# Undergraduate Learners' Perceptions of Critical Thinking Role in Learning Grammar English Language and Literature Department at Mohamed Lamine

تصورات الطلبة الجامعيين عن دور التفكير الناقد في تعلم قواعد اللفة الانجليزية

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#### **Abstract**

The current inquiry elucidated the role of critical thinking in learning grammar, case of undergraduate learners of English as a Foreign Language. This quantitative research aimed at investigating critical thinking possible role in solving learners' difficulties in learning grammar. The gathered data were carried through a likert scale questionnaire for a convenience representative sample of 33 students at the English Language and Literature Department at Mohamed Lamine DEBAGHINE Sétif2 University, ALGERIA. After the data analysis, it was deduced that critical thinking could promote learners' grammar learning. Although this research had some limitations, but its findings remain interesting as well as significant. In order to test the applicability of the findings to a larger population, future researches should be done experimentally.

**Key terms:** Critical thinking, grammar learning

#### Résumé

Le présent travail de recherche a été mené pour examiner le rôle de la pensée critique dans l'apprentissage de la grammaire, le cas des apprenants de premier cycle de l'Anglais comme Langue Etrangère. La problématique de cette recherche quantitative est que les apprenants ont eu des difficultés avec l'apprentissage de la grammaire. Les données ont été recueillies par un questionnaire de l'échelle likert distribué à un échantillon représentatif de 33 étudiants sélectionnés à la convenance au Département de Langue et Littérature Anglaises à l'Université de Mohamed Lamine DEBAGHINE Sétif 2, ALGERIE. Les résultats recueillis ont révélé que la réflexion critique parait être utile dans l'apprentissage de la grammaire. Ce travail a ses limites, mais ses conclusions sont intéressantes et ses recommandations et suggestions sont indispensables. Enfin, les futures recherches devraient se faire expérimentalement pour tester l'applicabilité et l'importance des résultats à une population plus large de sujets.

Mots clés: Apprentissage de la grammaire, pensée critique

#### 1- Introduction

Critical Thinking is considered to be one of the indispensible skills that academic institutions can bequeath to the 21<sup>st</sup> century learners. It increasingly appears in language teaching and learning, where nurturing such a skill is recognized as a core objective of education. Even policy makers, business executives or civic leaders view critical thinking as a problem solving skill, which learners should possess. Therefore, are learners aware of critical thinking role in their learning, particularly in learning grammar which is essential and even basic to learn speaking as well as writing? The present article takes a look at such questions and aims to answer them for the sake to nurture the notion of critical thinking in the Algerian higher education, with a special reference to the English as a Foreign Language (EFL) grammar learning.

# 2- Statement of the Problem

The focus-group discussions held with EFL grammar teachers at the English Language and Literature Department at Sétif 2 University revealed that many undergraduate EFL learners don't have sufficient grammar for textbooks' comprehension, class discussion, or written work satisfaction; because they have oftentimes experienced a teacher- centered instruction, where they are receivers, memorizers, or passive learners of grammar rules. Critical thinking is not part of the grammar classes; learners don't have the opportunity to develop meta-cognitive strategies for comparing clarifying, analyzing, justifying, synthesizing, evaluating, or taking decisions in their grammar learning. The 21st century learners don't need only a mediated English instruction but a support in a stimulating environment, where they can think, reason, and communicate to promote their grammar learning in and outside the classroom.

## **3- Research Questions**

In accordance with the above mentioned problem, this inquiry aims at investigating the following questions:

- What is the role of critical thinking in EFL learning?
- What are undergraduate EFL learners' perceptions of critical thinking role in grammar learning?

## **4- Literature Review**

# **4-1 Critical Thinking Roots**

The literature on critical thinking has roots in three academic disciplines: philosophy, psychology and education. These trends developed their own definitions of critical thinking (Lai, 2011). In this research paper, the educational approach is the most explored one.

Critical thinking roots are as ancient as Socrates' vision 2,500 years ago. Socrates founded a method known as Socratic questioning focused the importance of asking deep questions, seeking evidence, examining assumptions, analyzing concepts, and tracing out implications before accepting ideas or beliefs. Socrates' thoughts were recorded by Plato, developed by Aristotle, increased by Aquinas, Erasmus, More and Bacon, and extended further by Spencer, Sumner, Descartes, and Newton (Sofos, 2004).

The basic questions of Socrates were focally highlighted in more modern contributions attributed to a set of notables in psychology as well as education, as Dewey, Wittgenstein and Piaget (Murawski, 2014). Another pioneering development of critical thinking by Watson and

Glaser, who stated that thinking critically involves a thoughtful attitude to consider problems, knowledge of the reasoning logical methods, and skill to apply those methods (Hitchcock, 2011).

Regarding Lipman (1988), critical thinking is not only about thought; it is a skillful, responsible, and good judgments' thinking facilitator via its criteria, self-correction, and context sensitivity.

Fischer went beyond the skill, reflection and activity of critical thinking; he set clarity, relevance, adequacy and coherence as standards for such thinking (Goddu, 2002). In addition to Fischer standards, Paul and Elder proposed precision, depth, breadth, logic, significance, fairness, etc. as new intellectual standards imposed on the inherent structures by the skillful critical thinker(2006). Regarding Fascione (2011), he thought of critical thinking as a purposive collaborative thinking that provides a point, interpret a meaning, or solve a problem.

Unlike Fischer and Scriven, Ennis treated critical thinking as applying to the creation of solutions to serious problems, decisions in different situations, or answers to hard questions, etc.(Hitchcock, 2011).

Ennis considered critical thinking as a reasonable and reflective thinking about beliefs and deeds (2011). His work gave rise and reflection to critical thinking in the classroom.

# 4-2 Critical thinking and Language Learning

It is strange that we expect learners to learn, yet seldom teach them anything about learning. We should be teaching learners how to think. Instead, we are teaching them what to think. Those were Norman, Clement and Lochhead words, as quoted by Schafersman (1991, p.1) meaning failure in teaching learners how to think. Therefore, learners are passive thinkers; they think just to survive.

Active thinkers or critical thinkers are characterized by their good quality of thinking in terms of knowledge, abilities, attitudes, and habitual behaviors (Nickerson, 1981). For instance, "critical thinkers exploit skillfully arguments and evidences to support decisions, distinguish logically between the different inferences, differentiate between reasoning and rationality, anticipate consequences, understand believes' levels, generalize the application of problem-solving as well as questioning technique, can learn independently etc." (Schafersman,1991,p.4-5). This incomplete list demonstrates the type of thinking and approach to critical thinking that grammar learners are supposed to have.

Vdovina and Gaibissou (2013) viewed that critical thinking is not a survival thinking; it needs a careful and intentional development of a given set of skills in information process, beliefs, opinions, etc.

Ramezani (2016) as many scholars, the case of Willingham, Arum and Roska, claimed that one of the essential goals of schooling or undergraduate education is to nurture critical thinking in learners' minds; in the sense that such a complex ability requires to be open to different and even new affirmations that are inferred by observation, evidence, deduction and so forth. Ramezani (2016) supported Warnick and Inch claims stating that critical thinking is a thinking activity based on reasoning, decision making, judging and problem solving.

Atkins' recent conclusions supported the up-mentioned claims in the sense that critical thinking brings numerous benefits, for instance:

• Improving attention and observation;

- Improving ability to identify the key points in a text or other message rather than being distracted by less important material;
- Improving ability to respond to the appropriate points in a message;
- Recognizing how to get your own point across more easily;
- Developing Skills of analysis that you can choose to apply in a variety of situations (2017,p.3)

In Hughes's point of view (2014), critical thinking is not only a unique mental cognitive subset of exploring a problem, questioning a situation, integrating information, arriving to a solution, or justifying a position. It is a stairway progressing steadily upwards in order of difficulty and sophistication. Understanding, applying, analyzing, evaluating and creating are its subs skills. This set or taxonomy developed by Bloom and refined by Anderson and Krathwohgl remains an interesting attempt that goes beyond the traditional rote learning promoting learners' thinking from a lower level towards a higher and reflective order.

According to De Villa (2017), many approaches like the communicative ones considered grammar as a separate language level. However, the new trends like consciousness-raising or language awareness approach, figured out equilibrium at this level in terms of assembling critical thinking and language internalization for learners' language comprehension.

For instance, Kumaravadivelu (2006) provided a brief definition of learner-centered language asserting that raising learners' thinking abilities' awareness helps in the process of engaging, noticing as well as internalizing the second language grammatical system. In this way, critical thinking demonstrates a deliberate attempt to draw learners' explicit attention to target language aspects, particularly to its grammatical features this is where critical thinking plays a significant role in learning grammar (De Villa, 2017). Under such conditions, learners are provided with high-order thinking dispositions, problem-based and Socratic questioning techniques; they are self-motivated, engaged and open minded to compare, clarify, analyze, debate, evaluate and even take decisions about grammar issues in a real life world without being limited to teacher-centered world.

Kumaravadivelu shared the idea of Pinker considering that when learners ask questions and gather data about language grammar, solve problems, organize thoughts, justify their answers and take decisions, language comes naturally and gets e in learners (2006).

Despite the above-mentioned studies, there seems to be a paucity of research as to whether critical thinking could promote EFL grammar learning. For instance, Thadphooton (2005), Vdovina, and Gaibissou (2013) claimed that little is known about critical thinking role in learning grammar, and EFL learners' perceptions of such a role. Most of the conducted researches didn't give any direct reference to critical thinking within the context of EFL grammar. Therefore, the current investigation aims to partially fill this gap.

# 5- Aim of the Study

The present research work tries to explore undergraduate EFL learners' perceptions of critical thinking role in learning grammar at the English Language and Literature Department at the Mohamed Lamine DEBAGHINE Sétif2 University. Specifically, the inquiry aims:

- To explore critical thinking role in the English language learning.
- To explore EFL learners' perceptions of critical thinking role in learning grammar.

# 6- Significance of the Study

This research work may serve as a springboard for those researchers and teachers who are interested to explore as well as clarify the different dimensions of critical thinking, and its role in learning grammar. The inquiry could also be useful to generate data as well as provide stakeholders with diverse recommendations and pedagogical implications concerning the status of critical thinking at the English Language and Literature Department at Mohamed Lamine DEBAGHINE Sétif2 University.

# 7- Methodology

- **7-1 Research Design:** The research design for this inquiry is cross-sectional as it attempts to explore undergraduate learners' perceptions of critical thinking role in learning grammar at the English Language and Literature Department at Mohamed Lamine DEBAGHINE Sétif2 University.
- **7-2 Questionnaire Design:** The deployed data collection tool was quantitative. The opted questionnaire was self-designed after investigating the related literature review. The Likert-scale questionnaire of five likert options (strongly disagree=1, disagree=2, undecided=3, agree=4, disagree=5) was piloted by a human and social sciences' statistics expert; which helped the rewriting of the ten items to fit the purpose of the inquiry. Then, the items were sectioned into two parts. The first part was the one of grammar learning of three items, whereas the second one was reserved to critical thinking in learning grammar of seven items. The number of items was limited on account of answering the research questions.

## Table 1. Student's Questionnaire

#### **Items of Section One**

Grammar is an essential EFL skill.

Adopting problem-based strategy in learning grammar.

Adopting Socratic questioning strategy in learning grammar.

**Items of Section Two** 

Critical thinking is an essential skill in EFL learning.

Critical thinking motivates and engages EFL learners.

Critical thinking helps in comparing, clarifying, analyzing, debating and evaluating EFL grammatical issues.

Critical thinking helps learners in organizing thoughts to justify their answers in grammar.

Critical thinking helps to approach any issue in an open-mind manner.

Critical thinking helps in decision making

Critical thinking could promote EFL grammar learning.

- **7-3 Population:** The findings of this research work are inferred to the undergraduate EFL learners at the English Language and Literature Department at Mohamed Lamine DEBAGHINE Sétif2 University during the research period.
- **7-4 Sampling Design:** The sampling design used for this inquiry was convenience representative. The research was conducted taking from the population 33 undergraduate EFL learners who were conveniently available to participate in the investigation.
- **7-5 Data Analysis:** The data were analyzed through the 23rd version of the Statistical Package for Social Sciences (SPSS). The first step was to find out whether the findings had relatively high internal consistency or not. The Alpha Cronbach reliability scale coefficient estimated .750, which is "acceptable", was higher than the reliability coefficient of .700. The second step was to check out the correlation between the questionnaire sections. The Pearson grammar learning-critical thinking coefficient was calculated. The correlation for section one

"grammar learning" and two "critical thinking" estimated\*\* .586, \*\*.940 respectively was significant indicating that the sections were strongly correlated and valid. Note that the 2-tailed correlation (\*\*.) is significant at .01 level. The next step was to run the one sample t-tests' analysis. The one sample T-test allows to compare different values, for instance: the scored means (M.) in reference to the  $\overline{X}$  ( $\overline{X}$  =3), and the standard deviations (Std. D.) in reference to the significance (Sig.) value.

#### **7-6 Delimitations:** This research is delimited in terms of:

- **Scope:** This work is designed to deal only with undergraduate EFL learners at the English Language and Literature Department at Mohamed Lamine DEBAGHINE Sétif2 University. Students in other levels, or disciplines at other institutions were not considered in this inquiry.
- Context: The present work was conducted at the University of Mohamed Lamine DEBAGHINE Sétif2 one of the relatively modern East state-owned institutions in Algeria. The researcher attempted, therefore, to look into critical thinking role in learning grammar in view of the issues identified in the theoretical and related literature. Data were obtained by using a likert scale questionnaire and observation drawn from the literature review available to the researcher.

## **7-7Limitations:** Some limitations were recognized during the investigation:

- Only few studies were conducted on critical thinking in learning grammar, which kept investigating the related literature a hard task.
- The population covered only the English Language and Literature Department at Mohamed Lamine DEBAGHINE Sétif2 University. As a result, the findings couldn't be generalized to other academic contexts.
- Due to time constraint, the population was sampled. That is, a convenience representative sample of undergraduate EFL learners was chosen.
- The deployed data collection means for this inquiry was a piloted self-designed likert scale questionnaire due to the non-availability of referential tools. As a result, the quantitative analysis using SPSS was a challenging mission.

# **7-8 Issues of Trustworthiness and Ethical Considerations:** When conducting a research work, a number of principles, rules, and standards/norms should be considered:

**Informed Consent:** The nature and the purpose of the current work were introduced to all participants who expressed their agreement to keep their responses part of the inquiry.

**Voluntary Participation:** Participants had the right to decide about their participation in this research.

**Anonymity:** Participants' identities are not revealed; made available to anyone's access except the researcher.

**Withdrawal Rights**: Participants were informed of their right to withdraw from the research at anytime and for any reason without any penalty.

Fair Interpretation of Data: Data analysis was perceived authentically avoiding misinterpretations.

#### 8- Results

Table2. One Sample T-Test t1

		$ar{X}$	= 3	1 1050	
N	М.	Std. D.	Sig.	R.I./Mt.	A.L.P.
1	4.76	.751	.000	1	High
2	3.76	.867	.000	4	High
3	3.91	.879	.000	3	High
	4.1414	0.57149	.000	2	High

T-test t1 table above displays the numerical analysis of section one 'Grammar'. The general M. of the three items is estimated **4,1414** taking the second position, which indicates a high A.L.P. Regarding the general St. D. is scored **.57149** indicating that students' responses are homogeneous due to the coming reasons:

The gained M. of the first item takes the first position, estimated **4,76** with a St. D. estimated **.751** which demonstrates a high A.L.P of the respondents.

For the second item's M., it occupies the fourth position, estimated **3,76** with a St. D. estimated **.867** which indicates a high A.L.P of the participants.

Regarding item three, the gained M. is estimated **3,91** which is in the third position with a St. D. estimated **.879** designating a high A.L.P of the respondents.

		$\overline{X}_{=3}$			
N	M.	Std. D.	Sig.	R. I. /Mt.	A.L.P.
4	4.27	.801	.000	1	High
5	4.15	.870	.000	4	High
6	4.21	.820	.000	3	High
7	3.94	.933	.000	7	High
8	3.70	.984	.000	8	High
9	4.06	.864	.000	6	High
10	4.24	.902	.000	2	High
	4.0823	.58032	.000	5	High

Table3.One Sample T-Test t2

The analysis of section two 'Critical Thinking' is illustrated on T-test t2 table above, for instance:

The general M. of the seven items is estimated **4.0823** taking the fifth position and indicating a high A.L.P, whereas the general St.D. is **.58032** which indicating that the responses are homogeneous revealing the conscientious agreement of the participants due to the different scored Ms. and St. Ds., as demonstrated below:

The M. of the fourth item which is in the first position, estimated **4,27** with a St. D. estimated **.801** designating a high A.L.P of the respondents.

Concerning the fifth item's M., it fills the fourth position, estimated **4,15** with a St. D. estimated **.870** indicating a high A.L.P of the participants.

With the sixth item, the gained M. is estimated **4,21** occupying the third position with a St. D. estimated **.820** which demonstrates a high A.L.P of the respondents

The seventh item's M. taking the seventh position, estimated **3.94** with a St. D. estimated **.933** which marks a high A.L.P of the respondents.

For the eighth item's M., it occupies the eighth position, estimated **3,70** with a St. D. estimated **.984** indicating a high A.L.P of the participants.

Regarding item ninth, the gained M. is estimated **4,06** filling the sixth position with a St. D. estimated **.864** yielding a high A.L.P of the respondents

The M. of the tenth item takes the second position, estimated **4,24** with a St. D. estimated **.902** leading to a high A.L.P of the respondents.

#### 9- Discussion

The current investigation achieved its aims. Firstly, the inquiry aimed to explore the role of critical thinking in EFL learning. The findings were homogeneous revealing EFL learners' consent as well as awareness of critical thinking essentiality in their motivation and engagement. These results lend support to some previous studies (e.g., Shaila & Trudell, 2010 & Foster, 2011). According to Kumaravadivelu (2006) and De Villa (2017), critical thinking raises in learners a self-motivation to liberate them from a teacher-centered world, and engage them in learning as active characters.

Secondly, the research sought EFL learners' perceptions of critical thinking role in learning grammar. The results showed learners' interests towards the skill of grammar. Besides, they agreed conscientiously on problem-based and Socratic questioning strategies' benefits in grammar learning, which is in accordance with Thompson's (2011) conviction. Like Wiggins, McTighe and Savery, Thompson viewed that problem-based learning and effective questioning are one the most useful critical thinking strategies that can promote language skills' learning (2011). Though some scholars viewed such strategies as being suspicious about the validity of the claims or points of view, yet problem-based and questioning remain important in orienting and motivating learners to fetch for answers or solutions to problems via comparing, clarifying, analyzing, debating, reflecting and evaluating which is the significance of learning (Rezaei, Derakhshan & Bagherkazemi, 2011; Boloori & Naghipoor, 2013; Rod-zalan & Saat, 2015).

The important point is that grammar is part of this learning, which leads to deduce that if critical thinking has a significant role in EFL learning, then critical thinking is expected to have a positive contribution in grammar, too. In this way, grammar learners can appreciate more the importance of not jumping to conclusions; that is to say critical thinking helps learners in organizing thoughts in an open-mind way where they are engaged in justifying positions, and taking decisions (Lai, 2011). In the same line with Khamesian, Zarei and Haghgoo(2012), Zarei (2015), De Villa, (2017), and Atkins (2017) asserted that critical thinking could be a stimulator to trigger grammar learning.

# -Recommendations and Pedagogical Implications

Upon an in- depth review of the existing literature (e.g. Foster, 2011; Rezaei, Derakhshan, & Bagherkazemi, 2011; Rodzal, & Saat, 2015; Zarei, 2015, etc.) and after discussing the findings of the current inquiry, teachers are recommended to:

- Review how they interpret the educational standards and in a collaborative way
  agree on the integration of critical thinking in grammar via instructions, or
  problem-based and questioning techniques.
- Adapt a blending of teacher-centered and learner-centered grammar learning with an eye on critical thinking.
- Focus on process then output, thinking then learning, learners' needs then their convenience. In doing so, teachers can predict what will be needed in the future, and learners can develop critical thinking traits, which will contribute to the learning of grammar.

Regarding EFL learners, it would be oversimplifying if researchers, educators or teachers make a hasty judgment that Learners, in the English Language and Literature Department, Setif 2 University, are strong or weak critical thinkers; yet learners showed their interest

towards critical thinking applicability in grammar. Therefore, learners are highly recommended to:

- Develop problem-based as well as questioning strategies to guide their thinking.
- Engage themselves in of Bloom's taxonomy upper levels where critical thinking takes place; that is in clarifying, analyzing, synthesizing, debating, reflecting and evaluating. By doing so, learners can organize their thoughts in an open-mind way, as well as take decisions with their teachers.

## - Suggestions for Further Researches

The results discussed above suggest that:

- This research has explored critical thinking role in EFL learners' grammar, but further inquiries could identify the relationship between the two variables or even experiment critical thinking, or its dispositions' impact on the EFL grammar learning or any other skill learning.
- There has been only one data collection tool; but future researches could deploy more than one means for collecting the data in accordance with the research type.
- The current work dealt only with a convenience sample of 33 undergraduate students in the English Language and Literature Department at Mohamed Lamine DEBAGHINE Sétif2 University, Algeria. Future researches could consider different levels at other academic settings with larger populations to support findings' generalization.

#### 10-Conclusion

This cross-sectional quantitative research was conducted to investigate critical thinking role in learning grammar. The work addressed two major research questions: what is the role of critical thinking in EFL learning? And what are learners' perceptions of critical thinking role in EFL grammar learning? The data collection instrument was: a piloted reliable self-design likert scale questionnaire administered to a convenience representative sample of 33 undergraduate students in the English Language and Literature Department at Mohamed Lamine DEBAGHINE Sétif2 University, ALGERIA. Although this work had some limitations, but the numerical analysis enabled to come up with interesting, significant homogenous findings: learners agreed conscientiously on critical thinking essentiality in their motivation and engagement, in promoting their grammar learning via problem-based and questioning strategies that provoke learners' meta-cognitive as well as communicative skills, for example: comparing, clarifying, analyzing, debating and evaluating in grammar learning. Thus, it is worthwhile concluding that if critical thinking has a significant role in learning, then critical thinking is expected to have a positive contribution in grammar, too; in the sense that it helps learners in organizing their thoughts, justifying their positions and deciding. That is critical thinking could be beneficial in the grammar learning under adequate conditions, for instance: grammar teachers should review their standards with an eye on critical thinking integration via instructions or thinking techniques for the sake to promote learners' grammar learning. Furthermore, learners should engage themselves in the world of critical thinking in order to promote their grammar learning in an organized open-mind responsible decisive way via problem-based and Socratic questioning strategies. As the present inquiry was exploratory; therefore, its findings are indicative of the need for experimental researches to generalize the current results.

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