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**The Effect of Using Dialogic Teaching on  
Developing English Majors' Critical Thinking Skills  
and Metacognitive Awareness**

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**Abstract**

The current study aimed at examining the impact of using dialogic teaching on English majors' critical thinking skills and metacognitive awareness. The sample involved 66 EFL freshmen students at the faculty of Specific Education, Zagazig University. Based on the quasi-experimental design, the study involved two groups: an experimental group (n=33) and a control one (n=33). To collect data, a pre-post critical thinking test and a pre-post metacognitive awareness scale were designed and administered to both groups. Findings showed that the experimental group surpassed the control one in overall critical thinking and its dimensions, as well as in overall metacognitive awareness. Accordingly, curriculum designers and EFL instructors need to incorporate various dialogic teaching practices in order to enhance students' reasoning, critical thinking and metacognitive abilities.

**Keywords:** dialogic teaching, critical thinking skills, metacognitive awareness, English majors.

## أثر استخدام التدريس الحوارى فى تنمية مهارات التفكير الناقد و الوعى بما وراء المعرفة لدى طلاب شعبة اللغة الانجليزية

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هدف البحث الى التعرف على أثر استخدام التدريس الحوارى فى تنمية مهارات التفكير الناقد و الوعى بما وراء المعرفة لدى طلاب الفرقة الأولى شعبة اللغة الانجليزية بكلية التربية النوعية، و تألفت العينة من (66) طالبا و طالبة، تم تقسيمهم الى مجموعتين (تجريبية ن=33، و ضابطة ن = 33)، حيث درست المجموعة التجريبية باستخدام التدريس الحوارى بينما درست المجموعة الضابطة باستخدام الطريقة التقليدية، كما تم اعداد اختبار لقياس مهارات التفكير الناقد و مقياس الوعى بما وراء المعرفة، و أوضحت النتائج وجود فروق ذات لالة احصائية فى كل من مهارات التفكير الناقد و الوعى بما وراء المعرفة لصالح طلاب المجموعة التجريبية.  
الكلمات المفتاحية: التدريس الحوارى، مهارات التفكير الناقد، الوعى بما وراء المعرفة

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**1. Introduction**

Within the social constructivist theory, both individual learners and groups construct concepts and knowledge collaboratively, creating a sense of mutual understanding. This views learning as a social process that reflects the culture and context that are rooted within individuals (Kiraly, 2014). Students, therefore, need to be engaged with each other in order to apply new concepts and principles to new situations and tasks. Additionally, students' progress and development are affected by the socio-cultural context in which learning occurs (Wells, 2000, p.59). Hence, classrooms take the form of inquiry communities featuring an exploratory approach in which students are challenged by questions and are encouraged to respond.

Jarvis (2010, pp. 67-68) underscored the social nature of learning by stating that individuals internalize the culture of the wider society through interrelationships and social interactions, which influences their responses and interpretations of the given ideas. Brock, Goatley, Raphael, Trost-Shahata, and Weber (2014, p.38) maintained that learning occurs through the process of transaction between the student and the information, as well as through understanding cultural, social and historical contexts. Meaning does not exist in the text itself; rather, it resides in the meaningful interaction between students and the stated ideas. Hence, the same text can have different meanings and interpretations because of the cultural and social factors influencing learners when approaching the text.

One of the impediments hindering the interaction between students and teachers is the lack of opportunities to study and monitor their practices systematically and deliberately (Adler, Rougle, Kaiser, & Caughlan, 2003). Besides, review of teachers' development practices revealed that most teachers think that they are doing the right practices and do not expect themselves to use ineffective discourse patterns (Richman, Permuth, & Richman, 2013, p.118). Thus, in order to promote effective dialogic instruction and establish a student-centered learning environment, teachers need to investigate their interactions with students, monitor and manage their behaviours, discover the gap between their practices and the intended pedagogical goals, and more importantly enhance their students' critical thinking skills (Garet, Porter, Desimone, Birman, & Yoon, 2001).

Studies conducted on critical thinking skills have affirmed the importance of stressing students' active involvement and interaction during the learning process (e.g., Fung, To, & Leung, 2016; Murphy, Firetto, Wei, Li, and Croninger, 2016; Mustika, Nurkamto, and Suparno, 2020; Nappi, 2017; Sahamid, 2016). However, Choi and Lee (2018) maintained that current teaching practices do not allow teachers to support students to elaborate on their ideas and conceptions with reasons, justify their views on the topic, consider alternatives, or raise other issues. Instead, students seem to encounter certain problems, such as uncertainty about their deep engagement in discussions, superficial discussions, inability to produce long answers, and unequal participation.

Hence, teachers need to promote students to delve into a certain topic more deeply, make connections among their responses, assist them to explain their thinking in depth, and engage actively with their peers. This can be achieved through utilizing the different interactive features of dialogic teaching. Wegerid (2013, p. 32) maintained that teachers can provide more dialogic space through employing reflective questions and bringing in new ideas.

Moreover, Mercer, Wegerif, and Major (2019) added that through creating more opportunities for discussions, teachers can enhance students' word choice and help them better understand not only what to say but also how to say it. Thus, dialogic teaching has a critical role in developing and expanding metalinguistic understanding of the language.

### **Context of the problem**

To make sure of the problem, a pilot study was conducted on a sample of 72 freshmen English majors at the Faculty of Specific Education, Zagazig University. A critical thinking test and a metacognitive awareness scale were used to assess the students' level. Results revealed that 78% of the students obtained very low scores on the critical thinking test, whereas 84% lacked the metacognitive awareness necessary to succeed in learning. In their investigation of the actual level of college students' critical thinking, Lane and Oswald (2016) found that the majority of the students revealed no significant gains in their critical thinking skills. They lacked the abilities to critically analyse a certain topic or problem. They could not assess their thoughts and engage in various cognitive processes allowing them to construct knowledge and reflect on their reasoning. Besides, Nauman (2017) conducted a study to find out higher education students' level in critical thinking. It was noted that the students could not actively analyse or evaluate the given information. They were not able to utilize different types of questions that promote their thinking processes. They needed more guidance and support to help them plan and implement different phases of critical thinking. Using a metacognitive awareness inventory, Pintrich (2002) examined the metacognitive knowledge of EFL university students during their study of academic courses. It was concluded that most students were not able to control or plan their thinking and understanding. They rarely evaluate their performance or question themselves about their

learning. Additionally, they could not transfer their learning experiences to new tasks and contexts.

### Statement of the problem

The problem of the study could thus be stated in the low level of freshmen English majors in critical thinking skills and metacognitive awareness. Hence, the current study attempted to answer the following main question: " **What is the effect of using dialogic teaching on enhancing critical thinking skills and metacognitive awareness of freshmen English majors?**"

This main question was thus sub-divided into the following questions:

1. What is the effect of using dialogic teaching on enhancing critical thinking skills of freshmen English majors?
2. What is the effect of using dialogic teaching on enhancing metacognitive awareness of freshmen English majors?

### Hypotheses

1. There is a statistically significant difference between the experimental group's mean scores and those of the control one in the post administration of the critical thinking skills test in favour of the experimental group.
2. There is a statistically significant difference between the experimental group's mean scores in the pre and post administrations of the critical thinking skills test in favour of post-administration results.
3. There is a statistically significant difference between the mean scores of the experimental group and those of the control one in the post administration of the metacognitive awareness scale in favour of the experimental group.

4. There is a statistically significant difference between the mean scores of the experimental group in the pre and post administrations of the metacognitive awareness scale in favour of the post- administration results.

### **Significance of the study**

As the current study investigates the use of dialogic teaching, it may provide curriculum designers with insights into how to integrate key practices and behaviours stressing social interactions and assisting them in understanding cultural contexts, which helps them construct meanings based on their experiences. It may help students enhance their mental abilities to think critically, e.g. examine ideas, interpret information, identify implied assumptions, assess opinions and claims, justify procedures and self-monitor their cognitive practices. The study also provides a critical thinking skills test that may help EFL instructors assess their students' thinking abilities, as well as diagnose their abilities to utilize knowledge in meaningful contexts. Moreover, the study stresses the importance of organizing and monitoring students' thoughts, which helps them enhance their language skills and stimulate their self-regulation processes.

### **Definitions of terms**

The following definitions were adopted in this study:

#### **Dialogic teaching**

Richards and Schmidth (2010, p.169) defined dialogic teaching as a type of teaching that focuses on planned and organized conversations among instructors and students. It also addresses various teaching and learning issues in order to further students' reasoning, examine their thinking and practices, and actively engage them in collaborative planning, decision-making and problem-solving.

### **Critical thinking**

According to Vanderstoep and Pintrich (2003, p. 275), critical thinking involves students' ability to utilize the gained knowledge and experiences in meaningful ways through considering different perspectives, formulating inferences, evaluating evidence, self-regulating and taking decisions.

### **Metacognitive awareness**

To Rivers (2001), metacognition awareness refers to students' ability to monitor and control their own thinking and be mindful of their learning, as well as how and why the skills being taught might be utilized differently in various learning situations. Hence, students can organize and categorize their thoughts and ideas in order to effectively learn new content.

## **II. Review of Literature**

The development of students' thinking abilities, especially critical thinking (CT), has become a key aspect in English language learning, and EFL teachers should take the responsibility to prepare their students to critically analyze information and determine its validity (Rezaei, Derakhshan, & Bagherkazemi, 2011). Similarly, Ramos (2014, p. 164) added that students' language development should include enhancing their critical thinking skills as one of the necessary capacities of English language learning. Cottrell (2017, p. 4) maintained that achieving a good level of CT abilities enables learners to recognize their own and others' reasoning and assumptions, and identify potential errors and inconsistencies that need further investigation. It also involves distinguishing between what is relevant and what is irrelevant, evaluating suggested solutions to current problems, analysing complex ideas and information accurately and with great speed, and viewing issues with different perspectives.

Critical thinking involves the ability to assess, judge, or evaluate a given topic or problem, in addition to evaluating learners'

own reasoning (DeWaelsche, 2015, p. 135). Elder and Paul (2010, p. 38) added that CT includes self-improvement of learners' thinking through engaging in a process of analysing and assessing their thoughts. Siegal (2010, p. 141) referred to CT as comprising two distinct elements: (a) the abilities or the skills necessary for assessing reason, and (b) the dispositions required to be guided by and engage in such assessments. Cottrell (2017, p. 2) argued that CT is considered a complex process involving identifying people's stance toward a topic, evaluating opposing arguments, identifying false assumptions, reading between the lines, determining whether arguments are justifiable and valid, and synthesizing given information to form new position.

CT can be viewed from three distinctive perspectives: psychological, philosophical and didactic (Lai, 2011; Lewis & Smith, 1993). From a psychological perspective, CT refers to the relationship between what learners think and what they are capable of doing. It involves strategies, mental processes and representations which learners exploit to realize different views of an issue, make decisions, solve problems, understand new concepts, and infer and deduce conclusions from given facts (Lai, 2011; Willingham, 2007). The effective use of such strategies and mental processes increases the probability of obtaining desirable outcomes (Halpern, 1998, p. 450). The philosophical point of view considers CT as reasonable and reflective thinking which focuses on what learners believe or do (Facione, 2000, p. 61). In other words, it refers to the ability to assess a specific situation in order to take a stance or form a belief (Lai, 2011). The didactic perspective views CT as an essential component of teaching and learning which can be approached from different directions (Willingham, 2007). Although these three perspectives offer different views of CT, Case (2005) and Lai (2011) introduced the principle mutual elements of CT. These elements include analyzing interventions and arguments based on deductive or inductive reasoning, making decisions, assessing, and evaluating.

Facione (2015, p. 5) identified a list of six mental abilities that comprise the core critical thinking skills, including interpretation, inference, analysis, evaluation, explanation and self-regulation.

**Interpretation** involves the ability to express the meaning or identify the significance of various situations, experiences, events, beliefs, rules or criteria. It also implies recognizing different problems and describing them without bias, identifying people's intentions, categorizing objects or ideas, paraphrasing others' ideas using one's own words, clarifying what a graph, sign or a chart means, and distinguishing between main and supporting ideas (Suter, 2011, p.9).

**Analysis** refers to identifying the inferential relationships that exist or intended by authors among concepts, statements, questions, descriptions, or any other forms of representations. It also involves detecting the differences and similarities between two perspectives to the solution of a certain problem, recognizing the main claim in a topic, and identifying the unstated assumptions (Rudinow & Barry, 2007, p. 90).

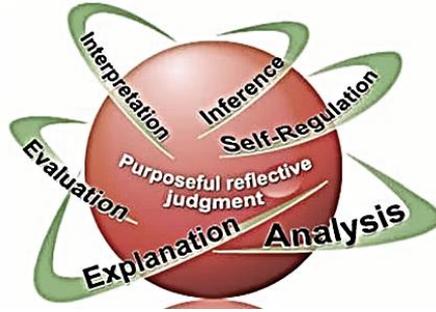
**Evaluation** indicates assessing the statements representing a person's judgment, belief, experience or opinion, as well as assessing the actual or logical relationships among descriptions, questions or statements (Egan, 2019).

**Inference** refers to constructing meaning from different elements in the text and drawing conclusions. Hence, learners can use existing knowledge to predict incoming information.

**Explanation** indicates that learners are required to present the outcome of their reasoning in a coherent way, justify procedures, and describe the methods used to achieve certain results (Glassner & Schwarz, 2007).

**Self-regulation** indicates that learners are required to monitor their cognitive activities and the elements comprising those activities. In

other words, it involves self-examination and self-correction of learners' own reasoning and inferential judgments.



Core critical thinking skills (Facione, 2015, p. 5)

According to Dunlosky and Metcalfe (2008), the thinking process also entails how learners control their thoughts and manage their behaviours. Thus, they select and plan their decisions, and consequently organize their thoughts, categorize their ideas, and monitor their behaviours. This is called metacognition (Meta means beyond or further and cognition refers to knowledge). To Ormrod (2004), metacognition generally refers to the process of monitoring and controlling a learner's cognition. It is also used to refer to what learners know about their cognitive processes and how they exploit these processes to learn new material.

Scholars and researchers (e.g., Peña-Ayala, 2016; Schraw & Moshman, 1995) further conceptualized the concept of metacognition by dividing it into two components, i.e. metacognitive knowledge and metacognitive regulation. These components are closely related to one another. Metacognitive knowledge involves the declarative, conditional and procedural knowledge shaping the different cognitive processes of learners. Declarative knowledge comprises what learners know about what they learn and what affects their teaching-learning process. Conditional knowledge refers to what learners know about the conditions through which they plan and implement different

cognitive processes. Procedural knowledge involves learners' knowledge about different learning procedures and strategies which learners find suitable and effective.

Metacognitive regulation, on the other hand, refers to the actual practices and activities in which learners engage to facilitate their learning. It involves three sub-components, i.e. planning, monitoring and evaluating. Planning occurs through arranging specific cognitive tasks and choosing the appropriate cognitive sources and strategies. Monitoring includes the learners' awareness of implementing different cognitive tasks and the ability to determine their progress. Evaluating indicates whether the intended learning outcomes match the specified learning goals and whether the processes implemented are effective (Schraw & Moshman, 1995).

When students develop their metacognitive awareness, they can monitor their learning and are most likely to develop their academic and language skills (Coutinho, 2007). Achieving a high level of awareness can assist them to think and act critically, as well as bring control to their learning preferences. Additionally, Chamot, Barnahardt, Berad, and Robbins (1999) maintained that when students are able to self-direct their learning or take charge of their progress through the development of metacognitive awareness, they can become independent and autonomous learners. During their study, students can enhance their metacognitive awareness through developing their critical thinking tasks and reflecting on different learning strategies, which facilitates the transfer of such strategies and tasks to other learning contexts.

Recent studies have examined students' metacognitive awareness and how it relates to the development of English language learning ( e.g., Goh, 2018; Ohtani & Hisasaka, 2018; Pantiwati & Husamah, 2017; Teng, 2020) . For instance, Pantiwati and Husamah (2017) investigated the use of self- and peer

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assessment in enhancing metacognitive awareness and cognitive abilities of 59 college students. For this purpose, a metacognitive awareness inventory was designed to collect data. Results indicated that self and peer assessment positively influenced students' awareness of metacognition, as well as the variables of metacognitive awareness had a direct influence on the cognitive variables. Teng (2020) examined the role of group feedback and self-explanation guidance on developing writing skills, metacognitive awareness and transfer ability. The participants involved 120 EFL Chinese students. Findings indicated that group feedback guidance demonstrated higher means on all measures than those of the self-explanation guidance. Qualitative data revealed that the students employed different metacognitive processes, effectively implemented the assigned tasks, and developed a high level of metacognitive awareness.

In spite the importance of enhancing students' thinking and metacognitive abilities, Cottrell (2017, p. 10) identified a number of factors that form barriers to their development. Such factors involve (a) misunderstanding about what criticism is (e.g., criticism does not involve only giving negative comments), (b) over-estimating one's own reasoning (e.g., most learners think that their own way of thinking is the best), (c) lack of utilizing suitable strategies and methods (e.g., some learners do not know the necessary steps to take in order to enhance their CT skills), (d) and reluctance to critically analyze works of experts.

In order to enhance their reasoning and metacognitive awareness, students should be involved in meaningful learning activities in which they are the focus of the learning process, rather than learning in teacher-centered settings. EFL instructors need to set activities and tasks that help them form well-founded judgment, construct good thinking habits, and adopt objective evaluation of arguments. To Mayer (2002, p. 227) meaningful learning takes place when students work independently and autonomously in different cognitive processes necessary for building knowledge and

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successful problem solving. Such cognitive processes and knowledge can be constructed through active student interaction in which students are allowed to participate and interact through different learning activities as opposed to passively receiving information. Additionally, Dennick and Exley (1998) pointed out that instructional designs adapted to enhance critical thinking should stress the interaction occurring among students. Such type of instruction enables students to learn best through extending the exchange of viewpoints or perspectives. This can be achieved through engaging students in focused discussions, interactive presentations, student-led seminars, and real-life situations.

Stressing the role of classroom language and interaction to develop higher levels of thinking, Musa (2019) and Yaqubi and Rashidi (2019) suggested that communication inside classrooms needs to be more dialogic. Consequently, both teachers and students act as co-inquirers who are collaboratively engaged in generating and evaluating text interpretations. To Reznitskaya (2012, p. 446), learners, in a dialogic teaching setting, can improve their own thinking habits through comparing the way they think with that of their peers and experts. Hence, dialogic instruction plays a key role in enhancing thinking skills. Additionally, Wegerif (2013, p. 143) stated that using dialogue in teaching is considered the primary method to enhance thinking skills, as it takes into account the individual and social aspects. Renshaw (2004) maintained that fostering dialogue helps students consider others' perspectives, assess the validity of their claims, and enhance their thinking skills and active learning. Dekker, Elshout-Mohr, and Wood (2004) added that the social interaction in the teaching- learning process influences students' cognitive processes and affects the development of knowledge and thinking abilities.

In this vein, Alexander (2017, p. 28) identified five key principles that shed light on how the interaction occurring between students and teachers, as well as the quality of their discourse, could

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result in better learning outcomes and support successful teaching and learning. These principles suggest that dialogic teaching should be:

- Collective: teachers and students work together when addressing learning tasks.
- Reciprocal: teachers and students share ideas and consider different viewpoints.
- Supportive: students produce their ideas without any fears and they guide each other to better understand the topic.
- Cumulative: teachers and students build on their previous knowledge and experiences in order to form coherent lines of thoughts and enquiry.
- Purposeful: teachers set particular educational goals in order to plan dialogic teaching.

In addition to the aforementioned principles, Alexander developed a repertoire list of learning talk (e.g., analysing, explaining, arguing, etc.), teaching talk (rote, recitation, exposition, instruction, discussion and dialogue), and classroom organization (whole class, teacher-led or student-led class work, teacher-student and student-student pairs). Lefstein and Snell (2013, p.24) maintained that educators can utilize these repertoires as tools to reflect on their practices.

Generally, classroom instruction can take the form of monologic or dialogic teaching. In monologic teaching, knowledge consists of stable facts that are transmitted by the teacher, who has unilateral authority, and received by learners. It is a teacher-centered approach in which teachers have active roles while students remain passive. On the other hand, knowledge in dialogic teaching is jointly constructed by the teacher, whose role is a guide and a mediator, and the students, who are active constructor of knowledge (Gravett, 2005:42).

Following monologic instruction, teachers dominate classroom discussion through choosing students to respond, evaluating the responses, and making topic shifts. The teacher is thus the ultimate source of knowledge when evaluating answers and correcting students' errors. Feedback usually takes the form of mechanical and simple reinforcement involving just repeating correct responses (Yaqubi & Rashidi, 2019). To Callander (2013), monologic instruction is superficial and insufficient to result in successful understanding. In contrast, dialogic instruction involves collective processes comprising tasks and activities that are collaboratively scaffolded. It provides opportunities for both students and teachers to share their ideas and thoughts supportively, considering alternative perspectives.

In order for teachers to apply dialogic teaching effectively, EFL teachers need to follow some key principles and techniques: (a) whole-class discussions should be preceded by small group discussions to allow students to refine their thoughts and encourage each other to share their ideas with groups, (b) eliciting various responses and promoting new ideas before providing feedback, (c) seeking justifications of answers to help students explain their answers and extend their thoughts, (d) students nominate their peers instead of the teacher, and (e) using constant reflective practices to create a successful dialogic classroom setting (Mercer & Dawes, 2010). Thus, when engaged in dialogic discussions, students become actively engaged in learning, which provides more opportunities for a deeper understanding of the topic and builds strong connection to their previous experiences.

In an attempt to make dialogic teaching accessible and relevant to EFL learners, Lefstein and Snell (2013, p.24) introduced a number of key strategies for developing classroom dialogic pedagogy. Such strategies involve: (a) explicit instruction of dialogue, including its elements, purposes and how it is conducted, (b) reflection on classroom practices using indicators and principles

of dialogic pedagogy, (c) using authentic questions and modeling teachers' talk, and (d) focusing on tasks and pedagogy aspects that foster dialogue.

In a dialogic teaching setting, teachers should not exclusively have authority over classroom discussions, as students can manage their roles and responsibilities during the turn-taking process. For example, a student can nominate another one to take his/her turn, make topic shifts by asking questions or making comments, or advance their inquiry (Reznitskaya, 2012). Consequently, teachers need to adjust their position in discussions, monitor the quality and quantity of students' output, diagnose their discourse practices, and generate effective pedagogical goals that enhance the opportunities for students' participation. Consequently, teachers can provide strategic feedback, such as re-thinking teaching and learning theories, re-formulating the specified pedagogical goals, relating students' ideas to each other, and enhancing the knowledge and skills necessary for students who consistently provide simple and basic facts. By encouraging teachers to further reflect on their knowledge, language, authority and learning, they may become able to gather information about their practices, and, eventually, promote the transition to dialogic instruction. Through introducing complex topics and controversial issues, teachers can also assist students to examine, elaborate or revise their thinking, rather than routinely repeat others thoughts.

Lefstein and Snell (2013, pp.25-26) introduced a number of issues which teachers should avoid in order to achieve the best dialogic practices in classrooms, including the following:

- Teachers may present dialogue as a primary classroom technique without reference to dialogic purposes and considering curriculum content.
- Dealing with dialogue as only an interactional form comprising teacher questions and students' responses, rather

than considering other dimensions such as, power relations and stance towards knowledge.

- Teachers may involve students in serious argumentation; however, teachers may have the absolute authority in controlling the situation.
- Dialogic pedagogy may be isolated from the context in which dialogue is enacted.

Hence, teachers need to manage competing voices and challenge students to protect their identities while engaging in dialogic practices. Additionally, dialogue need to be connected with school curricula, assessment and pedagogical goals. Students can also take notes during real-time or video-taped discussions (Reznitskaya, 2012). Such notes should represent the degree of authority the teacher has when discussing the content and processes, the type of questions used to help students interpret the text, the use of feedback to develop students' answers and inspire them for further exploration, and the opportunities given to the students to make connections between their ideas and what has been stated by others.

Recently, studies have stressed the importance of dialogic teaching in the development of students' English language and EFL teachers' practices (e.g., Alexander, 2018; Kim & Wilkinson, 2019; Lyle, 2008; Reznitskaya & Gregory, 2013; Sedova, 2017). In her study of the change process in the teaching practices of eight teachers, Sedova (2017) examined the mechanisms involved in dialogic teaching during the implementation of a teaching development programme. Data collection was based on reflective interviews and video recordings of lessons. It was found that the change process is non-linear and involves stages of regression. Besides, reflective interviews and video recordings stimulated the change of teaching practices towards dialogic teaching. Alexander (2018) investigated the effect of dialogic teaching on students' scores in the English language and their engagement in classroom

talk. During the intervention, dialogic teaching was used as set of repertoires directed to teaching improvement. Based on English language tests and coded interviews, results showed that the intervention group surpassed the control one in the English language test. Additionally, coded videos revealed significant improvements in students' talk while accomplishing tasks.

To conclude, researchers need to exploit the interactive features of dialogic teaching in order to enhance EFL students' reasoning and metacognitive abilities. Nevertheless, despite its pedagogical potential in English language learning, dialogic teaching has not gained attention, as to the researcher's best knowledge, especially with regard to the development of critical thinking skills and metacognitive awareness. Hence, the current study aimed at enhancing critical thinking skills and metacognitive awareness of English majors using dialogic teaching.

### **III. Methodology**

#### **Participants**

Sixty-six EFL freshmen English majors at the Faculty of Specific Education, Zagazig University were randomly chosen as the study participants. This sample was selected since at this early stage students need to enhance their critical thinking as well as their metacognitive awareness in order to overcome the challenges in their college studies from the very beginning. They were randomly assigned into two equal groups: an experimental group (n=33) and a control one (n=33). To make sure that both groups were homogenous, the students had the same average age and they had been learning English for twelve years. Additionally, students' pre-test results showed no significant differences between both groups in the critical thinking test and the metacognitive awareness scale.

**Table 1**

Pre-test results of the experimental and control groups in the critical thinking skills test.

Group	No.	Mean	S.D	t-value	Sig.
Exp.	33	9.81	6.00	0.284	0.776
Cont.	33	9.33	7.70		

t-value is not significant at (0.01) level

**Table 2**

Pre-test results of the experimental and control groups in the metacognitive awareness scale.

Group	No.	Mean	S.D	t-value	Sig.
Exp.	33	16.87	3.58	1.61	0.111
Cont.	33	15.03	5.51		

t-value is not significant at (0.01) level

### Study design

The current study adopted the quasi-experimental design in which two groups were selected: the experimental group taught through the dialogic teaching and the control one receiving regular instruction. The experiment continued for three months during the academic year (2019-2020). A pre-post critical thinking skills test and a metacognitive awareness scale were designed and administered to both groups to find out if there were any significant differences. The data obtained were then analysed using t-test.

### Instruments

For the purpose of the study, a pre-post critical thinking test (See Appendix B) and a metacognitive awareness scale (See Appendix C) were designed to assess both groups' level before and after the treatment. The test consisted of five sections with 32 items. In section (1), students were given multiple choice questions on a variety of topics and asked to infer information, find out arguments and make judgments. In section (2), they were given short reading passages and asked to think carefully of the content and then choose

the best answer. In section (3), they were given short paragraphs followed by a number of proposed conclusions, and then were asked to find out whether or not the conclusions logically follow the information given. In section (4), a statement followed by a number of arguments was introduced and students were asked to find out whether the arguments are strong or weak. In the last section, they were asked to read fact statements and then find out possible inferences. On the other hand, the metacognitive awareness scale consisted of 19 items to assess students' level. Following a three-point Likert scale, the students were asked to choose from three responses, i.e. always, sometimes, or never.

In order to determine their validity, the test and the scale were submitted to a jury of specialists in the field of teaching English language. They were kindly asked to evaluate the instruments in terms of wording, correctness and suitability for freshmen English majors. In addition, both the test and the scale were piloted on a random sample of 74 students other than the study groups to make sure of the suitability and clarity of the items to the students. The test-retest method was also used to determine the reliability. The internal consistency for the test and the scale were (0.83 and 0.81) respectively.

### **Study material**

Through reviewing literature and pertinent studies, four units based on dialogic teaching were designed to enhance the experimental group students' critical thinking skills and their metacognitive awareness (See Appendix D). Such units aimed at:

1. Enhancing freshmen English majors' critical thinking skills regarding interpretation, analysis, evaluation, inference, explanation and self-regulation.
2. Enhancing students' metacognitive awareness in order to effectively manage and control their thoughts.
3. Identifying the main characteristics of critical thinkers.
4. Identifying the main features of dialogic teaching.

5. Identifying the difference between monologic and dialogic teaching.

### **Content of the units**

The units were designed with regard to the intended objectives and involved four units that comprise various tasks and activities to enhance students' critical thinking and metacognitive awareness.

#### **Unit one**

Students, in this unit, were introduced to a general overview of the concept of critical thinking, the main characteristics of critical thinkers. The main features of dialogic teaching were also presented to the students, as well as the differences between monologic and dialogic teaching.

#### **Unit two**

In this unit, students were given copies of parts of a dialogue about missing a deadline. They were asked to work in groups and match each part to its speaker, and then interpret the key phrases. Students were asked to discuss the events in some pictures by speculating what might follow these events. Then they were engaged in discussions about how employees can be motivated based on the ideas in the given pictures. Distributing copies of pictures about different communication styles, the instructor asked the students to choose one of these styles and talk about it. Then, in groups, students were encouraged to ask questions about these styles using Yes/No, open-ended, and Wh-questions. Hence, they were engaged in interactive talk through questioning ideas presented by their classmates. Students were then engaged in a structured goal-oriented conversation about the definition of success in order to exchange specific information. One student was asked to anticipate the topic information and transfer this information clearly and concisely. Finally, students were guided on how to make effective presentations on specific topics and engage audience. They were also asked to answer a survey on their preferences for doing

male or female jobs. Having finished this task, they were asked to give presentations on their preferences.

### **Unit three**

At this stage, students were trained on how to analyse and evaluate reading texts, as well as excerpts from dialogues. For this purpose, the instructor distributed copies of reading texts to the students who were asked to examine the ideas and arguments, as well as assess the credibility of such ideas and arguments. In addition, they were asked to compare and contrast different texts on the same topic to find out the points of strengths and weaknesses, determining the credibility of information sources, and judging whether the evidences presented support the conclusions. Having completed this task, students were given copies of short conversations to decide which parts were not appropriate to the situation and why, explaining what speakers should have said.

### **Unit four**

The focus of this unit was to help students provide explanations of arguments and results, as well as self-monitor and self-assess their progress. They were asked to read excerpts of reading texts and explain the use of key phrases and words, as well as explain the effects and results of the main arguments. Students were also trained to self-monitor and assess their understanding through engaging in interactive dialogic activities that help them overcome barriers when involved in tasks. In groups, students were asked to discuss some questions on two reading texts and then check their understanding using the self-monitoring checklist. They were asked to answer questions to assess their learning goals, plan their work, and monitor their progress as they learn.

## **IV. Results**

Results of the current study were presented based on the study hypotheses. For data analysis, both paired and independent t-tests were used. Inferential and descriptive statistics were both calculated using the Statistical Package for Social Science.

### Testing the first hypothesis

The first hypothesis states "there is a statistically significant difference between the experimental group's mean scores and those of the control one in the post administration of the critical thinking skills test in favour of the experimental group". To verify the first hypothesis, t-test for independent samples was used to find out any significant differences.

Table 3  
Post t-test results of the experimental and the control groups in the critical thinking skills test.

Dimension	Group	N	Mean	S.D	t. Value	DF	Sig.
Interpretation	Exp.	33	9.818	1.44	18.869	64	0.000
	Cont.	33	1.818	1.95			
Analysis	Exp.	33	9.515	1.22	16.042	64	0.000
	Cont.	33	2.424	2.22			
Inference	Exp.	33	10.424	1.47	20.134	64	0.000
	Cont.	33	2.181	1.82			
Evaluation	Exp.	33	9.212	1.31	17.597	64	0.000
	Cont.	33	1.818	2.02			
Explanation	Exp.	33	9.575	1.29	21.218	64	0.000
	Cont.	33	2.606	1.36			
Self-regulation	Exp.	33	9.030	1.31	19.332	64	0.000
	Cont.	33	1.696	1.74			
Total	Exp.	33	57.575	3.873	31.527	64	0.000
	Cont.	33	12.545	7.23			

Table 3 shows that the experimental group surpassed the control one in overall critical thinking and its dimensions. The students in the experimental group obtained higher means in all dimensions of critical thinking as compared to the control one. The mean scores of the experimental group for interpretation, analysis, inference, evaluation, explanation and self-regulation were 9.818, 9.515, 10.424, 9.212, 9.575, and 9.030 respectively. On the other hand, students in the control group obtained lower means in all dimensions. The t-value for total critical thinking skills (31.527) is

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statistically significant at 0.001 level. Therefore, the first hypothesis is verified.

### Testing the second hypothesis

The second hypothesis states "there is a statistically significant difference between the experimental group's mean scores in the pre and post administrations of the critical thinking skills test in favour of post-administration results." To verify the second hypothesis, t-test for paired samples was used to find out any significant differences.

Table 4

t-test results of the experimental group comparing the pre- to post- results of the critical thinking skills test

Dimension	Measurement	N	Mean	S.D	t. Value	DF	Sig.	η2	d
Interpretation	Pre	33	1.39	1.69	34.75	32	0.000	0.97	12.28
	Post	33	9.81	1.44					
Analysis	Pre	33	1.75	1.19	40.86	32	0.000	0.98	14.44
	Post	33	9.51	1.29					
Inference	Pre	33	1.39	1.76	34.35	32	0.000	0.97	12.14
	Post	33	10.42	1.47					
Evaluation	Pre	33	1.87	1.40	39.00	32	0.000	0.97	13.78
	Post	33	9.21	1.31					
Explanation	Pre	33	1.63	1.53	23.96	32	0.000	0.94	8.47
	Post	33	9.57	1.299					
Self-regulation	Pre	33	1.75	1.479	39.09	32	0.000	0.97	13.82
	Post	33	9.03	1.31					
Total	Pre	33	9.81	6.00	61.729	32	0.000	0.99	21.82
	Post	33	57.57	3.87					

Table 4 shows that the experimental group obtained higher means in the overall critical thinking skills post-test and its dimensions. The t-value for interpretation, analysis, inference, evaluation, explanation and self-regulation (34.75, 40.86, 34.35, 39.00, 23.96, 39.09) are statistically significant at 0.001 level. The t-value for the total critical thinking skills test (61.72) is statistically significant at 0.001 level. Therefore, the second hypothesis is verified. The d-value is very high

(21.82), which indicates that dialogic teaching has a large effect on developing critical thinking skills.

### Testing the third hypothesis

The third hypothesis states "there is a statistically significant difference between the mean scores of the experimental group and those of the control one in the post administration of the metacognitive awareness scale in favour of the experimental group". To verify the third hypothesis, t-test for independent samples was then used to find out if there is any significant difference.

Table 5

t-test results comparing the experimental and the control groups in the metacognitive awareness post-scale.

Metacognitive awareness scale	Group	N	Mean	S.D	t. Value	DF	Sig.
Total of scale items	Experimental	33	49.393	2.783	31.045	64	0.000
	Control	33	15.454	5.629			

Table 5 shows that the experimental group's mean score ( $M=49.393$ ) is higher than that of the control one ( $M=15.454$ ). The estimated t-value (31.045) is statistically significant at 0.001 level. Hence, the third hypothesis is verified. This indicates that dialogic teaching enhanced students' metacognitive awareness.

### Testing the fourth hypothesis

The fourth hypothesis states "there is a statistically significant difference between the mean scores of the experimental group in the pre and post administrations of the metacognitive awareness scale in favour of the post- administration." To verify the fourth hypothesis, t-test for paired samples was then used to find out if there is any significant difference.

Table 6

t-test results of the experimental group comparing the pre to post results of the metacognitive awareness scale.

Metacognitive awareness scale	Measurement	N	Mean	S.D	t. Value	D F	Sig.	$\eta^2$	d
Total of scale items	Pre	33	16.878	3.586	58.143	32	0.000	0.99	20.55
	Post	33	49.393	2.783					

Table 6 shows that the mean score of the post- testing (M= 49.393) is higher than that of the pre-testing (M= 16.878). The t-value for the total metacognitive awareness scale (58.143) is statistically significant at 0.001 level. Therefore, the fourth hypothesis is verified. The d-value is very high (20.55), which indicates that dialogic teaching has a large effect on developing metacognitive awareness.

### V. Discussion of Results

The current study aimed to find out the effect of using dialogic teaching on developing freshmen English majors' critical thinking skills and metacognitive awareness. The results revealed that using dialogic teaching has a significant effect on developing experimental group students' critical thinking and metacognitive awareness. This improvement could be attributed to students' engagement in various dialogic activities that allowed students to discuss, analyse and reflect on different issues. The experimental group students were allowed to participate in activities that promoted higher-order thinking skills. Such activities include interactive discussions, question-answer sequences, effective presentations, analysing and evaluating excerpts from dialogues and certain texts, and collaborative reasoning.

Being involved in interactive question-answer sequences, students were able to present information collaboratively through interaction. They were encouraged to use different types of questions: closed questions, open-ended questions, probing questions, leading questions, recall and process questions, and

rhetorical questions. Such types of questions allowed students to get prepared for group discussions (as in closed questions); elaborate on ideas and engage in wider discussions (as in open-ended questions); gain clarifications and be encouraged to provide more information about the topic and avoid misunderstanding (as in probing questions); lead their colleagues towards a certain desired response in order to form positive discussions and guide the conversation towards the intended outcome (as in leading questions); increase their depth of knowledge about a specific topic in order to encourage their critical thoughts and in-depth evaluation of the presented ideas (as in recall and process questions); and make the discussions more engaging to get the listeners thinking (as in rhetorical questions). This is consistent with Mustika, Nurkamto, and Suparno (2020); Nappi (2017); Sahamid (2016); and Barnett and Francis (2012) who affirmed that using questioning and answering techniques promotes critical thinking skills.

Through engaging in interactive oral presentations, students could incorporate different ideas while establishing evaluation criteria for producing effective presentations. They could also involve listeners through posing questions and comprehension checks. They were asked to make presentations on specific topics, engage audience through receiving questions from their colleagues and then replying to them. Students were trained on how to use different questions that enhance their thinking skills. Their questions and responses were reinforced by the instructor through using verbal and non-verbal communication. When posing incorrect questions, students were asked to paraphrase, probe or ask the same question in another way. Probing was also used to explore students' comments, get students involved in criticizing and analysing their own and their colleagues' ideas, justify statements, recognize underlying assumptions, and elaborate on different responses through answering questions and making connections to their prior knowledge. Feedback on students' responses occurred through

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redirecting the questions to the whole group and providing prompts. This fostered student-student interaction and reduced reliance on the instructor, as well as it encouraged students to be independent learners finding out answers to their own questions rather than merely depending on the instructor.

Experimental group students were also involved in interactive discussions of a text or parts of a text. They were collaborated to generate ideas, review each other's work and discuss different questions posed by the instructor. A focused discussion of a student's work was conducted to shed light on the points of strengths and weaknesses, as well as areas for future development. Hence, students had the opportunity to read for meaning, view texts from different perspectives and weigh the persuasive and logical effects of the text content. They could evaluate different assumptions and biases and identify the relationships involved. They focused not only on factual information but also on perspectives and underlying meanings. This is consistent with Fung, To, and Leung (2016) and Murphy, Firetto, Wei, Li, and Croninger (2016) who affirmed that using interactive discussions promotes critical thinking skills.

In another vein, students in the experimental group could manage and control their thoughts while practicing structured conversations and Socratic discussions, which allowed them to engage in student-centered talk. Such conversations draw students' attention towards various words and expressions that promoted their thinking about multiple interpretations of the content. Students were also invited to make conversations with their peers, in small groups, and with the whole group. This helped them organize their ideas and thoughts and manage their behaviours in a way that respondents can understand. Thus, students could support each other as they think about the ideas and analyse information, as well as expose themselves to their colleagues' divergent thoughts. This is in line with Bae and Kwon (2019); Zepeda, Hlutkowsky, Partika, and Nokes-Malach (2019); and Akman and Alagöz (2018) who affirmed

that utilizing conversations and interactive discussions enhances students' metacognitive awareness.

On the other hand, students in the control group indicated no significant improvement in their critical thinking skills and metacognitive awareness. They lacked the necessary skills to evaluate and judge topics, as well as evaluate their own thinking. They were not engaged in meaningful learner-centered activities in which learners have effective roles and are the focus of acquiring knowledge. Additionally, they could not exploit different mental processes to identify different perspectives of an issue, as well as establish relationships between their capabilities and what they think. They could not identify inconsistencies with ideas and distinguish irrelevant information and false assumptions. Through regular instruction, students could not recognize links between the different elements of a given text nor recognize the logical relationships among stated ideas. Furthermore, students could not self-correct or self-examine their thoughts.

### **Recommendations**

Based on the study results, EFL instructors need to incorporate meaningful dialogic activities that promote collaborative engagement and foster active construction of knowledge. College courses should incorporate the development of critical thinking as a key component of students' learning of the English language to be able to effectively evaluate and analyse information. Assessment of students' critical thinking skills should be addressed in authentic contexts. Furthermore, students need to be involved in interactive dialogic discussions and divert questions that lead them to monitor different types of knowledge (e.g., declarative, conditional and procedural) and shape their cognitive processes. They need to be involved in meta-level reflections that provide opportunities for them to self-correct their reasoning and pay attention to the quality of their judgements.

**Suggestions for further research**

In the light of the present study, the following topics are suggested:

1. Investigating the impact of dialogic argumentative reasoning, as a key to developing intellectual abilities, on developing EFL students' speaking skills.
2. Further research is needed to examine the effect of using dialogic teaching to enhance EFL students' argumentative writing and their reflective thinking.
3. A qualitative study is needed to investigate EFL teachers' perceptions of dialogic teaching in actual teaching and learning situations and its impact on enhancing their professional skills.
4. Investigating the effect of using dialogic versus monologic teaching patterns on the development of students' writing proficiency.
5. Exploring the relationship between critical thinking, learning styles and students' engagement.
6. Examining the influence of dialogic teaching on students' academic spoken discourse and self-efficacy.

## References

- Adler, M., Rougle, E., Kaiser, E., & Caughlan, S. (2003). Closing the gap between concept and practice: Toward more dialogic discussion in the language arts classroom. *Journal of Adolescent & Adult Literacy*, 47(4), 312–322.
- Akman, Ö., & Alagöz, B. (2018). Relation between metacognitive awareness and participation to class discussion of university students. *Universal Journal of Educational Research*, 6(1), 11-24.
- Alexander, R. (2018). Developing dialogic teaching: Genesis, process, trial. *Research Papers in Education*, 33(5), 561-598.
- Alexander, R. J. (2017). *Towards dialogic teaching: Rethinking classroom talk* (5th ed.). York: Dialogos.
- Bae, H., & Kwon, K. (2019). Developing metacognitive skills through class activities: What makes students use metacognitive skills? *Educational Studies*, 1-16.
- Barnett, J. E., & Francis, A. L. (2012). Using higher order thinking questions to foster critical thinking: A classroom study. *Educational Psychology*, 32(2), 201-211.
- Brock, C. H., Goatley, V. J., Raphael, T. E., Trost-Shahata, E., & Weber, C. M. (2014). *Engaging students in disciplinary literacy, K-6: Reading, writing, and teaching tools for the classroom*. New York: Teachers College Press.
- Callandar, D. (2013). *A dialogic approach to teaching and learning in the primary grades*. Unpublished MA Thesis. Canada: University of Victoria.
- Case, R. (2005). Moving critical thinking to the main stage. *Education Canada*, 45(2), 45–49.
- Chamot, A., Barnahardt, S., Berad, P., and Robbins, J. (1999). *The learning strategies handbook*. New York: Longman.
- Choi, E., & Lee, J. (2018). EFL teachers' self-efficacy and teaching practices. *ELT Journal*, 72(2), 175-186.
- Cottrell, S. (2017). *Critical thinking skills: Effective analysis, argument and reflection*. London, UK: Pelgrave.
- Coutinho, S. A. (2007). The relationship between goals, metacognition, and academic success. *Educate*, 7(1), 39-47.

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---

- Dekker, R., Elshout-Mohr, M., & Wood, T. (2004). Working together on assignments: Multiple analysis of learning events. In J. van der Linden & P. Renshaw (Eds.), *Dialogic Learning* (pp. 145-170). Dordrecht: Kluwer Academic Publishers.
- Dennick, R. G. & Exley, K. (1998). Teaching and learning in groups and teams. *Biochemical Education*, 26, 111-115.
- DeWaesche, S. A. (2015). Critical thinking, questioning and student engagement in Korean university English courses. *Linguistics and Education*, 32, 131-147.
- Dunlosky, J., & Metcalfe, J. (2008). *Metacognition*. Thousand Oaks CA: Sage Publications.
- Egan, A. (2019). *Confidence in critical thinking: Developing learners in higher education*. London: Routledge.
- Elder, L., & Paul, R. (2010). Critical thinking: Competency standards essential for the cultivation of intellectual skills, Part 1. *Journal of Developmental Education*, 34(2), 38-39.
- Facione, P. A. (2000). The disposition toward critical thinking: Its character, measurement, and relationship to critical thinking skill. *Informal Logic*, 20(1), 61-84
- Facione, P. A. (2015). *Critical thinking: What it is and why it counts*. Hermosa Beach, CA: Measured Reasons LLC.
- Fung, D. C. L., To, H., & Leung, K. (2016). The influence of collaborative group work on students' development of critical thinking: The teacher's role in facilitating group discussions. *Pedagogies: An International Journal*, 11(2), 146-166.
- Garet, M. S., Porter, A. C., Desimone, L., Birman, B. F., & Yoon, K. S. (2001). What makes professional development effective? Results from a national sample of teachers. *American Educational Research Journal*, 38(4), 915-945.
- Glassner, A., & Schwarz, B. B. (2007). What stands and develops between creative and critical thinking? Argumentation? *Thinking Skills and Creativity*, 2(1), 10-18.
- Goh, C. C. (2018). Metacognition in second language listening. *The TESOL Encyclopedia of English Language Teaching*, 1-7.
- Gravett, S. (2005). *Adult Learning: Designing and implementing learning events – A dialogic approach*. Pretoria: Van Schaik Publishers.

- Halpern, D.F. (1998). Teaching critical thinking for transfer across domains. *American Psychologist*, 53, 449-455.
- Jarvis, P. (2010). *Adult education and lifelong learning: Theory and practice*. London: Routledge.
- Kim, M. Y., & Wilkinson, I. A. (2019). What is dialogic teaching? Constructing, deconstructing, and reconstructing a pedagogy of classroom talk. *Learning, Culture and Social Interaction*, 21, 70-86.
- Kiraly, D. (2014). *A social constructivist approach to translator education: Empowerment from theory to practice*. London: Routledge.
- Lai, E. R. (2011). *Critical thinking: A literature review*. Boston: Pearson.
- Lane, D., & Oswald, F. L. (2016). Do 45% of college students lack critical thinking skills? Revisiting a central conclusion of academically adrift. *Educational Measurement: Issues and Practice*, 35(3), 23-25.
- Lefstein, A., & Snell, J. (2013). *Better than best practice: Developing teaching and learning through dialogue*. London: Routledge.
- Lewis, A., & Smith, D. (1993). Defining higher order thinking. *Theory into Practice*, 32(3), 131-137.
- Lyle, S. (2008). Dialogic teaching: Discussing theoretical contexts and reviewing evidence from classroom practice. *Language and Education*, 22(3), 222-240.
- Mayer, R.E. (2002). *Teaching for meaningful learning*. Upper Saddle River, NJ: Prentice-Hall.
- Mercer, N., & Dawes, L. (2010). Making the most of talk: Dialogue in the classroom. *English Drama Media*, 16, 19-25.
- Mercer, N., Wegerif, R., & Major, L. (Eds.). (2019). *The Routledge international handbook of research on dialogic education*. England, UK: Routledge.
- Murphy, P. K., Firetto, C. M., Wei, L., Li, M., & Croninger, R. M. (2016). What really works: Optimizing classroom discussions to promote comprehension and critical-analytic thinking. *Policy Insights from the Behavioral and Brain Sciences*, 3(1), 27-35.
- Musa, H. I. (2019). Dialogic vs. formalist teaching in developing argumentative writing discourse and reducing speaking

## Dr. Amr Fathy Abdelwahab

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- apprehension among EFL majors. *Journal of Language Teaching and Research*, 10(5), 895-905.
- Mustika, N., Nurkamto, J., & Suparno, S. (2020). Influence of questioning techniques in EFL Classes on developing students' critical thinking skills. *International Online Journal of Education and Teaching*, 7(1), 278-287.
- Nappi, J. S. (2017). The importance of questioning in developing critical thinking skills. *Delta Kappa Gamma Bulletin*, 84(1), 30.
- Nauman, S. (2017). Lack of critical thinking skills leading to research crisis in developing countries: A case of Pakistan. *Learned Publishing*, 30(3), 233-236.
- Ohtani, K., & Hisasaka, T. (2018). Beyond intelligence: A meta-analytic review of the relationship among metacognition, intelligence, and academic performance. *Metacognition and Learning*, 13(2), 179-212.
- Ormrod, J.E. (2004). *Human learning*. Upper Saddle River, NJ: Pearson Prentice Hall.
- Pantiwati, Y., & Husamah, H. (2017). Self and peer assessments in active learning model to increase metacognitive awareness and cognitive abilities. *International Journal of Instruction*, 10(4), 45-57.
- Peña-Ayala, A. (2016). *Metacognition: Fundamentals, applications, and trends*. London: Springer International Pu.
- Pintrich, P. R. (2002). The role of metacognitive knowledge in learning, teaching, and assessing. *Theory into Practice*, 41(4), 219-225.
- Ramos, I. D. (2014). The English majors expectations, experiences, and potentials: Inputs toward Korea's globalization. *International Journal of English*, 2(1), 157-175.
- Renshaw, P. (2004). Dialogic learning, teaching and instruction: Theoretical roots and analytical frameworks. In J. van Linden, & P. Renshaw (Eds.), *Dialogic learning: shifting perspectives to learning, instruction and teaching* (pp. 1-15). London: Kluwer Academic Publishers.
- Rezaei, S., Derakhshan, A., & Bagherkazemi, M. (2011). Critical thinking in language education. *Journal of Language Teaching and Research*, 2(4), 769-777.
- Reznitskaya, A. (2012). Dialogic teaching: Rethinking language use during literature discussions. *The Reading Teacher*, 65(7), 446-456.

- Reznitskaya, A., & Gregory, M. (2013). Student thought and classroom language: Examining the mechanisms of change in dialogic teaching. *Educational Psychologist*, 48(2), 114-133.
- Richards, J. C., & Schmidt, M. (2010). *Longman dictionary of language teaching and applied linguistics*. Oxford: OUP.
- Richman, S. D., Permuth, S., & Richman, P. M. (2013). *Successful teaching: Practical ideas and enabling questions*. Lanham, MD, USA: R&L Education.
- Rivers, W. P. (2001). Autonomy at all costs: An ethnography of metacognitive self-assessment and self-management among experienced language learners. *The Modern Language Journal*, 85(2), 279-290.
- Rudinow, J., & Barry, V. E. (2007). *Invitation to critical thinking*. (6<sup>th</sup> ed.). Belmont, USA: Thompson Wadsworth.
- Sahamid, H. (2016). Developing critical thinking through Socratic questioning: An action research study. *International Journal of Education and Literacy Studies*, 4(3), 62-72.
- Schraw, G. & Moshman, D. (1995). Metacognitive theories. *Educational Psychology Review*, 7(4), 351-371
- Sedova, K. (2017). A case study of a transition to dialogic teaching as a process of gradual change. *Teaching and Teacher Education*, 67, 278-290.
- Sherry, M. B. (2018). Reframing recitation: The dialogic potential of students' responses in IRE/F. *Linguistics and Education*, 45, 110-120.
- Siegel, H. (2010). Critical thinking. *International Encyclopedia of Education*, 6, 1441-1445.
- Suter, W. N. (2011). *Introduction to educational research: A critical thinking approach*. Thousand Oaks CA: SAGE publications.
- Teng, F. (2020). Tertiary-level students' English writing performance and metacognitive awareness: A group metacognitive support perspective. *Scandinavian Journal of Educational Research*, 64(4), 551-568.
- VanderStoep, S., & Pintrich, P. (2003). *Learning to learn: The skill and will of college success*. Upper Saddle River, NJ: Prentice Hall.
- Wegerif, R. (2013). *Dialogic: Education for the Internet Age*. London: Routledge

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---

- Wells, G. (2000). Dialogic inquiry in education: Building on the legacy of Vygotsky. In C. Lee & P. Smagorinsky (Eds.), *Vygotskian perspectives on literacy research* (pp. 51-85). New York, NY: Cambridge University Press.
- Willingham, D. T. (2007). Critical thinking: Why is it so hard to teach? *American Educator*, 8-19.
- Yaqubi, M., & Rashidi, N. (2019). Comparative evaluation of dialogic versus monologic pedagogy among EFL instructors and teacher educators in Iran. *Iranian Journal of English for Academic Purposes*, 8(2), 13-33.
- Zepeda, C. D., Hlutkowsky, C. O., Partika, A. C., & Nokes-Malach, T. J. (2019). Identifying teachers' supports of metacognition through classroom talk and its relation to growth in conceptual learning. *Journal of Educational Psychology*, 111(3), 522.

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