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Depicting the development of the learners' critical thinking throughout the different teaching and learning strategies

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DEDICATION

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This study is dedicated to our beloved parents who have been our source of inspiration and gave us strength and encouragement when we thought of giving up. Who continually provide their moral, emotional, and financial support.

To our brothers, sisters, friends, and classmates who shared their words of advice and encouragement to finish this study.

We thank Allah for the strength, power of mind, guidance and for giving us a healthy life.

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Abstract:

Critical thinking is now considered to be an essential outcome in education. This study is an attempt to examine to what extent critical thinking is implanted before higher education, university students often fail to think critically because they lack the depositions to do so, and even though empirical evidence supports the notion that critical thinking can be taught at young age, teachers secondary school often neglects putting their learners' logical reasoning into practice. The research takes the case of English teachers of secondary school in Algeria, they were randomly selected through a questionnaire that was held online. The dissertation will be divided into three chapters; the first chapter is about the literature review while the second chapter is for the data analysis. The third chapter is devoted to the findings, suggestions, and recommendations. The results revealed that there is a lack of implementing ct skills that is due to a misconception of critical thinking by the teachers, therefore even if promoting their learners ct skills is one of their lesson aims, the misuse of the different teaching strategies puts them far from achieving this aim.

Keywords: critical thinking skills, teaching strategies, young learners, Algerian educational system.

List of Figures:

List of Abbreviations:

CT: Critical Thinking

PBL: problem-based learning

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General introduction:

Searchers in the field of education have long been aware of the necessity of implanting critical thinking skills within learners to shift from the dominant traditional teaching of rote learning and memorization to a modern high order thinking, they also identified critical thinking skills as an important outcome of the students learning, however training teachers who are able to transfer critical thinking skills to their learners is still a challenge worldwide and in Algeria in specific.

The Partnership for 21st Century Skills has identified critical thinking as one of several learning and innovation skills necessary to prepare students for post-secondary education, however throughout our leaning career before the higher education phase, we did not feel like there is a real instruction to our critical thinking skills, especially that the educational system in Algeria still adapt the same traditional path of mostly theoretical teaching and neglects the integration of practical way that can engage learners in real life experiences like school clubs for instance especially that such ways play an important role in enhancing ct skills and encourage auto learning which saves the teachers some efforts.

Foreign language university students often find difficulties to be critical about conducting a problem, they even seem to lack the dispositions to be critical thinkers, and that can be for the reason that their learning before the university phase was mostly based on memorization. This has motivated us to conduct this research to investigate to what extent secondary school English teachers attempt to enhance their learner's ct skills .

The following research questions and hypotheses would put the study in a clearer perspective :

1) Do secondary school English teachers in Algeria take promoting their learner's CT skills into consideration ?

2) What teaching strategies they use to enhance their learner's ct skills ?

3) How do they perceive critical thinking ?

Hypothesis:

1. The lack of attention and the early, proper instruction to the learners ct skills will result in a failure of making future critical thinkers.

2. Most teachers lack the training and the time to apply teaching strategies that may enhance their learners' ct skills.

3. Teachers must be critical thinkers themselves in order to be able to transfer those skills to their learners.

The major work is divided into three chapters. The first chapter is about the literature review; critical thinking definitions, teaching strategies and approaches, whereas the last two chapters discuss methods, the research design and the research tools(a questionnaire addressed on the internet to secondary school English teachers in Algeria). results and discussion and further recommendation.

Chapter one

Literature review

1.1. Introduction

Our knowledge driven world requires students that can go beyond the building of their knowledge capacity; they need to develop their critical thinking skills . This development is important in order to facilitate the transition of students' knowledge and skills into responsible action, regardless of their particular future role in society (Zoller, 1999, 2001). The development of students' critical thinking (CT), is also necessary for the analysis of unfamiliar situations, so that their question-asking, problem solving, and decision-making capabilities will be based on a framework of rational thinking[1] (Ennis, 1989; Zoller, Ben-Chaim, Ron, Pentimalli, & Borsese, 2000). It is also recommended that "from early childhood, people should be taught, for example, to reason, to seek relevant facts, to consider options, and to understand the views of others" (Facione, 1990, p. 27). The purposes of this literature review are to (a) explore the ways in which critical thinking has been defined by researchers, (b) see what current studies say about the teachability of critical thinking to young learners, (c) explore the different approaches and instructional strategies and for enhancing critical thinking.

1.2. Definition of critical thinking:

Researchers have offered many definitions of CT . John Dewey (1909) defines it as *"Careful reflective thinking"* In which individuals actively reflect on issues that are relevant to their lives. . he portrayed "reflective thinking" as consisting of mediating on a subject by giving it genuine maintained thought.(Cited in esher,2001.p2).

Ennis(1987,pp.1-2) defines critical thinking as *'reasonable reflective thinking that is focused on deciding what to believe or do'.* Critical thinking includes such acts as

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[1] the ability to consider the relevant variables of a situation and to access, organize, and analyze relevant information

'formulating hypotheses, alternative ways of viewing a problem, questions, possible solutions, and plans for investigating something'.

Ennis distinguishes between skills (analyzing arguments, reasoning, judging credibility of sources, making decisions or solving problems) and attitudes, the so-called dispositions[2] (open-mindedness, fair-mindedness, the propensity to seek reason ,inquisitiveness, the desire to be well-informed ,flexibility)   (Ennis, 1987, 1991; Kennedy, Fisher, & Ennis, 1991).

Most researchers agree that critical thinking involves both skills and dispositions, but there is still much to be resolved regarding the definition of critical thinking.

The American philosophical association (APA) organized a Delphi consus panel of 46 experts led by Dr.peter Facion to develop a brief And broad definition to CT :

We understand critical thinking to be purposeful, self-regulatory judgment which results in interpretation, analysis, evaluation, and inference, as well as explanation of the evidential, conceptual, methodological, criteriological, or contextual considerations upon which that judgment is based. . . . The ideal critical thinker is habitually inquisitive, well-informed, trustful of reason, open-minded, flexible, fair minded in evaluation, honest in facing personal biases, prudent in making judgments, willing to reconsider, clear about issues, orderly in complex matters, diligent in seeking relevant information, reasonable in the selection of criteria, focused in inquiry, and persistent in seeking results which are as precise as the subject and the circumstances of inquiry permit. (Facione, 1990b, p. 2)

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[2] A natural or acquired habit or characteristic tendency in a person or thing

1.2.1 Thinking skills :

According to De Bono (1976), thinking skills are patterns of thinking that help learners go beyond what they recall of information and enable them to explore and make sense of their world, to reason and problem solve, as well as to plan, create and invent. Edwards and Briers (2000), divided thinking skills into two levels : lower-order thinking[3] (level of remembering and processing information) and higher-order thinking[4] (level of creating and evaluating information). In contrast, Paul and Elder (2008) found three levels of thinking, which includes the previous two and also highest-order thinking. Highest-order thinking comprises critical thinking, which is more likely to be the main interest in today's education (Paul & Elder, 2008).

1.2.2 Dispositions

Facione (2000) defines critical thinking dispositions as *"consistent internal motivations to act toward or respond to persons, events, or circumstances in habitual, yet potentially malleable ways"* (p. 64) in other words dispositions are different mindsets that permits someone to think , according to Facione thinking skills and dispositions are separate entities .(Ennis,1985) also recognized that the ability to think critically is distinct from the disposition to do so.

1.3. Importance of ct in education

According to Paul (1992, p. 303–304). Critical thinking shouldn't be regarded as an aim of education but the aim, it is the quality of what is taught and learned. Therefore teachers can cultivate independence of thought in their students. For example, guidelines are formulated such as, 'rather than simply having students discuss ideas found in their texts, have them brainstorm their own ideas and argue among themselves about problems and the

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[3] Include skills such as: Remembering, Understanding, and Applying.
[4] Include skills such as: Analyzing, Evaluating, and Creating.

solution to problems', 'routinely ask students for their point of view on issues, concepts and ideas', 'whenever possible give students tasks that call upon them to develop their own categories and modes of classification instead of being provided with them in advance'.

Mason (2008, p.61) points out that the complexity involved in putting logical reasoning into practice has often been neglected and students often find it difficult to apply the fundamental principles in their academic work. The students need the ability to apply them.

It is very important for teachers to use critical thinking in the task of teaching. Mason (2008, p.6) believes that if teachers had a better understanding of the adaptive character of human reasoning, they would appreciate that students' logical reasoning also has to be trained in a domain-specific or context- sensitive way. In other words, the ability to reason needs to be developed and Looked after because it takes time for students to master this ability and use it in different contexts.

1.4. CT Skills Generic or Context-Specific

The generic versus content-specific debate has significant practical implications for education—if CT is generic, then it could be fruitfully taught in specialized courses that focus on CT skills (Royalty, 1995 ; Sá, Stanovich, & West, 1999), and if it is dependent on subject matter, then it might best be learned by tackling concrete problems in specific disciplines (Halliday, 2000 ; Smith, 2002)

Paul and other philosophers like Ennis (1989), Siegel (1988), Govier (1985) view CT skills as rather general (applicable across subject domains) and conjecture (a) that general CT skills might apply to more than one subject area, despite the fact that CT always involves thinking about some specific context; and (b) that the existence of general skills does not imply the nonexistence of context-specific knowledge. The generalist view supported by

Siegel (1988) contends that the ability to identify informal errors of Reasoning is easily transferable between different contexts.

McPeck (1981) argues that critical thinking is specific to a particular discipline, and that it depends on the thorough knowledge and understanding of the content and epistemology[5] of the discipline. For him, critical thinking cannot be taught independently of a particular subject domain. Martin (1992) emphasizes the dispositions associated with critical thinking, and suggests that it is motivated by and founded in moral perspectives and particular values.

1.5. Critical thinking in children :

According to current research, young children engage in many of the same cognitive processes as adults, implying that critical thinking has a place in the lower elementary curriculum (see, e.g., Gelman & Markman, 1986). According to Silva (2008), there is no single age at which children are developmentally ready to master more complicated thinking strategie ,Furthermore, Willingham (2007) claims that very young toddlers have been observed thinking critically, whereas professional scientists make errors in reasoning on occasion. Kennedy, et al. (1991) conducted a review of the literature and concluded that, while critical thinking capacity appears to grow with age, critical thinking teaching can benefit even young children.

Empirical evidence supports the notion that young children are capable of thinking critically. For example, Koenig and Harris (2005) have demonstrated that 3- and 4-year-old children can distinguish the reliability of diverse sources of information, in particular 4-year-old children appeared to prefer the judgments of adult participants who had a history of being

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[5] The theory of knowledge, especially with regard to its methods, validity, and scope, and the distinction between justified belief and opinion.

correct over those who were purposefully inaccurate. This finding was replicated in a number of other studies (e.g., Jaswal & Neely, 2006). Similarly, Lutz and Keil (2002) found that children as young as 4 years appeared to be aware that different people may possess different domains of expertise and that these areas of expertise might be related to their credibility on certain topics. For example, a car mechanic's diagnosis of car trouble was found to be more credible than a doctor's. Finally, Heyman and Legare (2005) found that children between the ages of 7 and 10 became increasingly aware that people may have motives to distort the truth, whereas children younger than this were not consistently critical of the credibility of people with such motives.

1.6. Bloom's Taxonomy of Cognitive Domain

Teachers may have a better understanding of critical thinking when it is linked to Bloom's taxonomy's cognitive domains, as it has proven to be a valuable and influential tool (Paul, 1985). Bloom's taxonomy, according to Brown (2004), is an important structure for fostering critical thinking since it provides instructions for students to *« establish clarity and accuracy, assess relevance, and exhibit the ability to analyze in depth »* (p. 76). Bloom's taxonomy can be used in the classroom as a reference for establishing learning objectives, developing lesson plans, asking students questions, organizing class activities, and preparing exams and assessments to assess students' critical thinking (Anderson, 1994). Bloom's taxonomy is a multi-tiered model of knowledge creation and thinking that is *« convenient, rapid, efficient, testable, measurable, and accountable »* (Berry, 2004, p. 464).

Bloom's taxonomy classifies six levels of thinking: "(a) knowledge, (b) comprehension, and (c) application represent lower-order thinking skills; (d) analysis, (e) synthesis, and (f) evaluation signify higher-order thinking or critical thinking skills" (Bloom, 1984, p. 18). the levels are arranged from simple to complicated In terms of the

development of critical thinking. The steps to critical thinking are higher order abilities in Bloom's taxonomy, which can only be attained through the completion of lower level prerequisites (Brown, 2004). Furthermore, several Bloom's hierarchy categories contained words that confused teachers and students in their efforts to make the most of Bloom's hierarchy (Krathwohl, 2002).

Bloom's taxonomy is an important educational tool. Teachers can use appropriate tactics to promote student thinking and assist *"students grasp different sorts or degrees of objectives"* in their learning by adopting Bloom's taxonomy (Anderson, 1994, p. 134). Teachers, for the most part, are responsible for incorporating tactics that assist pupils to maximize their learning potential.

1.7. Metacognition

Aside from Bloom's taxonomy, the metacognitive approach is important for improving students' critical thinking. However, there are contradictions in the definition of metacognition. Metacognition is often associated with *"metacognitive beliefs, metacognitive awareness, metacognitive experiences, metacognitive knowledge, feeling of knowing, judgment of learning, theory of mind, metamemory, metacognitive skills, executive skills, higher-order skills, metacomponents, comprehension monitoring, learning strategies, heuristic strategies"* (Veenman, Van Hout-Wolters, & Afflerbach, 2006, p. 4). Flavell (1979) defined metacognition as *"knowledge and cognition about cognitive phenomena"* (p. 906). Metacognition, according to Livingston (2003), is *"higher-order thinking that involves active control over the cognitive processes involved in learning"* (p. 2). Teachers, in particular, are responsible for making changes in their classrooms and using tactics that encourage students to improve their learning. Critical thinking can also assist children in the development of other cognitive abilities.

Metacognition is described as *"awareness and management of one's own thought,"* which uses *"inquiry, analysis, inference, and argument"* in its process; all are important elements in critical thinking (Dean & Kuhn, 2003, p. 3).

Flavell (1979) classified metacognition into four categories: *"(a) metacognitive knowledge, [e.g., I am good at delivering content rather than teaching critical thinking], (b) metacognitive experiences [e.g., emotional reactions when incorporating critical thinking in teaching], (c) goals or tasks [e.g., a goal to be a good critical thinker], and (d) actions or strategies [e.g., plans to implement active learning, cooperative learning, and other teaching strategies in class to stimulate students thinking skills]"* (p. 906).

1.8. Critical Thinking Teaching Strategies

Critical thinking is a difficult skill to teach and learn (Khojasteh & Smith, 2010). Teachers must be critical thinkers themselves in order to teach pupils how to think critically (Kincheloe, 2004). However, teachers may believe that their role is limited to providing students with content information, overlooking the necessity of providing opportunities for students to develop and improve their thinking skills (Jensen, 2004). Students may be motivated to optimize their learning and experience in order to improve their critical and reflective abilities[6] by creating good classroom climates that incorporate inquiry and problem-solving procedures (Timpso & Burgoyne, 2002).

Critical thinking has been studied by philosophers, psychologists, and educators. With the emergence of critical thinking in education, Halpern (1998) advocated for four structural components to improve critical thinking teaching and learning : *"a dispositional or attitudinal component, instruction in and practice with critical thinking skills, structured activities designed to facilitate transfer across contexts, and a metacog"* (p. 451).

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[6] the ability to reflect on one's actions so as to engage in a process of continuous learning.

The critical thinking process is sometimes misunderstood as merely a mental exercise. When solving an issue and making a decision solely based on assumptions, beliefs, precognition, and telepathy, mental processes cannot be deemed critical thinking (Halpern, 1998). Critical thinking entails scientific expertise and scientific methodologies in order to find meaningful links between our judgments (Halpern, 1998). In a nutshell, critical thinking is scientific associative thinking rather than a random mental activity.

1.9. Types of Teaching Strategies That May Enhance Critical Thinking

Various educational styles can aid in the development of critical thinking skills. Appropriate critical thinking skills may link school subjects and themes to real-life circumstances that kids see on a regular basis so that they may connect what they learn with what they see (Ten Dam & Volman, 2004). Students should be encouraged to explore, uncover, analyze, and synthesize issues or obstacles through educational methodologies (Krathwohl, 2002). Teachers must grasp both the subject content and the organization and construction of their instructional practice (Grant, 1988) Alternative teaching strategies such as Active learning (Duron et al., 2006), cooperative learning (Cooper, 1995), debate, role-play (Gratton, 2010), problem-based learning (Mimbs, 2005), questioning (Christenbury & Kelly, 1983), and writing (Green & Klug, 1990 ; Gunnick & Bernhardt, 2002) are some of the alternative teaching strategies that can help students develop critical thinking skills.

1.9.1.Active learning :

Active learning is a student-centered approach . *"Active learning can be characterized as anything that involves students in doing things and thinking about what they are doing,"* according to Bonwell and Eison (as stated in Keyser, 2000). (p. 36). Teachers offer activities that allow students to be responsible for their own actions and ideas during the learning process when utilizing this technique (Niemi, 2002). Students may not understand what they

learn until they have firsthand experience with it, and active learning provides these possibilities (Duron et al., 2006). Neimi (2002), on the other hand, thinks that the aims of active learning can be easily attained when students direct their own learning process. Furthermore, students must be self-disciplined in order to complete their learning objectives within the time frames set by their lecturers (Dewing, 2010). As a result, teachers must be able to identify and guide ways that will assist students in gaining information and skills. If students understand how to use active learning effectively, they will be more self-directed in acquiring knowledge and skills and will be able to learn independently (Gunn, Richburg, & Smilkstein, 2007).

1.9.2.Cooperative learning

Cooperative learning is a method of teaching that allows a small group of students to share their thoughts, ideas, abilities, and experiences in order to better their learning. Rather than taking notes and memorizing ideas and facts, it encourages students to be active participants in investigating what they are learning by asking questions and offering comments (HyslopMargison & Armstrong, 2004). Because it is a student-centered method, there is a case to be made that cooperative learning is a sort of active learning. Cooperative learning, according to Keyser (2000), can promote active involvement, but *"active learning is not cooperative"* (p. 30) Because not every student delivers the same replies and commitment to the work given by their teacher, Hijzen, Boekaerts, and Vedder (2007) agreed that cooperative learning *"does not inherently generate a conducive learning environment"* (p. 674). Teachers should praise individual accomplishments in the assignment rather than the entire cooperative learning group, according to Slavin (1996), because teachers must assess students' learning and personal development individually.

1.9.3. Debate

Debate is often seen as a good way to improve students' critical thinking skills because it incorporates arguments and investigation (Greenstreet, 1993). Students actively absorb knowledge, evaluate their work, value the perspectives of others, and share their views and ideas to their classmates utilizing credible sources during debate (Kennedy, 2007). Debate, on the other hand, aids in the development of pupils' oral communication skills (Bellon, 2000). Students must also improve their research skills in order to gather evidence to support their views in both oral and written presentations (Green & Klug, 1990). Concerns about unequal involvement and participants' challenges to overcome their anxiousness during the process, which leads to poor delivery, are two potentially negative aspects to debate (Dundes, 2001). For these reasons, cross-curricular discussion should be employed more frequently because it has positive effects on students' self-confidence and ability to think critically (Bellon, 2000).

1.9.4 Role-play

Role-play develops critical thinking because *"students work together to resolve a potentially real situation"* (Ertmer et al., 2010, p. 73). Students who participate in role-playing exercises are more likely to accept the opinions of others (Kienzler & Smith, 2003). Students might choose a role or have one given to them (Devet, 2000). Students must adjust their thoughts and contextual viewpoints to contemplate those of another, which they rarely experience, by playing a different role than themselves (Ertmer et al., 2010). When students use role-playing to verbalize their ideas, they will be able to understand their learning potential (Kienzler & Smith, 2003). This scenario-based simulation activity can boost group engagement and acceptance of others' ideas and perspectives when it comes to solving difficulties (Ertmer et al., 2010). With questioning and debriefing sessions, role-play

encourages students to actively participate (Devet, 2000). As a result, role-playing can widen pupils' knowledge while also improving their attitudes and abilities (Kienzler & Smith, 2003).

1.9.5 PBL (problem-based learning)

PBL (problem-based learning) is a student-centered method that has gained traction in the medical industry (Savery, 2006). PBL is a teaching method that *« is well suited to assisting students in becoming active learners because it situates learning in real-world challenges and empowers students to take charge of their own learning »* (Hmelo-Silver, 2004, p. 236). Student-centered learning encourages pupils to think critically, and teachers can help them overcome these obstacles (Azer, 2009). According to Barrows (1996), PBL can help students enhance their critical thinking and problem-solving skills by posing a problem for them to solve in small groups with the help of a teacher. According to Hung (2009), PBL begins when an issue is recognized, and students learn to be good investigators as a result of PBL's essential processes for problem resolution.

Thus, hands-on learning activities are an important component in PBL (Beacham & Shambaugh, 2007). Conversely, PBL can only be a success if students already know how to *"apply appropriate metacognitive and reasoning strategies"* in their learning (Hmelo-Silver, 2004, p. 240). Successful implementation of PBL is possible in different contexts and curricula because PBL is a stand-alone process (Beacham & Shambaugh, 2007).

1.9.6.Questioning

Teachers should begin by asking students questions to make questioning a part of the teaching and learning process' culture (Myrick & Yonge, 2002). Socratic questioning is an example of a critical thinking method that encourages people to speak up about their concerns (Innabi & El Sheikh, 2007). Questioning tactics help students to participate actively in

classroom activities and to learn more deeply (Weast, 1996). When faced with uncertainty, individuals ask questions. People's ability to evaluate their own learning may be indicated by the number of questions they ask (Myrick & Yonge, 2002). However, because people are afraid of being viewed as disrespectful if they ask questions, it is difficult to persuade them to do so (Ikuenobe, 2001). Students can fill in the gaps in their understanding by asking questions. When students get new information or seek clarification, they can ask questions, which allows them to gather in-depth and rich information (Ikuenobe, 2001). (Myrick & Yonge, 2002). This technique satisfies the criteria for what critical thinking should entail in the real world. Critical thinking incorporates inquiry processes, and critical thinking teaching styles emphasize questioning (Christenbury & Kelly, 1983).

1.9.7 Writing

Students' capacity to think critically is enhanced when they have strong critical thinking and writing skills (Green & Klug, 1990). Students who are critically literate and can articulate their opinions in writing have an edge in terms of increasing their thinking abilities (Hillocks, 2010). Critical thinking is meant to evolve empirical arguments and logical reasoning through writing. Understanding the components of critical thinking is necessary for demonstrating critical thinking through writing. should provide clear ground rules and a rubric to guide students' critical thinking in writing (Green & Klug, 1990). Writing can be employed in a variety of areas. Writing will also help students enhance their self-control and self-efficacy (Hammann, 2005). As a result, including writing-to-learn (WTL) activities such as journal entries and reading responses, formal assignments (Gunnink & Bernhardt, 2002), persuasive writing (Hillocks, 2010), essay exams, and reports improves learning (Hammann, 2005).

Teachers may be concerned about the time and effort required to evaluate critical thinking in a large number of student writings (Green & Klug, 1990). When students do not believe that writing is necessary for grasping concepts, they may be resistant to using writing abilities (Hammann, 2005). Teachers must keep the themes of writing assignments up to date in order to keep up with developments in vocational fields. Teachers can help children learn to write by giving explicit directions, rubrics, questions, and explanations (Hillocks, 2010) Green and Klug (1990) suggested that students could collaborate on writing in small groups where they share ideas and suggestions and review their peers' work. In conclusion, writing offers many opportunities for students to become critical thinkers.

1.9.8.Conclusion :

Thinking is a natural process that develops in every individual from birth. Individuals need this process to analyze, solve problems and make decisions. In education critical thinking is the most important skill for improved learning , both educational experts and scholars agrees that critical thinking must be taught ; explicitly or implicitly, in a generic way or content specific however teacher themselves must be critical thinkers. Bloom's taxonomy and metacognition are recommended topics to understand the concept of critical thinking.

Empirical research in the area of metacognition suggests that people begin developing critical thinking competencies at a very young age and continue to improve them (or not) over the course of a lifetime. Many adults exhibit deficient reasoning and fail to think critically. However, in theory, all people from all intellectual ability levels and from the very young to the very old can be taught to think critically. Empirical evidence suggests that children are, in fact, much more capable of critical thought than once predicted.   Teaching strategies such as : active learning, cooperative learning, debates, role-play, problem-based learning, questioning, and writing are recommended as ways to encourage students to become independent learners and problem solvers.

Chapter Two

The Methodology And Data Analysis

2.1.Introduction:

After having presented theoretical part in which we depicted the different concepts of educators, researchers and philosophers on critical thinking, and after seeing what current research has to say about the teachability of critical thinking to young learners throughout a critical thinking based teaching strategies , this chapter aims to investigate to which extent English teachers in secondary school implement critical thinking in the classroom, then moving to a description of the data collection tools and the research methodology used to investigate and analyze to which extent learners' critical thinking is tackled before the high education phase, further analysis to the collected data to be interpreted later on.

2.2.The purpose of the study:

The study focuses on the status of critical thinking within English learners before the university phase in Algeria, the objective is to see whether secondary school English teachers consider promoting their learners ct skills in the classroom, the results obtained from the analysis of the collected data will determine to what extent these teachers tackle their learner's CT skills; on one hand. On the other hand it will give an overview of how these teachers perceive critical thinking and whether they're critical thinkers.

2.3.Methodology:

We are going to show if secondary school English teachers in Algeria try to promote their learners' ct skills, to reach our objective the choice of the method must depend widely on the topic, its aims and the samples which are under our investigation. Presenting both the population and the gathering data tools. Qualitative and quantitative data were analyzed.

2.4.The population:

       The population of this study is from the internet. We gathered twenty teachers of the English language in secondary school, They were asked some questions to know how they foster students' critical thinking skills in educational practice. And what teaching strategies they use.

2.5.Questionnaire :

       One questionnaire was administered to the teachers to reach our objectives. The questionnaire is divided into two sections; the first is concerned with their background information in which they have to determine their degree, and their teaching experience, whereas the second section is devoted to detailed information using open-ended, close-ended and multiple choice questions.
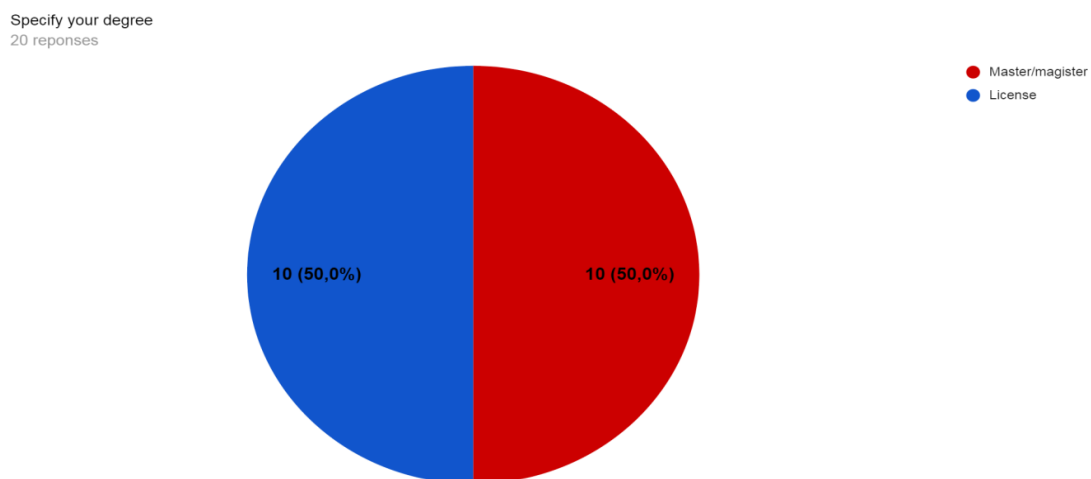
2.6. Analysis of the questionnaire:

2.6.1.Section one: personal information:

       This section consists of three items which are planned to get background information.

Question 01: Specifying the degree:

       The first question helps identifying degree of the selected teachers :
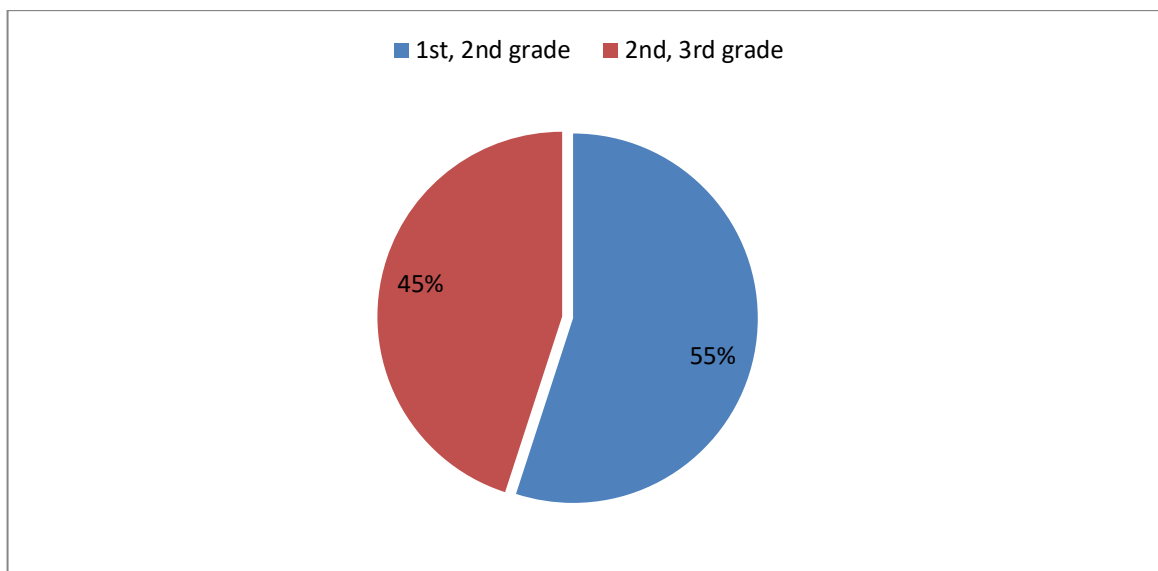

2.1.Figure : Teachers' degree.

Teachers who participated. from the graph above we can remark that 50% of the sample are master degree holders, the other 50% are license/DENS degree holders.

Question 02: What grades do you teach?

The second question helps identify the teaching grades of the teachers.


2.2.Figure : The teaching grades.

11 of the teachers who participated in this study were first and second grade teachers and that is 55% of the sample, 9 of the teachers were second and third grade teachers and that is 45% of the sample.

Question 03: How many years have you been teaching?

The second question is concerned with the period they have been teaching English. Knowing the experience of our sample is an important factor.

Work experience

- 1-3 years
- 4-8 years

3 (15,0%)

17 (85,0%)
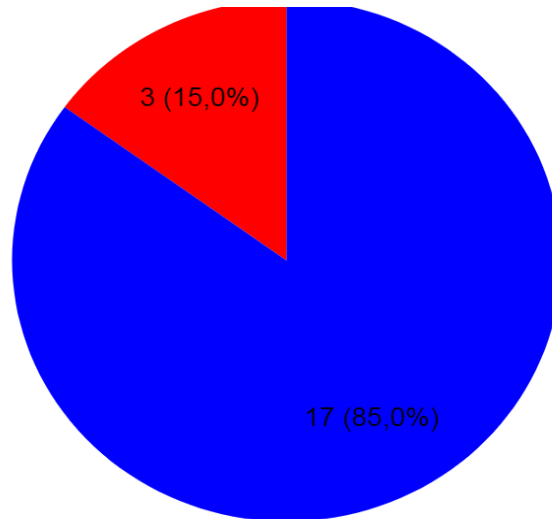
2.3.Figure : Teachers' experience.

17 of the teachers who participated in this study have work experience that ranges only between 1 and 3 years. That's 85% of the whole sample, only 3 teachers have a working experience that ranges between 4 till 8 years.
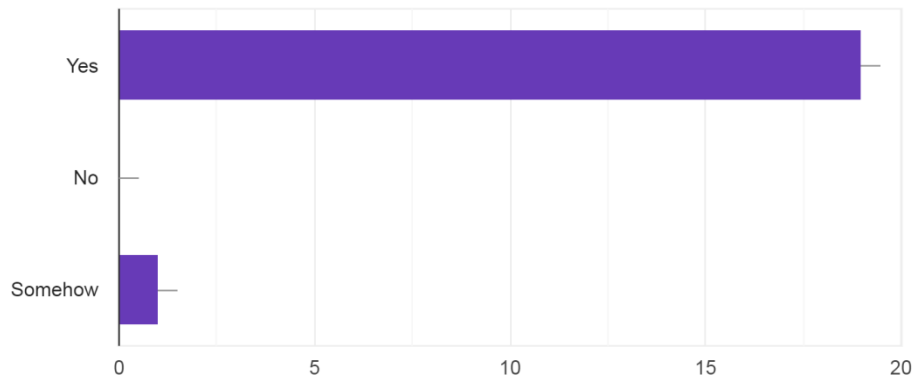
2.6.2.Section 2: Detailed information.

This section is a set of 10 questions:

Question 01: Are you familiar with the term critical thinking?

The question aims to see if all the participants are familiar with critical thinking.

Are you familiar with the term critical thinking?
20 réponses

2.4.Figure: Teachers familiarity with critical thinking

The result shows that all the participants are familiar with the term critical thinking; only one teacher reported that he is somehow familiar with the term.

Question 02: in your own words what is meant by critical thinking?

The following open-ended question aims to find a definition for the term critical thinking according to each teacher.

In this given open-ended question, we asked teachers to give a definition in their own words for the term critical thinking. They give some definitions among them:

- It can be defined as the process of observing, analyzing the given information.
- the objective analysis and evaluation of an issue in order to form a judgment.
- Teacher gives his pupils the chance to build critical ideas in the teaching-learning process
- Critical thinking is the ability to establish a judgment on a certain thing to eventually come up with a thorough analysis to its credibility, efficiency, and validity.

Question 03: Do you think critical thinking can be taught?

This question aims to see whether teachers think that critical thinking can be taught as an educational field.

Do you think critical thinking can be taught?
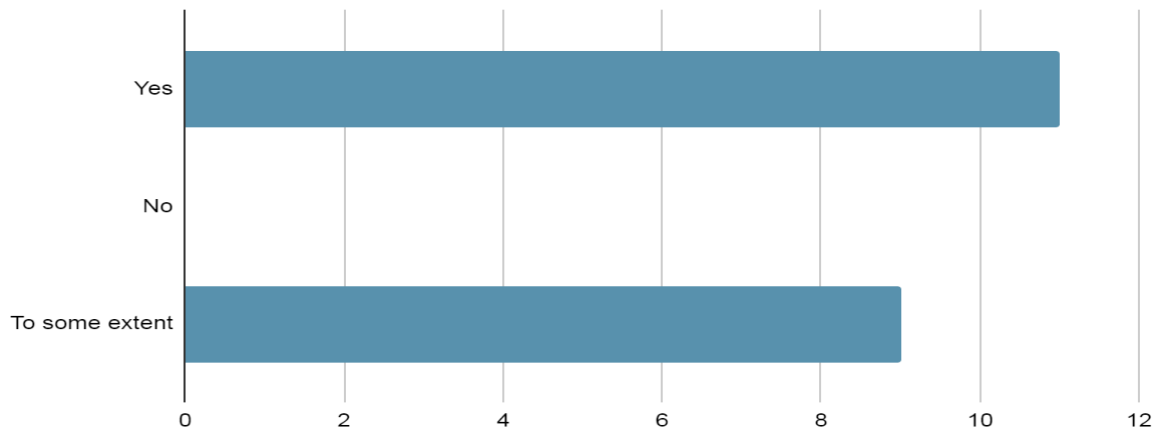
2.5.Figure: The teachability of critical thinking.

As it is shown from the bar chart 55 % of the teachers reported that critical thinking can be taught, 45 % stated that it can only be taught to some extent.

Question 04: Do you consider developing your learner's Critical Thinking as one of your objectives in the classroom?

In this question, it was aimed to investigate whether teacher consider critical think one of the major objectives in their classroom teaching.

Do you consider developing your learner's Critical Thinking as one of your objectives in the classroom?
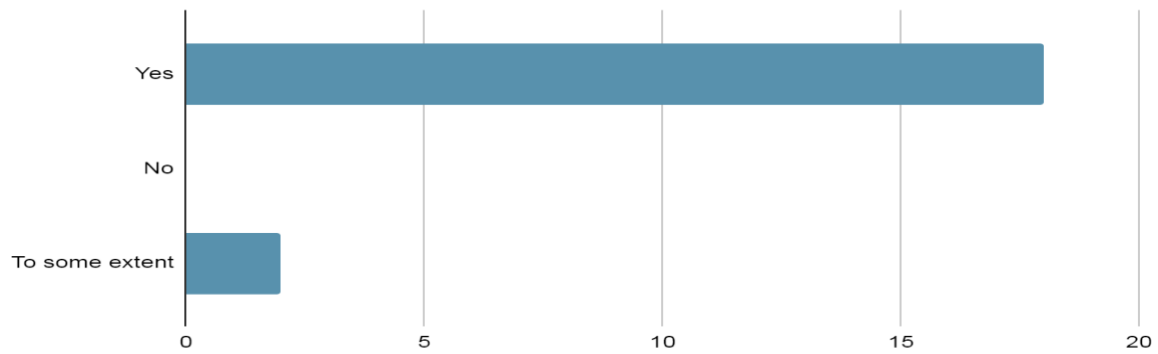
2.6.Figure: Critical thinking as a teaching objective in the lesson

90 % of teachers said that they consider developing critical thinking as one of their objectives whereas the other 10% said that they only consider it to some extent.

Question 05: Do you consider critical thinking as a skill ?

This question aims to discover the teacher's point of view about considering critical thinking as a skill.

Do you consider critical thinking as a skill ?
20 réponses
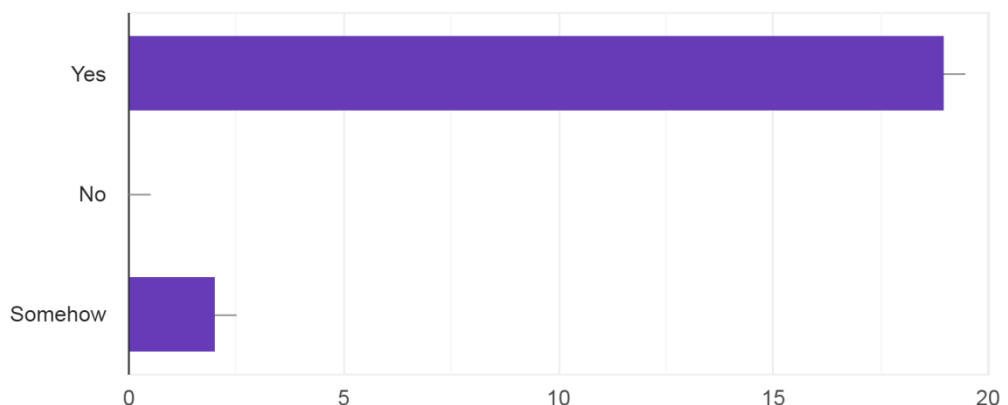
**2.7.Figure: Critical thinking as a skill.**

90% of the whole sample agree that critical thinking is a skill only 10 %said they only somehow consider critical thinking as skill

Question 06: To which extent critical thinking is implemented in your classroom?

The fifth item is set to discover to which extent teachers implement critical thinking in their classroom.

To wich extent critical thinking is implemented in your classroom?
20 réponses

- Yes, regularly
- Yes, Sometimes
- No, never

15%

65%

20%
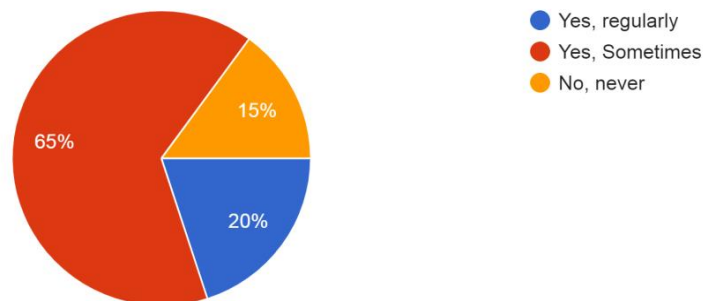
2.8Figure: Implementing critical thinking in the classroom.

As it is shown from the graph only 20% of the teachers admitted that they regularly implement critical thinking in their class, 65% stated that they only sometimes try to use it while 15% said they never had.

Question07: Which of the following teaching strategies have you used before in your teaching?

This question aims to see what are some teaching strategies these teacher use in the goal of promoting learners' CT skills

Wich of the following teaching strategies have you used before in your teaching?
20 réponses
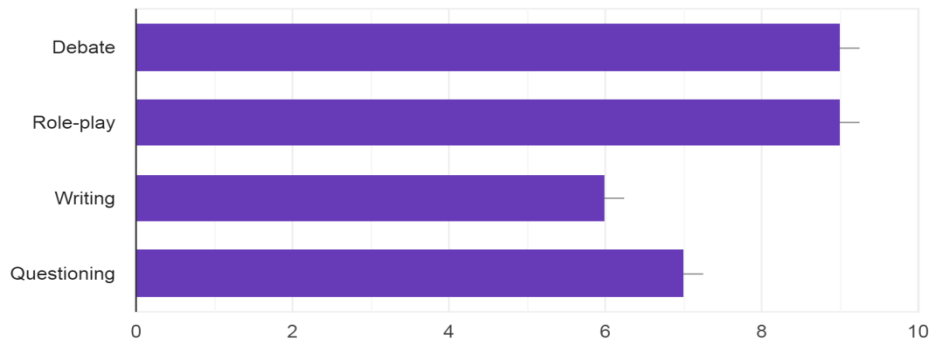
2.9.Figure: Teaching strategies used to enhance critical thinking.

The results show that 45% of the sample use debate and role play as teaching strategies to promote critical thinking in class, 30 % use writing and 35% use questioning.

Question 08: Do you encourage your learner's creativity in the classroom?

The seventh item aims to know if teachers encourage their learners creativity in the classroom.

Do you encourage you learner's creativity in the classroom?
20 réponses
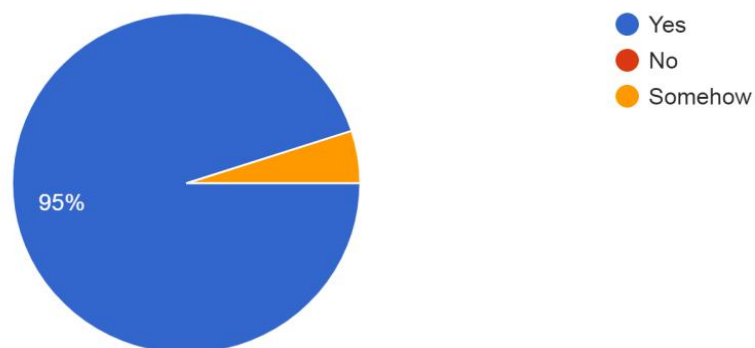
2.10.Figure : Encourage learners' creativity.

The results reveal that 95 % of the teachers agree that they do encourage the learners creativity in the classroom, one teacher reported that he only somehow try to do so.

Question 09: Why do students need critical thinking?

This question aims to know the opinion of teachers on why their learners need critical thinking skills.

We asked teachers to give reason on why do their learners need critical thinking skills they give some of the following reasons:

- Critical thinking is a crucial skill for students to develop. At the end of their education, students will get the chance to become researchers themselves. They will be conducting studies on different matters and for that the need to critically think about the information they come across.
- They need it to develop their different skills including writing, reading, speaking and sometimes listening. By critical thinking pupils will be able to think deeply and positively.
- they need critical thinking in order to solve any problem at hand

Question 10: When do learners need critical thinking?

This question aims at finding when do learners need critical thinking skills.

When do students need critical thinking?
20 réponses
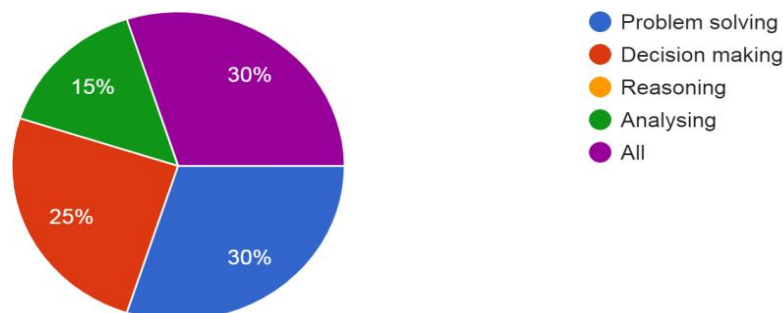
2.11.Figure: Areas where critical thinking is needed.

The graph above indicates that only 30% of the sample agree that learners need critical thinking in each set of skills, 30% assure on problem solving, whereas 25% on decision making and 15% on analyzing.

2.7.Conclusion:

In this chapter we have presented the research methodology that has been adopted in order to collect sufficient, reliable and credible data that allow us to achieve our research objectives concerning to which extent secondary school English teachers in Algeria tackle their learners' critical thinking skills in the classroom.

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Chapter three

Findings, Suggestions and

Recommendations

3.1. Introduction:

Chapter two presented the methodology followed in the research, in which the researcher provided a description of the research tools and data analysis of the research. This chapter displays the findings obtained in the study and discusses their significance. The overall objective of the study indicated in this research is to investigate whether secondary school English teachers in Algeria consider enhancing their learners' ct skills when teaching. The chapter is divided into two sections, with the first exploring teachers' questionnaires. Their answers were examined in order to determine how they perceive critical thinking and whether they try to improve their learner's ct skills. The second section is discussing the overall findings related to the research, exploring more suggestions and reconnections.

3.2. Discussion of the findings :

The questionnaire addressed to the teachers was adopted to see how they approach critical thinking and to what extent they try to enhance their learner's CT skills.

3.2.1. Results of the questionnaire :

The questionnaire was mainly addressed to secondary school English teachers in Algeria. The Total number of questioned teachers were twenty, each from a different secondary school. Eleven are first and second grade teachers, nine are second and third grade teachers.

Only a minority of the respondents reported that their experience as teachers surpasses four years, however seeing how the teachers with less than three years of teaching experience are approaching critical thinking in the classroom is going to give a great value to the study.

All the respondents reported that they are familiar with critical thinking The term is not new to them as they have all been encountered with it at some point in their career

When asked about providing a definition to critical thinking the majority of teachers said that critical thinking is rather analyzing reasoning and giving judgments about certain cases. Most teachers with three years plus teaching experience were able to give proper definitions to critical that are true in different levels. However, some of the teachers with less than two years of teaching experience have either failed to define critical thinking or have shown a superficial understanding towards it.

The majority of teachers agreed that critical thinking can be taught or can on only be taught to some extent in the educational fields also the majority of teachers considered critical thinking as a skill and that is one of their objectives to develop it in the classroom however when asked to what extent critical thinking is implemented in classroom only four teachers stated that they regularly implement CT in their classroom the majority said they only do it sometimes and only three teachers said that they have done tried

Debate role play, questioning and writing are great teaching strategies to enhance the learners critical thinking. The majority of teachers chose debate and role play as one of the strategies that they adopted before in the classroom. The teacher's choice might be based on which of the given strategies made more resemblance to a critical thinking based teaching strategy. it's important to note that debate and role play are very time consuming which explains why most of the teachers said they only sometimes try to implement ct in their classroom however teaching strategies like writing and questioning are even more effective to enhance ct skill and are less time consuming.

All the teachers reported that they encourage their learners creativity in the classroom there is a great connection between creativity and critical thinking they are in fact two faces to the same coin and they both ought to be integrated during instruction

After deep clarification to the teacher responses on why do students need critical thinking, positive results showed that at a general level these teachers have a great vision on why their learners need critical thinking. as to analyse and solve problems shift from the traditional learning strategies and to be able to conduct studies in the future

Problem solving, decision making, reasoning, and analysing are all situations that requires a good ct skills by the learners, only six of the respondents have agreed to this therefore at a specific level there is still much to be resolved when it comes to the teachers understanding of critical thinking

3.3. The Overall Achievement of the Research Aims:

The study has successfully answered the research questions and tested and tested the hypothesis stated in the general introduction. In examining whether secondary school English teachers in Algeria give credit to their learner's ct skills we found that these teacher do consider critical thinking as a skill that needs to be developed and it is one of their objectives in teaching however there is not much of an application to what is said on the real world for following reasons time training and experience.

As for the teaching strategies that the teachers use in the goal of enhancing their learners' ct skill concerning the second hypothesis which predicts teachers lack the training and time to conduct ct based teaching strategies, it's been revealed that most of the teachers might go with methods like debate or role play that tend to consume a lot of time and efforts unaware that other methods like writing or questioning are also quite effective when used to encourage creative thinking, they can also be used on daily basis as they are more appropriate for a classroom environment.

As for how teachers perceive critical thinking and are they critical thinkers, we found that the majority of teacher's Knowledge of critical thinking is rather superficial than that

metacognitive awareness that can allow them to make changes in their teaching and incorporate strategies that motivate students to enhance their learning.

3.4. Limitations:

The scope of the study is limited to the data collected from secondary school English teachers on the internet. The questionnaire was given during the end of the school year when we could not meet the teachers in person. Therefore generalization is not recommended, moreover most of the teachers who participated in this study lack the teaching experience that may influence the study results.

3.5. Recommendations and suggestions:

When teachers are asked to define critical thinking. answers are often weak and ambiguous a very common answers may include : teaching them to think , teaching them to be creative teaching them how to solve problems teaching them how think for themselves, they already know how to think and independent thinking does not necessarily involve critical thinking teachers needs to dive deeper and read about the different concepts and approaches of critical thinking to help learners enhance their learning

Even the most thoughtfully designed curriculum cannot anticipate the diverse needs of every classroom. It is up to teachers to critically brainstorm solutions and make decisions to fulfill the classroom needs. For instance, if a writing task in an English textbook does not encourage creative thinking, teachers can replace it with one that does.

Foreign language Teachers often are often ignorant of how can critical thinking help in new language acquisition, when learners are able to think clearly and systematically that is going to improve the way they express their ideas in new language, moreover in being able to

analyse the logical structure of texts critical thinking is going to improve their comprehension abilities.

One of the many flaws in the educational system in Algeria is its reliance on standard classrooms for all subjects. For instance, the only difference between an English class and a math class is the teacher. This puts all the pressure on the teacher, the class becomes more teacher centered and the learner's thoughts on a certain subject are mostly based on him . Therefore, both teachers and Learners will lack desire and motivation which are necessary dispositions to produce a notion of critical thinking.

In addition, we don't see any other teaching environments rather than classroom, additional learning environments such as clubs for English, history..ect are going engage learners in real life experiences, where they discuss ideas and interests this will positively reflect on their thinking ,and will be complimentary to teachers' work in the classroom.

It is necessary for educators to grasp what critical thinking is and why it is important in order to successfully teach critical thinking / rational thinking. The following are some questions to consider: What are the goals of critical thinking? How can one put their critical thinking skills to the test? Is there anything in my curriculum about scientific reasoning, logic, heuristic processing, and probabilistic thinking?

Being argumentative and critical of others should not be confused with critical thought. While critical thinking abilities can be useful in revealing fallacies and weak reasoning, they can also be useful in cooperative reasoning and constructive projects. Critical thinking can aid in the acquisition of knowledge, the improvement of theories, and the strengthening of arguments. Critical thinking can be used to improve work processes and societal structures.

Some people argue that critical thinking stifles creativity since it necessitates adhering to logical and rational standards, whereas originality may necessitate disregarding them. This is a misunderstanding. Critical thinking is perfectly consistent with "out-of-the-box" thinking, challenging consensus, and exploring unconventional solutions. Critical thinking, on the other hand, is a necessary component of creativity since it allows us to assess and enhance our creative ideas.

Learners should be encouraged to develop various abilities that they will require in their daily lives. Providing them with the ability to acquire relevant data in order to help them manage the data they collect. Putting learners in circumstances where they may recognize and consider various options, analyze those options, and develop tactics for making decisions and reviewing how they function is a crucial aspect. Teachers can also help their learners develop their capacity to recognize a problem and come up with creative solutions to it.

In order to improve their communication abilities, learners require opportunities to broaden their ideas. Due to the unrestricted control of the learners in the classroom, students have very little space to think, ask questions, or contribute to classroom discourse. There is no opportunity for learners to initiate discussion or critique, or to take any kind of active role in the class.

A discussion should be established between secondary and university education regarding each other's roles and obligations in strengthening the transition. The importance of both secondary and university education in the transition to university is frequently emphasized in transition support models. Briggs, Clark, and Hall (2012) recommended that, on the one hand, secondary school instructors should aim to prepare students for university learning modes, while on the other hand, university teachers should consider the curriculum material and learning modes of secondary education. This emphasizes the relevance of

educational and curricular components are essential in the transition process (Pinto, Lopes, and Mouraz 2019)

3.6. Suggestions for future studies:

As this study concentrated on small group of teachers in a short period of time it could not provide a good insight of how often secondary school teachers implement critical thinking in the classroom further research could address this by conducting a longitudinal study, in order to help us see to what extent teachers adapt teaching strategies in the goal of promoting their learners ct skills.

The data collected on this research is taken from the teachers only, it might be that teachers are ignorant of stimulating their learners critical thinking skills or that what these teachers do in the classroom does not actually match what they say they do, future research could try obtain better perspective of teachers practices by including students perceptions and classroom observation.

Beliefs play an important role when it comes to critically differentiating between arguments and claims, justified knowledge and facts. the culturally and socially reinforced beliefs have got various impacts on learning, beliefs tend to form from emotional, personal and psychological reasons created by friends, family, culture, society, and the internet. After beliefs form we later tend to defend and justify them with rational reasons and arguments , a further research which explores the common social and cultural beliefs in Algeria that stops learners from developing a notion of critical thinking.

3.7. Conclusion:

This chapter was entirely devoted to the findings, results and further suggestions. the analysis of the results revealed that English teachers in secondary school do not tackle much their learners CT skill when they are teaching the language, their lack of awareness of the critical thinking concepts and lack of training to apply the different teaching strategies in a way that they can achieve both language acquisition and enhances the learners' CT skills. Raising the awareness of teachers about the importance of critical thinking skills is a big contribution to the success of the teaching process, moreover supplying the learners with more than just a textbook will expose them to modern learning styles rather than rote learning.

General conclusion:

The current study is an attempt to investigate whether secondary school English teachers in Algeria try to promote their learner's CT skills. It became clear that students at university often Fail to fulfill the role of critical thinkers, even when the instruction of critical thinking has become explicit in many universities, it's seems like these students' logical reasoning has not been put into practice and has been neglected since before they reached out for university and as result they find it now difficult to apply fundamental principles in their academic work. Educational system in Algeria has also failed to keep up with the revolutionary advancement that is happening in the field of education as it still follows the same traditional teaching approaches that does not match the modern learners' needs.

The study started with a review of the literature that provided different definitions of searches and educators on critical thinking. In fact critical thinking has become a necessary outcome of any teaching process, since a lot of students nowadays fail to think critically in many situations and lack basic reasoning skills. Moreover there is plenty of empirical evidence that supports the notion that young children are capable of thinking critically, but teachers often neglect promoting their learner's CT skills throughout all the subject domains.

After an analysis of the data collected via the questionnaire, and with reference to the hypothesis and research questions given earlier. The results from the qualitative and quantitative collected data reveal that even though secondary school English teachers consider critical thinking as a skill that needs to be developed in the lesson, there isn't much application to what is said in the real world .

To sum up, the result of the study shows there are several factors that stops secondary school English teachers from promoting their learners' CT skill.

On one hand they lack the working experience and the good training to implicitly promote their learners' CT skill throughout the different teaching strategies. On the other hand there is no sign of an appropriate teaching environment that may put them, and the learners in dispositions where they can develop a notion of good thinking.

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Background information

This questionnaire aims to investigate to what extent do middle and secondary school

teachers consider their learner's critical thinking skills, You are kindly requested toanswer the given questions in a matter of honesty. Thank you in advance.

1. Specify your degree

   ⬭ License

   ⬭ Master/magister

2. What grade do you teach :

   ⬭ First grade

   ⬭ Second grade

   ⬭ Third grade

3. How many years have you been teaching

   _____

Detailed information :

4. Are you familiar with the term critical thinking?

   ☐ yes
   ☐ no

   ☐ Somehow

5. In your words what is meant by critical thinking?

_____

_____

_____

_____

6. Do you think critical thinking can be taught?

☐ yes
☐ No

☐ To some extent

7. Do you consider developing your learner's Critical Thinking as one of your objectives in the classroom?

☐ yes
☐ No

☐ To some extent

8. Do you consider critical thinking as a skill ?

☐ yes
☐ No

☐ Somehow

9. To wich extent critical thinking is implemented in your classroom?

   ( )   Yes, regularly

   ( )   Yes, Sometimes

   ( )   No, never

10. Wich of the following teaching strategies have you used before in yourteaching?

   [ ]   Debate

   [ ]   Role-play

   [ ]   Writing

       Questioning

Autre : _____

11. Do you encourage you learner's creativity in the classroom?

   ( )   yes

   ( )   No

   ( )   Somehow

12. Why do students need critical thinking?

_____

_____

_____

_____

_____

13.   When do students need critical thinking?

( ) Problem solving

( ) Decision making

( ) Reasoning Analysing

( ) All

Google   Form