in Higher-Order thinking skills *"presenting and defending opinions by making judgments about information, validity of ideas or quality of work based on a set of criteria"*. He also defines "Analysis" (1956:40) as *"examining and breaking information into parts by identifying motives or causes; making inferences and finding evidence to support generalizations"*. This can be only reached if the teacher asks his students to argue and justify their choices in order to develop their ability to judge. Whereas, teachers do not teach students how to use this concept. That is noticed in one of the students' answer by saying that: *"thinking clearly and systematically can improve the way we express our ideas in leaning, how to analyse logically the question during exams"* but, the findings we have obtained from the analysis of the exam papers indicate that these elements are totally absent.

"Logic" is another standard that is cited in Paul's theory. **Diagram15** shows that the majority of the students (84%) support their ideas by *arguments*. While analyzing the exam papers, we have found that just ten (10) of the exam papers present this concept. As the concept is so important when writing an academic essay, students should support their ideas with arguments. This is related to what Bonnet (2001:50-51) claims *"your essay is your argument; everything else makes sense because of it"*.

According to Plymouth University (2011:01) *"Essays are an intellectual exploration of a topic involving looking at different arguments, evidence and developing the writer's perspective"*.

According to Alagozhon (2017:119), a good academic writer should be able to present *"Evidence and arguments that he can then defend and from which he can draw conclusion"*. Another scholar Stapleton (2001:516) defines arguments as *"Claims supported by reasons"*.

"Argument" is defined by Toulmin, Reike, and Janik (1984:14) as "*the sequence of interlinked claims and reasons that, between them, establish content and force of the position for which a particular speaker is arguing*".

"Logic" is defined by Paul and Elder (2010:48) in Foundation for Critical Thinking as follows

*When thinking, people bring together a wide variety of thoughts in the same order. When the combined thoughts are mutually supporting and make sense in combination, the thinking is logical, when the combination does not make sense i.e., it is not logical*

Coherence and cohesion are two important aspects of language structure and knowledge of the usage of these two devices is essential for the students when writing their civilization essays during exams. As regards the role of cohesion and coherence in any writing, the findings gathered demonstrate that 86% of the students are coherent and cohesive when writing their civilization essays during exams. At the same time, we find these two concepts are present in students' papers but not in the most suitable way since, students when writing about past events, students do not respect the chronological order of events. They do not use linking words when combining statements and transitional words when moving from an idea to another contradictory one.

Coherence is the device which identifies a text in any language. It is possible when cohesive devices, grammatical and lexical, combine to give meaning to the text by connecting it to a social context (Halliday and Hassan, 1976).

Many scholars are aware of the significance of these two elements. Halliday and Hassan (1976:375) are the first significant writers on the subject of "*cohesion*". They drew the attention towards the importance of cohesion which, for them, refers to "*the range of possibilities that exist from linking something with what has gone before*" (*ibid*). They add that "*Cohesion is a semantic relation and therefore, is independent of grammatical structure, for example, sentence boundaries etc*"(*ibid*).

Almost all the respondents who have answered this question say they totally agree that *clarity, accuracy, precision, relevance, and logic* are parts of critical thinking. Most of the students (66%) say that their teachers ask them to apply these standards when writing their civilisation essays, but when analysing their exam papers we have found out that these standards are not applied by students in their civilization essays. This goes with what is defined by Scriven and Paul at the 8th Annual International Conference on Critical Thinking and Education Reform (1987) "*Critical thinking is based on Universal Intellectual values that transcend subject matter divisions: clarity, accuracy, precision, consistency, relevance, sound evidence, good reasons, depth, breadth, and fairness*". Whereas, when it comes to the practice students do not apply these intellectual standards when writing, this disconfirms our second hypothesis.

Critical thinking is self-guided, self-disciplined thinking which attempts to reason at the highest level of quality in a fair-minded way. As Elder (2007) "*People who think critically consistently attempt to live rationally, reasonably, and empathically*". In the intellectual world, thinking is judged according to intellectual standards, because all intellectuals implicitly use these standards in their thinking. Whether they are explicitly aware of it or not, they surely want their thinking to be clear rather than vague, to be relevant rather than irrelevant, to be accurate rather than inaccurate, to be deep rather than superficial, to be broad rather than narrow, to be logical rather than illogical, to be significant rather than insignificant. This is confirmed by Richard Paul's statement (2001)

*Critical thinking is that mode of thinking about any subject content or problem in which the thinker improves the quality of his or her thinking by skilfully taking charge of the structures inherent in thinking and imposing intellectual standards upon them.*

The majority of informants believe that they need the implementation of critical thinking standards in writing their civilization essays. **Diagram19** show that 72% declare that they

view CT as interesting when writing. As Bloom(1956:38) defines "*Critical thinking involves logical thinking and reasoning including skills such as comparison, classification, sequencing, cause/effect, patterning, webbing, analogies, deductive and inductive reasoning, forecasting, planning, hypothesizing, and critiquing*". A good *critical thinker* knows how to separate facts from opinions, how to examine an issue from all sides, how to make rational inferences and how to withhold personal judgment or biases. As far as, the question whether students have reached such level of thinking, the results gathered from the questionnaire show that 60% of the students have achieved this level (**diagram20**), but when analysing papers we find that some of these standards when writing civilization essays are not really implemented in the most suitable way. According to Clement and Lockhead (1980) instructors fail to recognize CT "*how to think*", and students fail to realize its absence during courses. Whereas, it is obvious that both of them may focus all their energies and efforts on the task of transmitting and acquiring the basic knowledge. Thus, CT is a learned ability that must be taught "*We should be teaching students how to think. Indeed we are teaching them what to think*"(*ibid*).

This section has permitted us to interpret the results gathered from students' questionnaire and through analyzing the exam papers concerning the students' representation of critical thinking and to what extent the criteria of CT are applied by 3<sup>rd</sup> year students at the English Department at MMUTO. The first hypothesis formulated to investigate this topic states that most of the students recognize what critical thinking means. Indeed the results obtained from the questionnaire clearly confirm the hypothesis, while the data obtained from the analysis of the exam papers disconfirm the second hypothesis that is the application of critical thinking standards when answering American Studies questions by 3<sup>rd</sup> year students

#### **IV.4. Suggestions**

In order to remediate the weaknesses that we have noticed through the questionnaire results and the analysis of the papers, we suggest the following:

- Teachers could be asked to implement Critical Thinking in the syllabus, as being one major goal of education.
- It is necessary that teachers avoid underestimating their students. However, they should take into account their multiple intelligence and help them to express themselves.
- Teachers are requested to avoid spoon-feeding their students which makes them dependent, do not rely on themselves .They make them also slow and passive learners waiting for their teachers to provide them with information instead of searching alone.
- Teachers are asked to let their students provide their points of view when judging some topics and use their cognitive skills.

#### **Conclusion**

This section has enabled us to interpret the findings obtained through students' questionnaires and the analysis of the exam papers concerning the students of the English department at Mouloud Mammeri University of Tizi-Ouzou representation of critical thinking, and at the same time investigating the application of critical thinking standards when writing civilization essays. The findings have been analysed under Paul Richard's theory of Critical Thinking.

This dissertation has investigated the issue of Critical Thinking in student's essays. It has focused on the use of critical thinking intellectual standards while writing an academic essay. Since CT has a big importance in many fields as education, psychology and philosophy, a considerable Review of the literature based on critical thinking has been provided.

Our dissertation has targeted two main objectives. The first objective consisted in knowing the students' representation of critical thinking. The second objective consisted in exploring and investigating to what extent the intellectual standards of CT are applied when answering the civilisation essays.

Taking as a starting point Paul Richard's theory of critical thinking, the study has attempted to discover the relationship between critical writing and critical thinking. We have hypothesized that most of the students knew what CT means and that the standards of critical thinking were highly applied in students' essays.

To conduct the investigation, we have adopted a Mixed-Methods Research. We have combined quantitative and qualitative approaches for data collection and data analysis. The data consisted of thirty (30) students' exam papers that composed a textual corpus. The second data collection tool was a questionnaire designed to fifty (50) students which consisted of two main sections. The participants are randomly selected.

For the quantitative part, we have used a statistical method to transform the data collected. We have interpreted and explained the results obtained from the exam papers by adopting the Qualitative Content Analysis.

The descriptive statistical analysis of students' questionnaire has revealed that most of the students were familiar with the concept of critical thinking. The majority (66%) encourage the implementation of CT within their civilization courses and during exams; therefore they viewed

it as very important to improve their level of thinking. As far as the application of intellectual standards, the findings showed that clarity is applied (94%). The findings also demonstrated that precision is given much importance (76%). The majority of students (56%) maintained that they do not elaborate further during exams because they feared their teachers. The results indicate that background knowledge is seen as an indispensable criterion to be used when answering civilization exams. In addition, coherence and cohesion are very important when developing ideas while writing. The results also show that students agree that *clarity, precision, accuracy, relevance and logic* are parts of critical thinking, thus teachers ask students to implement these standards when writing their civilization essays. The findings of the textual corpus indicate that *Accuracy* characterized 12 exam papers while clarity and precision were illustrated in twenty three (23) papers. As far as, *logic* and *Depth* are mainly used in no more than 3 papers. Concerning the CT standard that needs to be developed by students, the results indicate that *Relevance* is present in 20 exam papers. Another standard that is used by students is *Breadth* it is present in 15 exam papers. The findings obtained from the analysis of the exam papers disconfirm the second hypothesis about the application of the intellectual standards. The data obtained from the questionnaire confirm the first hypothesis that consists of students' recognition of critical thinking i.e. most of the students are familiar with critical thinking.

The discussion of the findings showed that students do not lack knowledge about critical thinking, yet they do not apply it when they come to practice. In addition, teachers may be they do not encourage their students to use CT. For this CT must be included in the curriculum so that to help students develop their thinking skills.

Our hope is that our study has contributed to the field of didactics that would open a new perspective for future research in the domain of critical thinking with other levels in the department of English and outside the department.

- Bailain, S. (2002). *Critical Thinking and Science Education*. Science and Education, 11 (4), 361-375, Netherlands.
- Bailain, S., Case, R., Combs, J.R., and Daniels, L.B. (1999). *Conceptualizing Critical Thinking*. Journal of Curriculum Studies, 31 (3), 285-302, New York.
- Bethany, R. (2013). *Defining Critical Thinking for the 21st Century World Language Classroom*. Master Dissertation..Brigham Young University.
- Bloom, B.S. (1974). *The Taxonomy of Educational Objectives: Affective and Cognitive Domains*. New York: David McKay Company.
- Bounoua, T, and Mehhadi, K. (2015). *The Investigation of the Teaching of Critical Thinking in First-Year Classes in the Department of English at Mouloud Mammery University of Tizi-Ouzou*.
- Business Dictionary (2017).  
(online)<http://www.businessdictionary.com/definition/microsoft-excel.html>.  
(Accessed on 10/10/2017).
- Chee Choy, S, and Phaik, K. (2009). *Teacher Perceptions of Critical Thinking Among Students and its Influence on Higher Education*.
- Cottrell, S. (2013). *The Study Skills Handbook*. p.232. 2<sup>nd</sup> ed. London: Palgrave.
- Cynthia, C (2015). *How to use Critical Thinking in your essay and write smarter*. Retrieved from: <http://www.kibin.com/essay-writing/>. ( Accessed on 20/06/2017)
- Dornyei, Z. (2007). *Research Methods in Applied Linguistics*. Oxford: Oxford University Press.
- Emig, J. (1977). *Writing as a mode of learning*. College Composition and Communication. 28. 122-128.
- Emiley, R. Lai. (2011). *Critical Thinking: A Literature Review*. Research report. Pearson.

- Ennis, R.H. (1985). *A logical basis for measuring critical thinking skills*. Educational Leadership, 43(2), 44.
- Ennis, R.H. (1989). *Critical Thinking and Subject Specificity: Clarification and needed research*. Educational Researcher, 18(3), 4-10.
- Fascione, P. (2013). *Critical Thinking: What It Is and Why It counts*.
- Forhand, Mary. 2005. Bloom's Taxonomy. (Online) Available <http://www.coe.uga.edu> (Accessed on 20/06/2017).
- Gary, R.K., Jeffery, R.G. (1990). *Critical Thinking*. Pearson.
- Halliday, M., Hassan, R. (1976). *Cohesion in English*. London: Longman Group Ltd.
- Halpern, D. F. (2013). *Thought and knowledge: An introduction to critical thinking* (5th Ed.). New York: Psychology Press.
- Halpern, D. F. (1998). *Teaching for Critical Thinking for Transfer across domains*, p 450.
- Kennedy, M., Fisher, M. B., & Ennis, R. H. (1991). *Critical thinking: Literature review and needed research in L. Idol & B.F. Jones (Eds.), Educational values and cognitive instruction: Implications for reform*. Hillsdale, New Jersey: Lawrence Erlbaum & Associates (pp. 11-40).
- Kothari, C.R (1990). *Research Methodology: Methods and Techniques*, p 100.2<sup>nd</sup> ed. University of Rajasthan: India.
- Limback, B., Waugh, W., and Duron, R. (2006). *Critical Thinking Framework for Any discipline*. International Journal of Teaching and Learning in Higher Education, 17(2), 160-166.
- Lipman, M. (1988). *Critical Thinking: What can it be?* Educational Leadership, 46(1), 38-43.

- McPeck, J. E. (1990). *Critical thinking and subject-specificity: a reply to Ennis*. Educational Research, p 19.
- Norris, S. P. (1985). *Synthesis of research on critical thinking*. Educational leadership, 42(8), 40-45.
- Paul, R. (2007). *Critical Thinking in Every Domain of Knowledge and Belief*.
- Paul, R., Elder, L. (1997). Foundation for Critical Thinking. Retrieved from:  
<https://www.criticalthinking.org/pages/Socratic-teaching/606>. (Accessed on 10/09/ 2017)
- Paul, R. and Elder, L. (2008). Critical thinking: strategies for improving student learning, part II. Journal of Development Education. Retrieved from:  
<https://www.ncde.appstate.edu/publications/jde/>.
- Scriven, M and Paul, R. (2003). *Defining critical thinking: The Critical Thinking Community: Foundation for Critical Thinking*. Retrieved from  
<http://www.criticalthinking.org/defining-critical-thinking/410>. Accessed on August 12, 2015.
- Sternberg, R.J. (1986). *Critical Thinking: It's Nature, measurement and improvement*. National Institute of Education. Retrieved from:  
<http://eric.ed.gov/PDFS/ED272882.pdf>. Accessed on February 4, 2015.
- Willingham, D.T. (2007). *Critical Thinking: Why it is so hard to teach?* American Educator, p 8-19.
- Vyncke, M. (2012). *The Concept and Practice of Critical Thinking in Academic Writing: An Investigation of International Students' Perceptions and Writing*. London.

# *Appendices*

## Appendix 01:

### Students` Questionnaire

Dear students

This questionnaire is part of a research that deals with Critical Thinking in students` Essays in American Studies in the English Department of MMUTO. Thus, you are kindly requested to answer the following questions. Your contribution will be of great help.

Please put a tick (✓) for the appropriate choice and make statements whenever it is necessary.

Thank you in advance.

#### Section One: An overview about writing essays

**Q 1:** Have you learnt how to write an academic essay in English?

Yes

No

**Q 2:** Do you think you are familiar with (academic) essay writing in English? Please Rank your familiarity with essay writing in English.

Familiar  partly familiar  Very familiar

Not familiar at all

**Q 3:** Do you think you are good at essay writing in English?

Yes

No

**Q 4:** How often do you brainstorm your ideas prior to writing your civilization` essay during examinations?

Always  often  sometimes

Rarely  never

**Q 5:** How much time do you spend in writing your civilization` essay?

Less than one hour  one to two hours  Two hours

**Q 6:** How do you organize your essay?

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

**Q 7:** Do you get any guidelines about the way to write your civilization essay?

Yes  No

If yes, from whom or where do you get them?

From teachers  in the Internet   
Through reading and writing lectures  mates

**Section three: Students` view of critical thinking**

**Q 8:** In your opinion what is critical thinking?

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

**Q 9:** How do you see critical thinking?

Necessary  
 Important  
 Very important  
 Useless

**Q 10:** Do you define clearly what you are talking about in your civilization essays during exams?

Yes  No

**Q 11:** Do you give your point of view when writing your civilization essays during exams?

Yes  No

**Q 12:** Do you apply your background knowledge when answering civilization essays during exams?

Yes  No

**Q 13 :** Do you use illustration when you write your civilization essays?

Yes  No

**Q 14 :** Do your teachers ask you to be more specific?

Yes  No

**Q 15 :** Do you elaborate further when writing your civilization essays during exams?

Yes  No

**Q 16 :** Does what you develop range from evidence?

Yes  No

**Q 17:** Are you coherent and cohesive when writing your civilization essays?

Yes  No

**Q 18 :** Do you face any difficulties when writing your civilization essays during exams? if ,yes which ones?

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

**Q 19:** Do you agree that clarity, accuracy, precision, relevance, and logic are parts of critical thinking?

Yes  No

**Q 20:** Do your teacher ask you to use them when writing your essays?

Yes  No

**Q 21:** How do you find the implementation of critical thinking standards in writing your civilization essays?

1- Very interesting  4- optional

3- Interesting  5- useless

**Q 22 :** Do you think that you have reached such a level of thinking?

Yes  No

**Please use this section for any additional comments:**

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Thank you so much

## **Appendix 02: the textual corpus (exam papers).**

# *General Introduction*

# **Chapter One**

## ***The Review of the Literature***

## **Chapter Two**

# ***Research Methodology***

## **Chapter three**

### ***Presentation of the Findings***

## **Chapter four**

### ***Discussion of the Findings***

# *General Conclusion*

# *Appendices*