



## Applying an Electronic Inquiry-Based Learning Environment to Promote Preparatory-Stage Students' EFL Fluency

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### Abstract

The current study seeks to determine how preparatory-stage students develop their EFL fluency resulting from exposure to an electronic program based on the inquiry-based learning (IBL) method. The researcher made use of two social media platforms: Telegram and Skype. The participants were 15 preparatory-stage students in a governmental school, Qena, who were chosen at random by the researcher. Before conducting the current study, a pilot study was conducted in the form of an interview with a pre-posttest to assess their EFL fluency ability. There are ten EFL fluency components in the electronic program. The information is analyzed quantitatively. The Wilcoxon test was used to calculate the extent of the effect of the proposed program on increasing the research participants' EFL fluency. The results showed that the study participants' overall mean scores on the post-administration of the test were higher than their total mean scores on the pre-administration of the test. The researcher found that teachers should employ a variety of e inquiry-based activities to aid students improve their EFL fluency and that more time should be given so that students may put their information into practice, think about it, and applying it to different real-world situations. As a result, the proposed program demonstrated that it had a very substantial effect on developing EFL fluency in preparatory-stage students.

### Keywords

Inquiry-Based Learning, EFL Fluency, Social Media, Preparatory Stage, Electronic Program

## Introduction

Teachers and students confront new educational difficulties in the twenty-first century. EFL students are required to learn about such current progressive needs nowadays. One of these criteria and obstacles is how to increase EFL fluency using technology and its many tools and equipment to allow students to communicate themselves, their ideas, opinions, and even feelings. Fluency is the ability to communicate effectively in a spoken and written language. According to the whole language approach, fluency covers and implies a wide variety of abilities, including critical thinking, communication, creativity, idea flow, deep thinking, and expressing oneself, whether in writing or verbally. Fluency affects the degree of interaction and perception with others. Most people feel disappointed when trying to express thoughts in a language that is not fluent. (Shahini & Shahamirian, 2017). Albino (2017) declared that many EFL students have little fluency but sufficient grammatical understanding to pass an exam. In such a case, EFL students want fluency rather than greater grammatical understanding. As a result, in EFL teaching environments, EFL learners' fluency must be the center of attention.

McNeil (2012, P. 104) pointed out the significant role of questioning plays in stimulating interest in new topics, ideas, and difficulties, as well as helping language learners to reflect on their own views, assumptions, and grasp of new issues. Furthermore, students regard questions as a beneficial method for improving their analytical and communicative abilities as well as developing their word power, which encourages them to expand their discussions. He declared that raising questions and eliciting learners' thoughts, reasoning, experiences, and views is the basis of dialogic methods of learning. Toni and Parse (2013, P. 43) illustrated that teachers should encourage learners to question, increase their engagement, and develop their listening skills. Cakmak (2009) declared that teachers' questions are the strongest instrument for guiding,

extending, and controlling communication in the classroom, emphasizing the importance of asking in the process of enhancing and directing classroom debate.

Suhartono, *et al.* (2014) mentioned that inquiry-based learning can help learners become more critical and creative, which makes it easier for them to work in any given environment than other ways. Inquiry learning needs an environment in which students are allowed to work, draw conclusions, and educated judgments about the learning process in the classroom. Arroyo (2011) illustrated that online social networks are a fantastic communication tool for constructing knowledge based on social relationships, discourse, cooperation, and shared effort. As a result, the networks may be utilized to assist students in staying in touch with their teachers.

The past few years have seen a lot of innovation and improvements in English language teaching and learning due to the emergence of a new generation of education through social media. SM has had a big impact on the area of teaching English as a Second Language (ESL) since it has affected the field of education, both in elementary and higher education. (Ying et al., 2021)

Ying et al. (2021) stated that during Covid-19, several interventions were used to teach English, such as video conferencing using social media platforms like WhatsApp and Facebook, among others. For Al-Jarf (2021), educators also used Facebook platforms to engage their students and organize class presentations and comments gathered from students on their work from one other on Facebook.

## Review of Literature

Fluency in English allows students to express their ideas, share their thoughts with others, and persuade people with a clear and confident speech. According to Housen et al. (2012), the criteria for measuring language fluency for learners include utilizing a foreign language with ease and in a native-like manner. Fluency involves the creation of ideas, the capture of mental representations of knowledge, and prior knowledge of subjects.

Raising questions is a motivating technique that permits students to interact actively with the discussed topic, stimulating their thinking and creating issues for them to think about. For Xiao-Yan (2006), repeated questions can stimulate active engagement and create chances for ongoing student involvement in the session. Because questioning creates a connection between the teacher and the students, it has the ability to motivate students to use the language. Students who know the answer will try to reply when a teacher asks them. Students may learn and apply how the language works directly by responding to questions. Responding to questions provides them with an excellent chance to think and provide an understandable output, as well as to adjust their production when receiving feedback. By answering questions, students may perform and engage in classroom activities.

Haron *et al.* (2012) declared that Inquiry implies more than just answering questions or finding the correct answer; it also involves research, investigation, and observation. It is supported by participation in a social interaction community of learners. Inquiry-based learning (IBL) encourages learners to work on their own to develop their capacity to think about their own ideas. It stimulates problem-solving, exchanging ideas, and the collaborative creation of new ideas.

Social media (SM) usage in ESL classes has increased recently. Several initiatives have been delayed as a result of the Covid-19 pandemic, particularly educational ones. According to Adedoyin and Soykan (2020), most educational systems have developed alternatives to face-to-face teaching and learning, and many have shifted programs online to ensure that teaching continues even when classrooms are closed. Jaffar et al. (2019) declared that in recent years, many instructors have used social media as a teaching tool in both traditional and online classrooms, especially during the Covid-19 epidemic.

### *Using Electronic Inquiry-Based Learning (EIBL) Environment to enhance EFL*

Hakverdi-Can and Sonmez (2012) illustrated that by using technology and having access to a range of resources, students may obtain appropriate help with record keeping, reflective writing, collaborative brainstorming, search development, and self-directed research. They assured that inquiry learning and technology integration are major topics in educational environment. It is significant because educators are continuously looking for new methods to successfully incorporate technology into classrooms to engage students in the learning process and better prepare them for success in the twenty-first century.

Although there are several approaches to applying IBL, the effective usage of EIBL has attracted the attention of pedagogical experts and organizations. Al-Abdali (2016) pointed out that many researchers highlight the significance of incorporating technology and advise that it could be used to do further inquiry. The advantages of using technologies in inquiry learning situations involve offering free inquiry resources to anybody with Internet access and allowing students to investigate more effectively. He illustrated that students can receive optimized support with record keeping, reflective writing, collaborative brainstorming, search development, and self-directed research by using technology and having access to a variety of resources.

## *The Effectiveness of (EIBL)*

According to Ajit et al. (2016), the Inquiry may assist students in developing problem-solving, research, and management skills. It has the ability to improve learners' analytical and inventive abilities. Furthermore, it encourages student collaboration. According to Saunders-Stewart et al. (2012), inquiry-based education is a learner-centered way of teaching and learning that allows students to design at least some of their learning experiences based on their own interests and curiosity.

Al-Abdali (2016) declared that Inquiry-based learning implies that students should ask questions rather than listen to and reproduce predictable responses. In today's world, students require more than just the ability to remember and recall facts and information. They are expected to seek and use data. Students are educated to be knowledge inquirers rather than knowledge recipients. As well as building students' abilities to help them reach a high level of thinking, Ghaemi and Mirsaeed (2017) illustrated that inquiry-based learning has other benefits for students:

### *1. Encourage students' curiosity*

Students can share their thoughts and questions about a topic using inquiry-based learning context.

### *2. Allow students to take charge of their learning*

Students are given the option to investigate a topic, providing them with a greater sense of control over their learning. Students can study in a way that suits them rather than having the teacher tell them what they should know.

### ***3. Increase engagement with the material***

This strategy encourages students to completely participate in the learning process as an example of active learning. Students learn more efficiently when they are given the freedom to investigate topics, develop their connections, and ask questions.

### ***4. Enrich students' expertise in topics***

Students develop their connections regarding what they are learning rather than merely remembering information. This permits students to get a deeper grasp of a topic than just memorizing data. (Ghaemi & Mirsaeed 2017)

## ***Role of Questioning in the Development of EFL Fluency and Critical Thinking***

Arauz (2013) declared that EFL Fluency learning is developed when teachers ask high-order questions and let learners provide long responses. Some common question stems for higher order inquiries are like: "What happened," "How did it occur," "What if," "How does it relate," or "What is the evidence?" Teachers can help students develop critical thinking by asking questions that are encouraging alternatives. Teachers may assist learners to learn independently and enhance their learning by demonstrating effective inquiry and motivating students to ask questions themselves. Here are some types of deep learning and thinking questions that teachers can give their students, such as: asking for evidence: How can you prove that ...? What is the evidence for what you say? Also, extension questions such as, What is the correlation between what you say and .....?, hypothetical questions: What would happen if .....? cause questions such as What effect does... have? and summary questions: What are the most important points in this debate? What suggestions do you have for this subject?

Effective questioning is vital to learning. It can be more important than having answers, especially when the questions inspire students to reflect and think critically. Assisting learners in using self-questioning to track their progress is also required. This fact emphasizes both teacher and student self-inquiry (Arroyo 2011)

### *Enhancing EFL Fluency using Online Technology*

According to Yunkul and Cankaya (2017) Social networking sites and modern communication goods are popular; such sites have significantly altered the ways in which people and communities communicate and exchange information. Social networking has grown over the world and broken down borders, allowing everyone to express themselves and access other people's thoughts at any time and under all conditions.

Arauz (2013) said that the use of online technology in an EFL class could support the roles of both the teacher and students. Teachers educate students through a series of inquiry phases to develop deep knowledge and awareness of a topic and its cultural aspects, and students' language abilities gradually improve.

### *Preparatory Stage Students' EFL Fluency in the Twenty-First Century*

Daif-Allah and Khan (2016) investigated the effect of open discussion sessions on enhancing the oral communicative abilities of Saudi English language majors at Buraydah Community College. The study aimed to determine the English language fluency skill needs of English language majors and to look into the impact of using open discussion sessions as extracurricular fluency activities on developing students' oral communicative abilities. The study's findings revealed a perceived need for Saudi EFL students to develop their English fluency abilities, as their oral communicative abilities significantly developed, their needs and interests



were clearly defined, and the ways of meeting those requirements were more creative. Results revealed significant improvement in students' fluency abilities.

Naz et al. (2013) conducted a research to see teacher's questioning effects on students' communication in classroom performance and how students react to inquiries in the classroom. The research also looks into question kinds that are more or less well accepted as well as their effects. The research was carried out at three schools. The findings of the study revealed that questioning in the classroom is significantly related. The study suggested that teachers should be given training sessions and seminars, as well as practical courses on how to utilize effective questions in the classroom.

Irawan et al. (2018) conducted a research to investigate the effect of using inquiry-based learning on students' fluency. This study used a sample of 30 students from a single lesson. The findings of this study revealed that students' fluency ability increased in the following areas: vocabulary, grammar, fluency, and pronunciation. The study's findings were as follows: first, the IBL method developed students' fluency abilities, with an average increase across all four elements (vocabulary, grammar, fluency, and pronunciation). Second, the IBL method had a significant impact on students' fluency abilities.

### *Electronic Devices*

#### *Skype*

Skype is a free web-based communication service that allows users to video conference, phone, and instant message. Skype offers a wide range of educational alternatives for classes. Students can communicate with other students, expand their knowledge, and learn about different cultures. They can use Skype to discuss issues, improve their ability to communicate and

exchange knowledge about certain themes with students who read the same. Skype also allows students and instructors to contact EFL experts and engage in dialogues with classes all around the world. Skype offers a straightforward platform for student development and success (Lynch 2018).

The New Digital Revolution has provided us with new communication means/tools that allow us to communicate and see people all over the world for free, but only if we have access to the Internet. A lot of these technologies have evolved into learning resources that serve multiple purposes apart from their original ones. Skype is one of them. Being both digitally literate and fluent usually involves the employment of several educational technologies in the classroom. (Hart 2007)

#### *Telegram:*

Telegram is one of the technologies that may be employed to assist learners in learning other languages. Telegram is becoming one of the most popular online social networks among students at media universities (Tabrizi & Onvani, 2018). Using telegram groups in education has a substantial impact on students' reading comprehension abilities. Some study has already demonstrated the usefulness of using Telegram as a learning medium, and the majority of them report that Telegram helps them develop their language abilities. Additionally, it makes it easier for teachers to present the content. (Naderi & Akrami, 2018).

Abu-Ayfah (2019) declared that Telegram is a social network that has evolved to become the perfect educational tool. That quick and remarkable advancement in computer technology has an impact on many parts of life. Abu-Ayfah stated that Telegram is a free cloud-based communicator that allows users to view messages from a variety of devices in a variety of formats.

Telegram users may engage and send messages using a variety of media, including images, text, voice, and video. Another feature of Telegram is offline messaging, which occurs when all messages have been transferred but the device is turned off. When network coverage is restored or the device is turned on, data is automatically saved and retrievable. Telegram uses the same internet data plan as browsing and email, and there is no additional (low-cost) payment for communicating and staying in touch with others.

### *Definition of Terms:*

#### *Inquiry-based learning:*

Irawan et al. (2018) defined IBL as follows: It is a method in which teachers take an active part. They create a culture in which thoughts are respectfully challenged, tested, reinterpreted, and considered improvable, shifting students from a state of astonishment to one of performed comprehension and further inquiry. Inquiry entails more than just asking questions and receiving answers; it also includes investigation, exploration, search, quest, research, pursuit, and study. It is encouraged by participation in a community of learners, with each individual learning from the others through social contact.

In the current study, Inquiry-based learning refers to questioning strategies and conversations that extract students' thoughts, reasoning, experiences, and views to promote deep thinking and responses and make them critical and creative. Inquiry is an environment from which the researcher derives the theoretical basis required to build a program to develop EFL fluency of preparatory-stage students.

### *Fluency:*

Maharani (2020) defined Fluency as a variety of unusual and related thoughts formed on a specific topic or the amount of associations generated in reaction to a stimulant. Abdul-Aziz (2006) referred to Fluency as follows: It refers to prepared thinking, the capacity to recall a large number of appropriate thoughts at a specific time, or the ability to generate multiple verbal ideas for an issue.

In the current study, Fluency refers to students' ability to practice English effectively and to express communicatively their thoughts, experiences, opinions, and feelings without hesitation or pauses through interaction and discussion between students and their teachers as well as between students and their peers. Fluency is defined as the capacity to think critically and create understandable output when using EIBL environment.

### *Context of the Problem:*

Based on the information provided in the preceding sections, it seems that the researchers are very interested in adopting the Inquiry-Based Learning context to increase EFL fluency. There have been minimal Egyptian or Arabic studies on the Inquiry context in its electronic form as a method for enhancing EFL fluency. Furthermore, the majority of research on questioning methods has been undertaken abroad. As a result, there is an urgent need in Egypt to test this new trend.

The researcher conducted a pilot study in the form of an interview before undertaking the current study to measure the fluency of random EFL preparatory stage students. After the researcher presented various topics with questions, the students were expected to discuss and contribute extra knowledge. The researcher urged them to think about and write down any

thoughts they had on these problems, to come up with acceptable answers to the challenges and vocally explain them without hesitation or pauses, and to continue their discussions. One of the biggest problems among preparatory-stage EFL learners was found to be their considerably lower fluency ability when compared to their knowledge. Those learners are unable to appropriately express their thoughts and ideas.

Students use English in a more basic manner that does not correspond to their overall level of learning. They regularly make mistakes and slips, speak slowly and inefficiently, stop frequently, and struggle to find acceptable or exact wording. They usually feel cautious and hesitant when asked to respond. They avoid such situations as much as possible, do not cooperate with the teacher or their students, respond fast, and commonly employ one-word replies like "Yes" or "No." They are sometimes afraid to speak up in front of their peers. Poor fluency is a significant concern because it restricts student's capacity to use the language for its fundamental function, information exchange. As a result, frustration and worry occur. Such learners lose interest in language learning and are discouraged from learning it anymore.

One of the reasons students struggle to use English freely is because their environment does not inspire them to practice English daily. The "environment" refers to the individuals outside of the classroom. Some individuals may feel that when students employ English in ordinary conversations, they are merely attempting to impress others. Because of the reaction, students lose faith in their potential to grow their language talents. Students converse in their native language regularly because they do not want to be rejected by others. As a result, the learners are unable to speak English fluently outside of the classroom.

### *Statement of the Problem:*

In light of what was mentioned above, the problem with the current study can be stated as follows:

The present study's problem is EFL preparatory-stage students' lack of fluency. These students struggle to express their ideas, feelings, and thoughts clearly. Furthermore, despite the importance of employing the inquiry-based learning context in developing EFL fluency, it is widely ignored, particularly in preparatory-stage EFL classes. As a result, the current study is an attempt to develop and enhance EFL fluency using a proposed program based on EIBL context.

Finally, because there is little published research on employing the inquiry context to enhance English fluency, research on this topic is crucial. As a result, the researcher suggests that developing students' EFL fluency through inquiry-based learning is critical.

### *Study Questions:*

The current study tries to answer the following primary question:

What is the impact of employing EIBL environment on developing Preparatory stage students' EFL fluency?

Further sub-questions include:

1. What is the current level of preparatory-stage students' EFL fluency?
2. What are the underlying principles of Inquiry-Based learning?
3. What is the effect of a proposed program based on electronic Inquiry-based learning context on developing preparatory-stage students' EFL fluency?

### ***Study Hypotheses:***

The following hypotheses were investigated in the study:

1. There is a statistically significant difference in the average of scores achieved by subjects in the pre-post EFL fluency test in terms of total scores in favor of the post-test.
2. There is a statistically significant difference in the means of the participants' EFL fluency scores in each component separately in favor of the post-test.

### **Method**

***Study Design:*** The researcher used a one-group pretest-posttest design.

***Participants:*** Participants are limited to fifteen preparatory school students were nominated at random from a governmental prep school in Abu-Tisht, Qena, Upper Egypt.

For preparatory stage students:

- a. Developing their EFL fluency through the administration of a proposed program based on EIBL environment.
- b. Developing their ability to think deeply, discuss different points of view, connect with each other and with their teachers, uncover and share ideas fluently, and develop questions.
- c. Encouraging them to use the language with confidence.
- d. Introducing pupils to various sorts of problems by using questioning tactics.
- e. Improving their analytical and communication skills.
- f. Encouraging them to participate in conversations.
- g. Showing students how to avoid obstacles to achieving high levels of EFL fluency.

## *Study Instruments:*

### *1. A pre-post test to assess EFL students' fluency.*

The researcher graded the students' replies to the pre-post EFL Fluency test. All fluency components were rated by two raters (the researcher and an external rater). Each component was graded from 5 (the best) to 1 (the worst). This resulted in a total score of 50 points.

### *2. A rubric for judging the students' EFL fluency.*

The researcher developed a rubric with 10 fluency components after deciding on the final form of the list of EFL fluency components. Each of the ten components was scored using a rating system ranging from 1 to 5. The numerals "1" and "5" represent bad and excellent performance, respectively.

**Table 1**

*The correlation coefficient of the total score and each component*

<b>Language Fluency components</b>	<b>Correlation</b>
Giving Opinion and Reason	<b>0.75**</b>
Critical Questioning	<b>0.74**</b>
Discussing Context	<b>0.76**</b>
Making Connections Between Topics	<b>0.70**</b>
Using different Types of Texts	<b>0.68**</b>
Preparing Argumentation	<b>0.73**</b>
Assessing Argumentation	<b>0.71**</b>
High-Order Thinking	<b>0.74**</b>
Developing Critical Mindset	<b>0.69**</b>
Describing Pictures	<b>0.74**</b>

\*Significant at 0,01 N=15 R>0.63



### *Data Collection:*

To confirm the internal consistency, the correlation coefficient between each component and the total score of the test was determined after the scoring of each component was subtracted from the total score. The correlation coefficient is shown in table 1.

**Test Reliability:** The test's Alpha-Cronbach coefficient was estimated to be (0.90), indicating the test's accuracy and reliability as a measuring mean.

### *EIBL Program*

The researcher designed an electronic program based on the IBL environment to teach the experimental group students the stated EFL fluency components. The program consists of ten sessions through which ten dimensions are addressed:

1. Giving Opinion and Reason
2. Critical Questioning
3. Discussing Context
4. Making Connections Between Topics
5. Using different Types of Texts
6. Preparing Argumentation
7. Assessing Argumentation
8. High-Order Thinking
9. Developing Critical Mindset
10. Describing Pictures

The researcher is going to use the Telegram app as a device to employ the proposed electronic program. Before applying Telegram, two considerations should be established. Before

inviting kids to use Telegram, teachers should inform their parents about the program and gain their agreement. Following that, it is critical to set some fundamental session rules. Because one of Telegram's purposes is for learners to practice linguistic abilities, one restriction may be that posts should use entire sentences and words should be expressed completely.

Many of the activities on this platform are adapted to the requirements of the students. They are encouraged to express their thoughts, feelings, ideas, likes, and dislikes to their peers. They must also evaluate the thoughts of others and enable others to interview them. Self-expression is something that not everyone feels comfortable with. Even the most willing student will struggle if the group environment is unfriendly and the learner is afraid of being mocked or criticized. To achieve the activities' aims, the first and most critical criterion for implementing learner-centered activities is that the group be calm and sociable.

*For more details about the proposed program, contact the first author:*  
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## **Results of the Study**

### *Testing the first hypothesis:*

The first hypothesis stated that there is no statistically significant difference between the means of scores obtained by the participants in the pre-post Test of EFL fluency in terms of the total score. To evaluate the validity of this hypothesis, the researcher compared the participants' means of scores before and after implementing the suggested program on the EFL fluency pre-post test in terms of total scores. The Wilcoxon Test was performed to determine the significance of the difference between the pre-test scores.

**Table 2***Significance of differences in the participants' mean scores in terms of the overall score. N=15*

Overall EFL fluency	Ranks	( N )	Mean Rank	Sum of Ranks	Mean		Std. Deviation		Z	Sig.	Effect size
					PRE	POST	PRE	POST			
	Positive Ranks	15	8.00	120.00	17	44.07	1.13	0.96	3.437	0.001	1.00 Very strong
	Negative Ranks	0	0.00	0.00							
	Ties	0	0.00	0.00							
	Total	15									

According to Table (2), the positive ranks are 15, the ties are zero, and the negative ranks are zero. This signifies that the post-test scores of all 15 individuals grew (not declined or remained the same) as compared to the pre-test levels. It demonstrates that the overall mean scores of the study participants on the post-test (M.44.07, SD.0.96) are higher than their total mean scores on the pre-test (M.17, SD.1.13).

Furthermore, the table indicates that the significance level (Sig) is 0.001, which is less than 0.01. This is the difference in pre-post scores vs total scores at the significance level of 0.01 in favor of post-test results. As a result, the zero hypothesis is rejected, and the alternative hypothesis is accepted. As a result, it is determined that there is a substantial difference between the students' averages of scores in the pre-post EFL fluency test in terms of the total score in favor of the post-test.

Matched-Pairs Rank Biserial Correlation was used to determine if there would be a statistically significant difference between the mean scores of the pre and post-administration of

the test when using the Wilcoxon test to calculate the effect size of the suggested program on enhancing the study participants' EFL fluency. (Hassan, 2016)

$$R = (4 (T1)/n(n+1))-1.....(1)$$

Using the preceding calculation, the effect size is equal to (0.01). This demonstrates that the proposed program based on an inquiry-based learning environment has a very big effect on improving preparatory-stage students' EFL fluency in terms of total scores.

### ***Testing the second hypothesis:***

The second hypothesis stated that there is no statistically significant difference in the means of scores obtained by the participants in the pre-post Test of EFL fluency in each component separately. On the Pre-Post Test, the researcher compared the mean rank scores of the study group in each EFL fluency component before and after the administration of the proposed program to validate this hypothesis. The Wilcoxon Test is used to determine the significance of differences between tests pre- and post-administration. Table (3) summarizes the results in this regard.

Table (3) gives the EFL fluency components findings as follows: positive rankings = 15, ties = zero, and negative ranks = zero. This indicates that on the post-test, all 15 participants' scores on EFL fluency components rose (not dropped or remained the same) as compared to the pre-test on each component independently.

**Table 3***The significance of differences in each EFL fluency component (N=15).*

Language fluency components	Ranks	(N)	Mean Rank	Sum of Ranks	Mean		Std. Deviation		Z	Sig.	Effect size
					PRE	POST	PRE	POST			
Giving Opinion and Reason	Positive Ranks	15	8.00	120.00	1.4	4.6	0.51	0.45	3.535	0.000	1.00 Very strong
	Negative Ranks	0	0.00	0.00							
	Ties	0	0.00	0.00							
	Total	15									
Critical Questioning	Positive Ranks	15	8.00	120.00	1.93	4.33	0.59	0.62	3.482	0.000	1.00 Very strong
	Negative Ranks	0	0.00	0.00							
	Ties	0	0.00	0.00							
	Total	15									
Discussing Context	Positive Ranks	15	8.00	120.00	2	4.4	0.65	0.74	3.483	0.000	1.00 Very strong
	Negative Ranks	0	0	0.00							
	Ties	0	0.00	0.00							
	Total	15									
Connections Between Topics	Positive Ranks	15	8.00	120.00	1.73	4.07	0.89	0.80	3.529	0.000	1.00 Very strong
	Negative Ranks	0	0	0.00							
	Ties	0	0.00	0.00							
	Total	15									
Using different Types of Texts	Positive Ranks	15	8.00	120.00	1.73	4.53	0.73	0.64	3.460	0.000	1.00 Very strong
	Negative Ranks	0	00	0.00							
	Ties	0	0.00	0.00							
	Total	15									
Preparing Argumentation	Positive Ranks	15	8.00	120.00	1.73	4.27	0.7	0.75	3.453	0.001	1.00 Very strong
	Negative Ranks	0	0	0.00							
	Ties	0	0.00	0.00							
	TOTAL	15									
Assessing Argumentation	Positive Ranks	15	8.00	120.00	1.53	4.4	0.64	0.51	3.464	0.001	1.00 Very
	Negative Ranks	0	0.00	0.00							
	Ties	0	0.00	0.00							

Language fluency components	Ranks	(N)	Mean Rank	Sum of Ranks	Mean		Std. Deviation		Z	Sig.	Effect size
					PRE	POST	PRE	POST			
	TOTAL	15									strong
High-Order Thinking	Positive Ranks	15	8.00	120.00	1.47	4.33	0.82	0.74	3.446	0.001	1.00 Very strong
	Negative Ranks	0	0.00	0.00							
	Ties	0	0.00	0.00							
	TOTAL	15									
Developing Critical Mindset	Positive Ranks	15	8.00	120.00	1.08	4.47	0.69	0.78	3.329	0.001	1.00 Very strong
	Negative Ranks	0	0.00	0.00							
	Ties	0	0.00	0.00							
	TOTAL	15									
Describing Pictures	Positive Ranks	15	8.00	120.00	1.67	4.67	0.62	0.49	3.461	0.001	1.00 Very strong
	Negative Ranks	0	0.00	0.00							
	Ties	0	0.00	0.00							
	TOTAL	15									

In EFL fluency, the level of significance for each component independently is (0.001), which is less than (0.01). This suggests that at the significance level (0.01), there is a statistically significant difference in the means of scores achieved by the subjects in the pre-post Test of EFL fluency in each component separately in favor of the post-administration of the test. The effect size of all EFL fluency components is 1.00. As a result, the null hypothesis is rejected while the alternative hypothesis is accepted.

## Discussion of Results

Results of the study show that the suggested program has a very big impact on improving preparatory-stage students' EFL fluency components. It is concluded that there is a substantial difference between the students' averages of scores in the pre-post EFL fluency test in terms of

the total score in favor of the post-test. It is concluded, too, that there is a statistically significant difference between the means of scores acquired by the participants in the pre-post Test of EFL fluency concerning each component individually in favor of the test's post-administration.

The results mentioned above agree with the results of other previous studies tackled the same area. In Irawan et al.'s study (2018), results showed that IBL strategy affected significantly on students' fluency ability. The results of Arauz's study (2013) showed that EFL Fluency learning is developed when teachers ask high-order questions to let learners provide long responses.

### **Recommendations:**

- To help students develop their EFL fluency, teachers should use a range of inquiry-based activities.
- More time should be allotted for students to put their knowledge into practice, reflect on it, and apply it to various real-world circumstances.
- Teachers should encourage students to create their own learning strategies, encourage teamwork, and have students reflect on their learning.
- EFL instructors must be trained on how to use inquiry-based learning in the teaching/learning process.
- The obstacles that EFL teachers may have when applying inquiry-based learning in the classroom must be addressed as soon as possible.

### **Suggestions for further research:**

- A research investigation of the impact of creative approaches on enhancing EFL fluency.
- Investigating the impact of inquiry-based learning on improving EFL reading fluency.
- Choosing students from various educational levels and presenting them with the same current study.
- Examining how the Life-wide Learning method might improve EFL fluency.
- Raising teachers' knowledge of the need of aiding students in becoming EFL fluent through the use of various offline and online resources.
- Investigating the impact of project-based learning on EFL fluency.

### **Conclusion:**

The current study sought to explore the impact of EIBL setting on preparatory-stage students' EFL fluency. Several instruments were used to collect data. The study findings suggested that the submitted training program was beneficial in developing preparatory-stage students' EFL fluency. Participants also expressed their satisfaction with the proposed training program and their intention to apply the concepts and practices learned in the course in their forthcoming EFL sessions. EIBL setting has been found to be useful in building EFL fluency according to the results stated above.



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