The importance of incorporating Critical Thinking In EFL Teaching Curriculum

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Abstract:
Research studies indicate that 21st Century university graduates lack critical thinking and problem-solving skills that are needed for their academic success and in the modern workforce. The purpose of the current work is to investigate the extent to which EFL teachers in Algeria incorporate critical thinking in their curriculum. In addition to documents analysis, a questionnaire is administered to a group of lecturers. The findings suggest that the majority of them believe in the importance of touching upon critical thinking in their teaching process. They consider evaluating information, analysing, logical reasoning; arguing, reflecting, and problem solving are among the main strategies that can be fostered to develop critical thinking skills in their classes. However, the results indicate also that there is a gap in developing these strategies because of many problems and handicaps that the teachers face.

Key words: EFL, **c**ritical thinking, critical thinking skills, teachers' strategies, 21st Century.

1 .Introduction:

Today we educate a generation to the 21st Century, which requires individuals equipped with some thinking skills necessary to catch up with increasingly developing technology in the global workforce. Therefore, thinking must be at the core of the educational curriculum. The content is understood by thinking, constructed by thinking, modified by thinking, applied by thinking and assessed by thinking. Thus, thinking needs to be directed and improved because if it is left to itself, as explained by Saadat, Tarmizi and Bayat (2010), it will be 'biased, unclear, partial, uneducated or absolute narrow-minded' (543). Critical thinking provides the tools students need to think through the content. Specialists in modern

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education suggest critical thinking as the type of thinking that is necessary for a successful learning process.

By applying a sequence of critical thinking skill, students develop an increasingly sophisticated understanding of the processes they can use whenever they encounter problems, unfamiliar information and new ideas. Moreover, the progressive development of knowledge about critical thinking and the practice of using thinking strategies can increase students' motivation for, and the management of their own learning. They become more confident and autonomous problem-solvers and thinkers.

The educational system, being an act of change towards helping individuals to learn effectively rather than filling their brains with pieces of knowledge, recognizes that critical thinking is fundamental to students becoming successful learners. Henceforth, the present work seeks to answer the following questions: What is critical thinking? Why is it important in the field of education, in particular for Business English learners? What are the teachers' perspectives for integrating critical thinking skill in the curriculum? And what are the practices, methods and activities they can use to improve this skill?

2. Literature Review

2.1 Definition:

To understand the essentiality of critical thinking skill in education, it is appropriate to define the concept of critical thinking. Scholars have provided many definitions. Starting with John Dewey (1916) who discussed the concept of critical thinking skills in education. Dewey perceived critical thinking as a process that begins with a problem and ends with a solution and self-interpretation (Kuhn, 1999). He also defines this process in 1930 as 'the kind of thinking that consists in turning a subject over in mind and giving it serious consecutive consideration' (Stapleton 2011:15). Dewey perceived CT as a process that begins with a problem and ends with a solution and self-interpretation. Bean (2011) elaborates on this point by stating that such a problem should 'evoke students' natural curiosity and stimulate both learning and critical thought' (Bean, 2011, p.3).

Critical thinking in the present study is similar to the one defined by Richard Paul in 1987. He pointed out that it 'is the intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication, as a rubric to belief and action' (Paul, 1987: 1). Paul and Elder (2006) expand on this point of view by defining critical thinking as 'the art of analysing and evaluating thinking with a view to improve it' (Paul and Elder 2006: 4). These definitions indicate that critical thinking is the ability to apply cognitive skills, such as analysing, applying, and evaluating when thinking.

In the same context, Moore and Parker (2007) claimed that critical thinking is 'the ability to use acquired knowledge in flexible and meaningful ways, through understanding the problem or issue, evaluating evidence, considering multiple perspectives, and taking a position' (Jacob 2012: 805). For more explanation, Lipman (1988) clarifies the distinction between ordinary thinking and critical thinking. Ordinary thinking is simple, straightforward and without standards. By contrast, critical thinking is more complex and is based on standards of ob4jectivity, utility, or consistency. He supports the view that critical thinking does not include only the mental processes that people employ to solve problems or to make

decisions, but it involves "skilful, responsible thinking that facilitates good judgment because it relies upon criteria, is self-correcting, and is sensitive to context" (Lipman 1988: 39).

Critical thinking has also been referred by Paul (1990) to as a metacognition 'the art of thinking about your thinking' (Stapleton 2011:15). Similarly, Elder and Paul (1994) claimed that critical thinking 'refers to the ability of individuals to take charge of their own thinking and develop appropriate criteria and standards for analysing their own thinking' (Shirkhani and Fahim 2011: 111). It is worth to mention that the individuals who have the ability to think in a critical manner tend to be:

a) be open-minded,
b) take a position (or change a position) when they are convinced by evidence
c) take into account the entire situation, adopting a holistic approach
d) seek precision and objectivity in information, making use of credible and reliable sources of information
e) deal in an orderly manner with the elements of a complex whole
f) search for options and alternative solutions
g) look for reasons
h) seek a clear statement of the issue
i) keep the original problem in mind
j) remain relevant to the point, and be sensitive to the feelings and knowledge level of others

2.2 The importance of critical thinking in education:

Critical thinking is deeper than memorization and recall of information. When students think critically, they think deeply; they not only know the facts, but they take the additional step of going beyond the facts to do something with them. Cuseo (1996) asserted that critical thinking involves reflecting on the information received, moving away from surface memorization and toward deeper levels of learning. In other words, it implies a shift away from viewing learning as the reception of information from teacher or text to viewing learning as an elaboration and transformation of received information into a different form by the learner.

The development of critical thinking skills are accepted today as the major purpose of education. Friedman (2006) argues that many students have not been taught the thinking skills necessary to acquire jobs and enter into vocations that require 21st century types of reasoning and problem-solving skills such as recognition of patterns and visual perception. Responsive to the needs of Algeria, as a part of a global community, policy-makers and educators have to think seriously about the future challenges, and help students to meet the needs they will face in the 21st century. They need to know more than how to read and write, they must learn to analyze, synthesize and evaluate.

Critical thinking skills hence are important because they enable learners: 'to deal effectively with social, scientific, and practical problems (Shakirova 2007:42). Likewise, Ku (2009) pointed out that the educational reform is primarily based on the improvement of critical thinking skills because these skills will equip 'students with the competency necessary to reason about social affairs in a rapidly changing world' (Ku 2009: 70). In other words,

having knowledge is not enough. To be effective in the workplace, students must be able to solve problems to make effective decisions; they must be able to think critically.

The importance of incorporating critical thinking in EFL teaching is also raised by Shirkhani and Fahim (2011) ' Critical thinking has been recently introduced and gained a high position in …ELT settings so that nowdays enhancing critical thinking in learners is considered one of the foreign language teachers' tasks' (Shirkhani and Fahim 2011 : 111). These researchers give the reasons for this necessity:

-'Firstly ; if language learners can take charge of their own thinking, they can monitor and evaluate their own ways of learning more successfully

- Second, critical thinking expands the learning experience of the learners and makes the language more meaningful for them.

-Thirdly, critical thinking has a high degree of correlation with the learners' achievements' (Shirkhani and Fahim 2011 : 112).

Thus the integration of critical thinking in higher education is crucial in the sense it gives EFL learners the possibility to think, to use reasoning to construct and evaluate arguments, and to continue their learning outside the classroom.

2.3 Teaching critical thinking:

The kind of critical thinking the teachers need to develop at university level is the thinking that seeks to explore questions about the existing knowledge for issues which are not clearly defined and for which they are no clear-cut answers. Gelder (2005) asserted that promoting students' critical thinking begins by teaching them the basic elements. Students must understand the theory of this aspect, the related vocabulary, and specific skills.

2.3.1 The critical thinking skills:

Critical thinking is a broad set of skills and characteristics that sustain and define lifelong learning. The literature provides several taxonomies of critical thinking skills. This work deals with only two examples. The first is Dick's taxonomy (1991). Dick indicated that critical thinking consists of identifying and analysing arguments, of considering external influences on arguing, of scientific analytic reasoning, and of logical reasoning. Dick (1991) suggested the following taxonomy:

1- Identify arguments: This includes themes, conclusion, reasons, and organization.
2- Analyse arguments: This includes assumptions, vagueness, and omissions.
3- Consider external influences: This includes value, authority, and emotional language.
4- Scientific analytic reasoning: This includes causality and statistical reasoning.

2.3.2 The teaching strategies:

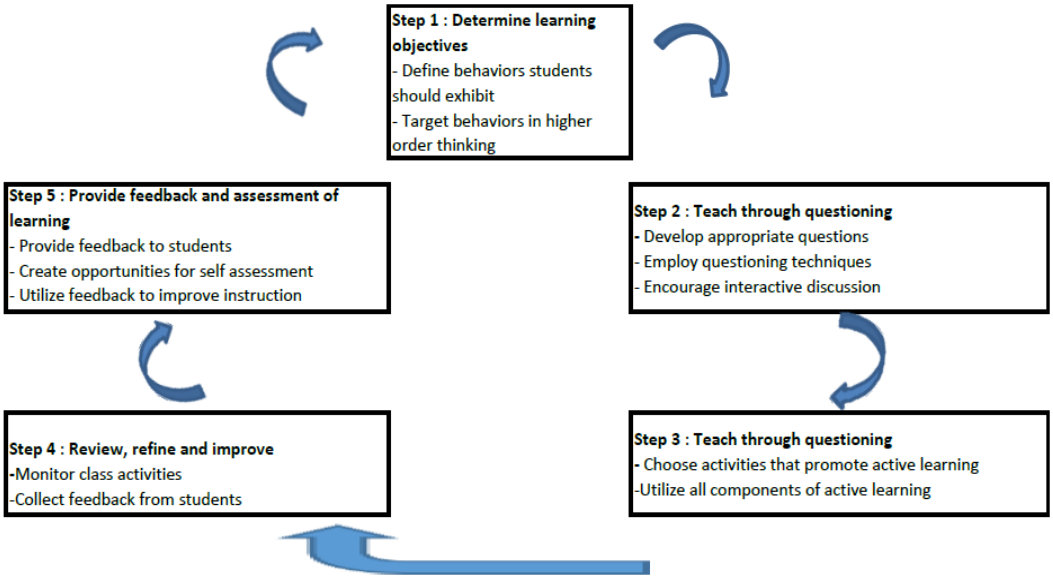
Different studies have discussed the effectiveness of using specific strategies to enhance critical thinking skills, such as class discussions, problem-based learning, collaborative learning, discussion methods, questioning techniques, and evidence-based projects (Kuhn 1999). Critical thinking is a learned skill that requires instruction and practice. The teachers can use strategies that actively engage students in the learning process rather than being passive learners or mere memorizers of information. Many researchers point out that there are many ways to introduce critical thinking into the classroom. The instructors should adopt some guidelines or follow steps or techniques proposed by some authors that help them in the task to move their students toward critical thinking.

Ennis argues that the teachers should be aware of the components of critical thinking that consist of several specific skills, which, as he argues, can be taught to students. These are: a) defining and clarifying, b) asking appropriate questions to clarify or challenge, c) judging the credibility of a source, and d) solving problems and drawing conclusions. In addition, teachers can support the development of critical thinking by asking students many questions, which require students to not only seek or retrieve information, but also to analyze, logically process, apply, and evaluate it. (Ennis, 1985, p. 44-48).

Lawrence et al. (2008) examined teachers and students' views to determine activities from which critical thinking skills best emerged. They found that both teachers and students thought that critiquing journal articles, engaging in debates, writing research papers, evaluating case studies, and discussing questions helped them practise critical thinking skills. This can be implemented by teachers asking students to look at multiple perspectives, while criticizing an article in a journal for example, question those perspectives, observe if they have sufficient evidence/research to back up their claims, and/or assess if the author of the journal is biased (e.g. is the article written in a way that favours only one side).

In order to teach critical thinking, the teachers can also benefit from many research studies, as the 5-step model provided by Duron, Limbach and Waugh (2006). This framework can be implemented in EFL classroom to help students gain critical thinking skills:

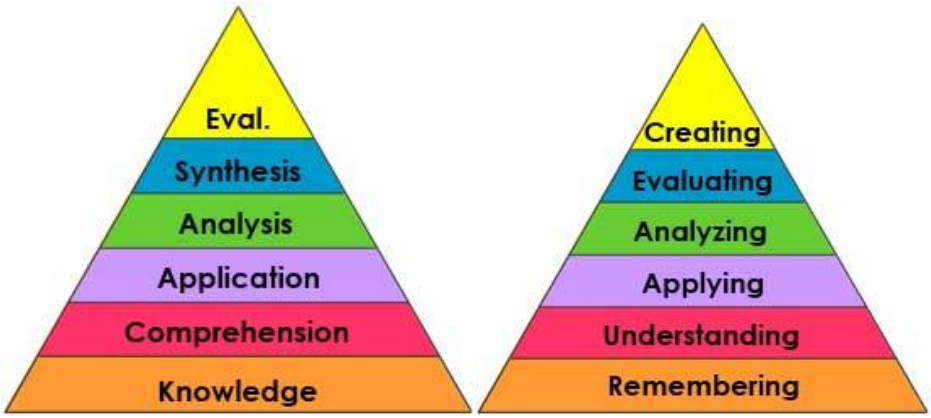
Figure 1: 5-Steps Model to Move Students toward Critical Thinking:



Source: Duron, R., Limbach, B., and Waugh, W., 2006, p.161.

To make critical thinking happen, the learning objectives, as well as the activities and assessments, must include those tied to the higher levels of Bloom's taxonomy.

Figure 2 : Bloom's (1956) Taxonomy Bloom's New Taxonomy



Source: Bloom, B.S. (1956). Taxonomy of Educational Objectives, Handbook 1: The Cognitive Domain, NY: David McKay Co., Inc.

Benjamin Bloom was 'an educational psychologist working in the late 1950s that categorized levels of intellectual behavior vital to learning. The resulting taxonomy or classification system has been modified slightly to meet the newer demands 21st century.

-Bloom's *Remembering* level requires the least amount of critical thinking from a student. Characteristics of questions or assessments at the REMEMBERING level include asking students to: define, list, memorize, recall, restate, and repeat.

-*Understanding* requires slightly more critical thinking from a student. Characteristics of questions or assessments at the UNDERSTANDING level include asking students to: classify, describe, discuss, explain, identify, locate, recognize, report, select, translate, and paraphrase.

-*Applying* requires substantially more critical thinking from a student. Characteristics of questions or assessments at the APPLYING level include asking students to: choose, demonstrate, dramatize, employ, illustrate, interpret, operate, schedule, sketch, solve, use, and write.

-*Analyzing* requires significantly more critical thinking from a student. Characteristics of questions or assessments at the ANALYZING level include asking students to: appraise, compare, contrast, criticize, differentiate, discriminate, distinguish, examine, experiment, question, and test.

-*Evaluating* requires much critical thinking from a student. Characteristics of questions or assessments at the EVALUATING level include asking students to: appraise, argue, defend, judge, select, support, value, evaluate.

-Finally, *Creating* requires the most critical thinking from a student. Characteristics of questions or assessments at the CREATING level include asking students to: assemble, construct, create, design, develop, formulate, write, debate.

The last three levels of Bloom's taxonomy (Analyzing, Evaluating, Creating) are where the most critical thinking (or higher order thinking skills H.O.T.S) is required and enhanced. The first three levels are important, but do not require much, critical thinking. Thus, the teachers should create learning environments and lesson plans that aim to reach these top levels.

As it is cited in Figure 1, one of the main steps to stimulate students' critical thinking is the questioning techniques. Duron, Limbach and Waugh (2006) assert that questions can be used to stimulate interaction between teacher and learner and to think critically. Clasen and Bonk (1990) posited that although there are many strategies that can impact student thinking, it is teacher questions that have the greatest impact. He went on to indicate that the level of student thinking is directly proportional to the level of questions asked.

In their research, Haynes and Bailey (2003) emphasized the importance of asking the right questions to stimulate students' critical thinking skills. Other researchers (Brown & Kelley, 1986; Hemming, 2000) also focused on integrating questioning techniques into class discussions to support an educational environment where students can demonstrate and practice critical thinking skills. Brown and Kelley's book, asking the Right Questions: A Guide to Critical Thinking documented the premise that students' critical thinking is best supported when instructors use critical questioning techniques to engage students actively in the learning process. Sample questions from all these studies include the following:

-What do you think about this?
- Why do you think that?
- What is your knowledge based upon?
- What does it imply and presuppose?
- What explains it, connects to it, leads from it?
- How are you viewing it?
- Should it be viewed differently?

These questions require students to evaluate the clarity and accuracy of their thinking. Students need to determine whether the content they are using is relevant and if their thinking process is logical. Research on questioning methodology also suggests that instructors should wait for student responses because thinking requires time and patience (Brown & Kelley, 1986; Hemming, 2000).

It is undoubtedly certain that EFL teachers benefit a lot from the above-mentioned researchers and others' proposed techniques, principles and steps that guide them to decide how to teach and which strategies they use to foster critical thinking in their classes. Thus, they should create a thinking learning environment that engage students in the thinking they want, and hold them responsible for the thinking they do. The most important thing, the instructors should know in order to achieve their goal is to prepare a course's content that is driven by questions or problems, a content that should be taught with a purpose, a content that be based on sound criteria, a content that should engage students in thought and a content that should raise questions – leading to new content.

4.3 Using technology

The integration of technology in EFL teaching and learning process can undoubtedly enhance critical thinking. A significant number of teachers have investigated the role of online discussions in their teaching. Simkins (1999) suggests that Web-based tools, such as online discussions, can provide a different learning environment with interesting new opportunities for collaborative learning. Chizmar and Walbert (1999) use online discussions to help students clarify their thinking on different topics explained in class, and to identify what they found to

be the most important or least understood idea among those discussed. Vachris (1999) uses online discussions as part of a strictly online principles course to have students comment on a reading assignment.

In addition, Preece and Shneiderman (2009) confirm that technology can increase students' motivation resulting improved works' quality and enhance critical thinking (Hamid et al., 2015). They argue that social technology making students become more active in constructing their own knowledge because they feel free to share their work online. For instance, teachers and students utilize the social networking sites, as Facebook, Instagram, Twitter, and blog. Moran et al. (2011) reported Facebook and Youtube are used by faculty members within and outside the classroom for teaching, for example, to upload notes to students.

It is important to say that many researchers confirm the role of using technology in enhancing critical thinking skills in EFL classroom. For example, it helps teachers in forming the content activities that assist students increase critical thinking skills such as: reflection activities; peer review activities; digital storytelling activities discussion forums; and small group activities (Mansbach, 2015).

This brief discussion indicates that critical thinking and the experience of technology are essential tools to prepare learners for the challenges of the 21st Century. The reality on the availability of ICT technology and their use will be examined in the empirical study.

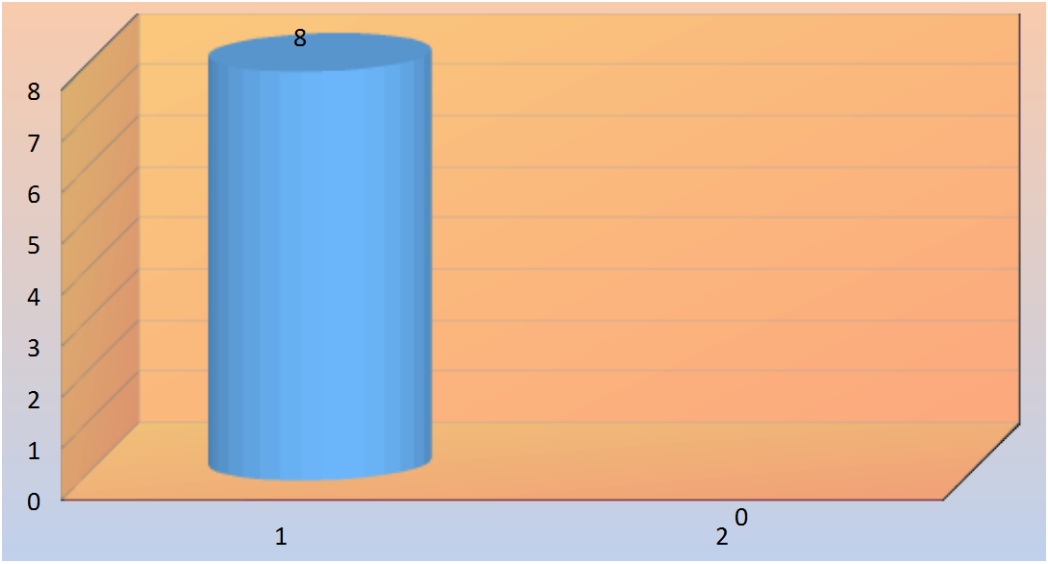
3. Data collection procedure

To investigate the importance of critical thinking for EFL students and how teachers can enhance it in their classes, a questionnaire was administered to 10 teachers at the faculty of Letters, Languages and Arts at Djillali Liabess University. This survey was used in order to enrish the validity of inferences that are to be made (Johnson, Onwuegbuzie, & Turner, 2007). The questionnaire consists of nine questions, which are grouped into three sections. The first one looks at the research sample: their age, gender and their teaching experience. The second section covers the teachers' opinions about the importance of integrating the critical thinking in the teaching process and how they can nurture it among learners. The third section identifies the existing barriers that thwart the successful incorporation of these thinking skills into the teaching strategies.

4. Data analysis and interpretation

The analysis of data showed that all the teachers viewed that thinking critically is important to be cultivated in the tertiary education. They all agreed that teaching critical thinking skills is an essential part of their job as language teachers, and that it

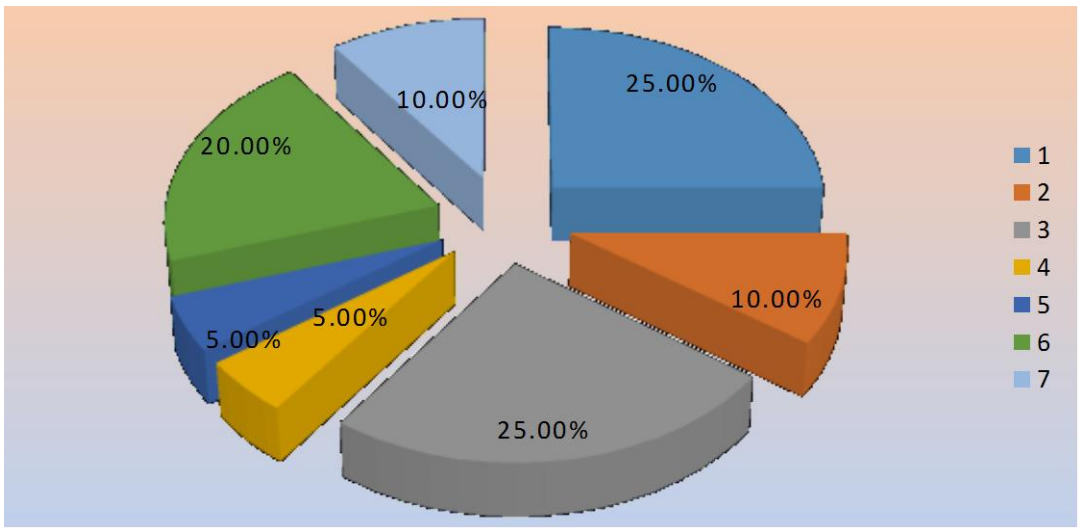
Figure 3 : Teachers' perceptions towards the importance of using creative skills in the classroom



is necessary to incorporate critical thinking into the ELT curriculum. There were common answers like 'it is essential to teach critical thinking', 'it is the job of the language teacher to incorporate critical thinking in ELT'. This finding espouse the idea that language teachers believe in instilling critical thinking as a pedagogical goal in English language classes. They replied that critical thinking, if effectively used, enhances students' motivation to do their best work.

Furthermore, the subjects were asked about the teaching strategies they use to improve critical thinking within their learners.

Figure 4: Teachers' practices to promote Students' critical thinking



1-Taking into account students' interest and choice
2-Using ICT
3-Encouraging multiple perspectives
4- Making personal connections to learning

5- Using Authentic Materials
6-Enhancing collaboration
7-Encouraging students' autonomy

25% of the subjects focused on encouraging students' choice. According to them, choice helps students enjoy the actual learning experience, and increase their confidence in their ability to do the task.

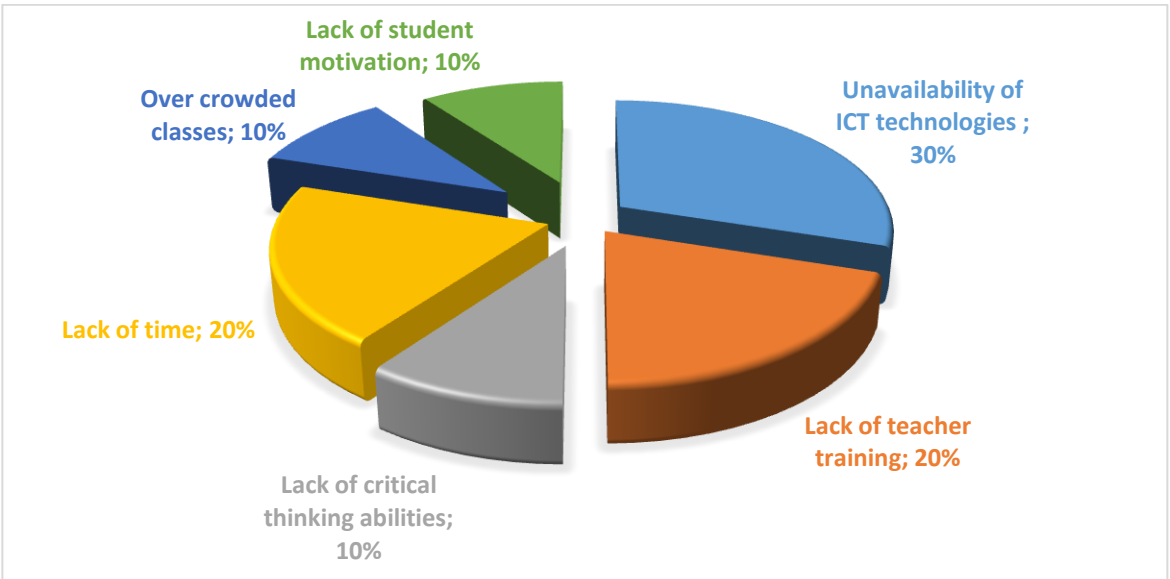
In addition, 25% replied that they encourage multiple perspectives by accepting more than one answer, and stimulating further thought. What was so attractive among the answers (10%) was to give students a boost to connect what they study to their own lives. By doing so, they may be more engaged and more interested in than merely complying to do the given assignment. 10 % of the teachers also stated that they use authentic materials to motivate their learners and drive them to be more active.

From the obtained results, 20% of the instructors said that they enhance collaboration as a suitable practice to promote the students' critical thinking. They enable to think and share their ideas with others (a teacher or classmates). This kind of interaction gives the students an outlet for processing and expressing new information in the midst of the lesson as opposed to simply sitting and getting information.

Only 10% of the respondents said that they encouraged their students to be less dependent on teachers and textbooks. For example, they can be asked by giving their opinions about what the teacher or another student has said; and stating the most important concept or the most confusing point of the class. The participants asserted that this practice raises undoubtedly their self-confidence and make them enjoy the course.

To investigate the reasons of their unreadiness to foster critical thinking learning, the teachers were asked about the major problems that thwart them to accomplish this task.

Figure 5: Barriers to enhance critical thinking in EFL classes



The results demonstrate that the most barriers to incorporate critical thinking into the teaching strategies are the following: lack of teacher training; unavaibility of ICT technology; lack of students 'motivation; lack of time and over-crowded classes. While some of the participants acknowledged that there should be courses in which critical thinking is very much highlighted as a core academic skill, others made reservations as they referred to the lack of critical thinking abilities on the part of the teachers, which could prevent them from taking a fresh outlook to language teaching.

This finding supports the claim made by Pishghadam, Zabihi, and Norouz Kermanshahi's (2012) that ELT teachers should become educational language teachers who are not only English teaching experts but also knowledgeable professionals in different other disciplines of knowledge such as psychology (Pishghadam, Zabihi, and Norouz Kermanshahi's, 2012: 893). The result of the experiment also indicates that there was a general agreement among the participants that the Algerian EFL teachers are lacking in critical thinking abilities.

Taken as a whole, it can be said that the teachers felt they had a clear idea of what critical thinking is; that it is important, and that the language teacher can teach it, perhaps because they believed that the learners were weak in this area. Accordingly, they also had a strong conception that there is a need for training teachers on how to teach critical thinking in ELT classes.

5. Conclusion and recommendations

The views and attitudes of a very small number of Algerian lecturers were sampled in this exploratory study. It can by no means be generalized yet, it gives an idea about the teaching strategies that can stimulate the critical thinking skills. As it has been identified in the data analysis, critical thinking is not effectively nurtured in the classroom. The teachers cited many problems that prevent them to implement their task including lack of teacher training, the absence of technology tools, time constraints, class sizes and lack of students' motivation. Hence, it is urgent and necessary to create and develop the conditions for promoting critical thinking. Therefore, it is recommended to make some transformations in the curriculum, in the classroom and in the teaching quality. The following are some effective strategies:

- The curriculum should make learning at the centre and beyond conventional notions of time and space. It should be opened to new learning and up to date experiences.
- The students should act autonomous. Their role has to shift from being passive consumers to active learners. The instructor is an initiator, a collaborator, a coach and a mentor.
- The teacher should create problem-solving exercises and get students to work collaboratively.
- The students should be asked to elaborate on what has been said by either giving examples or using their own words; and to make connections between related concepts (Paul and Elder, 1994).
- The learners want now to find information, analyse it, communicate it, collaborate with it, problem solve it and evaluate it. Similarly, many researchers agree on the fact

that the students should possess some of the abilities like analysing arguments, judging or evaluating, solving problems, asking and answering questions for clarification, defining terms, interpreting and reasoning (Ennis, 1985; Facione, 1990).

- The teacher has to be trained to become reflective practitioner able to discern how a teaching method or practice can stifle critical thinking in his or her students.

The incorporation of critical thinking skills in the teaching curriculum is tremendously crucial. It can be used to move students toward a more active-learning environment that is more enjoyable and effective not only for them but also for teachers. If the policy-makers, curriculum designers and educators perceive the importance of these skills and then accomplish them, the tertiary education learners will be undeniably ready to face the challenge of the 21st Century.

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