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## The Effect of Utilizing a Cooperative Inquiry Based Strategy on Enhancing Reading Comprehension and Reflective Thinking Skills

**ABSTRACT**

The purpose of this paper is to look into the effect of utilizing cooperative inquiry based strategy on enhancing reading comprehension and reflective thinking skills for English majored college students. The treatment group consists of (50) EFL university students which are randomly selected. The questionnaire was the technique used for collecting data in college context. SPSS was used to analyze the collected data. The study findings confirmed that there is a high level of reading comprehension abilities among EFL university students after being taught through Cooperative Inquiry Based Strategy. The paper is involved several sections starting with introduction and research questions followed by the objectives which aims at identify the effect of using a Cooperative Inquiry-Based Strategy on EFL University students' reading comprehension abilities and reflective thinking, ending with data collection and analysis the results which revealed that the cooperative inquiry-based Strategy has statistical and substantial positive outcomes on improving and developing on reading comprehension abilities and students independent work among EFL language university students. The strategy motivates learners to evaluate personal thoughts as well as, stimulates learner's engagements inside the class.

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### أثر استخدام استراتيجية الاستقصاء التعاوني في تعزيز مهارات الفهم القرائي والتفكير التأملي

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الخلاصة:

الغرض من هذه الورقة هو النظر في تأثير استخدام الإستراتيجية القائمة على الاستقصاء التعاوني على تعزيز فهم القراءة ومهارات التفكير التأملي لطلاب الجامعات المتخصصين في اللغة الإنجليزية. تتكون المجموعة العلاجية من (50) طالبا وطالبة جامعيين تم اختيارهم بشكل عشوائي. كان الاستبيان هو الأسلوب المستخدم في جمع البيانات في محيط الكلية. تم استخدام SPSS لتحليل البيانات التي تم جمعها. أكدت نتائج الدراسة أن هناك مستوى عالٍ من قدرات الفهم القرائي بين متعلمي اللغة الانكليزية كلغة أجنبية بعد أن يتم

تدريسهم من خلال الإستراتيجية القائمة على الاستقصاء التعاوني. تضمنت الورقة عدة أقسام تبدأ بالمقدمة وأسئلة البحث متبوعة بالأهداف التي تهدف إلى تحديد تأثير استخدام الاستراتيجية القائمة على الاستفسار التعاوني على قدرات فهم القراءة لدى متعلمي اللغة الإنجليزية كلغة أجنبية والتفكير الانعكاسي ، وتنتهي بجمع البيانات وتحليل النتائج. والتي كشفت أن الإستراتيجية التعاونية القائمة على الاستفسار لها نتائج إيجابية إحصائية وجوهرية في تحسين وتطوير قدرات الفهم القرائي والعمل المستقل للطلاب متعلمي اللغة الإنجليزية كلغة أجنبية. تحفز الإستراتيجية المتعلمين على تقييم الأفكار الشخصية بالإضافة إلى تحفيز تفاعل المتعلم داخل الفصل.

الكلمات المفتاحية: الإستراتيجية القائمة على الاستقصاء التعاوني ، الفهم القرائي ، والتفكير التأملي ، ومتعلمي اللغة الإنجليزية كلغة أجنبية.

## 1. Introduction:

Reading comprehension, according to a simplistic view of reading, is the consequence of two distinct but related abilities: decoding, or the ability to recognize single written words, and verbal fluency, or the process of comprehending words and connected speech. Throughout the beginning of learning to read, the ability to understand is the most critical part of the reading process. The interaction of a reader's talents and thought abilities with the linguistic elements of a text is referred to as reading. To produce a mental representation of the text's meaning, the reader must blend text information with prior knowledge. (Smith et al., 2021, p.2).

Reading comprehension is a necessary ability for pupils' academic success and lifetime learning. Accurate evaluation of reading comprehension is required to monitor student's reading development and offer appropriate, timely teaching and interventions. Reading comprehension necessitates the processing of complicated information (Cao&Kim, 2021, p.1).

Reading comprehension is the ability to read most or all of the words in a text. Word reading is a prerequisite for reading comprehension, but it is not sufficient. The development of core word-reading abilities, such as phonological awareness, print awareness, phonics, and word recognition teaching, is crucial to the development of reading comprehension. Skills and knowledge that bridge the gap between word reading and comprehension are also necessary for reading comprehension. Graph-phonological semantic cognitive flexibility (GSF), a kind of

executive function, is one such talent (and a fancy label for a down to-earth skill) (Duke et al., 2021, p.2).

Schon (1983) extended on Dewey's (1933) term "reflective thinking," which regarded as seminal in this field and is based on the ideas of several earlier philosophers and educators. Dewey's own definition of reflection as a cognitive process – 'the active, persistent and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and the further conclusions to which it tends' (1933: 9). However, he emphasized the conscious, active and deliberate thinking in this particular type of problem solving. Schon (1983) introduced some new ideas on the process of reflection when he indicates that the new ideas and reflection that developed must be trailed in supportive classroom context. In this respect, he emphasizes the importance of critical and analytical thinking created by teachers and students through reflective practice. Instructors can use reflective thinking to not only reflect on just what, why, and how things get done, and also adapt, grow, and improve their methods but they can also use critical reflection to improve their professionalism. Xiao et al. (2008) looked into reflective thinking throughout cooperative learning and found that clarifying underlying decisions helped undergraduates articulate their views and ideas, explore course themes, and engage in higher-order thinking skills (Yaacob&Asraf, 2021, p. 1-2).

Thus, Cooperative inquiry is another potentially fruitful field of study. Inquiry encourages participatory practice by framing learning as a dynamic, interactive co-construction process (Crook, 2021). Cooperative learning methodologies are useful in improving students' scientific reasoning abilities. Cooperative learning encourages students to learn in small groups (4-6 students) in order to increase their learning by helping one another. Jigsaw, two-stay-two-stray (TSTS), discovery learning (DL), and inquiry-based learning (IBL) were among them. Therefore, the students can resolve problems democratically and interdependently to reap the academic benefits to this method of learning. (Amelia et al., 2021, P. 1).

As a result, the current paper aims to determine the efficacy a cooperative inquiry based strategy on enhancing reading comprehension and reflective thinking skills.

## **2. Research Questions:**

- What is the effect of using Cooperative Inquiry-Based Strategy on EFL University students' reading comprehension abilities?

- What is the effect of using Cooperative Inquiry-Based Strategy on EFL University students' reflective thinking skills?

### **3. Research Objectives:**

This paper aimed to the following:

- To identify the effect of using a Cooperative Inquiry-Based Strategy on EFL University students' reading comprehension abilities.
- To identify the effect of using a Cooperative Inquiry-Based Strategy on development of EFL University students' reflective thinking.

### **4. Research Significance:**

The results of this paper may be helpful to university-level EFL students in the following ways:

- Providing assistance to English foreign language university students in introducing cooperative inquiry into their study.
- Advising curriculum designers on the benefits of including cooperative inquiry in EFL courses.

### **5. Review of Literature:**

#### **5.1. Reading comprehension:**

Reading comprehension considers the center of reading process. In order to help students improve their level of understanding and acquire essential reading abilities that enable them to draw inferences from a passage about its contents, the system of education, in all its forms, attempts to give them with this talent. Additionally, reading comprehension helps students understand the various interpretations of a text they are reading as well as analyze and evaluate it. (Capin et al., 2021, p 1).

The ability to read comprehension is crucial in determining a student's educational success or failure in his academic life. Since the speed of reading is already so important to students' comprehension, they should indeed be educated how to improve it. The faster students' understanding develops, the more critical knowledge or quick facts they can access. Thoughtful reading enhances and develops students' viewpoints, stimulates their intellectual talents, and provides them with the tools they need to deal with a variety of personal issues, identify and broaden tendencies, and form a sense of self and others' selves. It is suitable for youngsters

because it motivates the mind to ask, consider, and ponder, promotes awareness of social issues, fosters the spirit of book, periodicals, and newspaper criticism, and provides a sense of cultural connection (Khasawneh, 2021, p. 2).

One of the most serious issues that students experience, particularly in the early phases of their education, is a lack of reading speed. This has a deleterious impact on students, as seen by their low level of understanding. More work is still needed to address this issue. Several studies have been conducted in various contexts to address this issue; however few Arabic studies on developing reading speed abilities have been conducted. It is urgently necessary to create an experimental program to help students with learning disabilities improving their reading speed skills in order to display the results that will serve as a base for educational applications which will help students read more quickly, which will in turn help them understand and comprehend more.(Quinn et al., 2020). As previously mentioned above, reading comprehension is certainly significance for students and is the fundamental purpose of reading. Some of educators assume that reading and comprehension is synonymous. Reading should not be called so if there isn't understanding process. Therefore, comprehension is so important in language competency and understanding the verbal communication between reader and the author. Reading comprehension is paramount for students who want to enlarge their knowledge and information which can be implied with some elements which bring to detail understanding of comprehension in the reading (Khasawneh, 2021, p. 3-4).

## **5.2. Reflective thinking:**

Reflective thinking is closely related to meta-cognitive reasoning, which is the process through which people evaluate their reasoning technique and notice their thinking management. Reflective thinking, as defined by Dewey, is “the active, continuous, and conscious study of any view or assumed form of knowledge in light of the premises that support it and the further conclusion it has reached”. According to Ünver (2003), towards the end of reflective thinking, one frequently switches to creative thinking. Critical thinking, like other thinking abilities, is a broad concept that incorporates introspective thinking. To put it another way, when individuals think critically, they also think reflectively. Furthermore, reflective thinking is closely related to meta-cognitive thinking (Safari, 2022, p.5-6).

According to Vygotsky (1978) reflection is an important aspect of learning. It is a strategy that encourages pupils to take a moment to halt, think, and reflect. Learning to reflect and create meta-awareness through reflection on one's behaviors, feelings, and thoughts leads to critical thinking. To change their learning, students must engage in critical self-reflection. In education, reflective practice is a relatively recent notion. the concept of reflection is inextricably linked to the proposed learning theory. Reflective thinking is vital as both a teaching tool and an educational goal and it helps us comprehend who we are when we behave. Both Kolb (1984) claimed that reflective observation is necessary, and that synthesis and self-development learning vary from the acquisition of objective knowledge and facts in a lecture. Finally, when learners engage in self-assessment, they provide themselves with regular and thorough feedback to help them learn more effectively. They also discuss and share what they have learned with their peers, parents, and teachers (Yaakop et al., 2022, p.1-2).

There are several classifications of reflective thinking, the most widely accepted of which being Choy and Oo's (2012) scientific taxonomy. Four metrics are included in this categorization of reflective thinking: (1) Reflection as a retrospective examination (capability to self-evaluate);(2) Problem-solving via contemplation (Awareness of how one learns); (3) critical self-reflection (creating nonstop personal development); (4) Consider your views about your own efficacy (Safari, 2022, p. 6). Reflective thinking is one of the greater thinking skills. Mental data processing based on previous experience which is unaffected by exogenous factors is referred to as reflective thinking. Reflective thinking, according to experts, is a mental process of reacting to outside information by changing previously learned knowledge so that students can articulate, own their mistakes, and communicate both orally and in writing. Each of the three components of reflective thinking helps students enhance their reflective thinking skills: Each of these factors refers to the growth of students' reflective thinking abilities: 1) reflection timing, 2) reflection object, and 3) reflection degrees. Repetitive action, that is a popular habit among educators, knowledge, that also occurs once educators connect alternatives with difficulties, reflection, that also occurs when educators rethink answers by trying to adjust to the reality of the idea, and critical thinking that is the highest stage, are the four stages of reflective thinking. Whereas differentiates between three sorts of reflective thinking scenarios: pre-reflective, reflective, and post-reflective. (Khusna, 2021, p.2).

### **5.3. Cooperative inquiry based strategy:**

Inquisitive thinking or Enquiring is a life skill that has always been inherent in human nature and is crucial in conceptualizing instructional approaches. High-level skills like creating, acquiring, and using information as well as staying update with technology and adapting to change are also included in this list of talents. (Yanarateş&Yilmaz, 2022, p.1). IBL (inquiry-based learning) is a type of instruction method that emphasizes the student's involvement in the learning process. The pedagogy of inquiry-based learning (IBL) allows students to most effectively experience the processes of knowledge creation, according to Rachel Spronken-article Smith's "Experiencing the Process of Knowledge Creation: The Nature and Use of Inquiry Based Learning in Higher Education," and the essential elements are learning stimulated by inquiry, a learner-centered strategy, a shift to self-directed learning, and an active learning strategy. Students should learn how to conduct experiments and develop a lifelong interest in learning. Inquiry-based learning is being implemented at all levels, from within-class activities to inquiry courses and even inquiry degree programs, because there is strong educational theoretical backing for the use of inquiry methodologies. IBL appears to boost students' engagement, academic achievement, and higher-order learning outcomes, according to growing evidence. Inquiry-based learning is a popular method for increasing both involvement and skill development. It encourages kids to work together to solve problems and develop skills that will help them succeed in college and in their jobs. Students can delve deeply into the topic matter via inquiry-based learning, which keeps them engaged in posing questions and discussing ideas with their peers and instructor. Students' questions elicit a lot of participation (Najimova, 2022, p. 1).

Inquiry-based learning is a method of teaching that encourages students to generate their personal knowledge through the use of research instruments, such as scientific techniques, and is particularly useful for improving science and mathematics training. Despite its advantages in terms of students' motivation, skill building, and conceptual comprehension, scientific teachers rarely apply it in their pedagogical practice. Inquiry and interaction are two inquiry-based techniques for student learning. As a consequence, rather than fragmented knowledge teaching and learning, education must be refocused on achieving learning experience and conceptual understanding of scientific concepts (Pabón-Galán et al., 2022, p. 3).

Individuals with inquiry skills are perceptive to happenings and are always on the move. They are tenacious in the face of adversity. Furthermore, they are unbiased and open-minded, and they are not beholden to any authority. They can also provide credible answers for any subject they are

familiar with. They apply what they've learnt by drawing on a variety of resources. These people make decisions by examining situations from several perspectives. They appreciate people's perspectives and share them by listening to them. When required, they conduct enquiries that are not prejudiced towards alternative viewpoints. Therefore, it can be said that individuals can construct much of their understanding of the designed worlds through the process of inquiry (Yanarates&Yilmaz, 2022, p. 1).

## **6. Participants and method:**

### **6.1. The study Participants:**

The participants in the study were (50) EFL students which randomly selected from English department at Imam Al-Kadhumi College / Iraq. Simple Random Sampling ensures that findings obtained from the member's selection should be close to what would have been obtained if the whole population had been measured, in most cases, these results in a balanced subset that has the highest probability of accurately and impartially representing the larger group as a whole. (Shadish et al., 2002).

### **6.2. Study instrument:**

The questionnaire was designed as a research tool to assess the impact of using a cooperative inquiry-based technique on improving reading comprehension and reflective thinking abilities of the students. The students were given five sets of Likert scale questions. It includes phrases like "strongly agree, agree I'm not sure, disagree, and strongly disagree".

#### **The questionnaire included 4 parts:**

- The first part deals with Reading Comprehension abilities, it consists of 24 phrases
- While the second part focused on the perception of students after application of Cooperative inquiry based strategy, it consists of 6 phrases.
- The third part dealt with Reflective Thinking it consists of 21 phrases.
- The fourth part focused on the perception of students after application of Cooperative inquiry based strategy, it consists of 6 phrases.

### **6.3. Study procedures**

The followings show how the investigation went:

- Reviewing literature and prior studies on reading comprehension abilities, reflective thinking skills, and the cooperative inquiry-based program in order to establish the theoretical foundation and study tools.
- Compiling a preliminary list of reading comprehension skills and submitting it to an EFL methodology and literary experts to assess its validity.
- Examining the responses of the experts and establishing the most significant comprehension abilities required of university students.
- Developing a reflective thinking questionnaire based on the intended reflective thinking skills and presenting it to the experts for validation.
- Making changes to the reading comprehension and the reflective thinking tools based on experts feedback.
- Using the prescribed reading comprehension abilities and reflective thinking to design a cooperative inquiry-based curriculum.
- Choosing a sample of university students for the study.
- A trial run of the research tools to see how consistent and reliable they are.
- Before completing the experiment, delivering the reading comprehension list and reflective thinking questionnaire to the study sample to determine the extent to which they mastered the indicated reading comprehension skills and the degree to which they possessed reflective thinking skills.
- Instructing the study sample utilizing the researcher's cooperative inquiry-based program.
- Questionnaires on the effect of using a cooperative inquiry-based curriculum on both reading comprehension and reflective thinking skills were administered after the program was completed.
- Gathering data and quantitatively assessing it

- Interpreting the findings in the context of past research.
- Presenting conclusion

#### 6.4. Data Collection and Analysis:

The questionnaires have delivered to the participants in the research. While the subjects completed the surveys, the researcher remained at the institution to address any questions regarding the questionnaire that the participants had. SPSS was used to examine the data that was obtained by the students' completion of the questionnaires.

#### Results:

The following scale has been used to analyze the questionnaire: Phrases with a means of (1to Less than 1.67) was rated as (Low), while Phrases with a means of as (1.67 to Less than 2.32) was rated (Moderate) and phrase with a mean of (2.32 - 3.2) was rated as (Excellent).

#### 7.1. Results for the First Question

- What is the effect of using Cooperative Inquiry-Based Strategy on EFL University students' reading comprehension abilities?

**Table (1): Showing EFL University students' reading comprehension abilities**

Items		No.	Mean	SD	Agreement Degree	Rank
<b>Reading comprehension abilities</b>						
Reading Comprehension Abilities before using Cooperative Inquiry-Based Strategy						
<b>Literal</b>	Grasp different types of sequence	50	2.40	1.01	High	11
	Recall main ideas	50	2.93	0.99	High	4
	Grasp directly stated details	50	2.15	01.11	Moderate	23

	Skim the text for main idea	50	2.87	0.89	High	5
	Distinguish main ideas from supporting details	50	2	0.98	Moderate	24
	scan text for specific information	50	3	0.98	High	3
<b>Inferential</b>	Predict the outcomes	50	2.27	0.95	Moderate	16
	Infer ideas that are not explicitly stated in the text	50	2.28	0.99	Moderate	15
	Get the gist of author's message	50	3.10	0.95	High	2
	Determine relationships among ideas	50	2.41	1.30	High	10
	Summarize in a few words gist of a paragraph	50	2.35	1.21	High	14
	Make generalization from a series of related statements	50	2.17	0.99	Moderate	22
	Interpret the text by going outside of it	50	2.43	0.98	High	9
<b>Critical</b>	find out logic of arguments	50	2.19	0.89	Moderate	21
	Make sound judgments	50	2.53	1.10	High	8
	Identify difference between facts and opinions	50	2.20	1.11	Moderate	20
	Identify author's attitudes	50	2.24	0.96	Moderate	19
	discover evidence of bias or Prejudice	50	2.63	0.95	High	7
	Identify intended purpose of the specific part of a text	50	2.39	1.10	High	12
<b>Creative</b>	Develop new ideas related to the topic.	50	3.20	1.11	High	1

Transfer knowledge to new contexts	50	2.26	1.31	Moderate	17
use imagination and experiences to get new insights	50	2.75	0.98	High	6
Determine more than one end for the text.	50	2.25	0.99	Moderate	18
Suggest new solutions for problems that are included in a text.	50	2.38	1.03	High	13

Table (1) illustrated the reading comprehension abilities among EFL students. It showed that the phrase "Develop new ideas related to the topic." showed the highest mean (3.20) with SD (1.11) and took in the first rank in classification. Phrase "Get the gist of author's message" took the second rank, the means reached (3.10) by standard deviation (0.95). While the phrase "Distinguish main ideas from supporting details" showed the lowest mean (2) with SD (0.98) and took in the last rank in classification. Therefore, the results presented high reading comprehension abilities among EFL students.

**Table (2): The effect of using Cooperative Inquiry-Based Strategy on EFL University students' reading comprehension abilities**

Items	No.	Mean	SD	Agreement Degree	Rank
<b>Cooperative Inquiry-Based Strategy</b>					
Reading Comprehension group after using Cooperative Inquiry-Based Strategy					
I frequently remind my coworkers to give their thoughts.	50	3.2	1.02	High	1
I try to remind everyone how much time we have left to finish our reading.	50	1.67	1.11	Moderate	6

I frequently fail to contribute to the effort because I'm preoccupied with something else.	50	2.5	1.03	High	4
I frequently seek clarification when I don't grasp something.	50	3.1	0.99	High	2
I frequently ask myself questions to see if I've learned what I set out to learn.	50	2.4	0.95	High	5
I frequently provide feedback on other student's work.	50	3	0.90	High	3
<b>Total</b>	<b>50</b>	<b>2.60</b>	<b>0.90</b>	<b>High</b>	<b>4</b>

Table (2) showed application of Cooperative Inquiry-Based Strategy among EFL students. It showed that the phrase “I frequently remind my coworkers to give their thoughts” showed the highest mean (3.20) with SD (1.02) and took in the first rank in classification. While the phrase “I try to remind everyone how much time we have left to finish our reading” showed the lowest mean (1.67) with SD (1.11) and took in the last rank in classification. Therefore, the results presented a high level of Cooperative Inquiry-Based Strategy application among EFL students. The overall means of all items were high reached (2.60) which demonstrate a significant impact of the cooperative inquiry-based strategy on EFL students' reading comprehension abilities.

## 7.2. Results for the second Question

- What is the effect of using a Cooperative Inquiry-Based Strategy on development of EFL University students' reflective thinking skills?

**Table (3):showed the Reflective Thinking Skills among EFL students**

Items	No	Mean	SD	Agreement Degree	Rank
<b>Reflective Thinking Skills</b>					

I can work on various reading exercises without stopping to think about what I'm doing.	50	2.80	1.30	High	5
I occasionally wonder how my classmates enhance their reading comprehension and strive to come up with a better method.	50	2.72	0.99	High	11
To execute reading comprehension, I prefer to use cooperative inquiry rather than dismissing various approaches used by others.	50	2.30	0.89	Moderate	14
In order to do practical tasks, I need to understand the reading comprehension activities presented by the instructor.	50	2.79	0.95	High	6
I frequently evaluate my reading abilities to determine whether I can improve.	50	2.25	0.99	Moderate	15
I have to continually think about the reading activities I am doing.	50	3.2	1.01	High	1
I often assess my reading performance in order to learn from it and better my subsequent performance.	50	2.21	1.22	Moderate	16
I'm always thinking about the reading tasks I've accomplished.	50	3.1	1.03	High	2
In my thoughts, I frequently replay how I acted in a previous situation.	50	3	0.89	High	3
I frequently find myself reconsidering my actions.	50	2.20	0.97	Moderate	17

It is simple for me to block off unpleasant thoughts.	50	2	1.01	Moderate	19
I prefer to communicate my thoughts with a variety of justifications.	50	2.73	0.98	High	10
I don't spend much time reflecting on my embarrassing and ineffective situations.	50	2.10	0.96	Moderate	18
Reflecting about whatever circumstances occur in my life does not appeal to me.	50	2.75	1.05	High	9
Reflecting about whatever circumstances occur in my life does not appeal to me.	50	1.95	1.20	Moderate	20
During the explanation, I uncovered flaws in what I previously thought was correct.	50	1.91	1.01	Moderate	21
My introspective or self-reflective thinking methods are very important to me.	50	2.9	1.11	High	4
Self-analysis of situations is something I value highly.	50	2.31	0.94	Moderate	13
To comprehend the nature and meaning of things, I prefer to rely on evidence and proofs.	50	2.77	0.91	High	8
I frequently employ inventive solutions to difficulties that arise in my daily life.	50	2.71	0.89	High	12
I enjoy analyzing and understanding the rationale for what I do from various perspectives.	50	2.78	1.01	High	7

Table (3) showed the Reflective Thinking Skills among EFL students. It showed that the phrase “I have to continually think about the reading activities I am doing.” showed the highest mean (3.20) with SD (1.01) and took in the first rank in classification. While the phrase “During the explanation, I uncovered flaws in what I previously thought was correct” showed the lowest mean (1.91) with SD (1.01) and took in the last rank in classification. Therefore, the results presented high Reflective Thinking Skills among EFL students.

**Table (4): Effect of using Cooperative Inquiry-Based Strategy on EFL University students' reflective thinking skills**

Items	No	Mean	SD	Agreement Degree	Rank
<b>Cooperative Inquiry-Based Strategy</b>					
Reflective Thinking skills after using Cooperative Inquiry-Based Strategy					
I make an effort to ensure that we establish learning objectives and schedule time for various activities.	50	2.70	0.99	High	4
I frequently skim over the activities to see how they are laid out.	50	2.81	1.02	High	3
I frequently consider English learning tasks and determine what I should learn from them.	50	2.65	1.11	Moderate	5
I aim to ensure that we all work hard to attain our objectives.	50	3.1	0.89	High	1
I become bored easily and quit before we finish what we set out to do.	50	1.67	0.97	Moderate	6

Even if I don't enjoy what we're doing, I strive hard to perform well.	50	2.9	0.89	High	2
<b>Total</b>	<b>50</b>	<b>2.8</b>	<b>0.95</b>	<b>High</b>	<b>1</b>

Table (4) illustrated the application of Cooperative Inquiry-Based Strategy among EFL students. It showed that the phrase “I aim to ensure that we all work hard to attain our objectives” showed the highest mean (3.1) with SD (0.89) and took in the first rank in classification. While the phrase “I become bored easily and quit before we finish what we set out to do” showed the lowest mean (1.67) with SD (0.97) and took in the last rank in classification. Therefore, the results presented a high level of Cooperative Inquiry-Based Strategy application among EFL students. The overall means of all items were high reached (2.8) which indicate a significant effect of Cooperative Inquiry-Based Strategy on reflective thinking skills among EFL students.

**Table (5): Correlation between Cooperatives Inquiry-Based Strategy and both Reading comprehension abilities and Reflective thinking skills**

Variable		Reading comprehension abilities	Reflective thinking skills	Cooperative Inquiry-Based Strategy
<b>Reading comprehension abilities</b>	Pearson Correlation	1	1	0.312*
	Sig. (1-tailed)			0.37
	N	50	50	50
<b>Reflective Thinking Skills</b>	Pearson Correlation	1	1	0.293*
	Sig. (1-tailed)			0.36
	N	50	50	50

<b>Cooperative Inquiry-Based Strategy</b>	Pearson Correlation	0.312*	0.293*	1
	Sig. (1-tailed)	0.37	0.36	
	N	50	50	50

\* The correlation is significant at 0.05 level

Table (5) showed the relationship between Cooperative Inquiry-Based Strategy and both Reading comprehension abilities and Reflective thinking skills. It showed that the coefficient correlation between Cooperative Inquiry-Based Strategy and Reading comprehension abilities was (0.312), and the significance level (0.37). Therefore, there is a statistically significant relation between the Cooperative Inquiry-Based Strategy and Reading comprehension abilities at the level of significance ( $P < 0.05$ ). It also showed that the coefficient correlation between Cooperative Inquiry-Based Strategy and Reflective thinking skills were (0.293), and the significance level (0.36). Therefore, there is a statistically significant relation between the Cooperative Inquiry-Based Strategy and Reflective thinking skills at the level of significance ( $P < 0.05$ ).

## 7. Discussion:

One of the most well-known scientific education techniques, inquiry-based learning, aims to solve an issue by conducting suitable studies (Aditomo et al., 2013). As a consequence, inquiry-based learning encourages the growth and application of higher-order thinking skills like searching, inquiring, evaluating, correlating, and analyzing. Cooperative learning, according to Korkman and Metin (2021, p. 2), entails students working together and in workgroups to attain a common objective and caring about each other's success. Cooperative learning is defined as a method of assisting students in socializing, improving communication skills, and forming an in-group relationship.

Considering that reading regularly is the most efficient method to increase one's vocabulary, it's not surprising that children with a broad vocabulary are also great readers. Raja'a (2018, p. 40) elaborates on this idea, arguing that extensive reading improves one's chances of succeeding as a learner. He claims that exact extraction is essential for the work at hand, and also that skilled readers can take use of this ability. Another advantage of reading would be that it enhances one's creative abilities. Reading encourages children to increase their ability to construct distinct

characters or imagine scenes, which is in stark contrast to what happens in movies, in which the producer has complete control.

The current goals of the study are to identify the reading comprehension and reflective thinking skills that EFL require. As well as using cooperative inquiry-based strategy for developing English as a foreign language in University students' reading comprehension skills, to realize and evaluate the accuracy' reflective thinking, and to enhance EFL reading comprehension skills.

Tables (1) showed that there is a high reading comprehension abilities among EFL students. This conclusion is in line with Hamaad and Ibrahim's (2020), who discovered that there are high reading comprehension abilities among EFL students. Furthermore, in an Iranian L2 classroom, Bassiri (2012) evaluated the impact of scaffold on reading comprehension, perspective, and motivation.

Tables (1) showed that the Cooperative Inquiry-Based Strategy has a significant impact on EFL students' reading comprehension skills. In the same context, Abdelhalim (2017) evaluated the influence of new collaborative inquiry-based teaching strategies on boosting reading comprehension and participation among Saudi university EFL students. The paired sample t-test was used to compare the experimental group's pre- and post-performance on the reading comprehension assessment. The findings revealed a statistical significant difference in the reading comprehension so each reading comprehension skills between experimental group's mean pre-post test scores and the control group's mean pre-post test scores at (0.01) level between the experimental group's mean pre-post test scores and the control group's mean pre-post test scores.

Tables (2) showed that there is a high Reflective Thinking Skills among EFL students. There is a significant effect of Cooperative Inquiry-Based Strategy on reflective thinking skills among EFL students. Semerci and Duman (2012) found that Cooperative Inquiry-Based Strategy had a significant influence on Reflective thinking skills among EFL students. The findings of Albakri and Omar (2016) case study were similar to those of a case study conducted at a secondary school to employ thinking maps in English instruction. Interviews, observations, and field notes have been used to acquire information. According to the results, using thinking maps through literature courses allows the teacher to participate in critical thinking. In addition to thinking,

instructors in literature classes used Reader-Response methods and maps to foster critical thinking.

The study concludes that, as shown in tables 3, there are statistical significant relations between cooperative inquiry-based Strategies on developing EFL reading comprehension. To improve the reading comprehension abilities and interests of the students in a Hong Kong primary school, Chu et al. (2011) used a case study approach and collaboration between three types of instructors and the school library. The impact of students' attitudes and self-perceived talents on their reading skills was discovered. Finally, the children's reading comprehension, vocabularies, and speed had all increased.

The study's findings (tables 3) showed that there is statistical significant relation between cooperative inquiry-based Strategies on developing EFL reflective thinking skills. According to Erdogan's (2019) research, Cooperation and critical thinking abilities, will become increasingly vital in 2020. The purpose of his study is to explore how seventh-grade students' reflective thinking in the classroom is affected by cooperative learning mixed with reflective thinking skills. A significant difference was found between the corrected post-test mean scores. Based on these results, cooperative learning supported by reflective thinking activities can be said to have a positive effect on students' critical thinking skills.

## **8. Conclusion:**

The present paper has reached for a promising conclusion regarding the use of the cooperative inquiry-based Strategy which has some substantial positive outcomes on improving EFL reading comprehension skills and students independent work. The strategy motivates learners to evaluate personal thoughts, educational level, as well as, stimulates learner's engagements inside the class. Eventually, reading comprehension appears to be valuable with its successful results. In addition, the strategy aims to help learners to express personal knowledge, to comprehend notions properly, and to strengthen individual's abilities to think critically. Moreover, having Instructors involvement in teaching and learning procedure seems to be fruitful especially in enhancing learner's understanding of the material and lessons. Therefore, the current paper comes up with several recommendations in response to the earlier results. Initially, the English schoolteacher who instructs learners or others with similar individual factors might use a range of objects, media, and tasks for the participants to encourage greater participation as well as enthusiasm in the academic learning experience. Secondly, by the adaptation of such strategy in teaching it

appears simpler for learners to read and comprehend the material. As they progress, students can make connections between the learning content and own prior knowledge, and add new information. Thirdly, the strategy can be utilized as effective reading comprehension technique by the instructor to teach reading while students grasp information. Lastly, overall findings of this paper contribute to the model of teaching reading that have used such productive educational productive strategy. Consequently, it can be advised for future researchers who are interested in building learners reading comprehension.

The current paper, suggest that instructors be cautioned to recruit inquiry - based strategy in teaching and reading comprehension skills, by holding academic courses and workshops for teachers of English specifically to apply inquiry based strategy to improve the classroom instruction and build learners reading proficiency. Empirical research regarding the effects of the inquiry learning technique on several aspects of learning the English language, as well as other academic topics is also recommended.

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