

# Using “Predict, Organize, Search, Summarize, and Evaluate” Strategy in Improving Students’ Reading Comprehension

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**Abstract**—The current study looked at how the "predict, organize, search, summarize, and evaluate" (POSSE) strategy affected the reading comprehension of Jordanian EFL<sup>1</sup> students. The participants, 40 female tenth graders from Kufir Youba Secondary School for Girls, Irbid, Jordan, were divided into a control and an experimental group of 20 students each. The POSSE strategy was implemented in teaching reading comprehension to the experimental group, whereas the conventional method was utilized in teaching the control group. A quasi-experimental design was followed to collect data. A reading comprehension pre-posttest was developed for both study groups to meet the study’s purpose. The study's findings revealed that students in the experimental group outperformed those in the control group on the post-test. In light of the current study and its results, the researcher recommended utilizing the POSSE strategy to improve students’ reading comprehension.

**Index Terms**—EFL students, POSSE strategy, reading comprehension, Yarmouk University

## I. INTRODUCTION

Reading is "a complex process by which a reader reconstructs, to some degree, a message encoded by a writer in graphic language" (Goodman, 1970, p. 5). Students must understand what the text is trying to say in order to get the information they need and learn. Anderson (1999) and Grellet (1981) say that reading is a process in which the reader interacts with the written text to get the writer's message. It, further, helps students get better at school and learn languages. It is fun, increases their knowledge, improves their spelling and vocabulary, teaches them facts and important ideas, and gives them more chances to learn (Hamdan, 1991). It is also a crucial skill that helps students learn and master other language skills (Harmer, 2007).

Reading comprehension, according to Loca (2016), is "the process of constructing meaning through the coordination of several complex processes" (p. 117). Reading comprehension is the ability to understand and connect with a text by combining a number of complex skills such as fluency, vocabulary, and word reading. Similarly, it is a complex process that must build on what the reader already knows (Al-Rimawi & Al-Masri, 2022). It also entails grasping the overall meaning of what is said in a text, whether said directly or indirectly (Blachowicz & Ogle, 2008).

The activation of the pupils' prior knowledge depends on three levels of reading comprehension, which are: literal comprehension, which leads readers to obtain a direct meaning and determine specific details without activating their previous knowledge. However, inferential comprehension requires readers to find an implicit meaning and draw conclusions by stimulating their background knowledge. Concerning critical comprehension, readers can assess a text's elements and a writer's intent, style, and skill based on their prior knowledge (Burns et al., 1999).

The acronym of the POSSE strategy is Predict, Organize, Search, Summarize, and Evaluate (Englert & Mariage, 1991). POSSE aims to develop learners’ reading comprehension "by predicting what the text is about, organizing the students' background knowledge about the text, searching and summarizing the main ideas of a text, and evaluating the concept map before and after reading" (Suprida, 2020, p. 15).

The POSSE strategy helps learners link their predictions with the content of text. It is useful for learners since it involves activation of prior knowledge, visual aids, semantic mapping, and self assessment. It can be applied during the three stages of reading: pre-reading, while-reading, and post-reading (Arianti & Tiarina, 2014).

Researchers like Aprilia (2015), Andani (2017), Englert and Mariage (2008), Harisma and Karimah (2020), and Ichiarti (2020), have outlined some benefits of the POSSE strategy in teaching reading comprehension. These benefits include: (1) helping students figure out what will happen and make predictions about a text; (2) giving students a way to organize their predictions and connect them to information in a text through semantic mapping; (3) teaching a variety of

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<sup>1</sup> EFL: English as a Foreign Language

reading skills and strategies, such as brainstorming, semantic mapping, organizing, comparing, searching, evaluating, predicting, summarizing, and asking questions; and (4) helping students reach a higher level of reading.

Many students in Jordan have trouble understanding English texts (Alkhalaf, 2011; Fraihat, 2003; Jarrah, 2008). Many Jordanian researchers (such as Fraihat, 2018; Huwari, 2019; Migdadi & Baniabdelrahman, 2016; Radaideh et al., 2020; and Al-Awamleh et al., 2021) have said that the student doesn't understand what he or she is reading well enough. Similarly, Amoush (2012) said that although reading comprehension is important, students' reading comprehension is still low and falls short of expectations. Also, teachers are hesitant to use different strategies or methods that are similar to what they usually do (Hassan, 2019). Because of this, the current study could help Jordanian teachers improve and EFL students understand what they are reading better.

The present study's purpose focuses on determining how the POSSE strategy can develop the reading comprehension of Jordanian female EFL students in the tenth grade. To achieve this purpose, the present study attempts to respond to the study's question: "*Are there any statistically significant differences (at  $\alpha=0.05$ ) in female tenth-grade students' reading comprehension (literal, inferential, critical) that can be attributed to the instructional way (POSSE strategy vs. conventional)?*"

The present study is significant for students because applying the steps of the POSSE strategy could improve their reading comprehension. Furthermore, this study is vital for teachers because it could enable them to solve the problems related to students' reading comprehension, present an effective explanation of the reading texts, and develop the process of teaching reading. Moreover, this study is vital for researchers because they could use it as a reference to carry out reading comprehension research and increase their knowledge of teaching strategies.

## II. LITERATURE REVIEW

### A. Reading Comprehension

Reading comprehension is the ability to understand meaning by interacting between the reader and the reading text and connecting prior knowledge with an overall understanding of the text (Basaraba et al., 2013). Literal comprehension, inferential comprehension, critical comprehension, and appreciative comprehension are the levels of reading comprehension (Barrett, 1972; Zintz, 1978). This study only found three levels of comprehension: literal, inferential, and critical.

Literal comprehension requires the explicit comprehension of a text's content. Further, understanding content necessitates finding out a sequence of events, main and supporting ideas, and answering questions such as where, who, when, and how without completely understanding the text (Caldwell, 2008).

Inferential comprehension entails understanding text implicitly. It involves the deep use of background knowledge to expect results, conclude the author's implicit message in a text, identify the writer's purpose, and make inferences and predictions (Bilbao et al., 2016).

Critical comprehension refers to assessing a text in terms of who wrote it, his or her style, and goal. It includes skills like: 1) assessing the accuracy of the content of a text using one's prior knowledge and knowledge acquired from other texts; 2) inferring the intentions of an author; and 3) differentiating between viewpoints and facts stated in the text (Nuttall, 1996).

### B. POSSE Strategy

Englert and Mariage (1991) designed the POSSE strategy as a reading comprehension strategy to help learners enhance their reading comprehension. POSSE refers to several steps, as follows: *Predict*: to motivate learners' background knowledge by brainstorming ideas about a given text. To do so, learners utilized pictures, images, a text's title, and the headings, and they sometimes read the first sentence of a paragraph. *Organize*: Students used a concept map to organize their ideas while referencing a text. *Search*: learners read a text to seek the main ideas and supporting details for each paragraph, as well as any textual structures. *Summarize*: students summed up a text. *Evaluate*: learners evaluated and compared their predictions with the information mentioned in a text.

Setyowati (2017) studied how the POSSE strategy affected eighth-grade students' ability to comprehend what they were reading. 78 participants at MTS, Miftahul Ulum Balong Ponorogo, Indonesia, were randomly distributed into a control group that followed the lecture strategy and an experimental group that utilized the POSSE strategy. To achieve the study's goal, the researcher created a pre-post test that was given to study groups. The study's findings showed that the POSSE strategy helped Indonesian eighth-grade students enhance their reading comprehension.

Hajisamae (2020) investigated how the POSSE strategy on Google Classroom influenced the reading comprehension of students in the eleventh grade at Thailand's Khanaratsadon Yala senior high school. The researcher created a pre-test and post-test for measuring reading comprehension with different treatments, following a quasi-experimental design. A total of 86 participants were chosen as a sample and randomly assigned to one of two groups: 43 in the experimental group and 43 in the control group. The results demonstrated that the POSSE strategy implemented in Google Classroom has a beneficial impact on the eleventh graders' reading comprehension.

Ulfa and Juliari (2020) examined the impact of applying the POSSE strategy on enhancing the reading comprehension of 10<sup>th</sup> graders. 35 participants made up the study sample, including 30 female learners and 5 male

learners from SMK PGRI 2 Denpasar, Indonesia. Qualitative and quantitative data were extracted in this study. The qualitative data were gathered by examining the outcomes of observation. Pre- and post-test quantitative data were used to compile statistical information. The findings showed that the POSSE strategy effectively promoted the 10<sup>th</sup> graders' reading comprehension. Additionally, utilizing POSSE steps in the teaching and learning process might catch their attention.

Several studies associated with the current study have highlighted that the POSSE strategy is effective in enhancing students' reading comprehension. This is clearly demonstrated by the research of Andani (2017), Aprilia (2015), Hajisamaae (2020), Loca (2016), Maha and Sibarani (2013), Setyowati (2017), Sundari (2012), Ulfa and Juliari (2020).

However, according to the researcher's knowledge and research results, none of the studies reviewed how using the POSSE strategy affected learners' reading comprehension levels, such as literal, inferential, and critical comprehension. Moreover, there were no reviewed studies carried out in Jordan to measure the effect of the POSSE strategy on EFL students' comprehension. Therefore, the current study may be beneficial as it dealt with students' literal, inferential, and critical reading comprehension; in addition, it may be the first study conducted to investigate the effect of the POSSE strategy on the reading comprehension of EFL students in Jordan.

### III. METHODOLOGY

#### A. Design and Variables

The researcher used a quasi-experimental design. The dependent variable was reading comprehension (literal, inferential, and critical), and the independent variable was teaching method (POSSE vs. traditional).

#### B. Participants

Students from the tenth grade at Kufir Youba Secondary School for Girls, which is part of Irbid Directorate of Education in Jordan, participated in the study. Two entire sections out of the school's three sections were chosen at random. After placing the names of the three sections into a basket, a random selection was performed, and only two of the sections were chosen to take part in the investigation at hand. It was decided by tossing a coin to designate the first section as an experimental group and the second one as a control group. Each group includes 20 students.

All of the participants have been learning English for ten years, and they are now sixteen years old. The experimental group was taught using the POSSE method, while the control group was taught using a more traditional method. The students in the tenth grade were chosen because, in comparison to students in other grades at the same school, they have a more advanced knowledge of the language, both in terms of their prior experiences and their educational level. As a consequence of this, utilizing POSSE as a reading strategy may affect a positive change in their level of reading comprehension.

#### C. Instrument

The researcher prepared a reading comprehension pre-posttest. Reading comprehension can be broken down into three levels: literal, inferential, and critical. This test measures all three. In accordance with the reading material presented in *Action Pack 10*, the researcher designed both multiple-choice and open-ended questions for the reading comprehension pre-post test. There were nine questions overall, with a total of fifteen items.

These questions were categorized into one of three different levels. The first level, which measured the inferential level, consisted of seven questions and accounted for 40percentof the questions' overall number. The second level assessed the literal level and consisted of a total of six questions, which was equivalent to 35percentof all questions. The third level assessed the crucial level and consisted of two questions, which together accounted for 25 % of the total questions.

The reading comprehension post-test pursued to see if there were any differences in reading comprehension between the tenth-grade students that could be attributed to the use of the POSSE strategy both before and after the implementation of the educational program. The use of the POSSE strategy may be responsible for these differences.

#### D. Validity and Reliability of Instrument

The validity of the reading comprehension pre-post test was validated by a panel of 12 professionals who served on the jury. This jury was pleasantly asked to evaluate the content of the test as well as whether or not the questions were appropriate for the students' levels. They suggested modifying some of the test questions in order to make them more understandable, as well as ensuring that its content is consistent with the outcomes of the POSSE instructional program. As a result, the examination was altered in response to the suggestions and comments made by the jury.

Twenty students were given the test's pilot version so that its reliability (internal consistency) could be evaluated. The Pearson Correlation Coefficient between a level's overall score and the score of an item was calculated. In addition, the corrected item total correlation was determined between the score of the item and the levels' total score. According to the findings, the Pearson correlation coefficients between the item score and the level's overall score range were more significant and higher than the threshold point (i.e., 0.35). In addition to this, the corrected item total correlation values were higher than the threshold point (0.40). As such, the test is valid.

To evaluate test reliability, Cronbach alpha coefficients were extracted. Results revealed that the Cronbach alpha coefficients for the inferential, literal, critical, and overall tests were 0.91, 0.90, 0.86, and 0.91, respectively. Since the reliability coefficients are above the threshold value (0.70), the test is reliable and applicable to assessing students' reading comprehension.

#### E. The POSSE-Based Instructional Program

To fulfill the goal of this study, the researcher created a POSSE instructional program for teaching the POSSE strategy to tenth graders in order to enhance their reading comprehension. Before implementing the POSSE strategy, the researcher analyzed the reading activities from Modules 1, 2 (Units 1 and 2), and 3 (Units 3 and 4) of the student's book in *Action Pack 10* and redesigned them to fit for the instructional program based upon the POSSE strategy, which involves the 5 sequential steps of predict, organize, search, summarize, and evaluate.

The POSSE strategy used in the instructional program targets levels of *literal, inferential, and critical* reading comprehension as a means to improve reading comprehension in the experimental group. The POSSE instructional program has been in place for eight weeks. It ran from September 7, 2022, to November 10, 2022.

##### a) Procedures for Designing the Instructional Program

The researcher followed the suitable procedures in order to design the instructional program:

- 1- analyzing the reading activities of the student's book in *Action Pack 10*;
- 2- determining the reading of every lesson;
- 3- redesigning reading activities of the first three Modules in light of the POSSE strategy; and
- 4- designing worksheets.

##### b) Validity of the Instructional Program

The POSSE instructional program was presented by the researcher to 12 specialists in English instruction to ascertain its validity. Three professors, six instructors, a supervisor of English language instruction, and two teachers made up the jury. The researcher kindly requested that they review the instructional program's content and provide any feedback or suggestions regarding the program that was distributed. The jury's comments and suggestions were taken very seriously and used to improve the quality of the teaching program, make it work for all levels of students, and help students understand what they are reading better.

#### F. Data Analysis

The following statistical analyses were conducted to answer the study question,: (1) one-way analysis of covariance (one-way ANCOVA) was utilized to examine the influence of instruction way (POSSE vs. conventional) on overall reading comprehension levels; and (2) one-way multivariate analysis of covariance (one-way MANCOVA) was used to investigate the influence of teaching way (POSSE vs. conventional) on reading comprehension levels and POSSE steps, followed by univariate analysis.

## IV. RESULTS

To response the question of this study, the researcher followed the procedures below:

1. The means and standard deviations of pre- and post-test results in overall reading comprehension test for the two groups have been calculated, it is clear from Table 1.

TABLE 1  
RESULTS OF MEANS AND STANDARD DEVIATION OF THE OVERALL READING COMPREHENSION FOR THE PRE-TEST AND POST-TEST

Reading Comprehension Level	Group	Pre-Test		Post-Test	
		Mean	S.D	Mean	S.D
Overall	Control	9.45	3.78	10.65	4.68
	Experimental	8.75	3.01	16.40	2.96
	Total	9.10	3.39	13.53	4.84

Table 1 shows the two groups' mean scores are different in post-test performance for overall reading comprehension. It is noticed that the experimental group attains the best mean scores in overall reading comprehension as assessed by the reading comprehension post test.

A one-way analysis of covariance (ANCOVA) was employed to manifest a statistical effect of the instructional way (i.e., POSSE strategy and conventional method) on the overall reading comprehension after controlling the effect of the overall reading comprehension pre-test scores, as shown in Table 2.

TABLE 2  
RESULTS OF ONE-WAY ANCOVA TO ASSESS THE EFFECT OF INSTRUCTIONAL WAY ON THE OVERALL READING COMPREHENSION AFTER CONTROLLING THE EFFECT PRE-TEST SCORES

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Pre-Test	164.854	1	164.854	14.575	.000	.283
Group	377.396	1	377.396	33.366	.000	.474
Error	418.496	37	11.311			
Corrected Total	913.975	39				

Table 2 shows noticeable differences in the students' overall reading comprehension between the groups (treatment and control) in favour of the treatment group. An instructional approach explained 47.4% of the variance in overall reading comprehension, according to a partial eta squared value of 0.474.

In addition, adjusted and unadjusted means of the overall reading comprehension of study groups have been calculated. Table 3 shows the overall reading comprehension means, standard errors, and standard deviations for each study group before and after the overall reading comprehension pre-test scores were taken out.

TABLE 3  
ADJUSTED AND UNADJUSTED MEANS OF THE OVERALL READING COMPREHENSION

Group	Unadjusted Mean		Adjusted Mean	
	Mean	S.D.	Mean	Std. Error
Control	10.65	4.68	10.44	.754
Experimental	16.40	2.96	16.61	.754

As shown in Table 3, a difference virtually appears between the two groups in terms of the overall reading comprehension after differences in the pre-test scores of overall reading comprehension were taken into account. As such, the POSSE strategy enhanced overall reading comprehension.

1. The means and standard deviations of pre- and post-test scores in reading comprehension levels for the two groups were extracted, as shown in Table 4.

TABLE 4  
MEANS AND STANDARD DEVIATION OF READING COMPREHENSION LEVELS FOR THE PRE-TEST AND POST-TEST

Reading Comprehension Level	Group	Pre-Test		Post-Test	
		Mean	S.D	Mean	S.D
Inferential	Control	3.95	1.64	4.35	1.84
	Experimental	3.65	1.69	6.20	1.01
	Total	3.80	1.65	5.28	1.74
Literal	Control	4.50	1.99	4.95	2.14
	Experimental	4.30	1.34	6.20	1.01
	Total	4.40	1.68	5.58	1.77
Critical	Control	1.00	1.08	1.35	1.46
	Experimental	.80	.95	4.00	1.52
	Total	.90	1.01	2.68	1.99

According to Table 4, differences were observed among the mean scores of post-test performance in levels of reading comprehension. The post-performance scores are higher in the experimental group than in the control group, as measured by the post-test of reading comprehension.

After accounting for the impact of the pre-test scores, a one-way multivariate analysis of covariance (one-way MANCOVA) with a multivariate test (Hotellings' trace) was conducted to evaluate the impact of the instructional way (i.e., POSSE strategy and conventional method) on the linear composite of reading comprehension levels. The results are illustrated in Table 5.

TABLE 5  
RESULTS OF MULTIVARIATE TEST (HOTELLINGS' TRACE) FOR THE EFFECT OF INSTRUCTIONAL WAY ON THE READING COMPREHENSION LEVELS

Effect	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Teaching strategy	1.425	15.671	3.000	33.000	.000	.588

Table 5 shows the important influence of the instructional way. That reveals that the linear composite of three comprehension levels between the two groups was different. 58.8% of the variance in the composite of comprehension levels, as shown by the partial eta square value of 0.588, could be attributed to the instructional strategy.

Because an instructional method has a significant effect on reading comprehension levels, a follow-up univariate analysis (tests of between-subject effects) was performed (see Table 6).

TABLE 6  
THE EFFECT OF THE INSTRUCTIONAL WAY ON READING COMPREHENSION LEVELS AFTER CONTROLLING THE EFFECT OF PRE-TEST SCORES

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Squared	Eta
Pre-inferential	Inferential	.003	1	.003	.002	.966	.000	
	Literal	.888	1	.888	.453	.505	.013	
	Critical	2.605	1	2.605	1.519	.226	.042	
Pre-literal	Inferential	5.258	1	5.258	2.994	.092	.079	
	Literal	19.500	1	19.500	9.959	.003	.222	
	Critical	16.227	1	16.227	9.460	.004	.213	
Pre-critical	Inferential	7.860	1	7.860	4.477	.042	.113	
	Literal	6.217	1	6.217	3.175	.083	.083	
	Critical	2.900	1	2.900	1.691	.202	.046	
Teaching strategy	Inferential	39.443	1	39.443	22.463	.000	.391	
	Literal	19.418	1	19.418	9.918	.003	.221	
	Critical	74.263	1	74.263	43.293	.000	.553	
Error	Inferential	61.456	35	1.756				
	Literal	68.529	35	1.958				
	Critical	60.038	35	1.715				
Corrected total	Inferential	117.975	39					
	Literal	121.775	39					
	Critical	154.775	39					

Table 6 demonstrates that significant differences are statistically noticed among the participant students at each of the three levels, with participants preferring the experimental group. The partial eta squared values of inferential, literal, and critical were 39.1, 22.1, and 55.3, respectively. This means that the instructional method explained 39.1%, 22.1%, and 55.3% of the variance in reading comprehension levels (inferential, literal, and critical, respectively).

Three reading comprehension levels' adjusted and unadjusted means were also determined for the participants. Table 7 shows means, standard errors, and standard deviations for two groups at three levels of reading comprehension before and after controlling the levels' pre-test scores.

TABLE 7  
ADJUSTED AND UNADJUSTED MEANS OF READING COMPREHENSION LEVELS

Dependent Variable	Group	Unadjusted Mean		Adjusted Mean	
		Mean	S.D	Mean	S.E
Inferential	Control	4.35	1.84	4.28	.297
	Experimental	6.20	1.01	6.28	.297
Literal	Control	4.95	2.14	4.87	.314
	Experimental	6.20	1.01	6.28	.314
Critical	Control	1.35	1.46	1.30	.294
	Experimental	4.00	1.52	4.05	.294

Table 7 reveals that differences are no longer still after they are controlled through pre-test scores between control and experimental groups at different levels (i.e., inferential, literal, and critical). As a result, the POSSE strategy assisted participants in performing better at the literal, inferential, and critical levels.

The standard deviations and means of pre-post scores in POSSE strategy steps (predict, organize, search, summarize, and evaluate) for the two groups were measured, as seen in Table 8.

TABLE 8  
MEANS AND STANDARD DEVIATION OF POSSE STRATEGY STEPS FOR PRE-TEST AND POST-TEST

POSSE Strategy Steps	Group	Pre-Test		Post-Test	
		Mean	S.D	Mean	S.D
Predict	Control	2.90	1.25	2.95	1.57
	Experimental	2.30	1.45	4.75	1.07
	Total	2.60	1.37	3.85	1.61
Organize	Control	1.05	.83	1.40	.68
	Experimental	1.35	.67	1.45	.60
	Total	1.20	.76	1.43	.64
Search	Control	3.80	1.36	4.10	1.48
	Experimental	4.10	1.21	4.95	.39
	Total	3.95	1.28	4.53	1.15
Summarize	Control	.70	.98	.85	.99
	Experimental	.20	.52	1.25	.85
	Total	.45	.81	1.05	.93
Evaluate	Control	1.00	1.08	1.35	1.46
	Experimental	.80	.95	4.00	1.52
	Total	.90	1.01	2.68	1.99

Table 8 exhibits observed differences among the present mean scores of two groups in post-test performance for POSSE strategy steps. The reading comprehension test was utilized to measure the POSSE strategy steps and conclude that the post-performance scores that an experimental group got were superior to those of a control group.

To assess the effect of instructional ways (i.e., POSSE strategy and conventional) on the linear combination of the POSSE strategy steps, a one-way multivariate analysis of covariance (one-way MANCOVA) with a multivariate test (Hotellings' trace) was carried out after considering the effect of pre-test scores. See the results shown in Table 9.

TABLE 9  
RESULTS OF MULTIVARIATE TEST (HOTELLINGS' TRACE) FOR THE EFFECT OF INSTRUCTIONAL WAY ON POSSE STRATEGY STEPS

Effect	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Teaching strategy	1.234	7.158	5.000	29.000	.000	.552

Table 9 shows the main effect of the instructional method was considerable and significant. This demonstrates that the linear composite of the POSSE strategy steps differs between the two groups. The partial eta square value of 55.2 demonstrates that the instructional way may contribute to 55.2% of the variance in the composite of the POSSE strategy steps.

Because the effect of the instructional method on the combination of the POSSE strategy steps is significant, further univariate analysis (tests of between-subject effects) was performed, as shown in Table 10.

TABLE 10  
THE EFFECT OF THE INSTRUCTIONAL WAY ON THE POSSE STRATEGY STEPS AFTER CONTROLLING THE EFFECT OF PRE-TEST SCORES

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Squared	Eta
Pre- (covariate)	Predict	1.184	1	1.184	.754	.391	.022	
	Organize	.410	1	.410	1.142	.293	.033	
	Search	3.127	1	3.127	3.745	.062	.102	
	Summarize	.006	1	.006	.008	.931	.000	
	Evaluate	2.994	1	2.994	1.666	.206	.048	
Pre-organize (covariate)	Predict	4.100	1	4.100	2.611	.116	.073	
	Organize	.199	1	.199	.552	.463	.016	
	Search	.341	1	.341	.409	.527	.012	
	Summarize	.421	1	.421	.536	.469	.016	
	Evaluate	.000	1	.000	.000	.993	.000	
Pre-search (covariate)	Predict	.420	1	.420	.268	.608	.008	
	Organize	.044	1	.044	.123	.728	.004	
	Search	5.913	1	5.913	7.081	.012	.177	
	Summarize	.258	1	.258	.329	.570	.010	
	Evaluate	7.151	1	7.151	3.980	.054	.108	
Pre-summarize (covariate)	Predict	2.909	1	2.909	1.853	.183	.053	
	Organize	.374	1	.374	1.040	.315	.031	
	Search	.937	1	.937	1.122	.297	.033	
	Summarize	1.292	1	1.292	1.646	.208	.048	
	Evaluate	4.829	1	4.829	2.688	.111	.075	
Pre-evaluate (covariate)	Predict	1.298	1	1.298	.827	.370	.024	
	Organize	2.168	1	2.168	6.032	.019	.155	
	Search	1.990	1	1.990	2.383	.132	.067	
	Summarize	.955	1	.955	1.217	.278	.036	
	Evaluate	2.686	1	2.686	1.495	.230	.043	
Group	Predict	23.919	1	23.919	15.233	.000	.316	
	Organize	.524	1	.524	1.457	.236	.042	
	Search	3.903	1	3.903	4.674	.038	.124	
	Summarize	1.885	1	1.885	2.401	.131	.068	
	Evaluate	55.619	1	55.619	30.957	.000	.484	
Error	Predict	51.815	33	1.570				
	Organize	11.863	33	.359				
	Search	27.557	33	.835				
	Summarize	25.903	33	.785				
	Evaluate	59.290	33	1.797				
Corrected total	Predict	101.100	39					
	Organize	15.775	39					
	Search	51.975	39					
	Summarize	33.900	39					
	Evaluate	154.775	39					

Table 10 shows that statistical differences between the participant groups are significant in the three POSSE strategy steps (predict, search, and evaluate), with the experimental group benefiting. 31.6, 12.4, and 48.4 were partial eta squared values for *predict*, *search*, and *evaluate*, respectively. This means that the instructional way explained 31.6%,

12.4%, and 48.4% of the variance in *predict*, *search*, and *evaluate*, respectively. In contrast, the differences in *organizing* and *summarizing* between both groups were not significant.

Adjusted and unadjusted means of three POSSE strategy steps were obtained for the groups of the study. Table 11 clarifies groups' means, standard errors, and standard deviations in POSSE strategy steps before and after taking the effect of pre-test scores into account.

TABLE 11  
ADJUSTED AND UNADJUSTED MEANS OF THE POSSE STRATEGY STEPS

Dependent Variable	Group	Unadjusted Mean		Adjusted Mean	
		Mean	SD	Mean	S.E
Predict	Control	2.95	1.57	2.97	.301
	Experimental	4.75	1.07	4.73	.301
Organize	Control	1.40	.68	1.29	.144
	Experimental	1.45	.60	1.56	.144
Search	Control	4.10	1.48	4.17	.219
	Experimental	4.95	.39	4.88	.219
Summarize	Control	.85	.99	.80	.213
	Experimental	1.25	.85	1.30	.213
Evaluate	Control	1.35	1.46	1.33	.322
	Experimental	4.00	1.52	4.02	.322

Table 11 shows the differences are still present between the two groups in *predict*, *search*, and *evaluate*, although the differences were considered in the pre-test scores. Therefore, the POSSE strategy positively changed students' performance in *predict*, *search*, and *evaluate* steps.

## V. DISCUSSION

The study question sought to determine whether there would be any statistically significant differences in the post-test literal, inferential, and critical levels of Jordanian EFL tenth-grade students that could be attributed to the instructional method at  $\alpha = 0.05$  (POSSE strategy vs. conventional method).

The findings of the study show that the significance values agree with the fact that the POSSE strategy had an efficient impact on each level of reading comprehension. As a consequence of this, participants who followed the POSSE strategy in their learning accomplished better in the post-test regarding their overall performance as well as their performance on the literal, inferential, and critical levels compared to those who utilized the conventional method. In addition, the findings indicate that the application of the POSSE strategy develops the students' level of reading comprehension.

These results are in line with those found in earlier studies, such as those conducted by Andani (2017), Aprilia (2015), Hajisamaae (2020), Maha and Sibarani (2013), Setiadi (2019), and Sundari (2019). The findings are also consistent with previous research (e.g., Harisma & Karimah, 2020; Ichtiarti, 2020; Loca, 2016; Mertosono et al., 2020; Setyowati, 2017; Ulfa & Juliari, 2020). These studies demonstrated that the POSSE strategy is an appropriate teaching strategy for the purpose of enhancing students' abilities to comprehend what they read. The research's results indicated that the POSSE strategy influenced the reading comprehension of treatment group students. As a consequence of this, these findings may increase the generalizability of the role that the POSSE strategy plays in enhancing tenth graders' reading comprehension.

Several different factors may have contributed to the experimental group's advancement post-test. One of them could be attributed to the POSSE instructional program's structure, which was designed to be adaptable while still incorporating explicit steps. The interaction between students was significantly improved by this program. They were encouraged to make predictions about the texts that were taken from the student's book based on their background knowledge. Students were able to interact with one another and their teachers thanks to these activities. In addition, the teacher was able to identify areas of difficulty for each student, leading to more individualized instruction and improved academic performance. She was able to have a close interaction with her class when she guided and assisted the students in their discussions regarding the activities (e.g., activating their prior knowledge, using semantic mapping, pair work, and group work).

Additionally, the students' interest was piqued by the POSSE instructional program that was being conducted. For example, they endeavoured to comprehend the activities that comprised the instructional program. Instead of receiving information from their teacher, the students were able to be active and engage in the learning process thanks to this strategy. It was observed that they participated in the discussions, and compared to prior semesters, their level of participation was significantly higher. As a direct result of the increased involvement of the students in the learning process, they not only gained a deeper comprehension of the subject matter but also an improved command of the fundamental concepts.

In addition to this, the POSSE instructional program supplied each student with a POSSE strategy sheet, which was handed out during each individual lesson. The students have the opportunity to comprehend the material and derive needed information from the text, both of which were made possible by the provision of this sheet by a semantic map.

Moreover, it made it possible for them to evaluate the results of the text in light of their predictions, which ultimately led to the formation of a summary and a conclusion.

During classes, worksheets gave the students the opportunity to talk about the reading text that they were currently working on and to apply a series of reading strategies. These reading strategies included the following: predict (guess what the text will be about), organize (arrange their predictions into categories), search (read and determine the most important details of the text), summarize (summarize the text), and evaluate the text (ask questions, compare, clarify, and predict).

Worksheets given out to students as a take-home assignment at the end of each class session are one more factor that may have led to the improvement in reading comprehension seen in the experimental group. Working through these worksheets significantly improved their reading comprehension. They included many different types of reading activities. Reading comprehension questions, for example, covered the levels of reading comprehension on some worksheets (such as worksheets 1 and 3). These questions began at the literal level, moved on to the inferential level, and finally arrived at the more difficult critical level. Others instructed students in contrasting and comparing, matching, summarizing, paraphrasing, and filling out tables. Although the researcher used different kinds of reading activities that students should answer individually at home, many students who were interested in and eager to complete these worksheets completed them before the end of each lesson.

The researcher noticed, in relation to the post-test results, that the students were able to respond to questions about literal comprehension in a clear and precise manner. They did not need to read the entire passage in order to respond to these questions. In addition, the researcher noticed that the students became better at responding to inferential questions over the course of the study. Students were presented with a wide variety of opportunities throughout the POSSE instructional program to answer these questions by making use of their prior knowledge, which is the primary factor that contributed to this improvement. In addition, the researcher noticed a significant improvement in both the participants' level of achievement and their responses to challenging questions. This is because most students eventually learn how to make decisions, have discussions, make comparisons, evaluate the information they are given, and make connections between the text and what they already know.

## VI. CONCLUSIONS

The current study's goal was to explore how the POSSE strategy affected the Jordanian tenth-grade participants' reading comprehension. A POSSE-based instructional program was created and applied to achieve this purpose during the academic year 2022–2023. After applying the POSSE strategy, improvements were observed in the students' reading comprehension level. The findings were presented as follows: (1) Reading comprehension was boosted after a POSSE-based program was introduced. Students were able to practice the steps of the POSSE strategy, which include making predictions before reading a text, organizing those predictions, searching for the supporting and main idea of every paragraph of a text, summarizing what they read, and evaluating their understanding; (2) the literal, inferential, and critical levels all increased after implementing the POSSE-based instructional program; (3) students were more engaged in class after a POSSE-based program was implemented; (4) it was found that teaching reading comprehension using the POSSE strategy helped students do better on the post-test, which shows the program's worth. Depending on the current study's findings, the following recommendations are made:

- EFL textbook designers should integrate the POSSE strategy steps into the students' textbooks and the teacher's book in a clear way by presenting a number of different teaching and learning activities focusing on reading comprehension levels.
- EFL teachers should use the POSSE strategy, which enables their students to comprehend a text effectively and participate in the teaching and learning process.
- The Ministry of Education should think about the benefits of using the steps of the POSSE strategy to teach reading comprehension and train EFL teachers on how to use and activate these steps in their teaching so that they can be put into practice and change the routine of traditional teaching methods.
- Researchers should carry out various studies to determine how the POSSE strategy affects various language skills and how students feel about it, benefit from it, and replicate the findings of this study.

## REFERENCES

- [1] Al-Awamleh, W. J., Bajes, A., Majali, A., & Inshasi, L. (2021). The Impact of Employing Some Learning Strategies to Develop Reading Comprehension Skills of 7<sup>th</sup> & 8<sup>th</sup> Grade Students at King Abdullah II Schools of Excellence in Jordan. *Multicultural Education*, 7(8), 735-743. <https://doi.org/10.5281/zenodo.5331861>
- [2] Alkhawwaldeh, A. (2011). EFL Reading Comprehension Interests Among Jordanian High School Students and Their Relationship with Gender Achievement Level and Academic Stream. *European Journal of Social Sciences*, 232(3), 454-465.
- [3] Al-Rimawi, S., & Al Masri, A. (2022). The Level of Reading Comprehension Skills of Students With Learning Disabilities in Jordan. *Journal of Educational and Social Research*, 12(1), 234. <https://doi.org/10.36941/jesr-2022-0019>
- [4] Amoush, K. (2012). The Effectiveness of Using Semantic Mapping Strategy on Reading Comprehension of Jordanian University Students. *Interdisciplinary Journal of Contemporary Research in Business*, 4(6), 714-729.

- [5] Andani, N. (2017). *Using POSSE (Predict, Organize, Search, Summarize and Evaluate) Strategy to Improve the Students' Reading Comprehension at the Eighth Graders of MTs N Lampung Timur in the Academic Year of 2017/2018*. [Undergraduate Honors Thesis, IAIN Metro]. Metro University Campus Repository. Retrieved 28 March 2022 from <https://repository.metrouniv.ac.id/id/eprint/2196>
- [6] Anderson, N. J. (1999). *Exploring Second Language Reading: Issues and Strategies*. Heinle & Heinle Publishers.
- [7] Aprilia, N. (2015). *Improving Reading Comprehension of the Eighth Grade Students at SMP N 6 Yogyakarta Through POSSE Strategy in the Academic Year of 2014/2015*. [Undergraduate Honors Thesis, Universitas Negeri Yogyakarta]. Eprints UNY. Retrieved 22 February 2022 from <http://eprints.uny.ac.id/id/eprint/23894>
- [8] Arianti, G., & Tiarina, Y. (2014). The Effect of POSSE Strategy on Developing Students Reading Analytical Exposition Text to Senior High School Students. *Journal on English Language Teaching*, 3(1), 196-201. <https://doi.org/10.24036/jelt.v3i1.4376>
- [9] Barrett, T. C. (1972). *Taxonomy of Reading Comprehension. Reading 360 Monograph*. Ginn A Xerox Education Company.
- [10] Basaraba, D., Yovanoff, P., Alonzo, J., & Tindal, G. (2013). Examining The Structure of Reading Comprehension: Do Literal, Inferential, and Evaluative Comprehension Indeed Exist? *Reading and Writing: An Interdisciplinary Journal*, 26(3), 349-379. <https://doi.org/10.1007/s11145-012-9372-9/>
- [11] Bilbao, M., Donguilla, C., & Vasay, M. (2016). Level of Reading Comprehension of the Education Students. *International Journal of Liberal Arts, Education, Social Sciences and Philosophical Studies*, 4(1), 342-353. <http://ejournals.ph/form/cite.php?id=13762>
- [12] Blachowicz, C., & Ogle, D. (2008). *Reading Comprehension: Strategies for Independent Learners* (Second Ed.). Guilford Publications.
- [13] Burns, P. C., Roe, B. D., Ross, & Elinor P. (1999). *Teaching Reading in Today's Elementary Schools* (7th ed). Houghton Mifflin Company
- [14] Caldwell, J. (2008). *Comprehension Assessment: A Classroom Guide*. Guilford Press
- [15] Englert, C. S., & Mariage, T. (2008). *The Sociocultural Model as a Framework in Instructional Intervention Research*. The Guilford Press.
- [16] Englert, C. S., & Mariage, T. V. (1991). Making Students Partners in the Comprehension Process: Organizing the Reading "POSSE". *Learning Disability Quarterly*, 14(8), 123-138. <https://doi.org/10.2307/1510519>
- [17] Frahihat, A. (2003). *The Effect of Seen and Unseen Reading Texts on the Comprehension and Reading Strategies of Tenth Graders Irbid Second Directorate of Education*. [Unpublished Doctoral Dissertation]. Yarmouk University.
- [18] Fraihat, B. (2018). *The Effect of Using Graphic Organizers on Jordanian Female EFL Tenth-Grade Students' Reading Comprehension and their Attitudes Towards Using them*. [Unpublished Doctoral Dissertation]. Yarmouk University.
- [19] Goodman, K. (1970). *Reading: Process and Program*. National Council of Teacher of English.
- [20] Grellet, F. (1981). *A Practical Guide to Reading Comprehension Exercises*. Cambridge.
- [21] Hajisamaae, E. (2020). *The Effect of POSSE Strategy Using Google Classroom on Students' Reading Comprehension in Thailand Senior High School*. [Undergraduate Honors Thesis, Universitas Muhammadiyah Gresik]. Eprunte UMG. Retrieved 5 March 2022 from <http://eprints.umg.ac.id/id/eprint/3674>
- [22] Hamdan, J. (1991). *Reading: A Three-Phase Approach*. UNRWA HQ.
- [23] Harisma, R., & Karimah, A. (2020). The Effect of using POSSE (Predict, Organize, Search, Summarize, and Evaluate) Strategy on the Students' Reading Comprehension Achievement in Descriptive Text. *Lintang Songo: Jurnal Pendidikan*, 3(2), 11-16.
- [24] Harmer, J. (2007). *The Practice of English Language Teaching*. Pearson Education.
- [25] Hassan, I. J. (2019). *The Employment of Task-Based Activity in Teaching Reading Comprehension to Resolve the Difficulties Encountered by Jordanian Ninth-Grade Students*. [Master's Thesis, Middle East University]. MEU. Retrieved 24 March 2022 from [https://meu.edu.jo/libraryTheses/5d36b41ff0986\\_1.pdf](https://meu.edu.jo/libraryTheses/5d36b41ff0986_1.pdf)
- [26] Huwari, I. F. (2019). A Study on the Influence of Jordanian EFL Teachers Experience in Teaching Reading Comprehension. *Asian Journal of Social Sciences & Humanities*, 8(3), 73-90.
- [27] Ichtarti, D. (2020). *Improving Students' Reading Comprehension Using POSSE (Predict, Organize, Search, Summarize, Evaluate) Strategy (A Classroom Action Research of the Ninth Grade Students of MTs PSA Nurul Amal in the Academic Year 2019/2020)*. [Doctoral Dissertation, IAIN Salatiga] IAIN Salatiga Campus Repository. Retrieved 1 March 2022 from <http://e-repository.perpus.iainsalatiga.ac.id/id/eprint/8512>
- [28] Jarrah, N. (2008). *The Effect of the Think Aloud Strategy on Jordanian Eighth Grade Students' Reading Comprehension*. [Unpublished Doctoral Dissertation]. Yarmouk University.
- [29] Loca, V. (2016). *The Use of POSSE (Predict, Organize, Search, Summarize, and Evaluate) Strategy to Improve Students' Reading Comprehension in Recount Text at The Eleventh-Grade Students' of SMA Plus Negeri7 Bengkulu in Academic Year 2015/2016*. [Diploma Thesis, IAIN Bengkulu]. IAIN Bengkulu Campus Repository. Retrieved 25 February 2022 from <http://repository.iainbengkulu.ac.id/3445/1/VITA%20LOCA.pdf>
- [30] Maha, E. R. & Sibarani, B. (2013). The Effect of Applying POSSE (Predict- Organize-Search-Summarize-Evaluate) on the Student's Reading Comprehension. *GENRE Journal of Applied Linguistics of FBS Unimed*, 2(1).1-8. <https://doi.org/10.24114/genre.v2i1.725>
- [31] Migdadi, A. I. M., & Baniabdelrahman, A. (2016). The Effect of Using Team Teaching on Jordanian EFL Eleventh Grade Students' Reading Comprehension and Their Attitudes Towards This Strategy. *Journal of Education and E-Learning Research*, 3(2), 38-50. <https://doi.org/10.20448/journal.509/2016.3.2/509.2.38.50>
- [32] Nuttall, C. (1996). *Teaching Reading Skills in a Foreign Language*. (2nd Ed.). Heinemann
- [33] Radaideh, E., Al-Jamal, D., & Sa'di, I. (2020). Digital Storytelling: Time to be Considered in Reading Comprehension. *Universal Journal of Educational Research*, 8(6), 2621 -2633. <https://doi.org/10.13189/ujer.2020.080645>
- [34] Setyowati, W. (2017). *The Effectiveness of POSSE Strategy in Reading Comprehension (Quasi-Experimental Research to the Eighth-Grade Students of MTs. Miftahul Ulum Balong Ponorogo in Academic Year 2016/2017)*. [Undergraduate Honors Thesis, IAIN Ponorogo]. Electronic theses of IAIN Ponorogo. Retrieved 20 April 2022 from <http://etheses.iainponorogo.ac.id/id/eprint/1992>

- [35] Sundari, R. (2012). *The Effect of Using POSSE (Predict, Organize, Search, Summarize, and Evaluate) Strategy Toward Reading Comprehension at the Second Year Students of SMA Handayani Pekanbaru*. [Doctoral Dissertation, State Islamic University of Sultan Syarif Kasim Riau]. SIUSSKR Campus Repository. Retrieved 26 February 2022 from <https://repository.uin-suska.ac.id/9722/>
- [36] Suprida, A. P. (2020). *The Use of POSSE (Predict, Organize, Search, Summarize, Evaluate) Strategy Through Socratic Application to Improve English Reading Achievement of The Eleventh Grade Students of SMA Negeri 11 Palembang*. [Undergraduate Honors Thesis, Sriwijaya University]. SU Campus Repository. Retrieved 5 March 2022 from [https://repository.unsri.ac.id/28959/1/RAMA\\_88203\\_06011181520019\\_0002087401\\_0015117905\\_01\\_front\\_ref.pdf](https://repository.unsri.ac.id/28959/1/RAMA_88203_06011181520019_0002087401_0015117905_01_front_ref.pdf)
- [37] Ulfa, V. I., & Juliari, G. A. (2020). The Use of POSSE (Predict, Organize, Search, Summarize, Evaluate) Strategy to Improve Students' Reading Comprehension in Narrative Text at the Tenth Grade of SMK PGRI 2 Denpasar in the Academic Year 2019/2020. *Widya Accarya*, 11(2), 208-215. <https://doi.org/10.46650/wa.11.2.964.208-215>
- [38] Zintz, M. (1978). *The Reading Process. The Teacher and the Learner*. Brown Company Publishers.



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