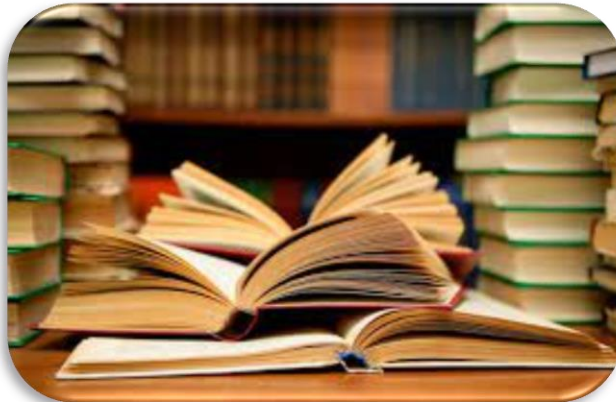


## Research Paper



### **The Role of Critical Thinking Disposition in Enhancing Argumentative Writing Skill: Iranian EFL Teachers' and Learners' Perspective**

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#### **ABSTRACT**

This study investigated the attitude of the Iranian EFL teachers and learners toward the role of critical thinking disposition in enhancing argumentative writing in the Iranian EFL context at Islamic Azad University, Kurdistan branch. Attitude plays an important role that affecting language learning, especially writing skills in an EFL context like Iran. In this descriptive study, 14 EFL teachers and 80 EFL learners both males and females were selected based on a random sampling method. The data were gathered based on a survey approach, by using the online CCTDI questionnaire. To answer the research questions of this study and uncover the attitude of EFL teachers and learners towards the treatment, the responses the to CCTDI online questionnaire were coded and analyzed. The results indicated that teachers and learners had positive attitudes towards all components of CCTDI. They represented a highly positive disposition towards truth-seeking and inquisitiveness. Results of the study revealed that of the EFL teachers and learners have a positive attitude regarding English language teaching and learning. Another finding of the study was that, having favorable perspective toward English did not enhance their proficiency in learning English. It is hoped that the findings of this study help teacher and learners learn about critical thinking principles they will apply prudent judgment, challenge the improbable, pursue difficulties, establish alternatives, use tactics, consider alternative perspectives, and attempt to be objective.

**Keywords:** Argumentative Writing, CCTDI Questionnaire, EFL Teachers' Attitude, EFL learners' Attitude

تأثیر گرایش به داشتن تفکر نقادانه بر تسهیل و پیشرفت در مهارت مقاله نویسی استدلالی: بررسی دیدگاه استادان و دانشجویان ایرانی رشته آموزش زبان انگلیسی  
این مطالعه به بررسی تأثیر دیدگاه زبان آموزان و اساتید آموزش زبان انگلیسی و آموزش اصول تفکر انتقادی (CT) بر توانایی‌های نوشتاری تعدادی از زبان آموزان مرد و زن ایرانی زبان انگلیسی که در دانشگاه آزاد اسلامی واحد کردستان، زبان انگلیسی تحصیل کرده‌اند، پرداخته است. دیدگاه نقش مهمی را بر یادگیری زبان خارجه به ویژه در پیشرفت مهارت مقاله نویسی استدلالی ایفا می‌کند. در این مقاله توصیفی در مرحله اول، 80 زبان آموز و 14 معلم انتخاب شدند. سپس در شروع ترم با استفاده از پرسشنامه آنلاین سنجش تمایل به داشتن تفکر انتقاده کالیفرنیا (CCTDI) دیدگاه این زبان آموزان مورد ارزیابی و بررسی قرار گرفت. برای جمع‌آوری داده‌های مورد نیاز، آزمون مهارت‌های تفکر انتقادی کالیفرنیا (CCTDI) دو بار، یکبار قبل و یکبار بعد از تدریس انجام شد. این مطالعه از یک طرح شبه آزمایشی پیش‌آزمون پس‌آزمون استفاده کرد که در آن تکنیک‌های CT شامل حقیقت‌جویی، ذهن باز، تحلیل‌گری، سیستماتیک، اعتماد به نفس، کنجکاوی و اطلاعات در 6 مرحله به شرکت‌کنندگان معرفی شد. نتایج به دست آمده حاصل از این پژوهش نشان داد که معلمان و دانشجویان رشته آموزش زبان انگلیسی دیدگاه مثبتی را نسبت به تمام بخش‌های پرسشنامه سنجش تفکر نقادانه داشتند. آنان تمایل مثبتی نسبت به حقیقت‌جویی و کنجکاوی در نوشته‌های خود داشتند. نتایج حاصل از این تحقیق همچنین نشان داد که شرکت‌کنندگان در این تحقیق دیدگاه مثبتی نسبت به یادگیری زبان انگلیسی داشتند.  
واژگان کلیدی: دیدگاه، تمایل به داشتن تفکر نقادانه، زبان آموزان رشته زبان انگلیسی، مقاله نویسی استدلالی.

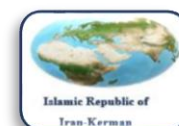
## INTRODUCTION

As one of the distinguished learning and modern skills of the 21<sup>st</sup> century, critical thinking has been studied within different educational and professional settings. The degree to which it is operationally defined, taught, and assessed, however, is not well documented. This complicates efforts to develop critical thinking disposition studies in the Iranian EFL context and assessment tools. In today's EFL contexts, it is a common belief that having critical thinking dispositions among learners and relating it with attitude and perspective, provide them opportunities for better understanding and enhancing their new knowledge, especially in argumentative writing. Therefore, most educational programs put an effort to develop such potentiality among EFL learners.

The need for developing argumentative writing among Iranian EFL learners through critical thinking disposition has become one of the most important goals of the Iranian EFL teaching context. Argumentative writing is claimed to be a higher form of critical thinking as well as a problem-solving activity where a combination of various skills as well as attitude is tapped via practicing action learning and cooperative learning. Writing proficiently necessitates gaining higher-order level of thinking and positive attitude. Unfortunately, in the Iranian EFL context limited research has been conducted to prove the effectiveness of using critical thinking disposition and attitude for fostering argumentative essay writing among Iranian EFL learners', because the focus of English language teaching in Iranian EFL contexts has traditionally been on training students to be proficient in language skills. Additionally, to the concerns highlighted above, instructional materials continue to lack critical thinking abilities as an educational objective. This concentration always results in the disregard of a more crucial purpose of language education, which is to think and act critically and as an ultimate result cultivating positive attitude, and as a consequence, they will be unable to be effective instructors after graduation, despite their excellent test scores. When our learners are actively involved in the learning process, they have the opportunity to immediately experience the benefits and drawbacks of their course materials, ensuring that classrooms will no longer be a place of trial and error for them in the future.

Critical thinking skills is of great importance for learners in academic contexts because the educational materials in these contexts necessitate a rational level of thinking, like the ability to make a critical assessment, provide justification for their ideas, and defend the logic of accuracies they receive from instructors. On the contrary to these mentioned points, Norris (1985) found that critical thinking skills are not widely used among learners. An ideal ideologist must have certain skills: cognitive skills and thinking techniques and skills. The distinguishing feature of ideal thinkers, however, is not just their proficient intellectual abilities or special abilities, but rather their propensity to investigate, probe, looking for evidence, take logical ventures, and critical thinking and visionary.

There are various principles that contribute to success in foreign language learning in an EFL context, some are : motivation, perspective, age, intelligence, aptitude, cognitive style, and personality traits which are all factors that influence English language learning (Khasinah, 2014). Attitude is considered one of the important principles affecting the success of language learning. Attitude in the oxford dictionary is defined as the way that humans act toward someone or something that shows how they think and feel. Teachers' and learners' practice toward English learning could enhance their language learning. As Lightbown & Spada (2006, p.63) stated that if the learners have a positive attitude toward the natives of the language, they have more willingness to communicate with them. It means that the students will



be more attracted to learning the language if they are interested in the target language. This affirmative perspective toward the English language will motivate the students to learn the target language eagerly.

Many tests are designed to assess critical thinking attitude. One of these is the California Critical Thinking Dispositions Inventory (Facione, Sanchez & Facione, 1994). Because this tool was developed for English-speaking populations, it had to be modified and adapted when used in contexts where English is not the first language and whose customs, including beliefs and traditions, differ significantly from those in the English-speaking countries. Therefore, this instrument was back-translated for use among college students in Iran.

Positive language teaching and learning can give students a positive attitude, while negative language learning can have a negative effect in the classroom. Therefore, language teaching and learning should be positive because it can create a positive atmosphere in the classroom and also positively affect students' attitude towards language learning. The more positive students' attitude is, the more eager they are to learn the language, and the more negative students' attitude is, the more apathetic they are to learning the language. (Gardner & Lambert, 1972 cited in AlSobhi et al, 2018, p.1).

Finally, this paper provided insights into methods that may enhance the practice of argumentative essay writing instruction in EFL context courses and improve the quality of critical thinking disposition and provide learners and teachers with a positive attitude. The study of critical thinking disposition in an Iranian EFL context could lead to the development of the argumentative essay writing skills of Iranian EFL learners. Critical thinking disposition solely did not concentrate on problem-solving, but must also include in-depth critiques of existing structures and practices. The synthesizing of critical thinking and action learning offered reflection-in-action and reflection-on-action that comprised reflective practice. Improving reflective practice built and improved practitioners' commitment and capacity to reflect on the dimensions of their actions in conditions of uncertainty and conflict. The study of the use of critical thinking disposition offered a structure and a process for reflective practice in curricular design.

## LITERATURE REVIEW

On 100 Iranian university students, Nikoopour, Amini Farsani, and Nasiri (2011) examined the association between critical thinking and the use of active and passive language acquisition methodologies. The data indicated a statistically significant positive link between critical thinking and cognitive ( $M=43.62$ ), metacognitive ( $M=32.68$ ), and social strategies ( $M=19.91$ ), but not with memory, and compensations, or emotional strategies.

Khatib, Marefat, and Ahmadi (2012) evaluated two kinds of instructional strategies used in EFL classes in order to determine the influence of audiotaped and written discussion diaries on the development of critical thinking among EFL students. This research enrolled 33 Iranian EFL students in three courses using a random sample technique. A pretest-posttest design was used by the researchers. As a pretest, pupils were given the Watson-Glaser Critical Thinking Appraisal. Two experimental groups used two distinct types of discussion diaries, audiotaped or written, while the control group completed standard writing assignments. Finally, at the conclusion of the course, learners took a post-test. The findings indicated a statistically significant difference between the two groups. The researchers found



that specific methods of critical thinking instruction may have a direct influence on the development of this competence among EFL students.

Fahim and Mirzaii (2014) sought to improve EFL learners' argumentative writing abilities via the use of integrating writing instruction and interactional critical thinking in their research. In their research, 48 Iranian EFL learners were unsystematically allocated to the experimental class, which received writing teaching in combination with conversational critical thinking activities, and to the control class, which received just writing training. To analyze the two groups' writing abilities, a pretest was conducted before to the instruction and a posttest was provided after the teaching, both in the form of in-class 180-word four-paragraph argumentative essays with a time constraint of 30 minutes. While both groups improved statistically significantly in argumentative writing, the findings suggested that combining writing training with dialogic critical thinking resulted in greater performance.

Ghorbandordinejad and Nourizade (2015) used emotional intelligence to investigate the association of critical thinking disposition and English learning success among Iranian high school third-grade EFL students. A sample of 264 students was chosen for their critical thinking disposition and emotional intelligence (145 men and 119 females). The participants' final English exam results were also utilized to determine their English achievement. The findings indicated a favorable link between overall critical thinking dispositions ( $r=.506$ ,  $p.01$ ) and their subscales, namely engagement ( $r=.33$ ), maturity ( $r=.47$ ), and inventiveness ( $r=.44.6$ ), and English learning success. Additionally, the findings indicated that emotional intelligence serves as a mediator between critical thinking disposition and English learning performance.

Heidari Tabrizi et al. (2016) examined the relationship between autonomy and lexical competence among Iranian EFL students, as well as the influence of critical thinking ability on learners' autonomy and the effect of critical thinking ability on learners' lexical knowledge. They discovered a substantial and favorable association between Iranian EFL learners' autonomy and lexical competence in that research. Additionally, they discovered that critical thinking abilities had a good effect on EFL learners' autonomy. That is, learners with a higher capacity for critical thinking were the most autonomous. Additionally, same research discovered that learners' degree of critical thinking had a favorable effect on their word knowledge. In other words, students who had a greater capacity for critical thinking have a greater capacity for lexical knowledge.

Tamjid et al. (2017) examined the effect of critical thinking skills instruction on the motivation of Iranian advanced EFL learners at Tabriz's Simin language centre. 42 EFL students were chosen based on their TOEFL Proficiency exam scores. The chosen EFL learners were then randomly allocated to one of two groups, each of which comprised of 21 EFL learners. A motivation questionnaire, adapted from Salimi (2000), was provided to students in both the experimental and control groups at the start of the research to assess their motivation. Then, the experimental group's 21 pupils were educated in the Watson and Glaser (1980) critical thinking evaluation. Critical thinking sub-skills included inference, assumption identification, deduction, interpretation, and assessment of arguments. For advanced pupils, the educational treatment consisted of ten sessions twice a week. Each session included a 20-minute treatment period. The control group received conventional teaching. Analyzing the motivation ratings obtained at the conclusion of the treatment using an independent samples t-test revealed that training critical thinking skills had a significant impact on increasing participants' motivation.



Riasati et al. (2018) investigated the efficacy of critical thinking on students' writing performance and inclinations toward critical thinking. 140 pupils were chosen for his research sample. 73 pupils were assigned to the experimental group, whereas 67 were assigned to the control group. The experimental group was taught critical thinking techniques. The researcher-created essay exam, the Ennis-Weir critical thinking essay test, and the California Critical Thinking Dispositions Inventory were all employed in that study (CCTDI). To ascertain the treatment's result, a two-group pretest/posttest quasi-experimental approach was used. The descriptive statistics and independent-samples t-test were used to evaluate the data. There were statistically significant variations in the overall scores of the three instruments between the experimental and control groups. The findings revealed that students' writing abilities and inclinations toward critical thinking methods improved. There were no changes, however, in some dispositional characteristics such as truth seeking, cognitive maturity, and open-mindedness.

Mousavi (2019) conducted quasi-experimental research to determine the effect of critical thinking instruction on the speaking ability of EFL students. To accomplish the study's aims, 44 male and female intermediate students from Respina Talk (i.e., Iran-Canada) language college were recruited. Their ages ranged from 20 to 35. According to the findings, there was a substantial correlation between critical thinking enhancement and EFL learners' speaking ability.

Mohseni et al. (2020) evaluated the influence of critical thinking on reading comprehension. They randomly separated the participants into three groups of immediate classes and assessed if their comprehension abilities of general, argumentative, and cause and effect text categories were homogenous by administrating the reading pre-test. The findings stressed the importance of EFL learners for enhancing their organizational competence related diverse writing genres and especially the cause-and-effect organizational signals in EFL learning. The findings also figured out the multiple categories of teaching reading and the types of learners of the variables like a textual genre that has to be taken into consideration to progress EFL learners' understanding.

Ghaani and Roslin (2021) conducted recent descriptive research on Iranian EFL instructors' knowledge, attitude, and practice of Critical Thinking (CT) abilities. A total of 276 male and female EFL instructors completed pre-tested self-report questionnaires on knowledge of CT skills, the California Critical Thinking Disposition Inventory, and classroom practise of CT skills. Following non-parametric one-sample Wilcoxon Rank Order tests on the gathered data, the most significant result in this research was that EFL instructors lacked general awareness of the idea of fundamental CT abilities, despite their considerably favorable attitude toward CT. The findings indicated that CT skills practise was presented in EFL classrooms, particularly in listening sessions, where a substantial proportion of students did not practice any of the CT sub-skills. On the contrary, a significant proportion of instructors claimed that they include almost all of the CT sub-skills into their speaking sessions.

In conclusion, the relevant literature constitutes the foundation of the question and the variables of the current study. Reviewing the related literature indicated the effectiveness of having a critical thinking disposition in the field of language learning and teaching and EFL learners' writing development. However, to date, fewer studies was conducted to examine the effective role of the critical thinking disposition in developing EFL learners' argumentative writing among Iranian EFL learners. To



strengthen the literature and help the Iranian EFL context this research specifically addresses the following research questions:

**RSQ1:** What is the attitude of the Iranian EFL teachers toward synthesizing critical thinking disposition and action learning approach for teaching argumentative writing?

**RSQ2:** What is the attitude of the Iranian EFL learners toward synthesizing critical thinking disposition and action learning approach for teaching argumentative writing?

## METHODOLOGY

In this section, a comprehensive description of the design and context, the participants, instruments, data collection procedure, and data analysis procedure of the study are provided.

### Design and Context of the Study

To serve its purpose, this study employed a quasi-experimental control/experimental group pre-test/post-test design. It employed two groups: experimental and control. Its independent variable was critical thinking disposition and its dependent variable was argumentative writing development in the learning environment. It took place at the Islamic Azad University, Kurdistan branch.

### Participants

Participants of the study were from two intact classes of Iranian undergraduate translation majors. A number of 80 EFL learners were selected out of the 130 EFL learners based on their performance on Oxford Placement Test (OPT). Then, these 80 EFL learners were randomly assigned to two homogeneous groups, namely control (n=42) and experimental groups (n=38) Their age range was from 20 to 30 years old (53 females and 27 males). As it was stated above, the number of students was 80 (38 students in the experimental class and 42 students in the control class), and 14 EFL teachers in terms of gender (9 male) and (5 female) were selected based on voluntary participation. In addition, all of them were Iranian and their language learning experience was restricted to language credit units of secondary and tertiary (university) education. The following table (Table 1.) provides a summary of the participants' demographic data.

**Table 1**

*Demographic Background of the Participants*

<b>No. of Students</b>	<b>80 Undergraduates</b>
<b>No. of Teachers</b>	14 EFL Teachers
<b>Gender</b>	53 Females & 27 Males
<b>Age Ranges</b>	20-30
<b>Native Language</b>	Kurdish
<b>Major</b>	English Language Translation
<b>Universities</b>	Islamic Azad University, Kurdistan-Iran
<b>Second Language Background</b>	English, limited to the credit units of language in secondary and tertiary education
<b>Academic Years</b>	2021-2022



All of the participants were supposed to take a (writing) pretest and an achievement posttest. In addition, the participants' gender is not taken into account as a variable in this study. All of the participants attended the English translation course in two separate classes at the Islamic Azad University, Kurdistan-Iran.

## Instrument

### The California Critical Thinking Disposition Inventory (CCTDI) (1992)

To gather the related data for this study, which was to realize the effect of having critical thinking disposition and being able to use it among EFL learners as well as teachers, which was a crucial skill in an EFL learning context like Iran, where English was taught as a foreign language. The (CCTDI) test was chosen because it is appropriate for use with secondary school, college students, and adults.

The CCTDI assesses seven aspects that affect a participant's potential to learn and utilize critical thinking skills effectively: the tendency toward reality of things or prejudices, interactive or bigotry, eagerly awaiting possible consequences or being careless of them, progressing in a structured or unstructured manner, to be self - assured in justifying power and influence or distrust of thinking, being curious or resilient to learning.

The CCTDI assesses seven characteristics that affect an individual's potential to acquire and successfully use critical thinking abilities. These characteristics are as follows: Inquisitiveness, Systematicity, Analyticity Truth-seeking, Open-mindedness, Self-Confidence, Maturity.

**Table 2**

*CCTDI measures, based on the Insight Assessment CCTDI website (Insight Assessment 2016a) and the user manual (Insight Assessment 2017a)*

Scale	Scale Description
<b>Overall score</b>	The overall measure of critical thinking mindset.
<b>Truth-seeking</b>	"...is the practice of continually seeking the maximum possible knowledge of any issue; it is following arguments and facts wherever they may go, even if they cause one to doubt treasured beliefs. Truth seekers pose difficult, often terrifying, questions; they do not overlook crucial data; and they make a concerted effort to avoid allowing prejudice or preconception to cloud their pursuit of knowledge and truth. The absolute opposite of reality of the situation is prejudice, which disregards sound arguments and pertinent data in order to avoid confronting challenging concepts."
<b>Open-mindedness</b>	"...is the disposition to allow people to express opinions with when one disagrees. Open-minded individuals demonstrate tolerance for the viewpoints of others, acknowledging that often, we all have ideas that make sense only from our own vantage points. As used here, open-mindedness is critical for maintaining peace in a heterogeneous and complex society where individuals approach problems from a variety of religious, political, social,



familial, cultural, and personal perspectives. Intolerance is the polar opposite of open-mindedness."

**Analyticity** "...is the desire to be on the lookout for what will happen next. This is the practice of anticipating both the positive and negative prospective implications or outcomes of circumstances, decisions, ideas, and plans. The opposite of objective truth is being indifferent to consequences, failing to consider what occurs next when one takes decisions or mindlessly accepts ideas."

**Systematicity** "...is the disposition or practice of approaching issues in a disciplined, ordered, and methodical manner. The opposing trend is disorganization. The individual who is competent in systematic thinking may not be aware of a particular technique or may be inept at using a certain problem-solving strategy, but he or she has the desire and proclivity to address problems and difficulties in an ordered and orderly manner."

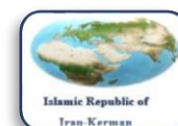
**Self-confidence** "...is the practice of relying on introspection to solve issues and make decisions. Trust in thinking, like the other traits examined here, pertains to both people and organizations. A family, team, company, community, or society can rely on reasoned judgement to solve issues and achieve goals. The inverse tendency is mistrust of logic, which is typically shown as a dislike of using thorough reason and contemplation when making judgments or determining what to think or to do."

**Inquisitiveness** "...is cognitive temper. It is the desire to know things even if they are not instantly or clearly beneficial. It is being interested and eager to learn new things and find reasons for things, even if the consequences of that new information are not instantly obvious. Indifference is the absolute opposite of curiosity."

**Maturity** "...the practice of recognizing the complexities of problems but yet attempting to make timely judgments. A mature judge recognizes that numerous answers may be appropriate while also acknowledging the necessity to reach a conclusion even in the lack of comprehensive knowledge. Cognitive immaturity, on the other hand, is reckless, cognitive distortion, failing to make the best use of time, stubbornly refusing to change when reasoning and facts show one is erroneous, or shifting ideas arbitrarily without sufficient cause.."

### **CCTDI Reliability and Validity**

Except for the CCTDI, no instruments have been identified in the literature that claim to test the dispositional aspect of CT validly and reliably. It has the capacity to make accurate inferences, analyze statements effectively, and evaluate reasoning accurately. This instrument, in general, predate the Delphi Research Project (Watson & Glaser, 1980; Ennis, Millman, & Tomko, 1985; Ennis & Weir, 1985) and hence makes use of less rigorous theoretical formulations of the CT concept. The California Critical





Thinking Skills Test (CCTST) (Facione, 1990; 1992) is one instrument that is based on the Delphi concept. It is progressively being utilized to test CT abilities in learner cases (Carter-Wells, 1992; Love, 1993), and research on its applicability in nursing samples was becoming accessible (Ouzts, 1992). Due to the fact that the CCTDI seems to be the first straight scale of the tendency aspect of CT, related validity studies comparing multiple CT disposition scales were not feasible at the time. However, strong relationships between specific CCTDI scores and known psychological scales targeting related topics have been identified, indicating concurrent validity (Sanchez, 1993).

In measurement establishment, analysis of factor procedures was used to find out (a) the inherent statistical formation of a set of variables used to compute a theory and (b) the cross-statistical structures among the different scales of one formulation and those of other related structures (Nunnally, 1978). In the CCTDI, analysis of factor methods was applied directly to measure (a) as well as indirectly to assess (b).

Analysis of the factors of answers to the instrument CCTDI proved the validity of various distinguished (but not definitely considerate) elements in the tendency toward critical thinking. A study of the list of questions which placed under each element paved the way for the scanning of these classifications in relation to the tendency sentences that formulated their structure. Delphi's perfect critical thinker was therefore brought down from nineteen explanatory sentences to seven dispositional aspects or traits of mind. This construction was shaped by both the experimental (statistical) associations concerning among these items and the theoretical links concerning within the expressive sentences.

### **Data Collection Procedures**

The researcher in this study investigated the attitude of Iranian EFL teachers on using a synthesis of critical thinking disposition and action learning strategies for teaching argumentative writing. In addition to the earlier stated aim, the experimenter attempted to investigate whether Iranian EFL teachers were familiar with the basic characteristics of a successful critical thinker or not and what was their attitude toward having acritical thinking disposition. To accomplish the aforementioned objectives, the researcher used the California Critical Thinking Disposition Inventory (CCTDI), which was given at the course's onset.

In this part of the study the researcher aimed to identify differences in critical thinking disposition of teachers' attitude in an Iranian EFL context, Faculty of language and literature, Kurdistan. that specifically, consisting of seven components: 1) inquisitiveness, 2) self-confidence. 3) truth-seeking, 4) open-mindedness, 5) analyticity, 6) systematics, and 7) maturity (Facione and Facione 1994). Additionally, the CCTDI was developed using the Delphi exercise's majority consensus. The test's objective was to ascertain a participant's disposition or attitude toward critical thinking. The (CCTDI) is composed of seven subscales and 75 items in total. The subscales were named Truth Seeking (12 items), Self-Confidence (9 items), Systematicity (11 items), Analyticity (11 items), Maturity (10 items), Open-Mindedness (12 items), and Inquisitiveness (12 things) (10). The authors assert that, like the (CCTST), this inventory is suited for group or individual testing. The researcher allotted 15 minutes to complete the exam, which had 75 items. To gather data for questions of the study, a survey approach was utilized to determine the critical thinking disposition of Iranian EFL instructors by administering The California



Critical Thinking Disposition Inventory (CCTDI) questionnaire created by (Facione and Facione 1994). At the start of the data collection the researcher gave the CCTDI to the EFL teachers to analyze their attitude toward having a critical thinking disposition and its importance in teaching. The sample in this research was 14 EFL teachers at the Islamic Azad university, Kurdistan (9 males and 4 females).

In the treatment stage of the study for this research question, the research acted as a supervisor which directly and for far branches via online connection guide the teachers to act based on the principles of the CCTDI, as mentioned earlier the data collection procedure for this study was took place in 16 sessions, so the teachers divided their sessions in two parts, in the first eight sessions, they focused their teaching on the control stage of the research which they focused their attention on lower-order thinking skills; in each session the teachers, provided their EFL learners with lower-order thinking skills based on Bloom`s Taxonomy and CCTDI principles which was mentioned earlier. This lower consisted of knowledge, comprehension, and application levels. Every step involved special questions to be answered and think about, questions such as define, and describe, for the second part questions like discuss, and explain, and for the third part questions such as illustrate, and classify were presented. Besides, particular learning strategies related to various levels of Bloom`s Taxonomy and CCTDI were taught to their learners.

In the second stage of the data collection procedure, or the second eight sessions of the research which was called experimental stage because at these sessions the focus of the teachers was on higher-order thinking skills; at each session the teachers supplied the students with higher-order thinking skills based on CCTDI and Bloom`s taxonomy. The higher section is divided into stages of analysis, synthesis, and assessment. Each level had a unique set of questions. For example, first-level questions such as contrast and generalize, second-level questions such as categorize and contrast, and third-level questions such as conclude and justify were presented; additionally, students were taught specific learning strategies associated with the various levels of Bloom's Taxonomy. Additionally, participants in the last session completed an open-ended questionnaire to ascertain their sentiments regarding the implementation of CT-based activities.

After sixteen sessions of the guided treatment based on CCTDI and Bloom`s taxonomy of educational aims, the researcher again gave the CCTDI to the teachers to investigate the effect of synthesizing critical thinking disposition and action learning approach on the attitude of Iranian EFL teachers toward employing critical thinking strategies in the Iranian EFL context.

The data collection procedure for question number two was completely similar to the data collection procedure of question number five, with some minor differences, Again, in order to collect the related data for questions number six, the survey methodology was employed to identify the attitude Iranian EFL learners` critical thinking disposition by giving The California Critical Thinking Disposition Inventory (CCTDI) questionnaire designed by (Facione and Facione 1994).

38 selected EFL learners studying English at a language in the experimental group were given the CCTDI. After scoring their answers, their level of attitude toward critical thinking was assessed, then the researcher planned to treat these EFL learners and see whether the treatment has any significant effect on their attitude or not.

Again, the sixteen session of treatment was divided into two eight sessions, the first eight sessions which were called the control sessions of the study, because it was based on lower-levels of thinking



skills; each session the teacher, supplied the EFL learners with lower-order thinking skills based on Bloom's Taxonomy and CCTDI principles. The lower part included open-mindedness, Self-confidence, comprehension, Inquisitiveness, and application levels. Every level involved specific questions. For instance, for the first level, questions like define, and describe, for the second level questions such as discuss, and explain, and for the third level questions like illustrate, and classify were presented. Besides, particular learning strategies related to various levels of Bloom's Taxonomy and CCTDI principles were taught to students

The study's second eight sessions were designated experimental due to their emphasis on higher-order thinking abilities; throughout each session, the teacher presented learners with higher-order thinking skills based on Bloom's Taxonomy. The advanced section encompasses the levels of analysis, systematicity, maturity, synthesis, and assessment. Each level addressed a different set of questions. For example, first-level questions such as contrast and generalize, second-level questions such as categorize and contrast, and third-level questions such as conclude and justify were presented. Additionally, EFL learners were taught specific learning strategies related to various levels of Bloom's Taxonomy and CCTDI principles.

Having finished the sixteen sessions of treatment based on CCTDI principles and Bloom's taxonomy of educational objectives, the researcher again presented the CCTDI to the EFL learners to investigate the effect of synthesizing critical thinking disposition and action learning approach on the attitude of Iranian EFL learners toward employing critical thinking strategies in the Iranian EFL context.

In this section of the study, the researcher presents the data collection procedures for the two research questions of the study and elaborated on the similarities and difference of the research questions data collection procedures. It is hoped that by presenting these data collection procedures the study paves the way for the next sections of the study.

### **Data Analysis Procedures**

The researcher utilized the CCTDI to gather data for both questions, and then used the CCTDI to analyze the acquired data. The CCTDI provided eight scores: seven scale-related scores and an overall total score. According to Facione, Facione, and Giancarlo (1996), learners and instructors with a strong tendency toward critical thinking scored 5 or 6 points for each item, whereas those with a poor disposition earned 3 or fewer points for each item. He then translated these scores into statistical scales with a maximum of 60 points and a minimum of 30 points. A score of more than 50 on any of the sub-scales indicates that the disposition is strong. A score of greater than 40 shows a favorable disposition. Between 3 and 39, scores indicated an ambivalent disposition toward the given disposition. A score of 30 or less indicates a negative propensity, whereas a score of 10 to 20 indicates a significant negative inclination. The highest possible score was 420 in total. A total score of less than 280 shows a significant overall deficit in the capacity for critical thinking. Between 280 and 350 is a favorable score, but 350 or more is a strong sign of overall strength in a certain disposition (Facione, 1997).

To improve scoring, students kept track of their CCTDI responses on answer sheets. Each of the 75 items allowed for six options. The optical scoring instructions contained specific instructions on how to respond to each of the six potential replies. Facione, Facione, and Giancarlo(1996) additionally offered



instructions on how to organize the items according to the appropriate sub-scales; how to combine the scores for each item into the raw scale score; how to normalize each scale score; and how to compute the overall score.

## RESULTS

### Teachers' Attitudes Towards the Treatment

The penultimate research question of the study aimed to unearth Iranian EFL teachers' attitudes towards synthesizing critical thinking disposition and action learning approach for teaching argumentative writing. For this reason, the surveyed teachers' responses to the CCTDI were coded, analyzed through descriptive statistics, and presented in the following table:

**Table 3**

*EFL Teachers' Attitudes Towards the Treatment*

CCTDI (subscales)	<i>N</i>	Mean	Std. Deviation	
	Statistic	Statistic	Std. Error	Statistic
Truth-seeking	14	56.77	.755	5.23
Open-mindedness	14	46.43	.971	6.73
Analyticity	14	49.29	.675	4.67
Systematicity	14	46.83	.717	4.97
Self-confidence	14	47.79	.584	4.04
Inquisitiveness	14	50.16	.492	3.41
Maturity	14	47.64	.651	4.51
CCTDI	14	344.93	2.435	16.87

CCTDI interpretation is as follows: a score above 50 in each of the subscales indicates strong disposition, 40-50 is an indicator of positive inclination, 31-39 insinuates ambivalence, and a score below 30 implies a negative tendency. As far as the total CCTDI is concerned, a score greater than 350 shows a strong disposition, 280-350 indicate positive inclination, 211-279 imply ambivalence, and a score below 210 is an indication of negative tendency.

Therefore, it could be argued that the EFL teachers participating in this study had a strong disposition in the subscales of truth-seeking ( $M = 56.77$ ) and inquisitiveness ( $M = 50.16$ ), and positive inclination for the other subscales: open-mindedness ( $M = 46.43$ ), analyticity ( $M = 49.29$ ), systematicity ( $M = 46.83$ ), self-confidence ( $M = 47.79$ ), and maturity ( $M = 47.64$ ). Their total CCTDI means score also indicates a positive inclination ( $M = 344.93$ ).

### Learners' Attitudes Towards the Treatment

The last research question of the study intended to investigate Iranian EFL learners' attitudes towards synthesizing critical thinking disposition and action learning approach for argumentative writing instruction. Hence, the responses of the EFL learners in the EG to the CCTDI were coded, analyzed through descriptive statistics, and displayed in Table 4:



**Table 4***EFL Learners' Attitudes towards the Treatment*

CCTDI (subscales)	N	Mean		Std. Deviation
	Statistic	Statistic	Std. Error	Statistic
Truth-seeking	80	55.61	.593	5.21
Open-mindedness	80	47.24	.729	6.39
Analyticity	80	47.55	.561	4.92
Systematicity	80	45.15	.639	5.61
Self-confidence	80	46.03	.551	4.84
Inquisitiveness	80	47.57	.615	5.39
Maturity	80	45.12	.651	5.71
CCTDI	80	334.31	2.370	20.79

For reasons of convenience, the interpretation of the CCTDI presented before is repeated here: a score above 50 in each of the subscales indicates strong disposition, 40-50 is an indicator of positive inclination, 31-39 insinuates ambivalence, and a score below 30 implies a negative tendency. Regarding the total CCTDI score, a score greater than 350 shows a strong disposition, 280-350 indicates positive inclination, 211-279 implies ambivalence, and a score below 210 is an indication of negative tendency.

Hence, it could be claimed that the EFL learners who took part in this study had a strong disposition in the subscale of truth-seeking ( $M = 55.61$ ), and positive inclination for the other subscales: open-mindedness ( $M = 47.24$ ), analyticity ( $M = 47.55$ ), systematicity ( $M = 45.15$ ), self-confidence ( $M = 46.03$ ), inquisitiveness ( $M = 47.57$ ), and maturity ( $M = 45.12$ ). The learners' total CCTDI mean score also indicated a positive inclination ( $M = 334.31$ ).

## DISCUSSION

Because the two research questions of the study were descriptive, no hypotheses have been formulated for them, therefore, in this section, the last two questions are addressed together. To answer the first research question and uncover the attitude of EFL teachers towards the treatment, the responses to CCTDI questionnaire were coded and analyzed. The results indicated that teachers had positive attitudes towards all components of CCTDI. They represented highly positive disposition towards truth-seeking and inquisitiveness. As it was highlighted by Facione & Facione (1992), truth seeking is the practice of continually seeking the maximum possible knowledge of any issue; it is following arguments and facts wherever they may go, even if they cause one to doubt treasured beliefs. Truth seekers pose difficult, often terrifying, questions; they do not overlook crucial data; and they make a concerted effort to avoid allowing prejudice or preconception to cloud their pursuit of knowledge and truth. The absolute opposite of reality of the situation is prejudice, which disregards sound arguments and pertinent data in order to avoid confronting challenging concepts. Inquisitiveness was considered as cognitive temper. It is the desire to know things even if they are not instantly or clearly beneficial. It is being interested and eager to learn new things and find reasons for things, even if the consequences of that new information are not instantly obvious. Indifference is the absolute opposite of curiosity. These two components are directly



related to success in overcoming difficulties of argumentative writing. Those who want to be able to develop acceptable and high-quality argumentative essays should constantly ponder and go to the depth of issues. They should follow arguments and facts ask various questions and do not ignore significant points. They should be eager to discover new things and seek for the rationale behind them.

The EFL teachers were also moderately positive towards open-mindedness, analyticity, systematicity, self-confidence, and maturity. Argumentative-essay writers need to be able to express opinions even if they disagree. Open-minded individuals demonstrate tolerance for the viewpoints of others, acknowledging that often, we all have ideas that make sense only from our own vantage points. Learners need to be able to anticipate both the positive and negative prospective implications and outcomes of circumstances, decisions, ideas, and plans. They should develop the ability to approach issues in a disciplined, ordered, and methodical manner. They should have enough self-confidence relying on introspection to solve issues and make decisions. They should recognize the complexities of problems and try to make timely judgments.

To answer the second research question, the same questionnaire was given to the EFL respondents and similar results were obtained. They also had a strong disposition in the subscale of truth-seeking and positive inclination for the other subscales: open-mindedness, analyticity, systematicity, self-confidence, inquisitiveness, and maturity.

The findings of the study were in line with the majority of the previous ones. Palavan (2020) conducted a research to ascertain potential instructors' attitudes and beliefs regarding critical thinking and their own critical thinking dispositions. This study used a pretest-posttest design without a control group. Purposive sampling was used to conduct the research. A total of 14 preservice teachers volunteered for the research, 9 of whom were male and 4 of whom were female. The California Critical Thinking Disposition Scale was utilized to gather quantitative data, while semi-structured interviews were employed to acquire qualitative data. The students' pre-test scores on critical thinking dispositions, as well as their scores on the sub-dimensions of analytical, open-mindedness, inquisitiveness, and systematicity, indicated that they had moderate dispositions in these sub-dimensions, whereas their scores on the sub-dimensions of self-confidence and truth-seeking indicated that they had low dispositions in those sub-dimensions.

Ghaani and Roslin (2021) conducted recent descriptive research on Iranian EFL instructors' knowledge, attitude, and practice of Critical Thinking (CT) abilities. A total of 276 male and female EFL instructors completed pre-tested self-report questionnaires on knowledge of CT skills, the California Critical Thinking Disposition Inventory, and classroom practice of CT skills. Following non-parametric one-sample Wilcoxon Rank Order tests on the gathered data, the most significant result in this research was that EFL instructors lacked general awareness of the idea of fundamental CT abilities, despite their considerably favorable attitude toward CT. The findings indicated that CT skills practice was presented in EFL classrooms, particularly in listening sessions, where a substantial proportion of students did not practice any of the CT sub-skills. On the contrary, a significant proportion of instructors claimed that they include almost all of the CT sub-skills into their speaking sessions.



## CONCLUSION AND IMPLICATIONS

This study probed whether the perspective is influenced by having a critical thinking disposition or not. It can be inferred that critical thinking and attitude separately affect foreign language success, and the most considerable differences were seen between high and low-critical learners. Attitude and critical thinking interaction were also detected. It means that in learners (25-30 years), attitude scores were higher. It could be concluded from this study that attitude and having a critical thinking disposition, are important factors in learning and should be considered by both learners and teachers.

The findings of this study could be used in improving argumentative writing courses. We can learn and teach more effectively when we recognize the factors influencing our learning. Therefore, it would also highly help both learners and teachers. Some limitations should be noted regarding this study. First, the writing task may have been affected by attitude.. It is necessary to control for some variables such as language aptitude, context, duration of language training and etc.

Argumentative writing requires criticality; it's not enough to just describe or summarize evidence, the writer also needs to analyze and evaluate information and use it to build his own arguments. This is where he shows his own thoughts based on the evidence available, so critical writing is really important for higher grades. Synthesis of critical thinking and action learning motivate teachers and learners' interest, boost expressiveness, strengthen problem-solving ability, fosters independence, is a sort of multi-faceted practice, and it's a skill for life, not just learning.

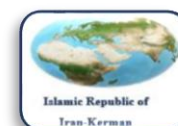
The results of this research bear beneficial consequences for EFL teachers, learners, materials developers, and syllabus designers. Critical thinking is a combination of abilities and dispositions that, when used properly, enhances the possibility of developing a reasonable response to a quandary or a good result to an issue (Stewart, 2015). If learners learn about critical thinking principles they will apply prudent judgment, challenge the improbable, pursue difficulties, establish alternatives, use tactics, consider alternative perspectives, and attempt to be objective.

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