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The Role of Classroom Interaction in Developing EFL Learners' Critical Thinking

Case Study: First-Year Master Students of English at the University of 8 Mai 1945

Guelma.

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DEDICATION

In the Name of Allah

We dedicate this work to all the precious people in our lives

To our beloved parents, Farida and Noureddine

To our dearest grandparents, Amar and Fatimazouhra

To our cherished brother, Ala

To our angelic aunt Sohaila and her beautiful little daughter Meryoucha.

To our lovely uncle Abed el-Karim and his wife Hasina

To our adorable relatives Nacira and Akila and all family members

To all our closest friends

To Nessrine and Romaissa Benredjem

And to You.

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Abstract

The present study initially aims at exploring English foreign language learners' attitudes towards the impact of classroom interaction on critical thinking. It also endeavors at investigating English foreign language Learners' perceptions concerning the importance of critical thinking. Most English language students encounter difficulties during their learning process among which their inability to think critically. Hence, it is hypothesized that English foreign language learners may have positive attitudes towards the role of classroom interaction in developing critical thinking. For approving or rejecting the precedent hypothesis, a descriptive method that comprises only one quantitative tool has been adopted. Concerning this issue, a questionnaire is administered to one hundred First-year Master students at the Department of English, University of 8 Mai 1945, Guelma. The questionnaire is sent through online Google form via both Facebook and emails. After the analysis and the interpretations of students' answers and results, it is displayed that classroom interaction strategies especially teachers' questioning and peer's exchange of thoughts, as well as both types of classroom interaction may serve to enhance students' critical thinking. Accordingly, the retrieved results confirm the hypothesis, which indicates that English foreign language learners have shown positive attitudes towards the role of classroom interaction in developing critical thinking. Finally, the findings encourage both teachers and students to use classroom interaction as an effective strategy to promote critical thinking.

List of Abbreviations

CI: Classroom Interaction CF: Corrective Feedback CT: Critical Thinking DR: Deductive Reasoning EFL: English as a Foreign Language FL: Foreign Language ID: Inductive Reasoning IRF Model: Initiation-Response-Feedback Model LMD: License Master Doctorat NOM: Negotiation of Meaning SSI: Student-student Interaction TSI: Teacher-student Interaction

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1.Statement of the Problem

The primary goal of each educational system is to build well-educated and well-equipped learners who will be skillful and successful in their future careers. As learners, effective foreign language learning demands from them to develop both the four basic skills as well as other 21st century learning abilities, such as the ability to think critically. Learners must question, analyze, and reflect on any given information and not only accept or absorb everything provided by their teachers. In fact, mastering the skill of critical thinking could help learners to achieve different things at different levels in their life. They could control their own learning as well as develop effective communication abilities. It also helps them to solve problems rationally and present their ideas reasonably. Nevertheless, the development of critical thinking in EFL classes is yet partial especially in Algerian Universities that are unable to improve this skill either explicitly or implicitly. At the Department of English at 08 Mai 1945, Guelma, University most students encounter numerous problems among which their inability to think critically. Within this scope, they are unable neither to negotiate nor to question any given information. This is mainly due to several factors that may inhibit their learning for instance; their lack of knowledge, their passive learning, and the most influential factor is their unawareness of how to activate their cognitive ability. Besides, the radical change of the teacher-centered approach to a learner-centered approach requires students to be more interactive and active during the learning process. Hence, various teaching strategies were advocated to develop learners' critical thinking; among which classroom interaction. Consequently, the current study will deal with all parts regarding students' attitudes towards the impact of classroom interaction on EFL leaners' critical thinking.

2. Aims of the Study and Research Questions

The present study aims at exploring EFL learners' attitudes towards the impact of classroom interaction on critical thinking. It endeavors at investigating EFL learners' perceptions concerning the significance of critical thinking. It also attempts to tackle EFL learners' views about the teachability of critical thinking as skill. Therefore, the current research addresses the following questions:

1-What are EFL learners' attitudes towards the impact of classroom interaction on critical thinking?

2-Are EFL learners aware of the importance of critical thinking?

3. Research Hypothesis

In this study, it is anticipated that classroom interaction plays an effective role in learning a foreign language and in improving learners' critical thinking. Neglecting the importance of classroom interaction may lead to the lack of critical thinking. Hence, we hypothesize that: -EFL learners may have positive attitudes towards the role of classroom interaction in developing critical thinking.

4. Research Methodology and Design

4.1 Data Gathering Tools

The current study will follow a quantitative descriptive method to confirm or disconfirm the research hypothesis. For the purpose of exploring students' attitudes and perceptions towards the role of classroom interaction in developing EFL learners' critical thinking, one questionnaire is administered to First-year Master students at the Department of English at 08 Mai, 1945, Cuelma, University.

4. 2 Population of the Study

The sample of this study comprises one-hundred First-year Master students of English at the department of letters and English language, at 08 Mai 1945, Guelma University. The sample of this study is selected randomly. The ultimate goal for choosing this sample is that they are considered as the appropriate sample for the research because they are exposed to various modules that require them to thinking critically as well as that they are supposed to be in an advanced level of higher education.

5. Structure of the Dissertation

The present dissertation is divided into three chapters along with a general introduction and a general conclusion. The first two chapters are devoted to the theoretical part while the third chapter is concerned with the field of investigation. The first chapter is entitled classroom interaction. It endeavors to offer an overview of classroom interaction. It deals with six big titles that highlight the meaning of interaction in general and of classroom interaction in particular, along with its types, its aspects, and its significance. All together with the factors that affect its development. Besides some suggested strategies to overcome the obstacles that may hinder the progress of classroom interaction. The second chapter is entitled critical thinking. It attempts to provide a brief historical overview of critical thinking. It covers nine big titles that tackle the definition of both thinking and critical thinking. Standards of critical thinking, its characteristics, its skills, and its importance, along with the barriers that may prevent learners from being critical thinkers. In addition to some instructional strategies implemented for developing such important skill. Lastly, it tackles the role of classroom interaction in developing critical thinking. The third chapter represents the practical part, which is about the field of work. It gives a detailed description and analysis of the results, along with some pedagogical implications and limitations of the study.

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Introduction

Currently, it is remarkable that the idea of classroom interaction (CI) is taking a wide range of interests, especially in the field of foreign language learning (FLL). Foreign language (FL) teachers consider it as an essential way of learning the target language. Accordingly, this chapter attempts to present an overview of CI, which includes different scholars' perspectives regarding the concept of interaction in general and of CI in particular. Then, the present chapter draws attention to the main types and aspects of CI. In addition, it tries to highlight the significance of CI in FLL classes. All together with some crucial factors that may hinder the development of CI, as well as shedding light on the most common effective strategies for promoting CI among FLL learners.

1.1 An Overview of Classroom Interaction

For many years ago, debates among researchers have been taking place regarding the meaning of CI. Nevertheless, defining this concept implies first defining the term interaction that is needed within any classroom task. Accordingly, several scholars tend to define this notion from various perspectives. In its broadest sense, Richards and Schmidt (2010) define interaction as the mean used by speakers to produce a given language (p. 289). While in its narrow sense, Robinson (1994) points out that interaction refers to mutual face-to-face action, which can be of two types verbal or nonverbal interaction. On one hand, verbal interaction includes written and oral interaction, in which learners communicate their ideas through writing documents, essays, or assignments. Whereas, oral interaction indicates that learners are exchanging their views by holding parts in discussions, commenting, and reflecting on their peers' points of view. On the other hand, non-verbal interaction is associated with students' behavioral actions in the classroom. For instance, nodding heads, raising hands, eye contact, and body gestures (p. 7).

Furthermore, Brown (2001) argues that in the field of communicative language teaching, interaction is considered as an essential term (p. 165). He defines it as "the heart of the communication, in fact, it is what communication is all about" (p. 165). That is to say, in the communication process, individuals tend to exchange messages, try to understand them in their appropriate context, attempt to negotiate meaning, and cooperate to achieve specific goals. On this basis, it is emphasized that interaction is an integrated element of communication, where the success of this connection is thoroughly determined by interaction. Ultimately, interaction is the core of communication.

Moreover, Brown (2001) has provided another definition for the concept of interaction; he claims that interaction is the collaboration of two or more persons on exchanging their emotions, opinions, and thoughts with each other. Hence, their connection results in having mutual effects (p. 165). Further, after Browns' multiple researcher on learning and teaching languages, he explores that the perfect strategy to interact is by 'interaction itself' (p. 165). In this context, Rivers (1987) declares that interaction is a very distinctive and crucial element in influencing and motivating students to learn a given language. He states that:

Through interaction, students can increase their language store as they listen to or read authentic linguistic material, or even output of their fellow students in discussions, skits, joint problem-solving tasks, or dialogue journals. In interaction, students can use all they possess of the language– all they have learned or casually absorbed – in real life exchanges. (pp. 4-5)

Accordingly, interaction allows the students to build their knowledge while paying attention to or reading genuine texts that are printed or auditory, and at the same time being integrated into various classroom tasks. Therefore, they become adequately competent to practice the language in real life situations either inside or outside the classroom. Additionally, Rivers (1987) adds that interaction is an integral part of communication. He declares that through the process of interaction, learners are enthusiastic and confident to communicate successfully (p. 8). In light of this idea, Rodgers (2002) states that "without interaction, learning is sterile and passive, never fundamentally changing the learner" (p. 847). Likewise, Brown (1994, p. 159) stresses the importance of interaction when individuals use the language in a variety of contexts, such as to exchange their thoughts as well as negotiate meaning.

What is noticeable here is that all the above-mentioned definitions agree upon one idea that interaction is not only as a way to practice a language but also as a key element of communication.

Subsequently, in the English foreign language (EFL) context, Ellis (1990) defines CI as "all communication, which refers not only to those exchanges involving authentic communication but to every oral exchange that occurs in the classroom, including those that arise in the course of formal drilling" (cited in Suryati, 2015, p. 248). In view of this definition, Ellis believes that CI is of a specific structure; and consists of a considerable number of functions, including formal practices. More precisely, he identifies this notion as all communications that appear in the classroom. However, some scholars try to define CI from a pedagogical perspective. For instance, Hall and Walsh (2002) view that CI is one of the fundamental teaching techniques that play a significant role in accomplishing the learning process since it contributes to sustaining both the pedagogical objective of the lecture along with acting as a medium through which learning can be realized (p. 187). Similarly, Dee-vil (2012) sees CI as a process or activity used among learners to improve their productive and receptive skills particularly speaking and listening (p. 1).

Nevertheless, Koole (2007, p. 487) determines that the notion of CI is characterized as an individual interactional process that consists only of two participants, which are the class and the teacher. Koole also adds that each students' interaction is considered as a whole class interaction that occurs between the teacher and any student. Thus, he identifies CI as a two-party interaction. Along with this perspective, Loona (2012) asserts that CI is the process of exchanging authentic materials from a well-experienced instructor to his/ her learners in an organized classroom setting. Henceforth, CI embraces every interaction that occurs between teachers and their students (p. 1). In this regard, according to the Online Dictionary of Sociology (2019), CI is defined as "the relationship between teacher and students in the classroom". That is to say that the interaction between students and teachers is necessary so that the learning and teaching process can be successful.

Yet, Richards and Schmidt (2010, p. 80) indicate that CI can be related to other fields of investigation, for instance, discourse analysis, teacher talk, and second language acquisition. Further, the scholars Richards and Schmidt encompass that CI is classified as the verbal and the non-verbal types of communication as well as the various kinds of social relationships.

On the light of the aforementioned definitions, CI is a strategy used inside the classroom to integrate learners within discussions using both types of verbal and non-verbal communication, to build a student-teacher relationship, and to develop both receptive and productive skills.

1.2 Types of Classroom Interaction

Previously, the majority of FL teachers were adopting the traditional methods of teaching. However, with the development of the educational system, especially in the EFL classroom. The demands of interaction between teachers and students and between students and students are highly required. In fact, the classroom is the only setting where both teachers and students can practice the language and interact with each other effectively. Furthermore, the most two important participants of CI are the teacher and the learners. However, among their interaction, each teacher has a different strategy to integrate his/her students in discussions. Thereby, CI has several types that depend on teachers' methods of teaching. Accordingly, Moore (1989) has specified three types of CI: learner-content interaction, learner-instructor-interaction, and learner-learner interaction (p. 1). However, within this research, the focus is only on the last two types of interaction. As it is displayed according to Jia (2013), CI consists of teacher-learner and learner-learner interaction (p. 209).

1.2.1 Teacher-Student Interaction

According to Moore (1989), this type of CI occurs between students and their instructor (p. 2). In this regard, the teacher plays significant roles in the classroom. He attempts to gain students' attention during the learning process. He also tries to provide a motivational atmosphere, evaluate their progression, and supply individual encouragement, yet this support depends on each students' level and personality type (pp. 2-3). Furthermore, considerable researchers in the field of communicative language teaching, Tuan and Nhu (2010) claim that this pattern of teacher-student interaction (TSI) precisely can appear between one teacher and each learner individually, between one teacher and a small group of students, or between the teacher and the whole classroom participants (p. 30).

Essentially, Angelo (1993) argues that the importance of TSI in FLL classes is indisputable since it is considered as one of the most crucial aspects of facilitating the learning process (p. 8). In this case, teachers are engaged together with their students to solve essential problems, for instance, discovering some alternative solutions to provide each learner with equal opportunities

so that he/she can master the content of the course sufficiently (p. 8). For that reason, he believes that learners have to learn to integrate into group works because of its effective outcomes (p. 8).

Additionally, Hall and Walsh (2002) have emphasized the significance of TSI claiming that through this pattern, shared background knowledge is constructed among teachers and their learners (187). Moreover, adding that their interaction leads to developing a reciprocal understanding of each other's roles and connections, along with realizing the standards and the anticipations of their involvement as participants in their classrooms (p. 187). In other words, through students' interaction with their teachers, they are integrated to comprehend firstly the content course and then to understand themselves as learners of the subject matter; so that they can determine the standards by which individual learner performance is assessed. The researchers also state that learners rely upon these patterns for taking part in classroom activities, so that they can participate in subsequent academic events, where eventually they can obtain very important roles within these events (p. 188).

Despite the effective role of TSI during the teaching and learning process, instructors differ in their patterns of interacting with their learners. Few of them see the learner as an autonomous one who has a responsibility in the teacher-student relation and decisions to take in his/her learning, whereas the rest of them view that their learners need to be strictly directed and controlled so that they can reach a more advanced level of leaning (Englehart, 2009, p. 711). Based on this idea, it is argued that the teacher is still in control in terms of the amount of time talking and of managing the classroom (Tuan and Nhu, 2010, p. 31). On this turn, Suryati (2015) argues that the teacher is the one who controls the classroom. She adds that during CI, the teacher's talk takes 54.22%, and the students' talk is barely 14.9%. Whereas, the rest 30% is for silence and confusion (pp. 248-249).

Similarly, Sofyan and Mahmud (2018) declare that in CI, teachers' talk includes dealing with feelings, praising, encouraging, and using students' ideas. It also consists of asking questions, providing information, giving instructions, and criticizing students' attitudes (p. 56). Precisely, indicating that the teacher tends to deal with students' feelings in order to have a relaxed and comfortable teaching atmosphere. Then, he/she attempts to praise and encourage his/her students' ideas so that they can be motivated to study and to show the worthiness of their answers. This worthiness is shown by using students' ideas as an introduction or as a way of opening CI. Besides, during this process, the teacher endeavors to use questioning technique for encouraging their students to share their points of view among each other. Evidently, at this phase, the instructor provides information and instructions to help his/her leaners express and organize their thoughts. Usually, he/she ends this phase by criticizing his/her students' behaviors' positively, where he/she aware them about their unacceptable and correct answers.

Although, Krashen (1981) argues that if teachers decrease their time of talk inside the classroom, this may harm students' development. This idea has been challenged by Cullen (1998), who emphasizes that teachers' talk should be minimized. He also states that 'Good' teacher talk meant 'little' teacher talk (p. 179). This means that the good teacher is the one who gives more chances to his/ her students to integrate with each other, who does not prevent his/ her students from talking and expressing their ideas, but most importantly who reduces his/her time talk. Moreover, Kramsch (1986) determines that one of the aims of language teaching is to allow students to participate and engage in any simple discussion of the target language (p. 366).

Additionally, Brown (2001) recommends that teachers must be careful when planning their lessons so that they can provide a balanced teacher-student talk (p. 154). He also adds that students must have the opportunity to speak, to produce language, and to have a chance to

choose a topic and start talking about their thoughts (p. 154). Accordingly, Scrivener (2011, p. 60) suggests a diagram for TSI. The diagram represents that the teacher's role is to initiate the interaction and demonstrate understandable information while the student's role is to take part in this process. The following diagram explains this idea:

| St |
|----|----|----|----|----|----|----|
| St |
| St |
| St |
| St | St | St | St | 81 | St | St |

Figure 1.1 Interaction between Teacher and Students

(Scrivener, 2011, p. 60)

Nugent (2009) has explored the value and the impact of TSI on learners' achievements and motivation. The findings indicated that there is undoubtedly a positive relationship between the three of them (p. 83). Whereby students' perceptions of their teachers directly affect their performance, their learning experience, and their future success and achievements. To summarize, despite the teachers' dominance and the little opportunities he/she provides for his/her students' interaction, TSI can stimulate students to learn and enhance their academic achievement.

1.2.2 Student-Student Interaction

In contrast to TSI, Moore (1989) defines learner-learner interaction as "inter-learner interaction, between one learner and other learners, alone or in group settings" (p. 4). In other words, he determines that learner-learner interaction occurs between learners themselves either

individually or in groups. Moreover, Tuan and Nhu (2010, p. 35) continue arguing that in addition to student-student interaction (SSI) working in groups, this pattern of interaction consists of another form, which is known as peer interaction.

In the same context, Richards, and Lockhart (1996) support the prior scholars' view. They argue that thought teachers tend to use various learning arrangements in the classroom such as whole-class teaching and individual work, hey declare that teachers are required to use other types of teaching as a useful strategy to increase SSI like pair work or small groups (p. 147). As an advantage of this strategy, students can construct linguistic resources and improve their communicative competence (p. 152). Thereby, they become competent speakers. Furthermore, this strategy decreases the teachers' control in the class, raises students' participation, promotes cooperation between them, and enables them to have an effective role in the learning process (p. 153). Moreover, they indicate that SSI reduces both students' degree of deconcentration and increases their time of listening to their teachers' interaction with other students (p. 153).

Additionally, Richards and Lockhart are not alone in their evaluation of the significance of SSI concerning educational achievement. Johnson (1995) maintains that SSI might appear to be more significant than TSI because an effective construction of SSI is reflected positively on learners' educational success, improving their social abilities, and supporting them to exchange their points of view among each other (pp. 111-112). In light of this idea, Johnson affirms that SSI can improve learners' capacities to work cooperatively, promotes cooperative instead of competitive learning among them that lead to maintaining constructive results (p. 113). SSI also helps to overcome the stress and embarrassment that discourage some learners from talking in front of their classmates and taking part in discussions. Eventually, this leads to construct favorable and comfortable learning conditions (Foster, 1998, p. 1)

Based on what has been said concerning the effectiveness of SSI, teachers should not neglect its importance because it will affect the students' learning strategy, their impression about their teacher, and the topic discussed. Most importantly, how they perceive their opinions and their classmates' thoughts (Johnson & Johnson, 1985, p. 22). In order to show how this type of interaction happens inside the classroom, Scrivener (2011, p. 61) proposes the following diagram for SSI:

Figure 1.2 Student-Student Interaction



(Scrivener, 2011, p. 61)

Scriveners' diagram thoughtfully illustrates that at the level of SSI, learners are at the center of the learning process. As well as being regarded as the major classroom participants without the interruption of the teacher (Tuan and Nhu, 2010, p.35). Yet, the success of this process still depends on the teacher's role. On one hand, the teacher still remains an amount of control over the content and the structure during SSI. On the other hand, the teacher tries to play the role of a monitor and a supporter (Johnson, 1995, p. 114; Richards and Schmidt, 2010, p. 564). Taking into account all these points of view, through SSI students can build social relationships either with their teachers or with their classmates. In addition, they can learn from their classmates or teachers' experiences since they are interacting with each other, students can also develop their speaking abilities and communicative competence. Thus, teachers must promote this type of interaction because it is considered an important pedagogical strategy in enhancing students' abilities in general, and making them more active and interactive in the learning process in particular.

1.3 Aspects of Classroom Interaction

Lap and Thy (2017, p. 696) have classified two main aspects of CI. The first aspect is called the negotiation of meaning, while the second one is known as feedback. Eventually, learning through interaction genuinely requires the presence of these two aspects, by which learners are given opportunities to negotiate meaning, and in return to receive feedback to their negotiation either from their teachers or from classmates.

1.3.1 Negotiation of Meaning

As a matter of fact, the notion of negotiation of meaning (NOM) has been thoughtfully associated with Long's interaction hypothesis (1996). In this context, Namaziandost and Nasri (2019) assert that NOM is a very essential element, where learners of a given language are in an attempt to negotiate meaning (pp. 220-221). Generally speaking, Cook (2015) strives to define the concept of NOM as an effort to avoid any misunderstanding problems (p. 250). Moreover, Richards and Schmidt (2010) demonstrate that NOM usually occurs when speakers try to produce a meaningful and comprehensible utterance by adding more input for more clarification and explanation. In this situation, learners are provided with useful feedback on their language production (p. 290). However, Ellis (2003) particularly defines the term NOM as "the process by which two or more interlocutors identify and then attempt to resolve a communication breakdown" (p. 70). In other words, when interlocutors or speakers are negotiating meaning, the first step is to recognize the problem that needs further interpretation. By then, the speakers attempt to overcome the breakdown of communication.

Similarly, Ellis and Barkhuizen (2005) describe it as an oral giving and taking process between speakers in order to keep the communication progress. In this regard, it is notable to indicate that each person has a different speech vocabulary and structure. In this matter, the speaker needs to change his/ her utterance so that comprehensible input is produced. Furthermore, in classroom communication, the speaker is in the process of making a considerable number of modifications, and he/ she tries to follow certain techniques (cited in Lap &Thy, 2017, pp. 696-697).

In addition, Spada and Lightbown (2010) stress that in the communication that occurs between native speakers and Langue learners, native speakers tend also to adjust their utterance in order to make it more coherent and explicit. Further, among language learners and native speakers interaction, a sort of interaction techniques and adjustments are used to negotiating meaning. In fact, the adjustments that are used involve modifications and simplification of any language aspect, for instance, lexical, grammatical, or discussion adjustments (p 114). Hence, both language learners and native speakers attempt to use adjustments to their words and a variety of techniques to keep their interaction and communication successful, along with improving their language development. Gor and Long (2009) have provided an example of adjustments such as simplification and elaboration. About this, they claim that through these types of modifications, students' understanding is accomplished. They also evoke that concerning the role of NOM, if non-native speakers were provoked to start negotiation with skillful interlocutors, this result in having a very effective language experience (p. 443). The following example that is provided by Pica (1994) best summarizes how the process of NOM happens:

12.	NS	it's a rectangular ben	ch	
	NNS:	rectangular?		
	NS:		f a rectangle with um you	
			two long sides and two	
		short sides		
	NNS:	rectangle?		
	NS:	re—rectangle it's it's you flatten it out	like a square except you	
	NNS:	square except		
	NS:	uh a rectangle is a squ	lare	
	NNS:	uhuh		
	NS:	except a square has fo	our equal sides	
	NNS:	yes		
	NS:	a rectangle has two sides that are much longer and two sides that are much shorter		
	NNS:	OK	(Pica, 1993, p. 437)	

Figure 1.3 Example of Negotiation of Meaning

(Pica, 1994, p. 513)

Within this example, the native speaker tries to explain what the word 'rectangular' means to the non-native speaker using either repetition, modification, or paraphrasing. Yu (2008) emphasizes that negotiation of meaning plays a major role in the CI. He points out that when second language students are provided with more opportunities to negotiate their comprehension problems, they would obtain more success. For instance, learners can acquire and maintain more second language vocabulary acquisition (p. 49). Eventually, although some misunderstanding may appear and some messages are difficult to infer due to the different types of meaning and details that occur at the beginning of the negotiation, NOM aids second language speakers to understand each other clearly (Cook, 2015, p. 250).

1.3.2 Feedback

Within any EFL classroom, it is evident that language learners encounter some syntactical or grammatical mistakes while speaking that needs immediate correction either explicitly or implicitly. For that reason, teachers' feedback on students' participation is an essential aspect of CI. In the opinion of Richards and Schmidt (2010), feedback is whatever input that describes the input of some individuals' attitudes or actions. However, the term feedback in teaching refers to

teachers' reactions or responses to learners' answers in a given learning task or test to indicate either their success or failure (p. 217).

In a similar manner, Richards and Lockhart (1996) demonstrate that giving feedback to students about their production consider an influential aspect of learning. They define it as a reaction to the learners' output concerning whether the content or the form of students' speech. These reactions are either positive or negative used to inform learners about their accomplishment if it is accurate or inaccurate. Feedback also attempts to raise students' interests and create a helpful learning environment (p. 188).

Angelo (2013) argues that students have to receive feedback on their learning for successful learning to take place and to discover how to provide themselves with feedback. As a result, this leads them to develop a sense of self-reliance (p. 5). To this end, he confirms that consistent feedback gives learners direct instructions to overcome their errors. It also helps in promoting the interaction between the teacher and the student, and between students. As a final point, Angelo stresses that if learners learn to incorporate their teachers' instructions on their leaning; they can initiate a stage of corrective feedback (CF) (p. 6). In this regard, Babanoglu and Agcam (2015) define CF as an authentic reaction from a teacher to his/her students' errors, where he/she highlights the efficiency of his/her students' speech by using either explicit or implicit CF (pp. 127-128). In this case, Bower and Kawaguchi (2011) declare that CF is divided into two types: explicit and implicit (p. 44). In view of that, in implicit CF, the teacher does not provide a clear sign that an error has been devoted. While in explicit CF, the teacher offers an evident sign that student's production is erroneous (Bower and Kawaguchi, 2011, p. 44).

Furthermore, the explicit CF is demonstrated in a recast from, where the positive evidence is given (Ellis, Loewen, and, Erlam, 2006, pp. 340-341). This to say, the teacher tends to

reformulate everything his/her students' say with an emphasis on both the grammar and the meaning of his/her utterances. Likewise, Bower and Kawaguchi (2011) believe that the role of CF is effective "because it also provides language learners with negative evidence" (p. 44). In other words, Bower and Kawaguchi underline that the provided negative feedback is important as the positive one because it can stimulate students' learning. Therefore, this means that positive or negative feedback is a vital way to enhance students' learning and correct their mistakes.

1.4 The Significance of Classroom Interaction in Foreign Language Learning

Although the concept of CI is a recent one which goes back only to the late 1930s, the interest in investigating its role in the EFL context has been raised only since the late 1960s (Skukauskaite, Rangel, Rodriguez, and Ramón, 2015, p.44). In this viewpoint, many scholars and researchers argue that learning a FL primarily relies on CI. Correspondily, Allwright (1984) stresses the importance of CI in language learning classes claiming that it is "inherent in the very notion of classroom pedagogy itself" (p. 158). Specifically, teachers should not think of it merely as a method of teaching or using when it is appropriate, but rather it is a fixed, natural, and extremely essential aspect in the learning and teaching process. In addition, he emphasizes that CI is significant because the interaction is the necessary condition of classroom pedagogy, and without it, lessons are not completed. Thus, he confirms that the success of any classroom pedagogy requires the presence of interaction (p. 159).

Furthermore, other scholars, for instance, Namaziandost and Nasri (2019) have highlighted another important benefit of CI claiming that since the interaction that occurs in the classroom is between TSI and SSI, where communication and active participation are taking place. Thereby learners' knowledge is constructed collectively. Moreover, they continue to assert that in the process of learning English as a FL, CI is characterized as a substantial feature for experiencing an actual communicative setting. More precisely, learners can understand how to convey their own thoughts and ideas as well as they can improve their oral fluency and accuracy, which are regarded as the key elements of effective FL communication. Arguably, they affirm that CI is an inevitable and valuable strategy in promoting learning because it offers real chances for learners to develop their language skills and reinforce their knowledge (p. 219).

Following what has been mentioned, Rivers (1990) proclaims that genuine oral interaction demands the instructor to resign from his/her role as a controller, together with providing chances for students to talk and practice the language through involving them in a variety of communicate tasks. Rivers persists declaring that the teacher needs to support his/her learners to share their views openly, and most importantly to tolerate their mistakes while seeking to communicate (p. 9). Eventually, Rivers emphasizes the CI role in providing learners with substantial opportunities for interacting and exchanging ideas among each other.

Additionally, Yu (2008) makes another noteworthy attempt concerning the role of CI. He considers CI as a dynamic method of teaching, where learning opportunities are provided for both learners and instructors. In this context, CI endeavors to stimulate students' attention and increase their ability to interact with others. He also argues that this teaching technique helps in both language and students' improvement (p. 49). Moreover, Dee-vil (2012) indicates that the role of CI is not merely targeted at developing learners speaking and listening skills. Yet, it further "helps the learners to be competent enough to think critically and share their views among their peers" (p. 1). In other words, through CI students are exchanging ideas among each other, whereby they can adequately be qualified to initiate debates, communicate effectively, and reflect their way of thinking either to their teachers or to classmates. Hence, on the account of the

effective role that CI plays in the EFL context, it is considered as a useful and necessary pedagogical strategy of teaching and learning.

1.5 Factors Affecting Classroom Interaction

Some considerable researchers have categorized some factors that can negatively affect the development of CI in the EFL context. They are:

1.5.1 Teachers' Beliefs

Richards and Lockhart (1996, p. 29) have emphasized that teaching is characterized by terms of teaches' arrangements and habits inside the classroom, and by terms of its impact on students. In fact, they assert that teachers' reactions are a representation of their knowledge and belief that provide the fundamental structure of directing the teachers' classroom behaviors. Furthermore, teachers' belief is constructed regularly through time and includes equally personal and unbiased thoughts. Besides, these scholars claim that these beliefs are actually obtained from various sources such as from their own experiences as language learners, or personality choices (pp. 30-31). Hereafter, teachers tend to teach according to their own beliefs.

1.5.2 Teachers' Questioning

In the classroom setting, Jia (2013) asserts that questioning attempts to play an essential role regarding its complexity. He claims that this technique ought to supply the necessary communication methods such as speaking and writing, captivate students' interests, and find out students' extent of understanding. He further states that through teachers' questioning, students are able to find out the important things and overcome their confusion, as well as more chances are provided so that teachers can understand their students' thinking. Despite the teachers' questioning significance, he highlights that asking a big amount of questions, precisely particular types can hinder the process of active learning. Thus, EFL teachers ought to ask questions

according to their students' level. For instance, the more learners have higher English language proficiency, the more teachers are able to ask some referential questions (p. 210).

1.5.3 Learners' Different English Levels

Learners' different English levels is one of the main factors affecting CI. To this end, teachers attempt to classify learners into three distinctive levels: beginners, intermediate, and advanced. Each one of them has certain abilities and characteristics. In this regard, teachers should take into account those leaners' different capacities especially the first one; otherwise, this may lead to affect their classrooms negatively (Jia, 2013, p. 210).

1.5.4 Teacher-learner Rapport

Another important factor is the teacher-learner rapport. I.e. the relationship that is constructed between teachers and their learners. At this point, their connection is based on confidence and appreciation of each other. In this case, learners view themselves as proficient, skilled, and productive participants. However, a part of this relationship is established according to the teachers' compliments and criticism where the extensive use of both can be an obstacle to develop CI. Thereafter, teachers should make a balance between their compliments and criticism, in which constructive arguments allow students to accept being criticized (Jia, 2013, p. 2010).

1.5.5 Anxiety

Gustafson (1969) points out that a substantial number of researchers indicate that the main reason behind CI deficiency is possibly due to the pressure that occurs from TSI (pp. 2-3). In this context, he adds that anxiety has a great impact on CI patterns (p. 11). Further, concerning this issue, he states that students may have a limited amount of talk because of their teachers' stress (p. 11). Moreover, he emphasizes that when students are highly stressed, they become unable to accomplish any given task (p. 13). Yet, students are not alone regarding this issue, claiming that both teachers and learners are anxious about their classroom performance, and they also share attention about their classroom disciplines (p. 14). However, Anderson (1960) views that anxiety has more influence on teachers because of their inability to manage the classroom successfully (p. 339).

1.6 Strategies of Promoting Classroom Interaction

Jia (2013) has classified five main strategies that teachers can implement to promote CI in the EFL context (p. 211). They are:

1.6.1 Improving Questioning Strategies

In the learning process, particularly in the FL setting, self-confidence is regarded as an extremely sensitive and important element. When students lack confidence, teachers tend to select and interact only with those who are always active participants and able to answer their questions immediately. At this point, other students are neglected. Promoting STI and engaging all students in the discussion is highly needed where teachers should be more aware of how to raise students' self-confidence and self-esteem. This can be achieved by taking into consideration the type of asked questions according to their levels and comprehension capacities (p. 211).

1.6.2 Attending to Learners' Linguistic Levels

Since language learners differ according to their needs and levels, teachers need to consider these elements when planning their activities for example; beginners are exposed to learn merely the simple language. Whereas, advanced learners are exposed to learn more complex language as they are already aware of the simple rules and structure of the language (p.211).

1.6.3 Implementing Cooperative Learning

Cooperative learning means the involvement of all members of a given group despite the variation that exists between them. In this case, the collaboration between learners results in developing social skills and constructing knowledge of other cultures. Furthermore, their social, intellectual, and physical differences help in solving problems and accomplishing important activities with a little help of their instructor (p. 211).

1.6.4 Building Positive Teacher-learner Rapport

For successful CI, the significance of a teacher-student relationship cannot be neglected. In fact, the best teacher is the one who knows his/her students' individual differences, level, and personality type very well. As a result, a good relationship is built, and it will be characterized by mutual respect and confidence as well. Thus, this good relationship ends with increasing students' academic achievements (p. 211).

1.6.5 Reducing Classroom Anxiety

In the EFL classroom, anxiety is a major obstacle to language learning. Obviously, learners are not able to talk, to participate, or to interact with their teachers or classmates. Nevertheless, this results in breaking down the communication. In such situation, teachers should support students to avoid language anxiety that hinders their self-confidence and self-esteem. Teachers' role may imply providing opportunities for conveying their ideas freely, accepting them, and tolerating their errors and at the same time being interested in what they say. As a result, the tension of anxiety is reduced and a comfortable and safe environment of learning is provided (p. 211).
Conclusion

From this chapter, it is notable that a considerable number of researchers in the field of FLL and communicative language teaching highlighted the conceptual meaning of both interaction and CI from different perspectives. Yet, almost all of them agreed upon the idea that communication and interaction are two integral parts of each other. CI was also considered as one of the fundamental teaching techniques that play a significant role in accomplishing the learning and the teaching process. For this purpose, this chapter stressed the significant role of CI together with its both types and aspects. In addition to the effective strategies for promoting a more suitable and comfortable atmosphere of learning and teaching.

Chapter Two: Critical Thinking

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Introduction

The ability to think critically is of high importance in this revolutionary age of technological development. Indeed, critical thinking abilities are required in any domain of life such as economic, social, political, and educational spheres in general and in FL classes in particular. Learning to think critically will help EFL learners to achieve academic success at university as well as in their future professional careers. Therefore, this skill will enable them to distinguish facts from opinions, to develop their capacity to analyze, examine and question any information received and not accept it for granted. The current chapter attempts to shed light on the notion of critical thinking (CT), it provides a brief historical overview of CT. It also supplies some definitions provided by different scholars and researchers in the field. Besides, the chapter tackles a few of its characteristics, skills, and most importantly, it demonstrates the importance of CT in the EFL context. Finally, it provides some instructional teaching strategies to promote CT in EFL classes.

2.1 Historical Overview of Critical Thinking

According to Paul, Elder, and Bartell (1997), the idea of CT rooted back to the ancient times of Socrates' probing questioning method, 2500 years ago. Currently, this mode is known as "Socratic Questioning". It is used to teach critical thought where it emphasizes the importance of asking profound questions before accepting any idea or believing in it. Some Greek sceptics such as Plato and Aristotle make huge contributions to the development of CT. They argue that things are not as they seem in the surface, and only the trained mind is capable of depicting the deeper realities of life. Hence, for the ancient Greek tradition to think beyond the surface is the key to achieving systematic thinking, and tracing implications profoundly and broadly. Besides, thinking in a comprehensive, reasoned and reflective way towards interceptions could defeat delusive realities (p. 8).

2.2 Definition of Critical Thinking

Before giving an accurate definition to CT, Bassham et al. (2011) claim, "The word critical refers to negative and fault- finding . . . but it also means involving or exercising skilled judgments or observation" (p. 1). That is to say, the term critical is not merely associated with negative aspects, and when making a critical evaluation or observation, it could hold negative and positive connotations.

Another attempt by Halpern (2003) who has a considerable contribution to the field of teaching CT, states that the word "critical" signifies the element of evaluation. Yet it could also denote a negative meaning when someone calls the other as a critical person (p. 7). More precisely, the scholar explains that evaluation can and should be linked with a constructive reflection of both positive and negative characteristics because when humans think critically, they are in the process of evaluating the consequences of their thoughts (Halpern, 2003, p. 7).

For "thinking", some scholars such as Evans (2017) points out that human beings are born with the ability to think which makes them very distinct species from any other creatures. He assumes that the noteworthy success of humans is a result of their special powers of thought (p. 1). In the same sense, the famous French philosopher Descartes (2008) states, "I think therefore I am" (p. 14). Thus, thinking determines our essence and who we are as humans. Likewise, Kallet (2014) considers thinking as the cornerstone of all the things humans do in their everyday life even thinking in their sleeping, however, most of their thinking is not valuable (p. 3).

Moreover, Dewey (1933) provides another definition of thinking, he says that thinking is often referred to things not instantly perceived, but more to abstract things (p. 5). Besides, other scholars define thinking from two distinct perspectives. Firstly, they say that thinking composes of a variety of abilities, for example, being able to identify prejudice in a given argument as well as being able to draw conclusions derived from facts. Secondly, the theorists claim that thinking also composes of an unbiased disposition "habits" like curiosity and open-minded (Arends and Kilcher, 2010, p. 231). Consequently, thinking is an important mental process that helps humans to live the perfect quality of life if it is well constructed.

From the previous basic definitions, in the last two decades, many educators and scholars attempt to understand the notion "critical thinking". Thus, several definitions are found to avoid any kind of vagueness and confusion. However, there is no clear, precise, and standard definition agreed upon researchers. Moreover, Dewey (1933) who is regarded as the father of modern CT. He defines CT as "reflective thinking . . . active, persistent, and careful consideration of a belief or supposed form of knowledge in light of the grounds which support it, and the further conclusions to which it tends" (p. 9). Hence, CT is an active, constant process that demands from individuals reflective thinking, reasoning and evaluating conclusions.

Cottrell (2005) also portrays CT as a cognitive ability that necessitates the use of mental skills like attention, argumentation, classification, and evaluation (p. 1). Ennis (1987) states "Critical thinking is reflective and reasonable thinking that is focused on deciding what to believe or do" (p. 10). In other words, when engaging in CT, one has to think reasonably and reflectively so that he/she can decide what to believe or do. Similarly, Paul (2005) describes CT as disciplined and self-directed thinking which requires the mastery of intellectual skills. He perceives it as an art of thinking about one's own thinking while he or she is thinking. Besides, he adds that this ability helps learners to think more clear and accurate. This scholar also defines it as an active process of conceptualizing, analyzing, synthesizing, and examining data gathered via observation (cited in Billups-Thomas, 2011, pp. 19-20).

Furthermore, Halpern (2003) claims that CT is the application of cognitive skills to rise the possibility of a preferable outcome. Additionally, she indicates it as a purposeful, reasoned, and forthright thinking. Moreover, she argues that CT embraces other tasks like problem-solving, inferring, calculating likelihoods, and decision making (p. 6). On the light of the precedent definitions, CT is a highly complex process and it has a multiplicity of meanings that indicate the importance of both teaching and learning it at colleges.

2.3 Standards of Critical Thinking

According to Paul and Elder (2008), there are certain universal intellectual standards that must be applied to thinking to guarantee its quality. They also say that for students to learner these standards, instructors have to integrate and teach them directly. Additionally, they suggest nine standards which are clarity, accuracy, precision, relevance, depth, breadth, logic, significance, and fairness (p. 8). The researchers declare that the primary goal of the above-mentioned standards is to infuse them in learners' thinking so that they will be a part of their inner guide and instructor them to be good rational thinkers (p. 8). Equally, Bassham et al. (2011), classify eight clear intellectual standards of CT which they think they are foremost needed ones (p. 2). They include:

2.3.1 Clarity

Each person should be able to express his/her thoughts clearly so that people can understand and evaluate his/her claims and arguments adequately. This opacity often results from laziness, carelessness, or misled effort to learn. Thus, to achieve self-understanding, any critical thinker must value and strive for the clarity of thoughts (Bassham et al., 2011, p. 2).

Furthermore, Kallet (2014) considers clarity to be the first and most essential standard in CT (p. 21). He points out that this standard enables us to recognize and comprehend the actual problem and narrow its scope (p. 16). The statement should be clear, for example instead of saying "we need to improve our quality", it's better to say, "we need to reduce our defect rate to less than 10 units per 1.000" (p. 16).

2.3.2 Precision

Precision is a highly important standard in CT. When a person makes a careful detailed observation of the problem, through using a process of precise logical inference, he/she can detect the clues easily to find a solution to the issue and to overcome any confusion or unsureness (Bassham et al., 2011, pp. 2-3).

2.3.3 Accuracy

Critical thinkers should always base their decisions on accurate data rather than false assumptions to make adequate choices that are as informed as possible (Bassham et al., 2011, p. 3).

2.3.4 Relevance

Paul and Elder (2008) mention that all the above universal standards could exist in one statement, yet not relevant to the question of the problem. For instance, it is commonly known that when learners put their energy at a given course, their scores would increase. However, students' quality of learning is not measured by the effort and most of the time is irrelevant to their grads as well (p. 8).

2.3.5 Consistency

Consistency is another crucial standard in CT. Critical thinkers value the truth and they are always in search for inconsistencies either in their thinking or in the claims of others. This lack of consistency is of two types; logical and practical inconsistencies. The former is to say or believe inconsistent things and the latter is to say something and do the opposite. When individuals think critically, they raise their awareness to cut through such unconscious practical inconsistency (Bassham et al., 2011, pp. 4-5).

2.3.6 Logical Correctness

Logical thinking is to reason correctly. In other words, drawing reasonable conclusions from the held beliefs. Additionally, the capacity to think critically requires accuracy,

formulation of well-supported beliefs, and most importantly reasoning to infer logical conclusions (Bassham et al., 2011, pp. 5-6).

2.3.7 Completeness

In CT, depth thinking is necessary and preferable rather than shallow and superficial thinking (Bassham et al., 2011, p. 6).

2.3.8 Fairness

Human beings by their nature tend to be self-interest and only in favor of their thinking and feelings. Fairness implies that people's thinking should be fair, open-minded, and not bias to their points of view. Fair-mindedness is an obviously vital standard that every critical thinker should strive to achieve (Bassham et al., 2011, pp. 6-7).

2.4 Characteristics of a Critical Thinker

Bassham et al. (2011, pp. 25-26) have listed certain intellectual characteristics of critical thinkers. They include:

- The passion to master CT standards.
- The ability to reason logically and draw conclusions based on facts.
- The skill to analyze and evaluate arguments.
- The trait of intellectual honesty with themselves, avowing what they do not know and setting their restrictions.
- The open-minded thinking towards contrasting viewpoints via tolerating criticism of the various provided assumptions.
- The ability to build their beliefs on evidence instead of individual bias or self-interest.
- The ability to thinking objectively and independently.
- The ability to identify the truth or falsity of assumptions.
- The critical thinkers have the desire to trace the truth regardless of the different impediments, and they are also curious about a wide variety of issues.

Accordingly, Lau (2011, p. 2)) has categorized other features of critical thinkers. They include:

- The ability to comprehend the logical relationship between ideas.
- The ability to assess the pros and cons of a decision.
- The ability to justify one's own beliefs and values.
- The ability to analyze problems systematically.

Additionally, Diestler (2011) states that a Critical thinker is someone who can explain his/her decisions clearly (p. 2). Similarly, Halpern (2003, pp. 14-16) has emphasized several qualities among them. They include:

- Recalling relevant data whenever necessary.
- Constructing reasonable and persuasive arguments.
- Differentiating between reliable and unreliable sources of information.
- Synthesizing and collecting information from different sources related to a problem to be solved.
- Flexibility.

Therefore, a critical thinker is not recognized by any specific physical features rather, he/she demonstrates certain abilities like differentiating facts from opinions, formulating and asking appropriate questions. depicting the credibility of sources, drawing inferences from the evidence. but most importantly avoiding biases and prejudices.

2.5 Skills of Critical Thinking

Facione (1990) denotes certain cognitive skills as the cornerstone to CT that involves analysis and evaluation. Additionally, he considers decision making and problem-solving as other vital skills that each critical thinker should have (pp. 8-13). In this light, the GE Foundation Workplace Skills Program (2006) has proposed a model to outline five fundamental skills of CT. According to the model, the skills are interrelated, and they also include particular behaviors (p. 5). The skills are as demonstrated in figure 2.3



Figure 2.4 CT skills Model

(The GE Foundation Workplace Skills Model, 2006, p. 5)

2.5.1 Reasoning

Reasoning is considered as an important skill in CT. Online Merriam Webster Dictionary defines reasoning as "the use of reason especially; the drawing of inferences or conclusions through the use of reason" (n.d). In other words, reasoning is an act of thinking about things reasonably to draw conclusions and to make decisions.

Accordingly, Galotti (1989) explains that reasoning includes goal-oriented thinking, as well as the drawing of conclusions from different data. He also adds that those conclusions could be either intentional or unintentional (p. 333). As declared by the GE Foundation Workplace Skills Program, reasoning is the capacity to construct rationally and coherently arguments, and to justify those arguments using reasons (2006, p. 6).

Besides, Allen (2004) depicts reasoning as one of the major advances of humankind that help people comprehend the world and reach reasonable conclusions (p. 3). Further, he argues that reasoning is "A complex weave of abilities that help you get someone else's point, explain a complicated idea, generate reasons for your viewpoints, evaluate the reasons given by others, decide what information to accept or reject, see the pros as well as the cons and so forth" (p. 3). Therefore, reasoning comprises very complicated capabilities such as interpretation, evaluation, and decision making. Mastering the skill of CT is highly associated with acquiring the reasoning skill.

In addition, Cottrell (2005, p. 3) points out that the skill of CT is deeply correlated with the skill of reasoning or within every ability that implies "Rational thought". She continues arguing that the reasoning skill begins within us. It encompasses:

- The ability to set up the reasons for what you believe and do.
- The ability to make a critical evaluation of those beliefs and behaviors.
- The ability to show and reflect for others the reasons for your beliefs and behaviors.

Thus, it is important to state your reasons so that, it will be easy for you to justify your beliefs and actions for others. More precisely, to determine why you think that thing to be true.

There are two major types of reasoning: deductive and inductive reasoning.

2.5.1.1 Deductive Reasoning

According to Laird (2009), deductive reasoning (DR) is a cognitive process of making rational conclusions (p. 8). Besides, Hatch and Hatch (2006) observe that in DR the reasoner initiates from general insights (premises) into very specific conclusions (p. 66). Similarly, Schechter (2013) claims that DR is the type of reasoning in which almost the validity of assumptions (premises) insures logically the validity of the conclusion (p. 226). Consequently, DR is about drawing accurate conclusions based on logical premises. For example:

• All muscles are made out of living tissue. (general premise)

- All humans have muscles. (more specific premise)
- Therefore, all humans are made out of living tissue. (very specific premise)

2.5.1.2 Inductive Reasoning

In contrast to DR, in inductive reasoning (IR), the reasoner draws a specific conclusion from broad premises (Hatch and Hatch, 2006, p. 66). For example:

- Bella is a horse and has hooves. (Specific premise)
- Smoky is a horse and has hooves. (Specific premise)
- Nutmeg is a horse and has hooves. (Specific premise)
- Shadow is a horse and has hooves. (Specific premise)
- Therefore, it is likely that all horses have hooves. (General conclusion)

Despite the accuracy of all premises, the conclusion might be false because it is based on less-complete information. Within this kind of reasoning, if the reasoner develops a wider conclusion from specific premises, it is better to state that "the conclusion can be or is feasible to be true" instead of "it must be true". (Hatch and Hatch, 2006, p. 66).

2.5.2 Problem Solving

According to Krulik and Rudnick (1989), a problem is a state occurs when the person faces an obstacle to finding a clear solution or path to the problem. Further, they also define problem-solving as the use of the various means obtained earlier such as prior knowledge, skills, and comprehension so that the learner will be able to deal with the challenges of an uncommon situation (p. 7).

2.5.2.1 Problem Solving Stages

According to the GE Foundation Workplace Skills Program (2006, pp. 25-29), there are numerous stages that a problem solver should go through to solve problems efficiently. They include:

- a. Identifying the problem: is the initial and the most crucial stage in the problemsolving process. In order to comprehend the problem, the problem solver has to search for the root causes of the problem. Afterwards, he/she has to map the problem by reforming it in a form a question. For example:
- The problem: time pressures
- The causes: unequal workload, unclear expectations, and ineffective use of time.
- The problem in a form of a question: how do we create an equal workload, explain workplace expectations, and learn to use time effectively?
- b. Looking for possible solutions: at this stage, the attention is on generating possible ideas and solutions for the problem. The problem solver initiates by brainstorming every possible idea. Before discussing, debating, and deciding for the perfect solution, he/she must guarantee that the solutions or ideas are understandable.
- c. Selecting solutions: in the third stage, the solver makes decisions about what to do.Then, assessing each possible solutions and discussing all of their pros and cons.Ultimately, selecting the most suitable solution.
- d. Acting on solutions: in the final stage, the problem solver needs to develop an action plan so that he/she could implement the solution. He/she also needs to check-in the implementation of the process to assess the efficacy of the selected solution.

1.5.3 Decision Making

Decision making is considered as another central theme in CT. Human beings confront a lot of problems and make hundreds of decisions or choices every day; most of these are habitual and need little thought (Butterworth and Thwaites, 2013, p. 123; Evans, 2017, p. 51).

According to the Oxford Dictionary (2008), the word decision means to select or judge between all the potential options to come up with cautious conclusions (p. 115). Additionally, Halpern (2014) points out that most of the decisions humans make are uncertain because they cannot know in advance the outcome of their actions (p. 401). In the same context, she also defines decision making as "as an active process that is used when the task requires the decision-maker to select the best alternatives from several possibilities" (pp. 400-402). Indeed, decision making is a conscious process that includes the selection of the best option among various possible choices.

2.5.3.1 The Decision-Making Process

Some models are suggested by several scholars to determine the process of decision making. Tiernan and Morley (2013, pp. 148-151) have recommended a model consists of six basic steps that every decision-maker should go through. They include:

- a. Problem identification and diagnosis: the first step in the process of decision making is to determine and analyze the actual cause of the problem. After the decision-maker has collected diverse sources of data, action can take place. He/she also has to have the will to do something to redress the situation.
- b. Alternative identification: the second step is to identify a variety of choices to figure out a solution to the issue. Sometimes, the decision-maker can look at already made decisions, yet he/she needs to add his/her imagination to come up with a novel solution.
- c. Alternative evaluation: at this phase, decision-makers will base their decisions on intuitive feelings and scientific data. When evaluating all the possible options to select the most appropriate solution, they have to follow certain criteria. such as the cost, the time is taken, the outcomes, and the opportunities for the success of each alternative.
- d. Selection of alternative: after assessing the alternatives, the decision taker is ready to choose the best solution. If he/she has not met the best choice, he/she can return to the second step and repeat it again.

- e. Implementation: This stage is critically important because it is the key to the success of decision making. After making the decision, it has to be implemented. If the chosen decision is not implemented correctly, it is valueless.
- f. Evaluation: in the last stage, the decision-maker must reassess his/her decision to guarantee if it still the most suitable one or not. This step gives him/her the chance to see the decision outcomes as well as to determine if there must be any further changes.

2.5.4 Analysis

Merriam Webster Online Dictionary defines the term "analysis" as the study of something complicated by examining its parts to recognize its fundamental features and its origins (n.d). In comparison to the preceding skills, Bloom (1956) has categorized analysis at a higher level in his taxonomy. He states that analysis focuses on dividing the elements into smaller parts and discover the relationships between those parts, as well as the way they are classified (p. 144). In other words, analysis is to determine the exact relationship between different components and what those components intend to express. Facione (1990, p. 14) has proposed three sub-skills within this skill.

Examine Ideas

A careful analysis should be done to ideas, statements, and concepts operated for reasoning and persuasion. First, to determine the concept. Second, to make a comparison between these ideas, statements, or concepts. Third, to diagnose problems as well as to determine the existing relationship between these ideas, statements, or concepts (Facione, 1990, p. 14).

✤ Detecting Arguments

In detecting arguments, a particular set of statements, questions, or descriptions are provided to show whether the expressed reasons tend to support or oppose the claim (Facione, 1990, p. 15).

✤ Analyzing Arguments

Butterworth and Thwaites (2013) argue that before examining or evaluating any argument, there must be a clear understanding of reasoning to support your premises and to avert any misunderstanding of the argument (p. 38).

2.5.5 Evaluation

Iseni (2011) defines evaluation as the process of explaining information so that forming judgments about a certain program or programs (p. 6). Similarly, The GE Foundation Workplace Skills Program (2006) argues that evaluation is the operation of assessing or judging something based on particular criteria or data. For instance, if you go to the doctor, he/she is going to make plenty of vital signs tests for you. After that, he/she is going to read the reported data; he/she can give you judgment about the state of your health (p. 6). Subsequently, evaluation has to do with the ability to make judgments to decide the value of data using specific standards.

2.6 The Importance of Critical Thinking for EFL Learners

Lately, the discipline of CT has gained high importance in the field of education in general and in language learning in particular. Accordingly, Davidson and Dunham (1997) state that EFL classrooms have witnessed a shift from the focus on basic skills into stressing the significance and necessity of fostering CT skill as an indispensable element in the English language curriculum (p. 43). In a similar way, Shirkhan and Fahim (2011), emphasize its importance into the FL classes where they proclaim that language learners who have enhanced their CT skills are most likely to solve problems and do hard tasks than others with

less developed CT abilities (p. 112). They also state that English language learners have to possess CT skills for several reasons. Firstly, it helps them to read behind the literal meanings. Secondly, it makes them capable of writing well-convinced essays. Finally, it teaches them how to express their insights with adequate supporting evidence as well as to challenge the opposite views.

Furthermore, another scholar has identified other considerable reasons to encourage the skill of CT among foreign language learners. At first, He argues that when EFL learners are responsible for their own thinking, they can effectively control and enhance their own ways of learning. Second, if learners think critically, they can extend their learning experience and make the language more expressive and of value. Third, the skill of CT is extremely interrelated with students' academic achievements. He adds that diverse empirical studies portray its contribution to improving learners' writing ability, language proficiency, and oral communication capacity (Rafi, n.d., pp. 63-65).

Similarly, Bassham et al. (2011) highlight its value in the classroom in which they assert that practicing CT can help learners to develop their classroom performance when learning its different skills among them, the ability to comprehend arguments and beliefs, the ability to make a critical evaluation to those arguments and beliefs, and in turn improve their ability to defend their own claims. Eventually, promoting autonomous learning (pp. 8-9). Besides, (Tiwari et al., 2006) confirm that the active involvement of learners during the learning process can manifest to improve their CT ability (p. 548). It is concluded that CT and its different Skills are of great importance in EFL classrooms.

2.7 Barriers to Critical Thinking

It is widely remarked that developing learners thinking abilities is an important goal of education. However, there seems to be a lot of obstacles and barriers which prevent achieving this objective.

2.7.1 Egocentrism

According to Rudinow and Barry (2007), egocentrism is one of the major obstacles that hinder CT in which the individual has a preference to defend, prioritize, and value only his/her beliefs and opinions and close his/her mind to the probability that he/she is mistaken (pp. 18-19). Additionally, Paul and Elder (2011) say that egocentrism is a problem to any critical thinker because the individuals usually tend to use their self-interest psychological standards to define what to believe and what to reject and not the intellectual standards of thinking (p. 21).

2.7.2 Lack of Knowledge

Another obstacle to CT is students' lack of knowledge, the majority of them have a deficiency to the fundamental knowledge needed to think critically, as well as a lack of the basic academic knowledge to comprehend simple concepts. Let alone, the other abilities to analyze, integrate, and apply the subject matter they are presently learn (Buskit and Irons, 2008, p. 52).

2.7.3 Misunderstanding of what Is Meant by Criticism

Some people avoid making any kind of criticism when analyzing any given data. This is a result of the misconception of the word criticism when relating it only to negative aspects (Cottrell, 2005, p. 10).

2.7.4 Memorization

Although the act of memorization requires a lot of time and energy, some learners prefer to memorize facts and figures rather than thinking. Students also favor being told what is true and what is not rather than searching for accurate information on their own learning (Buskit and Irons, 2008, p. 52).

2.7.5. Insufficient Focus and Attention to Detail

A poor criticism maybe is a consequence of making judgments that are based on a too broad overview of the subject matter. Thus, for more accuracy and precision in CT; there must be good focus to details because CT tasks need total attention to any activity in hand (Cottrell, 2005, p. 12).

2.8 Teaching Critical Thinking

In spite of the fact that CT has approached extensive acknowledgement among researchers to create a well-equipped generation of critical thinkers, there has been a discussion about the teachability of CT in EFL context (Lin, 2018, p. 4). On one hand, McPeck (1990) describes the teachability of CT as a promise that probably cannot be maintained. He adds that it mainly distracts faithful teachers who are attempting to develop the different thinking abilities of students in which he claims that CT as a notion is too abstract or too complicated to be taught (pp. 19-20).

In the same vein, Atkinson (1997) demonstrates a sense of uncertainty towards the possibility of teaching CT to EFL learners, in which he proclaims that it is a "social practice" more likely to be inherent in Western cultures and it can particularly be acquired via an unconscious process of socialization during childhood (pp. 72-73). On the other hand, Davidson (1998) disputes with Atkinson's (1997) claim in which he argues that though some cultures have a minimum practice of CT because they give a high estimation to silence, imitation, submission, and conformity, this does not prohibit these cultures to teach CT to EFL learners. Rather, such cultural variations per se should be seen as a solid reason for its direct introduction (pp. 121-122).

According to Lin (2018), it might be true that CT is internationally less valued in certain societies. Yet, nobody ignores its significance in the field of academia (p. 5). Additionally, Snyder and Snyder (2008) indicate that CT is a learned skill:

The premise that critical thinking is to knowing as listening is to hearing implies that critical thinking is a learned skill that must be developed, practiced, and continually integrated into the curriculum to engage students in active learning. To support this premise focused attention needs to be placed on the application of content and the process of learning. (p. 91)

It is avowed that CT can be taught as the other essential skills. Nonetheless, teaching content is of high value, a careful attention should be placed on the process of how learners learn the material is correspondingly significant. Moreover, when it comes to the implementation of content, most teachers tend to use traditional teaching strategies that focus on lecture and rote memorization as a method of teaching. Since CT is a mental process, these instructions of teaching are not an effective way to boost it; instead, teachers should introduce some instructional teaching techniques that are specifically designed to promote CT (Snyder and Snyder, 2008, pp. 91-92).

Ennis (1989) suggests that CT can be taught directly and indirectly. Either through the explicit instruction also named "the infusion approach", the former focuses on teaching the CT principles, dispositions, and abilities to make them sound clear and direct for students. Or through the implicit instruction also labelled "the immersion approach", the later attempts to make learners well-involved in deep-subject content learning. However, the elementary concepts of CT are indirectly presented; it is assumed to be improved as a spontaneous result of the content learning (p. 5).

Another remarkable attempt is made by Zhao, Pandian, and Singh (2016) who declare that in EFL classes, if teachers are to use the explicit instruction, they have to be able to clarify, illustrate, and install the notion of CT into their classroom tasks and lesson deigns, and not only acknowledge its relationship to language learning (pp. 15-16). Along with what has been mentioned, in reading session, teachers, for example, can introduce and teach the pivotal CT skills affiliated with it. Among these skills: analysis, inference, interpretation, recognition of the essential claims and the supporting reasons, the summary of the main ideas, and the evaluation of claims' reliability and accuracy (p. 16).

Accordingly, Zhao et al. (2016) report that asking high-level questions and using probing questioning strategy is a useful way that assists and helps learners in the process of inferring, judging, evaluating, and interchanging thoughts. Hence, this strategy has a high potential to cultivate CT. Besides, teachers have to maintain an authentic interaction with learners and to give them sufficient time so that reflection occurs (p. 17). Further, a debate is seen as another perfect method to stimulate and develop EFL learners' CT skill because it obliges them to think about the various angles of the problem as well as to interact with their classmates (Halvorsen, 2005, para. 7). Based on the previous debate, it is obvious that teachers can teach EFL learners to think critically. Thereafter, CT is the outcome of education, training, and extensive practice.

2.9 Developing Critical Thinking through Classroom Interaction

1).

Recently, in the 21 first century, CT has gained wide attention among researchers and educationalists. It is regarded as one of the fundamental abilities that need to be acquired in the workplace, in life generally, and classrooms particularly. However, most of the education systems' curriculum does not customarily help learners to be reflective thinkers. To this end, Bearne, Dombey, and Grainger (2003) argue that the perfect way to develop ideas is through interaction. Besides, they assert that oral interaction works as a medium to stimulate students' ability to think and to learn (p. 2). Furthermore, Loona (2012) states that to averting the excessiveness of theoretical parts of the different items given while studying, CI is used by instructors as a teaching-learning tool to allow learners fostering CT abilities, concentrating on particular details, and advocating more space practicing what they already have learned (p.

In addition, supporting this view, Johnson (1995) continues arguing that the effective management of SSI results in developing students' cognitive skills, she states that:

Student-student interaction can be highly constructive, leading to . . . a higher level of cognitive development and moral reasoning. When students are exposed to alternative or contradictory viewpoints from their peers, they are often encouraged to seek more information or to take on alternative perspectives. When this occurs, new recognized conclusions can be reached that often include the reasoning of others. (p. 112)

From the above quotation it can be concluded that students' exchange of their different perspectives among each other could lead to draw evident conclusions based on moral reasoning. They can also understand and tolerate each other opposing ideas, whereby they can be critical thinkers because one of its main characteristics is to be open-minded and avoid being prejudice. Hence, SSI can be considered as a crucial factor that could lead to developing the cognitive skills of CT.

Moreover, as it is displayed earlier in the former chapter, one of the well-known patterns of SSI is small group work. In this regard, Cazden (2001) determines that within this type, when students are taking part in a given task or an activity, they are firstly asked to explain their thinking to their classmates. Secondly, they pay attention to understand their classmates' explanations. Thirdly, they attempt to comprehend the explanations that might not be logical. Finally, they approve upon one answer (p. 119). In this context, students are unintentionally following some steps while they are explaining their ideas to their classmates that are in common with CT abilities.

Similarly, in the previous chapter regarding the importance of CI, it is demonstrated that CI plays a significant role in developing students' CT, where peers' exchange of thoughts and ideas enable them to initiate debates, communicate, and reflect their way of thinking (Dee-vil, 2012, p. 1). Interestingly, the other form of CI that includes TSI consists of Initiation-

Response-Feedback (IRF) structure and teacher' questioning. Here, the teacher starts CI by asking questions and waiting for students' answers (Tuan and Nhu, 2010, p. 31). In the same perspective, Wells (1993) explains that the feedback's nature provided by the teacher in the last turn of the IRF offers chances for more interaction. Thereafter, the teacher ought to ask learners to stretch their thinking, defend, and explain their views or make connections with their own experiences (p. 35).

Other scholars, for instance, Tuan and Nhu (2010) declare that the teachers' questioning is considered as an essential strategy of CI (p. 32). The main aim of this strategy has changed from merely evaluating students' knowledge to be directed for extracting what students are thinking of, along with bolstering them to clarify their prior thoughts and helping them in constructing conceptual knowledge. Henceforth, through this technique, students' perspectives are determined, extended, and their thinking is reinforced (Chin, 2006, pp. 1318-1319).

Furthermore, Ascher (1961) and Gall (1970) believe that this strategy is one of the fundamental ways teachers use in order to trigger students' thinking and learning (cited in Tuan and Nhu, 2010, p. 32). More to the point, according to Orlich et al. (2013) teachers' questioning is a crucial way of stimulating students to think critically. Generally, CI as teaching technique is categorized into two main categories which are lower-level and higher-level questions. The former ones are recognized as factual or literal questions. They attempt to calling for recognizing or recalling valid information that already has been presented by the teacher. However, the latter is of a higher level, which challenges learners to manipulate already obtained knowledge for providing an accurate answer. Hence, this level of questions is above memory and factual information where learners are required to make higher determination so that they can conclude, analyze, and evaluate (cited in Zhao et al., 2016, p.

16). This indicates that the teachers' questioning strategy of CI has potential benefits to prompt students' CT skills such as analysis and evaluation.

Additionally, referential questions are one of the two teachers' questioning types. In this sense, this form of the question is adopted in high efficient language classes, where both lengthy and complicated answers are required. Significantly, students' responses consist of very essential elements like clarification, illustration, and conveying facts. Thus, the referential questions can effectively foster learners' CT (Tuan and Nhu, 2010, p. 34). In a related vein, Brock (1986) explains that students' answers to these questions tend to be more significant, longer, and syntactically complicated (p. 55).

In a similar manner, Arends and Kilcher (2010) attempt to provoke their students' thinking through asking them some referential questions in a given task, they proceed to present logical ideas and provide evidence. Hence, they are trying to teach their students how to think and more precisely to relate it to CT (p. 229). Along with similar lines, Richard and Lockhart (1996) have provided the following example of referential questions, which better summarizes how they are asked: what are the best ways of promoting the use of computers in education? (Richard and Lockhart, 1996, p. 187).

In practice, it is worth mentioning two essential case studies that come close to the same manner of the impact of CI on CT. Yiqi (2012) explores the role of CI in enhancing CT skill. The findings reveal that students' interaction, questions, and long responses to their classmates' presentations including facts and examples, have manifested to improve their thinking skills (p. 390). In another study, Yang and Chou (2008) have highlighted four vital strategies to enhance Eastern Asian students' CT skills and CT dispositions including modelling, opportunities, feedback, and interaction (p. 668). They notice that through interaction either it is a SSI or TSI; it will significantly help to bolster students to perform a

kind of accurate thinking and to develop their CT dispositions. Eventually, CI is the suitable strategy to enhance students' CT.

Conclusion

Some researchers and scholars have not agreed upon standard definition of CT, however, most of them have agreed about its importance and have identified it as one of twenty-one first century necessary skills. This chapter was devoted to explain some key terms related to CT. It also illustrated some qualities of critical thinkers. Finally, it asserted the importance of CT for EFL learners and demonstrated the existing relationship between the two variables.

Chapter Three: FIELD INVESTIGATION

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Introduction

After exploring the two variables of the research, CI and CT thoroughly, now it is possible to investigate learners' attitudes and views towards the impact of CI on EFL learners' CT practically. In doing so, one data-gathering tool has been used. Hence, the present chapter sums up the findings from the students' questionnaire. It also endeavors to analyze and interpret these findings so as to answer research questions and to prove or disprove the research hypothesis. In addition, some pedagogical implications and limitations of the study are provided.

3.1 Students' Questionnaire

3.1.1 Population of the Study

The current research targets First-year Master students (the academic year 2019-2020) at the department of English, Faculty of Letters and Languages, University of 8 Mai 1945, Guelma. The purpose of selecting First-year Master students as a population of the study is related to the fact that they have received four years of instructions at university. Furthermore, based on the consideration that at this advanced level, First-year Master students are supposed to have sufficient background knowledge and competencies that enable them to provide clear insights about the topic under investigation. More precisely, they are exposed to modules that need higher thinking skills. Thereafter, a random sample consists of 100 subjects out of 121 First-year Master students has been chosen.

3.1.2 Description of Students' Questionnaire

The design of students' questionnaire is fundamentally constructed on the antecedent theoretical framework. It is composed of thirty-two questions logically organized under three main sections; each section concentrates on a specific item. Proximately, all of the questions used in this questionnaire are both closed and open-ended questions. The precedent is about providing yes/ no answers or selecting the appropriate choices from the already mentioned

options, and the following is about asking students to provide justifications or suggest other alternatives. The final question is open-ended for allowing the participants to write their comments, recommendations, or suggestions freely concerning the topic under investigation.

3.1.2.1 Section One: EFL Classroom Interaction (Q1-Q10)

In this section, in the first question, students are asked to indicate the frequency of their participation inside the classroom. The question number (Q2) is yes/no question in which students are asked to state if their teachers create opportunities for interaction or not. If their answer is yes, students are requested to indicate how often they comment on their peers' thoughts. The subsequent question (Q3) students are asked to set which type of CI teachers usually use inside the classroom. The next question (Q4) students are required to choose the type of CI they prefer the most. Further, in question (Q5), students are asked if they think that SSI is an effective way for successful learning. In the following question (Q6) students are asked to state if TSI provides a comprehensible input that is adequate for students' level. Question (Q7) is directed to students to indicate whether NOM plays a significant role for successful CI. Question number eight (Q8) is yes/no question where students are asked to state if their teachers provide them with feedback during their participation or not. If their response is yes, they are requested to indicate whether it is positive or negative feedback. For question number nine (Q9) students are requested to set the factors that could have a high effect on CI. In the last question (Q10), students are asked to indicate which strategies are more effective to promote CI.

3.1.2.2 Section Two: Critical Thinking (Q11-Q22)

In question (Q11) students are asked about their perception of the existence of CT. In the subsequent question (Q12), students are asked if their teachers attract their focus to the existence of such skill. Further, question number (Q13) is yes/no question where students are asked to state if they consider themselves as critical thinkers or not. If yes, students are asked

to select the ability (ies) of a critical thinker. In question (Q14), students are requested to choose which intellectual standards could be more effective in developing their CT. Moreover, in question (Q15) students are demanded to indicate the characteristics of a critical thinker. In the following question (Q16) students are required to state which type of reasoning they use when constructing arguments. In question seventeen (Q17) students are asked to identify the stages of problem solving. Besides, question (Q18) is directed to indicate whether decision making is a conscious or unconscious process. For question nineteen (Q19) students are asked about their attitudes and views concerning the importance of developing CT. In question number (Q20) students are requested to select the factors that they consider have a great influence on developing their CT ability. Additionally, question (Q21) is about students' perception towards teaching the skill of CT as much as the other four essential skills. If students opt for yes, they are asked to pick CT skills that they think are of great importance. The last question (Q22) is directed to state whether teachers encourage their students to develop CT skills. If yes, students are asked to justify their answers by stating the kind of activities that their teacher use inside the classroom.

3.1.2.3 Section Three: Students' Attitudes towards the Impact of Classroom Interaction on Critical Thinking (Q23-Q31)

The first question in this section, students are asked to select which teaching strategy (ies) their teachers use very often inside the classroom to develop the lesson. In question number twenty-four (Q24), students are asked to state whether or not CI is an effective strategy of teaching and learning. For question number twenty-five (Q25), students are requested to state their opinions about the impact of CI on CT. Then, in question (Q26) students are asked to indicate their attitudes towards the impact of CI on CT whether it is positive or negative. In question (Q27) students are demanded to choose the modules that they think they require further interaction to develop their ability to think critically. In question (Q28) students are

asked to opt for the type of CI that they think can better enhance their CT. The next question (Q29) is yes/no question in which students are asked to indicate if their teachers ask them questions which need reflective thinking. If their answer is yes, they are asked to choose the types of questions mostly questioned by their teachers. For question number thirty (Q30), students are required to select the most important strategy (ies) of CI that they think can improve their CT. The last question (Q31) is designed to ask students to indicate the extent to which they agree with the statement that CI can develop EFL learners' CT ability.

3.1.3 Administration of Students' Questionnaire

The administration of students' questionnaire was handled on July 20th, 2020; and it was collected back after seventeen days exactly on August 6th, 2020. It has been delivered to First-year Master students through an electronic version via both emails and Facebook group. Actually, the process of gathering the results was difficult because of the spread of the virus COVID 19, along with the rejection of some students who were unhelpful to answer the online questionnaire. However, the other cooperative students who answered this questionnaire did not face any obstacle as it was reviewed many times to guarantee the accuracy of the research. Therefore, every First-year Master student at the department of English, university of 08 Mai 1945, Guelma was emailed to provide his/her response regarding the research topic.

3.1.4 Data Analysis and Interpretation

3.1.4.1 Analysis of Results and Findings from Students' Questionnaire

Section One: EFL Classroom Interaction

Question One: How often do you participate in the classroom?

Always	
Usually	
Sometimes	
Rarely	
Never	

Table 3.1

Options	Participants	Percentage (%)
Always	27	27%
Usually	18	18%
Sometimes	37	37%
Rarely	14	14%
Never	4	4%
Total	100	100%

Frequency of Students' Classroom Participation

Regarding the frequency of students' classroom participation, almost half of the students (37%) claim that they sometimes participate. Likewise, a remarkable number of them (27%) declare that they always take part in classroom participation. Yet, (18%) of them state that they usually participate, and nearly (14%) of them determine that they rarely participate. Nevertheless, only four students (4%) say that they never hold a part in classroom participation; this is possibly due to their passiveness and lack of interest. The finding shows that a considerable amount of students is highly appreciating the significance of classroom participation as an essential element of learning a foreign language, which indicates their awareness of its positive impacts towards developing their communicative and thinking skills.

Question Two: Does your teacher create opportunities for interaction?

No

Yes	

Table 3.2

Teachers' Encouragement for Creating Classroom Interaction Opportunities

Options	Participants	Percentage (%)	
Yes	97	97%	
No	3	3%	
Total	100	100%	

Concerning teachers' encouragement to create CI opportunities, the absolute majority of students (97%) confirm that their teachers never hesitate to arrange a dynamic environment of learning, which motivates them to be active learners, while a little number of students (3%) reports that their teachers are not interested in creating opportunities for interaction. Probably because of teachers' inexperience to implement new strategies of learning, which can decrease students' interaction.

-If yes, how often do you comment on your peers' thoughts?

Always	Sometimes	Never	

Table 3.3

Frequency of Students' Comments on their Peers' Thoughts

Options	Participants	Percentage (%)
Always	17	17,53%
Sometimes	68	70,10%
Never	12	12,37%
Total	97	100%

Concerning students' frequency towards their peers' thoughts, expectedly more than half of the students (70,10%) indicate that they sometimes comment on their peers' thoughts. This suggests that their integration might be only for getting good marks. Seventeen students (17,53%) report that they always do. This advocates that they are extrovert learners who enjoy the public exchange of thoughts. However, a few number of the same sample (12, 37%) declares that they never do, possibly because they are introvert students who lack confidence, feel shy, and afraid of making mistakes while discussing. These results imply that students have different personality types and learning objectives affecting their performance.

Question Three: Which type of classroom interaction does your teacher usually use inside the classroom?

-Teacher-student interaction

-Student-student interaction

Table 3.4

Students' Attitudes towards Classroom Interaction Types

Options	Participants	Percentage (%)	
Teacher-student interaction	85	85%	
Student-student interaction	15	15%	
Total	100	100%	

As it is shown in the table above (3.4), the vast majority of students (85%) reveals that the most CI type that is used by their teachers is TSI. Nevertheless, the less majority of them (15%) reports that their teachers tend to use SSI. This indicates that the EFL settings partially remain on a teacher-centered approach, along with the teachers' control over the learning process.

Question Four: Which type of classroom interaction do you prefer the most?

-Teacher-student interaction -Student-student interaction

Table 3.5

Students' Preferred Type of Classroom Interaction

Options	Participants	Percentage (%)
Teacher-student interaction	63	63%
Student-student interaction	37	37%
Total	100	100%

The results obtained from the precedent table (3.5) point out that sixty-three students (63%) out of one hundred prefer TSI rather than SSI. This indicates that the teacher performs various roles for meeting his/her students' needs as well as facilitating the learning and teaching process. Yet, thirty-seven of them (37%) display that they prefer to interact more with their classmates. This implicates that students may feel more comfortable and confident when they interact with each other. It may reflect the fact that teachers unintentionally

decrease SSI as regard their learners' level or only for accomplishing the pedagogical goals of the learning process.

-In your opinion, which one should be minimized?

- Teachers' talk	- Students' talk	

Table 3.6

Students' Opinions towards the Minimized Amount of Talking Time

Options	Participants	Percentage (%)
Teachers' talk	75	75%
Students' talk	25	25%
Total	100	100%

Concerning the amount of time talking inside the classroom, the participants are asked to choose which one should be minimized whether teachers' or students' talk. Surprisingly, a significant percentage (75%) of students who agree upon TSI as the perfect way to interact, approve for minimizing teachers' talk. Whereas a low percentage of the same sample (25%) agree upon minimizing students' talk. The results demonstrate that the implementation of the LMD system among EFL classrooms attempts to support learner-centered over the traditional teacher-centered approach. This question requires students' justifications and some of them are summarized as follows:

In the light of students' answers, it can be concluded that the overwhelming majority of them have chosen to minimize teachers' talk for raising students' participation and creating more opportunities for expressing their ideas, in which their communication and speaking skill can be efficiently developed. Others state that maximizing students' communication helps them to develop their CT along with language development.

The same sample confirms that raising students' speech provides a comfortable learning atmosphere and enhances their academic achievements. This indicates students' awareness of being independent learners and limiting the teachers' role only to guidance. However, the rest of them who have chosen to minimize teachers' conversations, their responses are clarified regarding the teachers' role as a source of information, in which the classroom is formally organized and the lesson is highly developed. Others declare that teachers' talk should be more than students' talk because of the lesson-limited time. More precisely, students interact only for the sake of gaining attention and obtaining high grades. Finally, students who opt for maximizing teachers' talk, they agree upon one opinion claiming that it is not a matter of depending on their teachers' roles, but clarifying that students are judgmental, disrespectful, and not tolerated towards their classmates' thoughts. Hence, leading to a chaotic learning environment.

Additionally, among students' responses, three students did not provide an explanation for their choices, and only one student indicates that teachers' and students' talk should be balanced. This suggests his awareness of implementing both types of CI for providing teachers and learners with equal opportunities for interaction.

Question Five: Do you think that students-student interaction is an effective way for successful learning?

Yes	No	
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Table 3.7

Students' Attitudes towards the Effectiveness of Student-Student Interaction

Options	Participants	Percentage (%)
Yes	90	90%
No	10	10%
Total	100	100%

This question is addressed to students to explore their attitudes towards the effectiveness of SSI. As it is displayed in the table (3.7), mostly the entire sample (90%) declare that they
assert the effectiveness of SSI as a way for successful learning. Strangely, few of them (10%) denote SSI as a useless way of learning and teaching. The result implies that students agree that SSI can affect their learning successfully.

-If yes, could student-student interaction lead to: (more than one option)

a- construct learners' linguistic resources	
b-improve leaners' communicative competence	
c- develop learners' speaking skill	
d- decrease the teachers' control inside the classroom	
e- raise students' participation	
f- reduce the degree of deconcentration	
g- overcome the stress and embarrassment	
h-construct favorable and comfortable learning atmosphere	
i-build good social relationship among teachers and students	
j- raise students' attention and motivation	

Table 3.8

The Effectiveness of Student-Student Interaction

Options	Participants	Percentage (%)
A	19	21,1%
В	79	87,8%
С	71	78,9%
D	28	31,1%
Е	63	70%
F	40	44,4%
G	60	66,7%
Н	44	48,9%
Ι	44	48,9%
J	55	61,1%

Concerning the role of SSI as it is indicated in the above table (3.8), mainly the majority of students (87,8%) convey that SSI leads to improve learners' communicative competence. Likewise, a very significant percentage of learners (78,9%) state that it contributes to

developing their speaking skill. This implies that these students recognize that the main aim of learning a language is to communicate. It also may reflect students' interest in developing a high speaking ability. Similarly, a very considerable number of participants (70%) assert that SSI can raise students' participation. This may show that this type of interaction works as stimuli to overcome students' shyness and fear of taking part in CI. Additionally, almost the same number of them (66,7%) agree that this form of interaction can overcome stress and embracement among learners. Other students (61,1%) state that SSI is beneficial to raise students' attention and motivation. Another notable percentage of them (44,4%) affirm that this pattern of CI is a way to reduce the degree of deconcentration. However, a correspondent number of learners (48.9%) approves that this kind of CI is key to construct relationships and a comfortable learning atmosphere, which in return leads to build good social relationship among teachers and learners. In contrast, few students (31,1%) claim that SSI lead to decrease the teachers' control inside the classroom. Furthermore, a small percentage of them (21,1%) opt for constructing learners' linguistic resources as an advantage of this CI type. This displays learners' value of some linguistic resources such as textbooks and dictionaries for supporting the ordinary way of learning.

Question Six: Does teacher-student interaction provide a comprehensible input that is adequate for students' level?

Yes

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No
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Table 3.9

Learners' Opinions about Teacher-Student Interaction Input

Options	Participants	Percentage (%)
Yes	97	97%
No	3	3%
No Total	100	100%

Regarding the data gathered in the table (3.9), the highest percentage (97%) of the sample view that TSI provides a comprehensible input that is adequate for students' level. This explains that the teacher-student exchange of modifications and explanations is highly contributing to provide a comprehensible input that is adequate for students' level. By contrast, only three (3%) students among one hundred participants consider that TSI does not provide a comprehensible input that is adequate for students' level. This might be related to their preferences, i.e. they do not encourage this type of interaction, or maybe at this level of interaction the input that is provided by both teachers and students leads to misunderstanding and confusion.

Question Seven: Do you think that negotiation of meaning plays a significant role for a successful classroom interaction?

Yes	No	

Table 3.10

Students' Points of View Concerning the Significance of Negotiation of Meaning

Options	Participants	Percentage (%)	
Yes	95	95%	
No	5	5%	
Total	100	100%	

It is notable from the above table (3.10) that nearly all students (95%) display that negotiation of meaning plays a significant role for a successful CI, however, the remaining percentage of them (5%) state that it does not. Based on these statistics, this implies its importance in forming accurate and meaningful utterances among learners.

-If yes, do you think that negotiation of meaning helps students to:

a-Resolve the breakdown of communication	
b-Improve language development	
c-Acquire and maintain more second language vocabulary acquisition	
d-All of the above	

Options	Participants	Percentage (%)
A	9	9,47%
В	12	12,63%
С	8	8,43%
D	66	69,47%
Total	95	100%

The Significance of Negotiation of Meaning

This question is a continuation to the antecedent one. In this question students who confirm that negotiation of meaning plays a major role for successful CI are asked to determine its usefulness. Nine students (9,47%) indicate that it helps to overcome the breaking down of communication. Other students (12,63%) claim that it improves language development. Yet, only (8,43%) of them declare that it helps to maintain more second language vocabulary acquisition. As a result, the overwhelming majority of reporters (69,47%) opt for all provided suggestions in the list. The findings demonstrate that few students select some choices, but all of them agree that negotiation of meaning has many advantages not merely one or two. This indicates students' awareness towards the significance of negotiation of meaning which enables them to understand each other clearly and fruitfully.

Question Eight: Does your teacher provide you with feedback during your participation?

Table 3.12

Yes

No

Teachers' Feedback

Options	Participants	Percentage (%)	
Yes	91	91%	
No	9	9%	
Total	100	100%	

From the above-obtained results, it is concluded that the overall majority of students (91%) assert that their teachers provide them with feedback during classroom participation, whereas only (9%) of them claim that they do not. This suggests that teachers give high importance to the aspect of feedback in order to support and stimulate their students' interaction such as correcting their mistakes and errors immediately.

-If yes, does teachers' feedback affect your oral classroom interaction?

Positively Negatively

Table 3.13

Students' Perceptions of Teachers' Feedback

Options	Participants	Percentage (%)
Positively	84	92,31%
Negatively	7	7,69%
Total	91	100%

This question is devoted to students who declare in the previous question (Q8) that their teachers provide them with feedback during their classroom participation. Hence, the percentage of this question is 91%. Eighty-four students (92.31%) report that their teachers provide them with positive feedback, while the rest of them (7.69%) reveal that they provide negative feedback. This explains teachers' awareness to provide learners with positive feedback for motivating them to value themselves, be active and creative learners. Alternatively, teachers' negative feedback maybe a useful way to develop a sense of self-correction among learners.

Question Nine: Which factors could have a negative affect on classroom interaction? (more than one option)

a-Teachers' beliefs	
b-Teachers' questions	
c-Learners' different English level	
d-Teachers'-learners rapport(relationship)	
e-Anxiety	

Options	Participants	Percentage (%)
Α	45	45%
В	42	42%
С	45	45%
D	47	47%
Е	56	56%
Others	7	7%

Factors Affecting Classroom Interaction

In this question, students are asked to choose which factors that negatively affect CI. As it is indicated in the table above (3.14), an equal percentage of students, (45%) agree upon two important factors regarding teachers' beliefs and learners' different English level as one of the difficulties influencing CI. This can be explained that some teachers lack the proficiency of distinguishing between their personal and academic experiences, along with very few numbers of instructors who do not take into consideration their learners' needs and levels. This displays learners' recognition towards the impact of these two factors on the learning atmosphere and their major role in decreasing either SST or TSI. Less than half of the students (42%) claim that teachers' questioning affect CI. This might assume that teachers' type of questions is of a high level of comprehension and difficulties, or possibly that these students lack self-confidence and self-esteem so that their classroom performance is greatly affected. This result signifies that specific types of teachers' questioning might hinder the development of interactive learning. However, a very significant percentage of students (47%) declare that teachers-learner rapport (relationship) is a crucial element of affecting CI. This implies that students' interaction, motivation, and attention are extremely dependent on the relationship that is constructed between teachers and learners. Whereas, the vast majority of students (56%) perceive anxiety as the main obstacle to the development of CI. This might be related to their past negative experiences during the whole learning process. Henceforth, it

is notable that First-year Master students highlight anxiety as the major problem of preventing the progress of CI. Seven students (7%) opt for others. Two learners assume that motivation and interest would affect CI. Another one points out that students' beliefs affect CI, while one more learner declares that lack of vocabulary hinder CI. In contrast, the last three remaining students approve that students' lack of knowledge prevents the progress of CI.

Question Ten: Which of the following strategies is more effective to promote classroom interaction? (more than one option)

a-Improving questioning strategies	
b-Attending to learners linguistic levels	
c-Implementing cooperative learning	
d-Building positive-learners rapport(relationship)	
e-Reducing classroom anxiety	

Table 3.15

Strategies Promoting Classroom Interaction

Options	Participants	Percentage (%)	
A	36	36%	
В	14	14%	
С	32	32%	
D	41	41%	
E	42	42%	
Others	2	2%	

As it is presented in the precedent table (3.15), a small percentage of students (36%) state that improving questioning strategies contribute to promoting CI. This shows that students are aware of the importance of improving questioning strategies in order to develop students' self-confidence and raise their participation, which may enable them to enhance their comprehension abilities.

Similarly, very few learners (14%) opt for attending to learners' linguistic level as a strategy to promote CI. This may indicate that these students possibly have unique needs that prevent them from engaging in any learning activity. Twenty-three (32%) of them affirm that implementing cooperative learning promotes CI. This may explain that learners relate the development of CI to implement cooperative learning because of its advantages in enabling students to appreciate each other's individual differences and respectively tolerate each other's thoughts. However, a significant number of learners (41%) opt for building positive teacher-learner rapport (relationship) as an efficient strategy to promote CI. This advocates students' approval towards the significant results of this strategy in constructing a good relationship and having mutual respect between students and teachers. Expectedly, almost half of the students (42%) declare that reducing classroom anxiety is deeply responsible for the improvement of CI. This suggests that students are aware of the positive outcomes of following this strategy as providing comfortable and safe learning conditions. Therefore, it is remarkable that reducing classroom anxiety and building a positive teacher-learner relationship is emphasized to be the two most effective strategies in order to promote CI. Two students (2%) opt for others, one of them considers giving positive feedback to the students' answers, and supporting them to participate (since some of them may be shy) would improve CI. Whilst the other one believes that incorporating different methods of students' involvement in the classroom would raise CI.

Section Two: Critical Thinking

Question Eleven: Are you aware of critical thinking existence?

Aware	
Somehow aware	
I do not know	
Not aware at all	

Options	Participants	Percentage (%)
Aware	75	75%
Somehow aware	23	23%
I do not know	2	2%
Not aware at all	0	0%
Total	100	100%

Students' Perception of Critical Thinking Existence

According to the results demonstrated in table (3.16), (75%) of the participants declare that they are aware of the existence of CT. While a few (23%) of them indicate that they are somehow aware of the existence of such skill. Only (2%) of the participants show no awareness of this skill. Overall, this implies that the overwhelming majority of students have an accurate understanding and conceptualization of what it is meant by CT.

Question Twelve: Do your teachers attract your focus to the existence of such skill?

No

Yes

Table 3.17

Teachers' Endeavors to Attract Students' Focus to the Existence of Critical Thinking

Options	Participants	Percentage (%)	
Yes	82	82%	
No	18	18%	
Total	100	100%	

As it is shown above (3.17), a great number of students (82%) point out that teachers entice their focus to the existence of CT. A low percentage of students (18%) neglect what has been said. In fact, this implies that even teachers attempt their best to help students reach a high level of thinking since the LMD system supports autonomous learning. Therefore, being a self-regulated learner who controls his/her own learning and has the willingness to acquire further skills for approaching an advanced level of thinking, he/she will certainly develop his/her CT.

Question Thirteen: Do you consider yourself as a critical thinker?



Table 3.18

Students' Perception of Themselves as Critical Thinkers

Options	Participants	Percentage (%)
Yes	88	88%
No	12	12%
Total	100	100%

This question was addressed to students for the purpose to assert that they have answered the former question attentively (Q11). Indeed, the attained data from this question confirms the results of the previous question. Most students (88%) are critical thinkers. Furthermore, it reflects that they possess certain characteristics of a critical thinker. However, very few of them (12%) state that they do not consider themselves as critical thinkers. This shows that they have a certain ignorance of such skill and its importance.

-If yes, a critical thinker is someone who? (more than one option)

a-asks profound and challenging questions	
b-identifies the truth or falsity of assumptions	
c-analyzes and evaluates data via observation	
d-constructs reasonable and persuasive arguments	
e-collects data	
f-draw conclusions based on evidence	

Options	Participants	Percentage (%)
A	52	52,9%
В	36	38,7%
С	75	80,6%
D	59	63,4%
Е	21	22,6%
F	59	63,4%

The Abilities of a Critical Thinker

This question was addressed to students who state in the previous question (Q13) that they consider themselves as critical thinkers. Hence, quite half of the sample (52,9%) display that a critical thinker is someone who asks profound and challenging questions. Whereas, a small number of participants (38,7%) believe that a critical thinker can only identify the truth or falsity of assumptions. However, the massive majority (80,6%) of students argue that a critical thinker can both analyze and evaluate data via observation. Equally, a quite large number of them (63,4%) respond that a critical thinker can merely construct reasonable and persuasive arguments. The same number of students (63,4%) portray that they are persons who can draw conclusions based on evidence. While very low percentage of them (22,6%) report that a critical thinker is able to collect data. From the obtained data, some of the participants show a variety of responses between options, this could be due to the lack of some abilities or they do not recognize all the mentioned abilities. Meanwhile, the majority of them display a degree of awareness and acknowledgement of the different abilities of CT. This confirms that they mostly have a clear perception of the CT abilities that any critical thinker should possess.

Question Fourteen: Which intellectual standards could be more effective in developing critical thinking? (more than one option)

Clarity	
Precision	
Accuracy	
Consistency	
Relevance	
Logical correctness	
Completeness	
Fairness	

Options	Participants	Percentage (%)	
Clarity	54	54%	
Precision	35	35%	
Accuracy	51	51%	
Consistency	31	31%	
Relevance	64	64%	
Logical correctness	83	83%	
Completeness	19	19%	
Fairness	24	24%	

The Effectiveness of Intellectual Standers on Critical Thinking

In this question, participants were allowed to choose more than one answer and according to the results shown in the previous table (3.20), none of them opts for one option. This displays that learners acknowledge that focusing on one standard is not enough to develop their CT. Thereafter, (54%) of students' responses agree that clarity can be one of the most effective intellectual standards that can develop CT. This would appear to indicate that students are conscious about expressing their thoughts clearly and reasonably. I.e. they value the importance of this standard, which would make them establish a sense of self-understanding. Whereas, (35%) of them claim that precision may help to develop CT. This shows students' unawareness of the significance of this standard or they do not appreciate it as much as the other standards. Moreover, half of the participants (51%) opt for accuracy. Among (31%) of them display for consistency. However, (64%) of the sample did not hesitate to choose relevance as the second most important standard to develop CT. The CT

standard that is selected more by learners is logical correctness (83%). Surprisingly, only (19%) of the sample select completeness and very few of them (24%) assume that fairness is significantly important to develop CT. Factually, this indicates that the majority of students considers logical correctness and relevance of high importance, which can intimate that they view them as essential standards to develop their ability to think critically. Yet they perceive the other standards as less important.

Question Fifteen: Do you think that developing such a skill would make you?

a-Rational	
b-Flexible	
c-Active learner	
d-Open-minded	
e-Objective thinker	
f-All of the above	

Table 3.21

Characteristics of Critical Thinker

Options	Participants	Percentage (%)	
A	7	7%	
В	5	5%	
С	7	7%	
D	7	7%	
E	11	11%	
F	63	63%	
Total	100	100%	

In this question, students are asked about their views concerning the characteristics of a critical thinker. As it is indicated in table (3.21), (7%) of them, agree that developing such skill would make them rational. Few of the respondents (5%) argue that this skill could make them flexible. Another low percentage of responses (7%) consider being an active learner as an essential quality to be critical thinkers. Equally, the same number of students (7%) perceive open-minded as less important. Only (11%) of them opt for the objective thinker. A

considerable percentage of learners (63%) believe that to develop such skill and to be identified as a critical thinker, you have to have all the mentioned features. This shows that students are aware of the various traits that critical thinkers should possess.

Question Sixteen: When constructing arguments, do you use:

Deductive reasoning	
Inductive reasoning	
Both	

Table 3.22

The Construction of Arguments

Options	Participants	Percentage (%)
Deductive reasoning	23	23%
Inductive reasoning	11	11%
Both	66	66%
Total	100	100%

Concerning the construction of arguments, a large number of students (66%) opt for using both types of reasoning. This affirms that learners have a sense of awareness towards the importance of using both DR and IR to develop their arguments. A low percentage of them (23%) respond to DR. This demonstrates that they appreciate the significance of using DR, yet, they have ignored the usefulness of the other type. Only (11%) of them choose IR, which shows that some learners neglect the advantage of using DR, and acknowledge merely the importance of inductive ones when constructing arguments.

Question Seventeen: What are the stages you go through to solve a problem successfully?

(more than one option)

a- Identifying the problem	
b- Looking for possible solutions	
c- Selecting solutions	
d- Acting on solutions	

Stages	of Probl	lem	Sol	ving
Singes	0,1700	cin	501	ving.

Options	Participants	Percentage (%)	
A	79	79%	
В	75	75%	
С	40	40%	
D	49	49%	

The aim of this question is to know if students can identify the stages of problem solving successfully. As shown in table (3.23), (79%) of students consider identifying the problem as the most important step in solving a problem. This reveals that they are conscious of the importance of this stage and its effect to comprehend the problem thoroughly so as to search for the appropriate solutions. (75%) of the participants opt for looking for possible solutions. This indicates that the majority of students draw their attention to the necessity of searching for all the potential solutions so that they can be able to solve the issue effectively. However, only (40%) of students indicate that they go through the step of selecting solutions. It demonstrates that they neglect the importance of this stage in the process of solving a problem successfully. Surprisingly, (49%) of students point out that they go through the step of acting on solutions. This might suggest that most of them do not comprehend the importance of implementing the solution or checking it to assess the efficacy of the selected solution.

Question Eighteen: Is decision making

Conscious process

Unconscious process

Table 3.24

Options	Participants	Percentage (%)
Conscious process	95	95%
Unconscious process	5	5%
Total	100	100%

The findings that are presented in table (3.24) show that the overwhelming majority (95%) of students consider decision making as a conscious process which entails that they are sufficiently aware of the decisions they make. Additionally, this indicates that most of them can be good decision-makers who select the most suitable alternatives among several possibilities. However, only (5%) opt for an unconscious process. This might be due to the natural and habitual routines tasks that they used to do.

Question Nineteen: Do you think that developing the skill of critical thinking is important?

Yes No

Table 3.25

Students' Perceptions of Critical Thinking Importance

Options	Participants	Percentage (%)
Yes	99	99%
No	1	1%
No Total	100	100%

As it is displayed in table (3.25), almost all students (99%) agree that developing the skill of CT is important. This shows that their awareness that their ability to think critically can be developed. Only (1%) of them perceive developing such a skill as less important. This indicates that either this person does not consider him/herself as a critical thinker, or he/she neglects the concepts of CT and its existence.

- If yes, please indicate the extent to which you agree or disagree with the following statements:

The statements	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
a-practicing critical thinking can help learners to develop their classroom performance by learning its different skills					
b- can enhance their ability to comprehend arguments and beliefs					
c-can make a critical analysis and evaluation to those arguments and beliefs					
d- can improve their ability to defend their own claims					
e- can contribute to improve learners' writing ability, language proficiency and oral communication capacity.					
f-can promote autonomous learning					
g-can improve learners' academic achievement					

Options	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	Total number of students and percentage
А	39	56	4	00	00	99
	39,39%	56,57%	4,04%	00%	00%	100%
В	32	65	2	00	00	99
	32,32%	65,66%	2,02%	00%	00%	100%
С	40	54	5	00	00	99
	40,40%	54,55%	5,05%	00%	00%	100%
D	41	53	5	00	00	99
	41,41%	53,54%	5,05%	00%	00%	100%
E	31	52	14	2	00	99
	31,31%	52,53%	14,14%	2,02%	00%	100%
F	25	70	4	00	00	99
	25,25%	70,71%	4,04%	00%	00%	100%
G	24	69	6	00	00	99
	24,24%	69,70%	6,06%	00%	00%	100%

The Importance of Developing Critical Thinking

As it is displayed in table (3.26), each statement is analyzed independently. In the first statement, (56, 57%) of the participants indicate that practicing CT can help them to develop their classroom performance by learning its different skills. In their response to the second statement, a great percentage (65,66%) of students demonstrates that CT can enhance their ability to comprehend arguments. For the third statement, a considerable category (54,55%)

of students avow that when practicing the different skills of CT, they can make a critical analysis and evaluation to those arguments and beliefs. In the fourth statement (53,54%) of the participants, agree that developing CT can improve their ability to defend their own claims. Nevertheless, almost (52, 53%) of students in the fifth statement agree that it can contribute to improving their writing ability, language proficiency, and oral communication capacity. Additionally, the vast majority (70,71%) in the sixth statement asserts that most of the respondents agree that CT can promote autonomous learning. In their response to the last statement, a significant number (69,70%) of learners reveal that CT can improve their academic achievement.

The gathered data from students' views about the importance of developing CT entails that the majority of students are aware of the paramount importance of CT and its different skills. Therefore, CT is one of the most vital factors that can boost learners' success.

Question Twenty: Which factors could have a great influence on developing learners' critical thinking? (more than one option)

a- Egocentrism	
b- Lack of knowledge	
c- Misunderstanding of what is meant by criticism	
d- Memorization	
e- Insufficient focus and attention to detail	

Table 3.27

Factors that Hinder the Development of Students' Critical Thinking

Options	Participants	Percentage (%)
А	46	46%
В	58	58%
С	67	67%
D	36	36%
E	43	43%
Others	1	1%

When students are asked about the factors that could hinder their CT, around half of them (46%) avow that egocentrism is one of the major factors that affect the development of their CT. The latter indicates that there is a close relationship between egocentrism and CT, in the sense that egocentrism makes them self-centered thinkers who do not accept the other points of view. Another considerable percentage of the respondents (58%) assert that the lack of knowledge is an important factor in decreasing the skill of CT. This might present that learners with sufficient background knowledge are more capable to reach a higher level of thinking. The highest percentage in the third option (67%) confirms that students agree with the claim that most of them do not have a clear understanding of what is meant by criticism. This implies that students believe that the word criticism holds mainly negative meanings. While a simple number of participants, (36%) reveal that memorization might be a barrier to CT. This might show that the nature of the educational system does not support learners to overcome some obstacles and to improve certain skills. Besides, a small percentage (43%) is shared by students who believe that insufficient focus to detail might be another factor to hinder their ability of critical thinking. This insinuates that students are aware of the different factors that could be an obstacle to improve this ability. Only one student (1%) opt for others; he/ she reports that the act of quick decision-making would affect the development of this skill.

Question Twenty-One: Do you that the skill of critical thinking should be taught as much as the other four essential skills? (receptive and productive skills)

Yes

No

Table 3.28

Students' Attitudes towards Teaching Critical Thinking

Options	Participants	Percentage (%)
Yes	93	93%
No	7	7%
Total	100	100%

The gathered data shows that (93%) of the sample opt for yes. This explains that most of the students have a positive attitude towards the possibility of teaching CT as much as the other four essential skills. Particularly, at this high level, they are exposed to various sources of data that demands the use of CT whether it is performed by their teachers, or classmates. This also may indicate that if students are exposed to it directly, there will be an opportunity for them to be critical thinkers. Actually, this question confirms the findings of the previous one (Q15). Whereas, only (7%) of them show disagreement for teaching such skill. This may indicate that they believe CT should be infused indirectly when teaching the other modules because it would be challenging to implement or teach it clearly.

-If yes, which of the following critical thinking skills are of great importance (more than one option)

a-Reasoning	
b-Problem solving	
c-Decision making	
d-Analysis	
e-Evaluation	

Table 3.29

Critical Thinking Skills

Options	Participants	Percentage (%)
A	67	70,5%
В	63	66,3%
С	48	50,5%
D	72	75,8%
Е	43	45,3%

Among those who have answered by yes (67) out of (93) select reasoning as an important skill to be taught. (66,3%) of them, report for problem solving, however, a number of the participants (50,5%) indicate that the skill of decision-making needs to be taught. Unsurprisingly, the mass majority of students (75,8%) state that analysis is significantly

important to be taught. A quite low percentage of responses (45,3%) opt for evaluation. This demonstrates that the skills of reasoning, problem solving, and analysis seem to be of high value for students and need more attention to be taught. Unlike the other skills which they perceive them as less important to be taught.

Question Twenty-Two: Does your teacher encourage you to develop the above-mentioned skills?

Yes No

Table 3.30

Teachers' Encouragement for Developing Critical Thinking Skills

Options	Participants	Percentage (%)
Yes	51	51%
No	49	49%
Total	100	100%

As presented in table (3.30), half of the participants (51%) state yes they do. Whereas, the other half (49%) are in discordance with the statement that teachers show a sense of encouragement to develop these skills. This indicates that some teachers endeavor to help their students to improve CT skills, and they are aware of its importance. As a result, they want their students to be self-regulated, independent, and active participants who ask, analyze and evaluate data and not only accept or absorb it for granted.

-If yes, what kind of activities does your teacher use?

This question was addressed only for those who opt for yes to illustrate the kind of activities that are used by their teachers to improve the previous-mentioned skills. Among those who opt for yes, 50 participants have answered this question. Some answers are summarized as follows:

- Opening discussion about controversial topics to see students' perceptions and reactions of those topics.
- On one hand, some teachers suggest problematic situations where students are asked to analyze and evaluate those situations in order to find out evident solutions for the problem in hand. On the other hand, other teachers ask students to read certain literacy works and make analysis of those works through writing essays.
- Classroom interaction, classroom debate, and oral presentation.
- Asking challenging questions that need deep thinking so that students can provide persuasive and well-constructed arguments that are based on facts.

Section Three: Students' Attitudes towards the Impact of Classroom Interaction on

Critical Thinking

Question Twenty-Three: Which of the following teaching strategies does your teacher use

very often inside the classroom to develop the lesson?

a-Individual work	
b- Group work	
c-Oral presentation	
d-Classroom interaction	
e-Free discussion	

Table 3.31

Teachers' Strategies for Developing the Lesson

Options	Participants	Percentage (%)
A	5	5%
В	6	6%
С	64	64%
D	16	16%
Е	9	9%
Total	100	100%

As it is described in table (3.31) a small number of students (5%) state that their teachers use the individual work as a teaching strategy to develop the lesson. While, (6%) of them proclaim that teachers tend to use group work as a teaching strategy to develop the lesson. The vast majority of students (64%) opt for oral presentation. However, a simple number of the sample (16%) declares that teachers prefer to use CI to develop the lesson and (9%) of them opt for free discussion. From the gathered data, it is assumed that teachers use a variety of teaching strategies to develop the lesson. This entails that they want their learners to be good communicators and to develop a sense of leadership. More precisely, students select CI as the second most effective strategy for teaching. This implies that teachers depend on this strategy to create less passive learners and improve their thinking abilities.

Question Twenty-Four: Do you think that classroom interaction is an effective strategy of teaching and learning?

Yes	No	

Table 3.32

Learners' Perceptions of the Importance of Classroom Interaction

Options	Participants	Percentage (%)
Yes	99	99%
No	1	1%
Total	100	100%

According to the findings, the vast majority of participants (99%) think that CI is an effective strategy for teaching and learning. Whilst, one student (1%) identifies it as an ineffective strategy. It is deduced that the overwhelming majority of students recognize the importance of CI over other learning and teaching strategies to provide equal chances for everyone inside the classroom.

-If yes, do you think that classroom interaction can:

a-enable students to develop language skills and reinforce their knowledge	
b-provide chances for interacting and exchanging ideas	
c-stimulate students' attention	
d-engage students to initiate debates, communicate, and reflect their way of thinking	

The Importance of Classroom Interaction

Options	Participants	Percentage (%)
A	21	21,2%
В	16	16,2%
С	8	8,1%
D	54	54,5%
Total	99	100%

This question sheds light on students' opinions about the importance of CI. Very few number of learners (8,1%) view that CI stimulates their attention. Equally, only (16,2%) assume that CI enables students to develop language skills and reinforce their knowledge. Other students (21,2%) believe that CI provides chances for interacting and exchanging ideas. By contrast, more than half of them (54,5%) agree that CI engages students to initiate debates, communicate, and reflect their way of thinking. After the analysis of the results, it is concluded that several students agree mostly on the last option, which explains the effects of CI on various elements but particularly on their way of thinking.

Question Twenty-Five: As EFL learner, are you aware of the impact of classroom interaction on critical thinking?

No

Yes

Options	Participants	Percentage (%)
Yes	99	99%
No	1	1%
Total	100	100%

Students' Awareness towards the Impact of Classroom Interaction on Critical Thinking

As it is revealed in table (3.34), the majority of students (99%) acknowledge that they are aware of the impact of CI on CT. Only one of the respondents (1%) shows disagreement. This entails that students recognize CI as an efficient learning-teaching strategy to enhance their CT.

Question Twenty-Six: If yes, what is your attitude towards the impact of classroom interaction on critical thinking?

Positive	Negative	

Table 3.35

Students' Attitudes towards the Impact of Classroom Interaction on Critical Thinking

Options	Participants	Percentage (%)	
Positive	93	93,9%	
Negative	6	6,1%	
Total	99	100%	

From the obtained data, the highest percentage of the respondents (93,9%) display a positive attitude towards the impact of CI on CT. Nevertheless, (6,1%) of them perceive the impact as negative. This reports that students recognize CI as an effective learning strategy to increase their thinking abilities in general and their CT in particular. Students are asked to justify their responses and some of them are summarized as follows:

- CI always provides opportunities for students to be active and confident. It also encourages learners to build well-developed thoughts and arguments. Hence, CI is the key to master the skill of CT.
- CI creates an open atmosphere for interaction, debate and free discussion. Thus, it can be a good way for each participant to develop the CT skills.
- The more students interact and discuss topics, and share their ideas and beliefs either with each other in the classroom or with their teachers, the more they will be to develop their ability to reason, question, analyze, and evaluate things and finding solutions to various problems. Thus, acquiring the skills of CT.
- Students are different. Therefore, they all have something to learn from each other. For instance, when they interact, they share those differences, they might agree or disagree, but CI will surely open up new aspects, ideas, and opinions for them to explore. Hence, they attempt to learn to tolerate differences and develop all types of thinking.
- Interacting more in the classroom will definitely make a learner express his/her thoughts and ideas clearly. Thus, CI can help learners to achieve some standards of CT.
- Listening to other students' arguments enable another student to grow further as a critical thinker by opening his/her mind to the diverse ideas.
- Interaction in the classroom makes the atmosphere vivid. This strategy helps the student to become a competent communicator by exchanging ideas with his/her classmates and teacher. It also aids him/her to learn how to organize ideas, how to develop convincing arguments, and reduce anxiety.

• Interaction makes the learner realize how much a critical thinker he/she is through offering him/her a chance to organize his/her ideas logically and interpret other students' views and react to them objectively.

Question Twenty-Seven: Which among the following modules do you think they need more interaction to develop students' critical thinking? (more than one option)

a- Communication practices	
b- Discourse analysis	
C- Psycho-pedagogy	
d- Ethics and deontology	
e- Advance reading and writing	
f- Literature and civilization	

Table 3.36

Modules that Require Further Interaction to Stimulate Students' Critical Thinking

Options	Participants	Percentage
A	61	61%
В	54	54%
С	44	44%
D	43	43%
E	28	28%
_ <u>F</u>	36	36%

When we have asked students about their attitudes regarding the modules they believe that they require further interaction to stimulate their thinking, a very significant number of participants (61%) opt for communication practices. (54%) of them select discourse analysis. While (44%) of the same sample choose psycho-pedagogy. Similarly, (43%) of them think that the module of ethics and deontology needs more interaction. A very few students (28%) assume that advanced reading and writing demands less interaction and only (36%) of students' see literature and civilization as one of the modules which require further interaction to foster their thinking ability. The respondents are asked to justify their answers and some of them are summarized as follows:

- The nature of particular modules such as discourse analysis, ethics, advanced reading, and writing require further interaction to stimulate students' critical thinking ability. Yet, discourse analysis requires students to analyze and evaluate their utterances. It also deeply necessitates thinking beyond the literal meaning in order to find out the hidden or intended meaning. In this case, CT is extremely needed.
- The nature of the aforementioned modules needs interaction to develop the lesson. Hence, the skill of CT can be developed implicitly during the students learning process.
- The modules of discourse analysis and advanced reading and writing necessitates students' involvement and interaction so that they will be able to analyze dialogues, speeches, and texts effectively, together with writing well-developed essays. Eventually, they will develop their cognitive abilities.
- Many modules demand further interaction. For instance, the module of ethics and deontology has a philosophical dimension. The teachers' types of questions during this course are provocative. Thus, students have to think profoundly in order to provide genuine and reasonable arguments to their claims.
- Since interaction is the heart of communication, it allows learners to share and discuss their ideas. Consequently, the lower-order thinking abilities are developed.
- As far as CT is concerned, many modules demand further interaction for active classroom participation, acquiring sufficient background knowledge, and enhancing cognitive abilities. Thereafter, all the previous mentioned modules can help in developing the skill of CT.

enhance your critical thinking?

Teacher-student interaction	
Student-student interaction	
Both	

Table 3.37

Classroom Interaction's Types that Better Enhance Critical Thinking

Options	Participants	Percentage
Teacher-student interaction	16	16%
Student-student interaction	8	8%
Both	76	76%
Total	100	100%

In this question, students are asked which type of CI can better enhance their CT. (16%) of the students opt for TSI. Only (8%) of them select SSI. However, the mass majority (76%) point out that both types of CI could lead to enhance their CT. The learners are asked to justify their responses and some of them are summarized as follows:

- The nature of the classroom environment needs both types of interaction to develop the lesson as well as to give opportunities for students to express their thoughts and ideas effectively.
- Both types of CI complete each other, and they are equally important in enhancing the CT. Therefore, this skill is boosted through learning new knowledge and changing beliefs towards certain things. I.e. avoid being bias.
- The teacher is the major source of reliable information who has a higher level than his /her students do. Because of his/her ability to correct his/her learners' misinterpretations or explanations. Thus, TSI can better enhance students CT.

- Teachers frequently ask certain smart, tricky, and complicated questions that need CT skills. As a result, CT is improved when the teacher is in control.
- TSI is valuable because the teacher has sufficient background knowledge. While SSI can motivate learners and decrease anxiety. Thus, both CI types are essential.
- The teacher is considered as the source of reliable information who guides his/her students while they are interacting with each other; however, the learners are of different levels of comprehension abilities. Precisely, if they are involved in a variety of SSI patterns such as group work, they will reflect on each other ideas. Eventually, this leads to asking high-level questions. Henceforth, both types of CI are important for developing CT.
- SSI is more important because it can help learners to be better communicators and reflective thinkers.
- First, TSI is insufficient to enhance CT. Second, SSI is very important since it reduces anxiety, builds self-confidence, and motivates the student to interact more. Finally, both types of CI are important to foster students' CT.

Question Twenty-Nine: During teacher-student interaction, does your teacher ask you questions that need reflective thinking?

Yes No

Table 3.38

Students' Views about Teachers' Questions that Need Reflective Thinking

Options	Participants	Percentage	
Yes	97	97	
No Total	3	3	
Total	100	100	

The findings show that the overwhelming majority of students (97%) presume that their teachers ask them questions that require reflective thinking. Whereas, (3%) of them state that

they do not. This means that teachers strive to get students' attention and motivation to stimulate their thinking skills.

-If yes, which type of questions does your teacher ask?

a-Referential questions	
b-Comprehension questions	
c-Knowledge questions	
d-Evaluation questions	

Table 3.39

Teachers' Types of Questions

Options	Participants	Percentage (%)
A	34	35,1%
В	62	63,9%
С	49	50,5%
D	44	50,5% 45,4%

More than half of the students (63,9%) opt for comprehension questions as the type of questions that are frequently used by their teachers to stimulate their thinking. This means that their teachers are aware of the ways, which prompt the deep thinking of their students, along with the evaluation of their understanding and interpretation of the provided information. Unexpectedly, half of them (50,5%) opt for knowledge questions. This shows that students probably link it to one of the components of CT; however, they are not enough for reflecting students' thinking. A remarkable number of them (45,4%) opt for evaluation questions. This indicates that their teachers are consciously attempting to ask such questions to enable their students to reach a high level of thinking. Despite the importance of referential questions, only (35,1%) of learners' select referential questions, or possibly that they do not consider them crucial as the aforementioned ones.

Question Thirty: Which of the following strategies of classroom interaction do you think is more important to improve students' critical thinking? (more than one option)

a-Referential questions	
b- Teachers' questioning	
c- Initiation-response-feedback model	
d- Peers' exchange of views and thoughts	

Classroom Interaction Strategies for Improving Critical Thinking

Options	Participants	Percentage (%)
A	37	37%
В	60	60%
С	36	36%
D	68	68%

In this question, students are permitted to opt for more than one response. As it is displayed in the former table (3.40), most of the respondents (68%) claim that peers' exchange of thoughts and views is the most prominent CI strategy to develop learners' CT ability. This explains that thinking needs sharing ideas and thoughts, and whenever interaction is taking place, participants tend to provide strong arguments for supporting their claims. As a result, they are going to be analyzed and interpreted by others, undoubtedly; this improves their CT. Equally, (60%) of them assert the importance of teachers' questioning as CI strategy to improve students' CT ability, maybe because teachers' questioning prompts students to think critically along with providing feedback for teachers concerning students' comprehension. Nevertheless, barely (36%) of learners opt for an IRF model to do so. This implies that this category of students is aware of the significance of this model to increase their CT ability as well as support and explain their views effectively. Surprisingly, only (37%) of learners denote that referential questions are vital for stimulating their CT ability. This signifies students' ignorance of the prominence of this strategy to provoke learners' CT.

Question Thirty-One: To what extent do you agree that classroom interaction can develop

EFL learners' critical thinking?

To some extent	
To a moderate extent	
To a great extent	

Table 3.41

Students' Appreciation of Classroom Interaction to Develop Learners' Critical Thinking

Options	Participants	Percentage (%)
To some extent	16	16%
To a moderate extent	27	27%
To a great extent	57	57%
Total	100	100%
	100	20070

The purpose of this question is to highlight the extent to which students agree that CI plays a major role in developing their CT. More than half of the respondents (57%) admit that CI can develop learners' CT to a great extent. Twenty-seven members (27%) of the same sample approve that CI can enhance CT to a moderate extent. While only (16%) of the students disagree that CI can improve CT to some extent. In this question, participants are asked to justify their answers and they are summarized as follows:

- To a great extent because the types of questions asked by both the teacher and the students during CI are very effective to reflect and stimulate students' CT ability.
- Because the more students are able to interact and communicate with each other via exchanging their different points of view, the more they can develop their CT ability and be able to distinguish personal opinions from facts.
- Because CI is an effective strategy to develop students' CT skills such as reasoning, decision making, problem solving, analysis, and evaluation.

- Because CI gives students chances to interact, express their thoughts, and reflect on their classmates' ideas, but most importantly CI can help them to be open-minded thinkers who seek nothing but the truth.
- CI can be considered as only the start of developing CT where students are required to improve this skill by incorporating it into different fields of life.
- To some extent because developing CT abilities is not only limited to CI.

3.1.4.2 Summary of Results and Findings from Students' Questionnaire

According to the gathered and analyzed data from students' questionnaire, a considerable number of perspectives have been explored concerning the role of CI in developing EFL learners' CT.

Concerning the first section "classroom interaction", the attained results show that many students are highly appreciating the significance of classroom participation as an essential element of learning a FL, which indicates their awareness of its positive impacts on developing their communicative and thinking skills. Based on these findings, the absolute majority of students confirm that their teachers never hesitate to arrange a dynamic learning environment, which motivates them to be active learners. Consequently, almost all of them prefer TSI because of the various roles that the teacher performs for meeting his/her students' needs as well as facilitating the learning and teaching process. However, several students agree to minimize teachers' talk instead of students' talk due to the implementation of the LMD system that attempts to support learner-centered instead of the traditional teacher-centered approach. Regarding these results, mostly the entire sample asserts about the effectiveness of SSI as a way for successful learning and appreciates its benefits, where all of their problems could completely disappear. Yet, it is notable that First-year Master students highlight anxiety as the major problem of preventing the progress of CI. In an attempt to resolve this issue, almost half of the students confirm that reducing classroom anxiety is

deeply responsible for the improvement of CI. This suggests that students are aware of the positive outcomes of following this strategy as providing comfortable and safe learning conditions. Therefore, it is remarkable that reducing classroom anxiety and building a positive teacher-learner relationship is emphasized to be the two most effective strategies in order to promote CI.

Concerning the second section "critical thinking", the vast majority of students avow a sense of awareness towards the existence of such skill and its importance on their learning development. They mostly assert that they are critical thinkers since they can conceptualize the notion and understand it clearly by identifying the different aspects of a critical thinker. Furthermore, they equally have much appreciation for all the intellectual standards that play a major role in improving CT. An interesting finding of students' responses estimates that teachers attract their focus to the existence of such skill as well as encourage them to develop it. In addition, they proclaim that CI is the second most used strategy by their teachers to develop the lesson. Nevertheless, there is a variation between the factors that could hinder CT development. More to the point, the majority think of what is meant by criticism to be the ultimate obstacle to CT. The participants also claim to welcome the possibility of teaching this skill as much as the other four essential skills (receptive and productive skills) because they have demonstrated more importance for reasoning, analysis, and evaluation. This highlights that learners have a strong willingness to rise their thinking abilities for higher levels. The results also reveal that the sample under investigation is appropriate for the present research.

Concerning the third section, it deals with students' attitudes towards the impact of CI on CT. The overwhelming majority of students confirm that CI is an effective strategy for teaching and learning. This demonstrates that they are aware of its importance during the learning process. Furthermore, almost all students affirm that there is a positive relationship
between the two variables since they declare that CI always provides opportunities for students to be active and confident. It also encourages learners to build well-developed thoughts and arguments. Hence, CI is the key to master the skill of CT. Moreover, these arguments are based on facts to support their claims, whereby CI attempts to teach all of these elements. Equally, the majority of the participants consider that both types of CI may work to enhance students' CT ability. This is mainly because the teacher is considered as the source of reliable information who guides his/her students while they are interacting with each other; however, the participants stress that learners are of different levels of comprehension abilities. Precisely, if they are involved in a variety of SSI patterns such as group work, they will reflect on each other ideas. Eventually, this leads to asking high-level questions. Hence, evident conclusions and reliable information are reached. The findings reveal that the respondents acknowledge the importance of both types of CI.

Finally, it is mostly agreed by students that the appropriate implementation of CI is definitely of paramount importance since it affects positively, and to a great extent students' development of CT. Chiefly, First-year Master students at the department of English, University of Guelma 08 Mai 1945, assert that CI develops EFL learners' CT.

Conclusion

Based on the attained results from students' questionnaire. This data-collecting tool serves to answer the research questions and confirm its provided hypothesis. Accordingly, the findings affirm that First-year Master students are aware of the importance of CT; and that learners have positive attitudes towards the impact of CI on CT.

3.2 Pedagogical Implications

In the ground of the obtained data from this study, it is apparent that the majority of students have positive attitudes towards the impact of CI on developing EFL learners' CT. It has also been proven that both types of interaction are of paramount importance in enhancing the ability of CT and in turn, students' academic achievement is improved. In this regard, some pedagogical implications are highlighted for policy-makers, teachers, and students to boost CT. These implications are formed from the analysis and interpretations yielded from students' questionnaire.

3.2.1 Implications for policy-makers

- Applying a holistic approach of training because instructors need adequate training to first have a full understanding of the different competencies and skills of the 21st century and second to successfully infuse CT into the course content.
- CT is of high importance which needs to be taught explicitly as a separate module that is mainly devoted for developing cognitive abilities, where learners can have an intensive practice of it.
- It can also be indirectly integrated either within the other four essential skills especially reading and writing or modules such as Communication Practices, Discourse Analysis, Literature and Civilization.
- Educators can manage to develop professional workshops throughout the whole country. This could create an authentic atmosphere where the students can interact, discuss, and debate with peers about controversial topics. As well as analyze complicated ideas, solve unfamiliar issues, and generate all possible solutions. All of this would probably keep them stimulated to think critically.

3.2.2 Implications for Teachers

- Teachers need to install the attribute of freedom in their classes and to create a fearless environment for their students. Hence, learners will feel free to express their thoughts, views and arguments, yet the latter should be based on facts and evidence.
- Teachers should generate challenging situations and real-world problems for students to overcome rote learning by asking open-ended questions, questions which demand reflective thinking rather than factual ones.
- If teachers want their students to enhance their CT ability, they have to be a good example. In other words, it is well-known that students learn better when teachers teach them how to do something. For example, following certain instructions to help them enhance this skill.

3.2.3 Implications for Learners

- Although teachers generate opportunities for interaction, from the findings, it is deduced that most of the students have a lack of interest and appreciation to engage in classroom talk or take part in commenting on their peers' thoughts.
- Students have to overwhelm their inner worries as well as reinforce their abilities of interaction through engaging in group work.
- It is not sufficient to be aware of the existence of the skill of CT rather students should have the willingness to develop it.
- As the LMD system attempts to build well-equipped and self-regulated learners who can reason, analyze, and evaluate data rather than consume it as it is, students have to take further actions by themselves to increase their thinking abilities in general and their CT in particular.

3.3 Limitations of the Study

Even though the research has met its aims, it was impeded by three main constrains.

- Firstly, in the theoretical part, the inaccessibility of primary authentic materials (books and articles), especially with the chapter of critical thinking, was a considerable barrier to the researchers.
- Secondly, in the practical part, due to the spread of the Coronavirus (COVID 19), the researchers had to cancel classroom observation as an important data-gathering tool. Thereby, depending only on the analysis of the finding from the students' questionnaire.
- Thirdly, as far as limitations are concerned, students' contribution to answering the questionnaire was one of the major obstacles that confronted the researches during the process of finishing the study. The sample was not cooperative in response to the research questions. Most of them show a lack of interest and seriousness.

GENERAL CONCLUSION

The current research is conducted for the purpose of exploring EFL learners' attitudes towards the impact of CI on CT. It also endeavors at investigating EFL learners' perceptions concerning the importance of CT. The conducted results from students' questionnaire demonstrate that EFL learners have shown positive attitudes towards the impact of CI on CT. Therefore, it can be concluded that the main research hypothesis, which assumes that EFL learners may have positive attitudes towards the role of CI in developing their CT is confirmed. Additionally, the main results that are gained from this study are:

- 1. EFL learners acknowledge the role of CI as an effective strategy of teaching and learning, whereby they are given valuable opportunities for interacting and exchanging ideas among each other. In addition to other considerable chances for developing their language skills and reinforcing their knowledge. Furthermore, they are stimulated to raise their attention as they are interacting with other students. They are also adequately qualified to initiate debates, communicate effectively, and reflect their way of thinking either to their teachers or classmates. Thereafter, CI has a positive effect on various elements but particularly on students' way of thinking.
- 2. Learners appreciate the value of SSI as a way for successful learning and teaching whereby they can develop their communicative competence and their speaking skill, particularly those learners who endeavor to develop a high level of speaking ability. They are also highly stimulated to overcome their shyness and fear of taking part in CI. Moreover, they can construct relationships and a comfortable learning atmosphere, which in return leads to build good social relationships among teachers and learners.
- 3. Learners appreciate the tendency of teaching CT ability and its different skills whether explicitly or implicitly, whereby they are able to refine certain abilities and

competencies. Thus, the skill of CT is one of the most vital factors that can boost learners' success.

- 4. Learners appreciate that designing peer work is beneficial for motivating students to think critically. They also value both types of CI for developing their CT where different low and high questions are asked.
- 5. In the CI environment, students acknowledge their teachers' strive to get their attention and motivation for enhancing their thinking skills, where they are asked a variety of questions, especially the comprehension ones to evaluate their understanding and interpretation of the provided information.
- 6. EFL Learners value CI strategies to prompt their CT, specifically peers' exchange of thoughts and ideas together with teachers' questioning techniques, whereby they are able to provide strong arguments to support their claims, and their teachers will be able to receive valuable feedbacks concerning their students' comprehension.
- 7. CI as pedagogical strategy of teaching in EFL classes is an integrated element whereby learners realize how much critical thinker they are through offering them a chance to organize their ideas logically, interpret their classmates' views and react to them objectively.

References

- Allen, M. (2004). Smart thinking: skills for critical understanding and writing (2nd ed.). Melbourne, Australia: Oxford University Press Australia.
- Allwright, R. L. (1984). The Importance of interaction in classroom language learning. Applied Linguistics, 5(2), 156-171.
- Analysis. (n.d.). In Merriam-Webster Online Dictionary. Retrieved from https://www.merriam-webster.com/dictionary/analysis
- Anderson, H. S. (1960). Prospective teachers have fears. The Clearing House: A Journal of Educational Strategies, Issues and Ideas, 34(6), 337-342.
- Angelo, T. A. (1993). A teacher's dozen. *American Association of Higher Education Bulletin*, 3-13. https://www.cs.rit.edu/~mmr/Teachers_dozen.pdf
- Arend, R. I., & Kilcher, A. (2010). *Teaching for student learning: Becoming an accomplished* (1st ed.). London, United Kingdom: Taylor & Francis Ltd.
- Atkinson, D. (1997). A critical approach to critical thinking in TESOL. *TESOL Quarterly*, *31*(1), 71-94.
- Babanoglu, M. P., & Agcam, R. (2015). Explicit and implicit types of corrective feedback in *Turkish Primary Education*, *3*(2), p126-132.
- Basshan, G., Irwin, W., Nardone, H., & Wallace, J. M. (2011). *Critical thinking: A students' introduction* (4th ed.). New York, NY: McGraw. Hill.
- Bearne, E., Dombey, H., & Grainger, T. (Eds). (2003). *Classroom interactions in literacy*.Milton Keynes, United Kingdom: Open University Press.
- Billups-Thomas, N. (2011). *Develop the territory under your hat-think! Critical thinking: A workout for a stronger mind*. Canada, United States of America: Trafford.
- Bloom, B. S. (1956). Taxonomy of educational objectives, handbook 1: Cognitive domain (2nd ed.). Michigan, United States of America: Longman.

- Bower, J., & Kawaguchi, S. (2011). Negotiation of meaning and corrective feedback in Japanese/ English etandem. *Language Learning & Technology*, 15(1), 41-71.
- Brock, C. A. (1986). The Effects of referential questions on ESL classroom discourse. *TESOL Quarterly*, 20(1), 47-59.
- Brown, H. D. (1994). *Teaching by Principles: Interactive Language Teaching Methodology*. New York, NY: Prentice Hall Regents.
- Brown, H. D. (2001). *Teaching by principles: An interactive approach to language pedagogy* (2nd ed.). White Plains, NY: Pearson Education Longman.
- Buskit, W., & Irons, J. G. (2008). Simple strategies for teaching your students to think critically. In D. S. Dunn, J. S. Halonen, & R. A. Smith (Eds.), *Teaching critical thinking in psychology: a handbook of best practices* (pp. 49-57). Chicester, United Kingdom: Wiley Blackwell.
- Butterworth, J., & Thwaites, G. (2013). *Thinking skills: Critical thinking and problem solving* (2nd ed.). Cambridge, United Kingdom: Cambridge University Press.
- Cazden, C. (2001). *Classroom discourse: The language of teaching and learning* (2nd ed.). Portsmouth, NH: Heinemann.
- Chin, C. (2006). Classroom interaction in science: Teacher questioning and feedback to students' responses. *International Journal of Science Education*, 28(11), 1315-1346.
- Classroom interaction. (2019). In Online Dictionary of Sociology. Retrieved February 27th, 2020 from <u>https://www.encyclopedia.com/social-sciences/dictionaries-thesauruses-</u>pictures-and-press-releases/classroom-interaction
- Cook, J. (2015). Negotiation for meaning and feedback among language learners. *Journal of Language Teaching and Research*, 6(2), 250-257.
- Cottrell, S. (2005). *Critical thinking skills: Developing effective analysis and arguments* (1st ed.). Basingstoke, Hampshire: Palgrave MacMillan.

Cullen, R. (1998). Teacher talk and classroom context. *ELT Journal*, 52(3), 179-187.

- Davidson, B. W. (1998). Comments on Dwight Atkinson's "A critical approach to critical thinking in TESOL": A case study for critical thinking in the English language classroom. *TESOL Quarterly*, *32*(1), 119-123.
- Davidson, B. W., & Dunham, R. A. (1997). Assessing EFL student progress in critical thinking with the Ennis-Weir critical thinking essay. *JALT Journal*, *19*(1), 43-57.
- Decision. (2008). Oxford learners' pocket dictionary (4th ed.). Oxford, United Kingdom: Oxford University Press.
- Dee- vil, P. (2012). Definition of classroom interaction. Scribed. Retrieved July 5, 2012, from https://fr.scribd.com/document/99159948/Definition-Classroom Interaction
- Descartes, R. (2008). *Discourse on the method of rightly conducting the reason, and seeking truth in the sciences.* Oxford, United Kingdom: Oxford University Press.
- Dewey, J. (1933). *How we think: A restatement of the relation of reflective thinking to the educative process.* Boston, NY: D.C Health and Company.
- Diesther, S. (2011). *Becoming a critical thinker: A user friendly manual* (6th ed.). Boston, MA: Pearson Education.
- Ellis, R. (2003). *Task-based language learning and teaching*. Oxford, UK: Oxford University Press.
- Ellis, R., Loewen, S. & Erlam, R. (2006). Implicit and explicit corrective feedback and the acquisition of L2 grammar. *Studies in Second Language Acquisition*, 28(2), 339-368.
- Englehart, J. M. (2009). Teaching in classrooms. In L. J. Saha, & A. G. Dworkin (Eds.), International handbook of research on teachers and teaching (pp. 709-722). New York, NY, United States: Springer.

- Ennis, R. H. (1987). A taxonomy of critical thinking dispositions and abilities. In J. B. Baron & R. J. Sternberg (Eds.), *Teaching thinking skills: Theory and practice* (pp. 9-26). New York: W. H. Freeman.
- Ennis, R. H. (1989). Critical thinking and subject-specificity: Clarification and needed research. *Educational Researcher*, *18*(3), 4-10.
- Evans, J. B. T. (2017). *Thinking and reasoning: Very short introduction* (1st ed.). Oxford, United Kingdom: Oxford University Press.
- Facione, P. A. (1990). Critical thinking: A statement of expert consensus for purposes of educational assessment and instruction, research findings and recommendations.
 Retrieved from ERIC database. (ED315423).
- Foster, P. (1998). A classroom perspective on the negotiation of meaning. *Applied Linguistics*, 19(1), 1-23.
- Galotti, K. M. (1989). Approaches to studying formal and everyday reasoning. *Psychological Bulletin*, *105*(3), 331-351.
- GE Foundation Workplace skills program. (2006). *Module six: Critical thinking skills: Participants booklet*. Porthan: Watch Publishing.
- Gor, K., & Long, M. H. (2009). Input and second language processing. In W. C. Ritchie, & T. K. Bhatia (Eds.), *The new handbook of second language acquisition* (2nd ., pp. 443-471). United Kingdom, UK: Emerald.
- Gustafson, K. L. (1969). Simulation of anxiety situations and its resultant effect on anxiety and classroom interaction of student teachers. Retrieved from ERIC database. (ED033064).
- Hall, J. K., & Walsh, M. (2002). 10. Teacher-student interaction and language learning. Annual Review of Applied Linguistics, 22, 186-203.

- Halpern, D. F. (2003). *Thought and knowledge: An introduction to critical thinking* (4th ed.). Mahwah, NJ: Lawrence Erlbaum Associates.
- Halpern, D. F. (2014). *Thought and knowledge: An introduction to critical thinking* (5th ed.).Hove, United Kingdom: Psychology Press.
- Halvorsen, A. (2005). Incorporating critical thinking skills development into ESL/ EFL courses. *The Internet TESL Journal*, 11(3). Retrieved from http://iteslj.org/Techniques/Halvorsen-CriticalThinking.html
- Hatch, S. A., & Hatch, L. Z. (2006). *The GMAT for dummies* (5th ed.). Hoboken, NY: Wiley. Inc.
- Iseni, A. (2011). Assessment, testing and correcting students' errors and mistakes. *Language Testing in Asia, 1*(3), 60-9.
- Jia, X. (2013). The application of classroom interaction in English lesson. *In the international conference on education technology and information system.*
- Johnson, K. E. (1995). Understanding communication in Second language classrooms. Cambridge, United Kingdom: Cambridge University Press.
- Johnson, R. T., & Johnson, D. W. (1985). Student-student interaction: Ignored but powerful. Journal of Teacher Education, 36(4), 22-26.
- Kallet, M. (2014). Think smarter: Critical thinking to improve problem solving and decisionmaking skills. Hoboken, NY: Wiley.
- Koole, T. (2007). Parallel activities in the classroom. *Journal of Language and Education*, 26(6), 487-501.
- Kramsch, C. (1986). From language proficiency to interactional competence. *The Modern Language Journal*, 70(4), 366-372.
- Krashen, S. D. (1981). Second Language Acquisition and Second Language Learning.London, Netherlands: Elsevier Science.

- Krulik, S., & Rudnick, J. A. (1989). *Problem solving: A handbook for senior high school teachers*. Needham Heights, MA: Allyn and Bacon.
- Laird, J. (2009). Deductive reasoning. WIREs Cognitive Science, 1, 8-17.
- Lap, T. Q., & Thy, H. V. U. (2017). EFL teachers' challenges in maximizing classroom interaction. *Studies in English Language Teaching*, *5*(4), 695-709.
- Lau, J. Y. F. (2011). An introduction to critical thinking and creativity: Think more, think better (1st ed.). Hoboken, NJ: Wiley.
- Lin, Y. (2018). *Developing critical thinking in EFL classes: An infusion approach*. Shenzhen, China: Springer.
- Loona, B. (2012). Classroom Interaction. Scribed. Retrieved June 20, 2012, from https://fr.scribd.com/document/97645151/Classroom-Interaction
- McPeck, J. E. (1990). *Teaching critical thinking: Dialogue and dialectic* (1st ed.). London, United Kingdom: Rutledge, Chapman and Hall, Inc.
- Moore, M. G. (1989). Editorial: Three types of interaction. American Journal of Distance Education, 3(2), 1-7.
- Namaziandost, E., & Nasri, M. (2019). A meticulous look at Long's (1981) interaction hypothesis: Does it have any effect on speaking skill? *Journal of Applied Linguistics and Language Research*, 6(2), 218-23.
- Nugent, T. T. (2009). *The Impact of teacher-student Interaction on student motivation and achievement*. In the College of Education at the University of Central Florida Orlando, Florida.
- Paul, R., & Elder, L. (2008). *The miniature guide to critical thinking concepts and tools*.Dillan Beach, CA: Foundation for critical thinking press.
- Paul, R., & Elder, L. (2011). Critical thinking: Tools for taking charge of your learning and your life (3rd ed.). Boston, MA: Pearson Education.

- Paul, R., Elder, L., & Bartell, T. (1997). California teacher preparation for instruction in critical thinking: Research findings and policy recommendations. Retrieved from ERIC database. (ED437379).
- Pica, T. (1994). Review article research on negotiation: What does it reveal about secondlanguage learning conditions, processes, and outcomes? *Language Learning*, 44(3), 493-527.
- Rafi, M. S. (n.d.). Promoting critical pedagogy in language education. *International Research Journal of Arts and Humanities (IRJAH), 37*, 63-73.
- Reasoning. (n.d.). In Merrieam-Wester Online Dictionary. Retrieved from https://www.merriam-webster.com/dictionary/reasoning
- Richards, J. C., & Lockhart, C. (1996). *Reflective teaching in Second Language classrooms* (*Cambridge Language Education*). New York, NY: Cambridge University Press.
- Richards, J. C., & Schmidt, R. (2010). *Longman Dictionary of Applied Linguistics* (4th ed.). London, United Kingdom: Routledge.
- Rivers, W. M. (1987). Interaction as the key to teaching language for communication. In W.M. Rivers (Eds.), *Interactive language teaching* (pp. 3-16). Cambridge, United Kingdom: Cambridge University Press.
- Rivers, W. M. (1990). Interaction: The key to communication. In M. A. K. Halliday, J. Gibbons, & H. Nicholas (Eds.), *Learning, keep and using language* (pp. 7-18). Amsterdam, Netherlands: John Benjamins.
- Robinson, H.A. (1994). *The Ethnography of Empowerment: The Transformative Power of Classroom Interaction*. Washington, D.C: The Falmer press.
- Rodgers, C. (2002). Defining Reflection: Another Look at John Dewey and Reflective Thinking. *Teachers College Record*, 104(4), 842-866.

- Rudinow, N., & Barry, V. E. (2007). Invitation to critical thinking (6th ed.). Belmont, CA: Wadsworth.
- Schechter, J. (2013). Deductive reasoning. In H. Plasher (Eds.), *Encyclopedia of mind thousand oaks* (pp. 226-230). California: Sage.
- Scrivener, J. (2011). Learning teaching: The Essential guide to English language teaching (3rd ed). London: MacMillan.
- Shirkhan, S., & Fahim, M. (211). Enhancing critical thinking in foreign language learners. *Procedia- Social and Behavioral Sciences*, 29, 111-115.
- Skukauskaite, A., Rangel, J., Rodriguez, L. G., & Ramón, D. K. (2015). Understanding classroom discourse and interaction: qualitative perspectives. In N. Markee (Eds.), *The handbook of classroom discourse and interaction* (pp. 44-60). New York, United States: John Wiley & Sons Inc.
- Snyder, L. G., & Snyder, M. J. (2008). Teaching critical thinking and problem solving skills. *The Delta Pi Epsilon Journal, 1*(2), 90-99.
- Sofyan, R. R., & Mahmud, M. (2018). Teacher talk in classroom interaction: A study at an English department in Indonesia. *ELT Worldwide*, *l* (1), 45-58.
- Spada, N. & Lightbown, P. M. (2010). Essential areas of enquiry in applied linguistics. In N. Schmitt (Eds.), An introduction to applied linguistics (2nd., pp. 108-161). London, United Kingdom: Hodder Arnold.
- Suryati, N. (2015). Classroom interaction strategies employed by English teachers at tower secondary schools. *TEFLIN Journal*, *26*(2), 247-264.
- Tiernan, S. D, & Morely, M. J. (2013). Modern management: Theory and practice for students in Ireland (4th ed.). Dublin, Ireland: Gill.
- Tuan, L. T., & Nhu, N. T. K. (2010). Theoretical review on oral interaction in EFL classrooms. *Studies in Literature and Language*, *1*(5), 29-48.

- Wells, G. (1993). Reevaluating the IRF sequence: A proposal for the articulation of theories of activity and discourse for the analysis of teaching and learning in the classroom. *Linguistics and Education*, 5(1), 1-37.
- Yang, Y. C., & Chou, H. (2008). Beyond critical thinking skills: Investigating the relationship between critical thinking skills and dispositions through different online instructional strategies. *British Journal of Educational Technology*, 39(4), 666-684.
- Yiqi, L. (2012). Enhancing critical thinking: Analyzing classroom interactions in the age of web 2.0. Procedia - Social and Behavioral Sciences 51, 386 – 391.
- Yu, R. (2008). Interaction in EFL classes. Asian Social Science, 4(4), 48-50.
- Zhao, C., Pandian, A., & Singh, M. K. M. (2016). Instructional strategies for developing critical thinking in EFL classrooms. *English Language Teaching*, *9*(10), 14-21.

Appendix: Students' Questionnaire

Dear Students,

The questionnaire in hand is a part of a research which is conducted to probe EFL learners' attitudes towards the impact of classroom interaction on critical thinking skill at the department of letters and English language, University of 8 Mai 1945- Guelma. The questionnaire is anonymous and your answers remain confidential. We would be deeply grateful if you answer the following questions as thoughtfully as possible. Your participation is highly appreciated; therefore, you are gently invited to answer the following questions either by ticking the appropriate box or by making a full statement when necessary.

Ms. Benredjem Nessrine Ms. Benredjem Romaissa Department of English language University of 08 Mai 1945-Guelma-2019- 2020

Section One: EFL Classroom Interaction

1- How often do you participate in the classroom?

Always	
Usually	
Sometimes	
Rarely	
Never	

2- Does your teacher create opportunities for interaction?

Yes	
No	

-If yes, how often do you comment on your peers' thoughts?

Always	
Sometimes	
Never	

3- Which type of classroom interaction does your teacher usually use inside the

classroom?

Teacher-student interaction	
Student-student interaction	

4-Which type of classroom interaction do you prefer the most?

Teacher-student interaction	
Student-student interaction	

-In your opinion, which one should be minimized?

Teachers' talk	
Students' talk	

-Please, justify your answer...

5- Do you think that student-student interaction is an effective way for successful

learning?

Yes	
No	

-If yes, could student-student interaction lead to: (you can choose more than one option)

a- construct learners' linguistic	
resources	
b- improve leaners' communicative	
competence	
c- develop learners' speaking skill	
d- decrease the teachers' control inside	
the classroom	
e- raise students' participation	
f- reduce the degree of deconcentration	
g- overcome the stress and	
embarrassment	
h- construct favorable and comfortable	
learning atmosphere	
I- build good social relationship among	
teachers and students	
k- raise students' attention and	
motivation	

6- Does teacher-student interaction provide a comprehensible input that is adequate for

students' level?



7- Do you think that negotiation of meaning plays a significant role for a successful

classroom interaction?

Yes	
No	

-If yes, do you think that negotiation of meaning help students to:

a- resolve the breakdown of	
communication	
b- improve language development	
c- acquire and maintain more second	
language vocabulary acquisition	
d-all of the above	

8- Does your teacher provide you with feedback during your participation?

Yes	
No	

-If yes, does teachers' feedback affect your oral classroom interaction?

Positively	
Negatively	

9- Which factors could have a negative affect on classroom interaction? (you can choose

more than one option)

a-Teachers' beliefs	

b-Teachers' questions	
c-Learners' different English level	
d-Teachers'-learners rapport(relationship)	
e-Anxiety	

- If others, please specify.....

10- Which of the following strategies is more effective to promote classroom interaction

(more than one option)

a-Improving questioning strategies	
b-Attending to learners linguistic levels	
c-Implementing cooperative learning	
d-Building positive-learners rapport(
relationship)	
e-Reducing classroom anxiety	
- If others, please specify	· · · · · · · · · · · · · · · · · · ·

Section Two: Critical Thinking

11- Are you aware of critical thinking existence?

Aware	
Somehow aware	
I do not know	
Not aware at all	
Not aware at all	

12- Do your teachers attract your focus to the existence of such skill?

Yes	

No			

13- Do you consider yourself a critical thinker?

Yes	
No	

-If yes, a critical thinker is someone who (more than one option)

a- asks profound and challenging	
questions	
b- identifies the truth or falsity of	
assumptions	
c- analyzes and evaluates data via	
observation	
d- constructs reasonable and persuasive	
arguments	
e- collects data	
f- draws conclusions based on facts	

14 -Which intellectual standards could be more effective in developing critical thinking?

(more than one option)

a-Clarity	
b- Precision	
c-Accuracy	
d-Consistency	
e-Relevance	
f-Logical correctness	
h-Completeness	

i-Fairness

15- Do you think that developing such skill would make you?

a-Rational	
b-Flexible	
c-Active learner	
d-Open-minded	
e-Objective thinker	
f-All of the above	

16- When constructing arguments, do you use:

a-deductive reasoning(the reasoner	
initiates from general insights (premises)	
into very specific conclusions)	
b- inductive reasoning (the reasoner draws	
specific conclusion from broad premises)	
c-both	

17- What are the stages you go through to solve a problem successfully? (more than one

option)

a- Identifying situation	
b- Looking for possible solutions	
c- Selecting solutions	
d- Acting on solutions	

18- Is decision making?

a-Conscious process	
b- Unconscious process	

19- Do you think that developing the skill of critical thinking is important?

Yes	
No	

- If yes, please indicate the extent to which you agree or disagree with the following

statements:

The statements	Strongly	Agree	Neither	Disagree	Strongly
	agree		agree nor		disagree
			disagree		
a- practicing critical					
thinking can help learners					
to develop their					
classroom performance					
by learning its different					
skills					
b- can enhance their					
ability to comprehend					
arguments and beliefs					
c- can make a critical					
analysis and evaluation to					
those arguments and					
beliefs					
d- can improve their					
ability to defend their					
own claims					
e- can contribute to					
improve learners' writing					

ability, language			
proficiency and oral			
communication capacity.			
f-can promote			
autonomous learning			
g-can improve learners'			
academic achievement			

20- Which factors could have a great influence on developing learners' critical thinking?

(more than one option)

a- Egocentrism	
b- Lack of knowledge	
c- Misunderstanding of what is meant by	
criticism	
d- Memorization	
e- Insufficient focus and attention to detail	

-If others, please specify.....

21- Do you think that the skill of critical thinking should be taught as much as the other four

essential skills (receptive and productive skills)

Yes	
No	

-If yes, which of the following critical thinking skills are of great importance (more than one

option)

a- Reasoning	
b- Problem solving	

c- Decision making	
d- Analysis	
e- Evaluation	

22 - Does your teacher encourage you to develop the above-mentioned skills?

Yes	
No	

-If yes, what kind of activities does your teacher use?

.....

Section Three: The Impact of Classroom Interaction on Critical Thinking

23-Which of the following teaching strategies does your teacher use very often inside the

classroom to develop the lesson?

a-Individual work	
b- Group work	
c-Oral presentation	
d-Classroom interaction	
e-Free discussion	

24- Do you think that classroom interaction is an effective strategy of teaching and learning?

Yes	
No	

-If yes, do you think that classroom interaction can:

a- enable students to develop language skills and reinforce their	
knowledge	
b- provide chances for interacting and exchanging ideas	

c- stimulate students' attention	
d- engage students to initiate debates, communicate, and reflect	
their way of thinking	
-If others, please specify	

25- As EFL learner, are you aware of the impact of classroom interaction on critical thinking?

Yes	
No	

26- If yes, what is your attitude towards the impact of classroom interaction on critical

thinking?

Positive	
Negative	

-Please justify your answer.....

27- Which among the following modules do you think they need more interaction to develop

students' critical thinking?

a- Communication practices	
b-Discourse analysis	
c-Psycho-pedagogy	
d-Ethics and deontology	
e-Advance reading and writing	
f-Literature and civilization	

-Please explain.....

28- Which type of classroom interaction do you think can better enhance your critical

thinking?

-Teacher-student interaction	

-Both	-Student-student interaction	
	-Both	

-Please justify your answer

29- During teacher-student interaction, does your teacher ask you questions that need

reflective thinking?

Yes	
No	

-If yes, which type of questions does your teacher ask?

a-Referential questions	
b-Comprehension questions	
c-Knowledge questions	
d-Evaluation questions	

30- Which of the following strategies of classroom interaction do you think is more important

to improve students' critical thinking? (more than one option)

a-Referential questions	
b-Teacher questioning	
c-Initiate-response-feedback model	
d- peers' exchange of views and	
thoughts	

31- To what extent do you agree that classroom interaction can develop EFL learners' critical

thinking?

-To some extent	
-To a moderate extent	
-To a great extent	

-Whatever your answer, would you please explain.....

32- If you have any other suggestions, recommendations or comments, we would be very grateful if you add them below.

•••••	•••••	••••••	••••••••••••••••	•••••
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Thank you for your cooperation

ملخص

يسعى البحث الحالي في البداية الى سبر آراء وتوجهات متعلمي اللغة الإنجليزية كلغة اجنبية إزاء تأثير التفاعل الصفي على التفكير النقدي. كما تهدف هذه الدراسة ايضا الى استقصاء وجهات نظر متعلمي اللغة الإنجليزية على أهمية التفكير النقدي. وبالتالي، فإن فرضية البحث تقوم على ان متعلمي اللغة الإنجليزية يمكن ان يكون لهم آراء إيجابية تجاه دور التفاعل الصفي في تحفيز التفكير النقدي. لإثبات أو رفض الفرضية السابقة الذكر تم إتباع المنهج الوصفي الذي ينطوي على أداة كمية واحدة فقط في هذا الصدد، تم توزيع استبيان الكتروني على طلبة سنة أولى ماستر بقسم اللغة الإنجليزية بجامعة 08 ماي واحدة فقط في هذا الصدد، تم توزيع استبيان الكتروني على طلبة سنة أولى ماستر بقسم اللغة الإنجليزية بجامعة 08 ماي تحليل وتفسير نتائج وإجابات الطلاب المتحصل عليها، من الواضح ان استر اتيجيات التفاعل الصفي خصوصا استراتيجية المعلم الموجهة واستراتيجية تقييم الاقران للأفكار، بالإضافة الى كلا نو عي التفاعل الصفي يعملون بلا شك التفكير النقدي لدى الطلاب المتحصل عليها، من الواضح ان استراتيجيات التفاعل الصفي خلى تحفيز التفكير النقدي لدى الطلاب، وبناء عليه، تؤكد البيانات المجمعة الفرضية الرئيسية للبحث، والتي تدل على ان طلاب اللغ الإنجليزية كلغة اجنبية أظهروا مواقف إيجابية تجاه دور التفاعل الصفي في متلون بلا شك على تحفيز الإنجليزية كلغة اجنبية أظهروا مواقف إيجابية تجاه دور التفاعل الصفي في عملون بلا شك على تحفيز الإنجليزية كلغة اجنبية أظهروا مواقف إيجابية تجاه دور التفاعل الصفي في تنمية التفكير النقدي. أخيرا تشجع نتائج البحث

Résumé

La présente étude vise dans un premier temps à explorer les attitudes des apprenants de l'EFL relatif à l'impact de l'interaction en classe sur la pensée critique. Il essaye également de clarifier les différentes perceptions des apprenants sur l'importance de la pensée critique. Par conséquent, on suppose que les apprenants EFL peuvent avoir des attitudes positives envers le rôle de l'interaction en classe dans le développement de la pensée critique. Pour adhésion ou le rejet de l'hypothèse précédente, une méthode descriptive comportant qu'un seul outil quantitatif a été adoptée. A ce sujet, un questionnaire a été établie est adressé à cent étudiants de première année Master du Département d'Anglais, Al' Université du 8 mai 1945, Guelma. Le questionnaire a été diffusé en ligne via une plateforme numérique (le site Google forme) partagés dans le groupe Facebook et en dernier nous avons opté pour l'option d'e-mails histoire de garantir la réception de notre questionnaire dans les temps. Par conséquent, après avoir analysé et interprété les résultats des étudiants et les réponses obtenues, il est clair que l'enseignant opte pour une stratégie celle de poser des questions bien spécifiques, et l'interaction entre les pairs (égo) permet l'échange des idées; aussi que les deux types d'interaction de classe fonctionnent sans aucun doute pour stimuler la pensée critique chez les étudiants du coup, les données collectées confirment l'hypothèse principale de la recherche, qui indique que les étudiants en anglais comme langue étrangère ont montré des attitudes positives envers Le rôle de l'interaction de classe dans le développement de la pensée critique. Au final, les résultats de la recherche favorisent et encouragent les enseignants et les élèves à utiliser l'interaction en classe comme une stratégie efficace pour améliorer la pensée critique.