The 1st International Webinar Undergraduate Paper (IWUP)
Faculty of Teacher Training & Education
University of Muhammadiyah Prof. DR. HAMKA
Jakarta, 30 June 2023
DOI : 10.22236/ie.vil

TEACHING ENGLISH IN A LARGE CLASS: THE USE OF PORPE AND SQ3R FOR SCIENCE MAJORS

[1]Sri Meliyana Wardani, [2]Emma Rosana Febriyanti, [3]Noor Eka Chandra, and [4]Rina Listia
Universitas Lambung Mangkurat
[1]meliyanawardani@gmail.com; [2] emma.rosana@ulm.ac.id; [3] nooreka_chandra@ulm.ac.id; [4]rina_listia@ulm.ac.id

Abstract: *The English course is designed to cater to students from all majors and study programs, including those pursuing English Language Education. The primary objective of this course is to equip students with the knowledge, comprehension, and practical usage of English within their respective fields of study. In certain cases, where students undertake English courses with specific objectives, it can be referred to as English for Specific Purposes (ESP). The purpose of this research is to find out whether there are differences in reading comprehension achievement between students who are taught using the PORPE strategy (Predict, Organize, Rehearse, Practice, Evaluate) and the SQ3R strategy (Survey, Question, Read, Recite, Review) for science students. This research uses a quasi-experimental method. The population of the research was the Biology and Mathematics students who contracted English courses in the academic year 2022/2023. The sample of this research was 132 students covering 68 students of the experimental class taught using the PORPE strategy and 68 students of the control class taught using the SQ3R strategy. The findings of this research are the average reading comprehension of the students in the experimental class after the PORPE strategy treatment was 82.63. However, in the control class treated with the SQ3R strategy, the average score of the students' activity ability after the test was 83.97. It shows that using the PORPE and SQ3R strategies can greatly benefit teaching English for Specific Purposes (ESP) students.*

Keywords: ESP, PORPE strategy, SQ3R strategy

INTRODUCTION

English is a globally recognized language that is widely spoken and mastered by people worldwide, including Indonesians. It holds significance in various domains such as education, social interactions, business, trade, and technological understanding. Consequently, English is introduced as a subject in the Indonesian education system, starting from kindergarten and elementary school. At the tertiary level, English is mandatory for all first-year students.

The English course is designed to cater to students from all majors and study programs, including those pursuing English Language Education. The primary objective of this course is to equip students with the knowledge, comprehension, and practical usage of English within their respective fields of study. In certain cases, where students undertake English courses with specific objectives, it can be referred to as English for Specific Purposes (ESP). Hutchinson and Waters (1987) define ESP as an approach to learning English that focuses on topics and methods tailored to meet the learners' specific needs and motivations. This distinguishes it from General English, which covers a broader scope. In higher education, students learn English not solely based on personal motivation, but due to the course's compulsory nature. Therefore, it is the responsibility of stakeholders and English teachers to ensure that this course is meaningful and beneficial for the students.

Learning English encompasses four fundamental language skills: reading, speaking, writing, and listening. However, this study specifically focuses on reading skills due to Indonesian students' persistent difficulties in mastering this skill. Many students exhibit a lack

DOI : 10.22236/ie.vil

of interest in reading texts, which hinders their comprehension abilities. Nonetheless, reading is an essential English skill that ESP students must acquire, as it provides knowledge, information, and enhances creativity. Students actively practice and develop their creative thinking skills when they engage in reading. Reading enables students to improve their language proficiency and gain new experiences. Additionally, it helps students identify areas where they need further knowledge or understanding.

In addition to academic success, reading can also contribute to personal growth. Reading is a process in which the reader obtains the information intended by the author through text/written material or selects and comprehends the meaning inherent in written material (Tarigan, 1985: 32). Reading allows students to expand their vocabulary, improve their comprehension skills and acquire knowledge on various subjects. Furthermore, exploring different perspectives and ideas can stimulate their imagination and creativity. In summary, reading is an excellent activity that provides numerous benefits to students inside and outside the classroom. Nonetheless, reading is a basic and essential skill in learning English as it facilitates the extraction of meaning from written text. Consequently, improving reading skills can enhance students' ability to understand and comprehend the texts they read more effectively.

To comprehend what they read, students must understand the message conveyed through written language. The primary objective of reading is to grasp the ideas presented in writing. Reading involves intelligent analysis, critical examination, and formulating questions about the reading material. Therefore, effective teaching strategies in reading comprehension are critical to the learning process and can significantly impact students' reading comprehension (Enggar & Wibowo, 2020)

Unfortunately, some teachers still rely on traditional teaching strategies where they simply explain topics in class, leaving students to only pay attention to what is being said. Consequently, students become bored and disinterested in learning, which negatively impacts their academic performance. Especially, when teaching large classes with a large number of students. Teaching large classes poses many challenges, both inside and outside the classroom. In the classroom, large student numbers can encourage student disengagement and feelings of alienation, which can erode students' sense of responsibility and lead to behaviors that reflect and encourage a lack of involvement

To tackle the challenge of disengagement in large classes, teachers should adopt a clear, directed, systematic, and creative approach that captures students' interest. By incorporating innovative teaching techniques, educators can ignite curiosity and motivation to learn. This can enhance their comprehension of the subject matter and ultimately improve their academic performance. It is important to emphasize the need for adapting teaching strategies and creating an inclusive learning environment, particularly in large classes. By implementing these strategies and remaining attentive to students' individual needs, teachers can cultivate an engaging and effective learning experience, regardless of class size.

To enhance students' comprehension, teachers should implement a range of strategies when teaching reading. By incorporating diverse teaching strategies, the process of teaching reading can be made more straightforward and effective (Brown, 2004). Therefore, teachers should utilize various instructional strategies to cater to different learning styles and abilities. Reading comprehension instructional strategies are crucial in the learning process and can significantly influence students' reading comprehension skills. According to (Harianto, 2020), learning to read in schools emphasizes the significance of using diverse strategies when teaching reading to improve students' comprehension.

DOI : 10.22236/ie.vil

Based on many studies, two strategies are proven to be helpful for students in comprehending the texts. The first one is PORPE or Predict, Organize, Rehearse, Practice, Evaluate. According to (Hasibuan et al., 2022), research suggests that using the PORPE strategy was effective in enhancing students' reading comprehension while promoting creativity, activeness, and independence in learning. The PORPE strategy was developed to assist students in actively planning, monitoring, and assessing their understanding of reading material (Mahendrayana, 2016). The PORPE strategy can also aid students in developing their creativity by integrating keywords into sentences to predict the content of the text, thus enabling them to create meaning from various events (Omalia, 2012; Wiryani & Fitrawati, 2017; Wati, 2021). This strategy, which stands for Predict, Organize, Rehearse, Practice, Evaluate, can be readily applied to reading lessons.

By implementing the PORPE strategy, students are encouraged to clarify the purpose of reading, identify the primary content of the reading material, and direct their attention to the essential details, ultimately becoming more skillful readers (Sinaga & Sibarani, n.d.). This is an efficient self-learning technique that can enhance cognitive and metacognitive processes, eventually aiding readers in comprehending and learning material related to content areas (Simpson,1988 as cited in Hasibuan et al., 2022). PORPE is a strategy created to help students actively design, perceive, and evaluate their progress in reading comprehension.

The second one is SQ3R or Survey, Question, Read, Recite, and Review. According to Hidayat et al. (2018) as cited in Istiqamah & Normuliati (2019) mention SQ3R is a strategy that encourages students to actively engage in the reading process by surveying the text, questioning what they want to learn, reading the material, reciting information from memory, and reviewing what they have learned. The SQ3R learning strategy is an instructional approach that guides students in studying and analyzing concepts attentively (Atmajati et al., n.d., 2022).

The SQ3R strategy, which stands for Survey, Question, Read, Recite, and Review, is a systematic approach to studying a discourse. This strategy involves a series of steps designed to enhance comprehension and retention of the material being studied (Rusbaena, 2022). The utilization of the SQ3R strategy in learning offers several beneficial outcomes. Firstly, students can enhance their understanding of the material by initially reading it attentively. This allows them to grasp the content and develop a solid foundation of knowledge. Secondly, collaborative group work facilitates the exchange of opinions among students, fostering a deeper comprehension of the concepts presented in the text. By discussing and sharing insights, students gain different perspectives and enrich their understanding. Thirdly, the practice of repeating questions and providing answers enables participants to review and reinforce what they have learned during the learning process. This iterative process strengthens their grasp of the material and enhances their overall retention. This process helps to enhance students' comprehension of the material and aids them in retaining the information. Both PORPE and SQ3R are effective strategies that can improve students' reading comprehension. By adopting these strategies, students can develop critical thinking and analytical skills, which are essential for comprehending and retaining information. Therefore, teachers should incorporate these strategies into their teaching approaches to help students improve their reading comprehension and achieve better academic performance.

Based on the importance mentioned previously about these strategies, the researcher intended to find out whether there are differences in reading comprehension achievement between students who are taught using the PORPE strategy (Predict, Organize,

DOI : 10.22236/ie.vil

Rehearse, Practice, Evaluate) and the SQ3R strategy (Survey, Question, Read, Recite, Review) to teach English at Lambung Mangkurat University's science major.

LITERATURE REVIEW

Large classes are often unavoidable in various educational settings, and they can present significant challenges for teachers. Effectively conveying material and engaging all students in the activities provided becomes more difficult in such settings. Numerous studies (Amua-Sekyi, 2010; Bahanshal, 2013; Fortes & Tchantchane, 2010; Goodykoontz, 2008; Sharndama, 2013; Yelkpieri et al., 2012; Febriyanti et al., 2022) have highlighted that large classes can lead to chaos and hinder the teaching and learning process. Teachers may struggle to maintain control, resulting in a lack of concentration and deviation from planned activities. Remembering all students' names and individual characteristics becomes challenging, making it difficult to provide personalized assistance due to the sheer number of students. Similarly, teachers may find it challenging to effectively convey the material and engage all students in the given activities. Overall, large classes often limit the opportunities for instructors to create optimal educational and learning conditions for their students.

Aligned with this perspective, employing appropriate teaching strategies in an English class can greatly assist teachers in effectively imparting English language skills, particularly in large class settings. Utilizing the right strategies helps create a dynamic and engaging learning environment, catering to the needs of a larger number of students. Successful teaching in this context necessitates the implementation of strategies that align with the desired learning outcomes (Pentury, 2017).

For EFL learners as well as ESP learners, reading comprehension can be a challenging task for a variety of reasons. Firstly, students may struggle with vocabulary, which can make it difficult for them to understand the text. Secondly, they may have difficulty decoding complex sentence structures, which can affect their ability to comprehend the text. Thirdly, cultural differences can also impact a student's understanding of a text, especially if it relates to a topic or concept unfamiliar to them. Fourthly, students may not possess the necessary background knowledge to fully comprehend the text. Finally, a lack of practice in reading can also contribute to poor reading comprehension skills. Therefore, encouraging students to read more frequently in their free time can also improve their vocabulary and reading skills.

To overcome the challenges encountered by English as a Foreign Language (EFL) learners in reading comprehension, it is crucial to offer them additional support and teach them specific strategies. By doing so, the goal is to gradually transfer the responsibility to the students, enabling them to independently utilize these strategies. One effective strategy for improving reading comprehension skills is the implementation of the PORPE strategy, which was designed to support learners in predicting, organizing, rehearsing, practicing, and evaluating the content they read (Simpson et al., 1989). The implementation of learning using the PORPE strategy is carried out in five steps, namely Predict, Organize, Rehearse, Practice, and Evaluate. The first step is Predict which involves making predictions about the content before reading in the form of questions. Here, questions made by the students serve as guidelines for them to explain, compare, differentiate, or criticize the content of the reading text. The second step is Organize, students organize the answers to the prediction questions in the form of concept maps. The teacher helps students organize the problem into a coherent concept map in this step. The third step is Rehearse, that is students rehearse the information by summarizing, visualizing, or asking questions as well as finding

DOI : 10.22236/ie.vil

answers to questions that have been gathered. Then, the Practice step, that is students practice the results of their predicted questions using their language by discussing it with others or applying it to real-life situations. The last step is Evaluate, in this step, the answers are evaluated by re-examining the prediction questions, concept maps, and essay questions they wrote and reflecting on what has been learned, and identifying areas that need improvement.

According to (Fadillah et al., 2019), implementing the PORPE strategy in learning activities improved students' reading comprehension skills. This finding was further supported by (Fikriyah et al., 2021), which demonstrated that using the PORPE strategy led to an increase in the average reading comprehension scores of fourth-grade students. Additionally, according to (Ningrat et al., 2022), the application of PORPE to enhance reading comprehension in descriptive texts was conducted on eighth-grade students at SMP Negeri 13 Palembang. The statistical analysis results revealed that the PORPE strategy significantly improved the reading comprehension of descriptive texts in the experimental group of Class VIII 3.

Another strategy that can support students with reading is SQ3R. The SQ3R learning strategy is a popular strategy that can help students improve their reading comprehension and retention of information while studying. The acronym stands for Survey, Question, Read, Recite, and Review, encompassing a sequence of five steps. The strategy emphasizes careful and thorough reading skills, to enhance students' metacognitive development (Sakinah & Ibrahim, 2023). The first step is a Survey, where the reader previews or examines the text to get an idea of what it is about. Then comes Question, where the reader formulates or compiles a list of questions based on their preview. The third step is Read, where the reader reads the text carefully to answer the questions that have been listed. The fourth step is Recite, where the reader recites or retells the main points and answers their questions. Finally, in the fifth step, Review, the reader reviews all the answers to the questions listed from the material they have learned. By using this strategy, students can become more efficient and effective learners, as they learn to preview, question, read, recite, and review the material they study in a systematic and structured way.

Research conducted by (Suharyono, 2022) highlights the SQ3R strategy as a sequential learning approach that aims to achieve specific objectives. The strategy effectively condenses reading activities while maintaining a clear focus on the text at hand. By following the prescribed steps, students can navigate through the text in a structured manner, improving their comprehension and retention of the material. Furthermore, (Atmajati et al., 2022) emphasize that the SQ3R strategy is widely recognized as a valuable learning technique. It instructs students to engage in thorough research and analysis of a given concept, providing them with effective study skills. By surveying the text, generating relevant questions, reading actively, reciting key information, and reviewing the material, students can optimize their learning experience and deepen their understanding of the subject matter. In summary, the SQ3R strategy offers a systematic approach to studying texts, allowing students to develop metacognitive skills, condense reading activities, and enhance comprehension and retention. It is a widely recognized technique that encourages students to actively engage with the material and adopt effective study habits.

The implementation of effective reading comprehension strategies, such as the PORPE and SQ3R methods, can significantly contribute to students' academic success. The PORPE strategy enables students to predict, organize, rehearse, practice, and evaluate the content they read, while the SQ3R strategy offers a systematic approach to studying texts, enhancing comprehension and retention. Therefore, incorporating these strategies into

DOI : 10.22236/ie.vil

teaching practices can empower students to become more engaged, independent, and effective readers.

METHOD

This study uses quantitative research methods, according to Creswell (2012) Identifying a research problem in quantitative research is typically based on field trends or the motivation to explain a particular occurrence. Quantitative research problems need to explain the relationship between variables. In quantitative research questions, specific and limited inquiries are asked to collect observable and measurable variable data. In research involving the collection of quantitative data utilizing instruments to quantify variables. Instruments are devices used to measure, observe, or record quantitative data.

Based on this, it shows that quantitative research is research to identify whether one variable influence other variables by using instruments as a data collection tool. In this research, the researcher will use a quasi-experimental design. Quasi-experiments involve the allocation of participants, but not random assignment groups (Creswell, 2012). Researchers chose a quasi-experimental design because the participants were well organized in a class where randomization was impossible.

In this research design, there were two intact groups of classes involved. Researchers gave different treatments to the two groups, the first group was the experimental group which use the PORPE strategy(Predict, Organize, Rehearse, Practice, evaluate), while the second group was the control group which used the SQ3R strategy(Survey, Question, Read, Recite, Review). The quasi-experimental design table can be illustrated as follows by Suharsimi (2006).

Table. 1 Quasi-Experimental Design (Pre- and Post-test)

Pre-test and Post-test Design			
Control Group	0_1	X_1	0_2
Experimental Group	0_1	X_2	0_2

Note:
0_1 : Pre-test
X_1 : Treatment by using SQ3R strategy
X_2 : Treatment by using the PORPE strategy
0_2 : Post-test

The subject of this study is Biology and Mathematics students who contracted English courses in the academic year 2022/2023. This study hypothesizes that there is a significant difference in learning outcomes between the application of the PORPE and SQ3R learning strategies to the learning outcomes of the 22nd batch of mathematics and biology students.

DOI : 10.22236/ie.vil

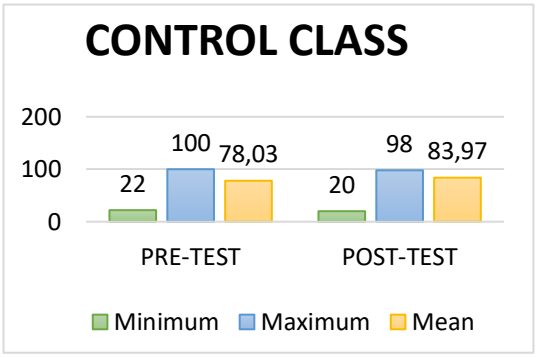
FINDINGS AND DISCUSSION

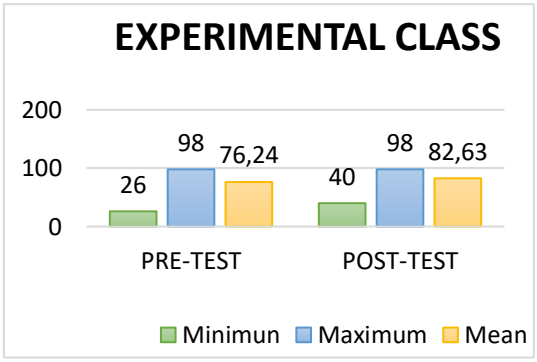
Findings

In this study, researchers observed the experimental class and the control class. This section describes the teaching and learning process in experimental and control classes based on the observations of researchers. The experimental class was English class A and students were taught using the PORPE strategy. On the other hand, the control class is English class B and students are taught using the SQ3R Strategy. After the data was collected, the researchers analyzed it using SPSS (Statistic Product and Statistic Solution) Version 25 by IBM Corporation.

Data analysis techniques use descriptive analysis, normality test, and homogeneity test as a prerequisite for carrying out the average difference test and hypothesis testing. After carrying out prerequisite tests with homogeneity and normality tests, a t-test was then carried out with the Mann-Whitney U test to analyze differences in learning models. The result of the average score of the reading comprehension test has increased from the pre-test stage to the post-test average score. Can be seen in the following table 2.

Table. 2 Result of Experimental and Control Class





The table above shows an increase in students' ability to understand reading content. This can be seen from the average score between the pre-test and post-test. The average pretest score is 76.24 and the average posttest score is 82.63. While for the control class, the average pre-test result was 78 and the average post-test score was 83,97.

The increase in the average scores among these students indicates that implementing the PORPE strategy in the experimental class is beneficial in enabling students to effectively analyze the main ideas presented in a text. This is evident from the post-test results given after applying the PORPE strategy. The post-test questions were designed to ensure specific details are understood from reading sentences. Compared to traditional approaches, the PORPE strategy proves to be more efficient in enhancing students' reading comprehension. This is due to its intentional structure, which emphasizes understanding and exploring the content of the reading material through a series of proactive activities such as designing, monitoring, and evaluating the text (Wiryani,2017).

Similarly, the results of the post-test in the control class showed that the use of the SQ3R strategy in determining reference points and identifying detailed information had a pretty good presentation of improvements in the process. SQ3R helps students focus on

DOI : 10.22236/ie.vil

the challenging parts of the reading. Students concentrate on the "who, what, when, where, and how" to identify and search for the answers. As Nuriadi (2008) as cited in Aisyah (2020) stated, SQ3R can accelerate students' understanding of the reading, grasp the abstract, identify important ideas, develop an interest in reading, and facilitate better recall and comprehension of the text. Consequently, students can retain the key points from the reading for a longer period and express the content in their own words.

Normality test

After getting the results mentioned above, the researcher conducted a normality test to assess whether the research data in both the experimental class and the control class came from populations that were normally distributed. The normality test helps researchers determine the feasibility of using certain statistical analyses that are normally distributed or not normally distributed.

Table. 3 Normality test results of Pre-test and Post-test scores for the Experiment and Control class

Tests of Normality

			Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Kelas		Statistic	Df	Sig.	Statistic	Df	Sig.
Hasil Belajar Siswa	Pre-Test (PORPE)	Eksperimen	,164	67	,000	,910	67	,000
	Post-Test (PORPE)	Eksperimen	,179	67	,000	,878	67	,000
	Pre-Test (SQ3R)	Kontrol	,143	67	,002	,926	67	,001
	Post-Test (SQ3R)	Kontrol	,201	67	,000	,812	67	,000

a. Lilliefors Significance Correction

Based on Table 3 the results obtained for the normality test of pretest and posttest learning outcomes in the experimental class and control class. The normality test uses the Kolmogrov-Smirnov technique with SPSS 25, if the significance value (sig) > 0.05 then the data is said to be normally distributed. If the significance value (sig) <0.05 the data is not normally distributed. Based on the data above the data is not normally distributed.

Based on the normality test, knowing that the data are not normally distributed but have homogeneous variation, a non-parametric statistical test using the Mann-Whitney test was performed using SPSS 25 for Windows to find out whether there were differences between experiments and control to the learning outcomes control the class. The analysis results are shown in Table 4.

Table. 4 Results of the Mann Whitney U Posttest Class Experiment and Control

Test Statistics[a]

	Hasil Belajar Siswa

DOI : 10.22236/ie.vil

Mann-Whitney U	2010,500
Wilcoxon W	4288,500
Z	-1,045
Asymp. Sig. (2-tailed)	,296

a. Grouping Variable: Kelas

According to the results of the Mann-Whitney U test, the Asymp value. Sig. (2-tailed) posttest is 0.296, which exceeds 0.05. This indicates that, based on the decision-making process of the Mann-Whitney U test, the null hypothesis (Ho) is accepted, and the alternative hypothesis (Ha) is rejected. In other words, it can be concluded that there is no significant difference between the impacts of the PORPE (Predict, Organize, Rehearse, Practice, Evaluate) and SQ3R (Survey, Question, Read, Recite, Review) strategies on academic performance of students in mathematics and biology when learning English.

Hypothesis test

Then tested the hypothesis. Hypothesis testing is the process of determining whether the hypothesis should be accepted or rejected. In this particular study, the hypothesis put forward is.

Ho: There is no significant difference in learning outcomes between the application of the PORPE and SQ3R learning strategies to the learning outcomes of English subjects in batch 22 mathematics and biology students at Lambung Mangkurat University.

Ha: There is a significant difference in learning outcomes between the application of the PORPE and SQ3R learning strategies to the learning outcomes of English subjects in batch 22 mathematics and biology students at Lambung Mangkurat University.

The basis for decision-making uses the Sig coefficient in the Mann-Whitney test with conditions

1. If the sig value < 0.05 then Ho is rejected and Ha is accepted
2. If the sig value > 0.05 then Ho is accepted and Ha is rejected

The result of the hypothesis test, which was calculated using the Mann-Whitney test, indicates that the obtained significance value of 0.296 is greater than the predetermined significance level of 0.05. This signifies that the null hypothesis (Ho), which states that there are no significant differences in the learning outcomes between class 22 biology and mathematics students who applied the PORPE and SQ3R learning strategies in the English course, is accepted. Consequently, the alternative hypothesis (Ha), which suggests the presence of significant differences, is rejected. This implies that the application of both the PORPE and SQ3R learning strategies had a comparable impact on the learning outcomes of the students in class 22, irrespective of their respective fields of study.

Discussion

This study aims to determine whether there are differences in reading comprehension achievement between students who are taught using the PORPE strategy (Predict, Organize, Rehearse, Practice, Evaluate) and students who use the SQ3R strategy (Survey, Question, Read, Recite, Review) in Biology and Mathematics contracted an English course for the 2022/2023 school year.

DOI : 10.22236/ie.vil

Based on the results of this study the use of the SQ3R and PORPE strategies did not differ significantly but still showed an increase in reading comprehension in the average student scores before being given treatment and after being given treatment. This means that the two strategies affect students' ability to read and not only be able to read but also understand well so that they can answer questions with a better score than using the general strategy. In the calculations, data on the scores of students' reading test results were obtained before and after being given treatment. The highest pre-test score in the experimental class was 98, and the lowest score was 26. After being given the test treatment, the highest score obtained by students during the post-test was 98 and the lowest score was 40. For the average score before being given treatment, it was 76. 24 while the average value after being given treatment is 82.63.

During treatments, by applying the PORPE strategy, students are trained to think critically about the content of the reading. Students are given stimulation in the form of questions as predictions from the reading given. students are notified in advance about the reading that will be carried out so that students critically explore predictions from the discourse that students will read. After that, then students rearrange the predictions that have been made in the concept map to make it easier to rewrite the contents of the reading in their language. By using the PORPE strategy in reading class students can actively participate in every activity.

The PORPE strategy, with its focus on predicting, organizing, rehearsing, practicing, and evaluating, offers students an active and dynamic learning experience. It promotes student engagement, encourages active participation, and fosters meaningful discussions among learners. The strategy also encourages students to take ownership of their learning by utilizing their prior knowledge, organizing information effectively, and practicing their reading skills independently.

The research conducted by (Pajriahasrikandi, 2017) provides evidence that the implementation of the PORPE strategy has a significant positive impact on teaching reading comprehension. Integrating this strategy into the classroom has proven to be beneficial for students' reading comprehension skills. By incorporating the PORPE strategy in reading classes, students become more actively engaged in the teaching and learning process. This approach offers relevant activities that cater to the curiosity and preference for dynamic situations commonly found among high school students. It effectively creates meaningful learning situations in language classes.

Moreover, the PORPE strategy encouraged high levels of student participation in various activities (Hadi et al., 2018). Students displayed increased effort by seeking clarification on unfamiliar English vocabulary to maintain their engagement during reading tasks with their peers or within their groups. They also engaged in additional reading practice independently, even when not directly monitored by the teacher. This heightened level of involvement fostered a sense of interest in the learning process as students freely shared their ideas, resulting in a lively and interactive classroom environment. Additionally, the application of the PORPE strategy proved to be a useful and engaging technique as it provided every student with an opportunity to present their answers in front of the class.

Furthermore, the findings from (Permata Sari et al., 2023) support these results, the study focused on the ability of students in reading comprehension of report texts before and after using the PORPE strategy in Class X of *SMA Negeri 3 Nganjuk* during the 2021/2022 academic year. The highest score achieved after implementing the PORPE strategy was 90, while the lowest was 60, with an average of 77.29 out of 35 students in Class X-5. This indicates that the PORPE strategy was effective in the teaching and learning

DOI : 10.22236/ie.vil

process. The research consistently demonstrates that the implementation of the PORPE strategy has a positive impact on teaching reading comprehension, leading to improved student performance in this area.

In contrast, there was a control group in the research that did not implement the PORPE strategy in reading discourse activities during the learning process. Instead, the teacher applied the SQ3R strategy. The data collected from the control group revealed that the highest score on the reading test during the pretest was 100, while the lowest score was 22. In the posttest, the highest score was 98, and the lowest score was 20. The average post-test score was 78.03. However, after the treatment was implemented, the average score increased to 83.97. This indicates that the utilization of the SQ3R strategy resulted in an improvement in learning.

These findings highlight the positive impact of employing the SQ3R strategy on students' learning outcomes in Mathematics and Biology as ESP students. The SQ3R strategy, with its emphasis on surveying, questioning, reading, reciting, and reviewing, has proven effective in enhancing students' comprehension and retention of the reading material. It provides a structured approach that encourages active engagement and understanding of the subject matter.

Thus, the results suggest that incorporating appropriate strategies, such as the SQ3R method, can significantly contribute to improving students' academic performance and learning outcomes in various subjects. This aligns with the research conducted by (Rusbaena, 2022), which demonstrated that implementing the SQ3R strategy in class X students at SMK Muhammadiyah Watansoppeng resulted in improved reading skills. The average score of students' reading skills increased to 79.23, with a minimum score of 70 and a maximum score of 90, indicating an enhancement in student learning outcomes, particularly in reading skills.

Additionally,(Fitriyah & Arfani, 2022) found that the application of the SQ3R strategy in reading short stories increased students' reading comprehension. The research showed that in cycle II, 20.5% of students achieved a very good score, which was an improvement compared to the 14.7% in cycle I. These results highlight the effectiveness of the SQ3R strategy in improving students' reading skills and comprehension. By employing this strategy, students can develop effective reading habits, enhance their understanding of the text, and ultimately achieve better learning outcomes.

The SQ3R strategy engages students in cognitive processes and facilitates their comprehension of textual concepts. According to Husna (2006), as cited in Yanti et al., (2022), the advantages of employing the SQ3R strategy include the following: Firstly, this strategy still confidence in students by providing them with a structured approach to tackling text-based reading tasks. Secondly, it assists students in directing their focus toward understanding the core concepts embedded within the reading material. Thirdly, it aids students in prioritizing and concentrating on the most challenging sections of the text. Fourthly, the strategy encourages regular practice in answering questions about the material, reinforcing their understanding. Finally, it facilitates the creation of organized notes in the form of questions and answers, promoting effective study habits.

In summary, the SQ3R strategy offers numerous benefits, such as boosting student confidence, enhancing concentration on essential concepts, targeting challenging sections, promoting question-answering practice, and facilitating the creation of structured study notes. The findings of the study conducted by (Sakinah & Ibrahim, 2023) support the positive impact of implementing the SQ3R strategy in the learning process. Through observations, it was noted that students in the experimental class displayed enthusiasm in asking questions,

DOI : 10.22236/ie.vil

actively participating in the learning activities, and exhibiting a high level of engagement. Furthermore, the application of the SQ3R strategy resulted in improved reading comprehension skills among fourth-grade elementary school students, enabling them to meet the minimum competency requirements (KKM). These findings highlight the effectiveness of the SQ3R strategy in enhancing students' enthusiasm for learning and their ability to comprehend reading materials.

Similar results were also received in research conducted by (Yanti et al., 2022) that there was an increase in learning outcomes using the SQ3R strategy in learning English in class X IPS I *SMA Negeri I Sungai Raya Kepulauan*. By incorporating the SQ3R strategy into their reading approach, students can effectively improve their comprehension skills and overall learning experience. Applying the SQ3R strategy, it is believed that student learning outcomes will be very satisfying, considering that students straightforwardly become dynamic and coordinated readers. The directed and sequential strategy makes it easier for students to answer long reading text questions.

Fostering and enhancing teacher creativity through the integration of innovative teaching and learning strategies is crucial. This entails exploring diverse instructional approaches, incorporating interactive activities, utilizing technology, and promoting student-centered learning. By embracing creativity and adaptability, teachers can create a dynamic and effective learning experience, even in large classes. These combined two strategies efforts empower teachers to overcome challenges and optimize the learning experience for their students in large class settings. The PORPE strategy and the SQ3R strategy both aim to enhance students' reading comprehension skills. Although they have slightly different approaches, both strategies emphasize active engagement and involve students in activities that promote understanding and analysis of reading material.

The PORPE strategy (Predict, Organize, Rehearse, Practice, and Evaluate) emphasizes certain steps to guide students in understanding and analyzing texts. Students make predictions about text content, organize existing information, practice understanding through exercises, and evaluate their understanding after reading. This allows students to be actively involved in the reading process and build better understanding. Meanwhile, the SQ3R strategy (Survey, Question, Read, Recite, Review) also involves active steps in reading. Students start by reading a summary or peeking at the text as a whole (Survey), then they generate relevant questions about the content of the text (Question). Next, they read to answer these questions (Read). After that, they re-recorded (Recite) and repeated the material they had read to strengthen their understanding. Lastly, they do a review (Review) of the text to ensure better understanding.

Both of these strategies share the same goal, which is to help students improve their reading comprehension. They encourage students to be actively involved in the reading process, organize information, apply comprehension strategies, and review material they have read. In combination with the SQ3R strategy, the PORPE strategy can provide a holistic and comprehensive approach to improving students' reading comprehension.

Based on the provided information, it is evident that the student scores in both the control and experimental classes, during the pre-test activities, fell within the sufficient category. This implies that both the PORPE and SQ3R strategies can be considered viable options for learning. Both approaches serve as effective reading strategies that aid in the advancement of students' reading comprehension skills while also enhancing their cognitive and metacognitive capacities.

Reading comprehension for English for Specific Purposes (ESP) students can vary depending on their specific field of study and the purpose for which they are learning

DOI : 10.22236/ie.vil

English. ESP students typically focus on reading texts and materials that are directly related to their area of specialization. This can include academic texts, research papers, technical documents, professional articles, and industry-specific literature. They should be trained to develop the necessary reading skills and strategies to comprehend specialized texts effectively. They also should learn to identify and understand domain-specific vocabulary, technical terms, and concepts within their field. Reading comprehension for ESP students often involves a deeper level of analysis and interpretation, as they need to extract relevant information, understand complex ideas, and apply them within their professional context. Hence, both the PORPE and SQ3R strategies are appropriate to be implemented for ESP students to help them acquire reading skills.

The utilization of the PORPE and SQ3R strategies can greatly benefit the teaching of English for Specific Purposes (ESP) students. ESP focuses on providing language instruction tailored to specific professional or academic contexts. Incorporating the PORPE strategy, which emphasizes active planning, monitoring, and evaluation of learning, helps ESP students engage with specialized texts and comprehend them effectively. By integrating keywords and predicting content, the PORPE strategy enhances their creativity in interpreting various events. On the other hand, the SQ3R strategy, with its systematic approach of surveying, questioning, reading, reciting, and reviewing, aids ESP students in studying and analyzing complex concepts relevant to their specific fields. These strategies foster active involvement, comprehension, and retention of subject matter, equipping ESP students with the necessary language skills and knowledge for their professional or academic pursuits. Therefore, the combined use of the PORPE and SQ3R strategies proves to be an effective approach to teaching ESP students, empowering them to succeed in their specialized areas of study.

CONCLUSION AND SUGGESTION

1. The average reading comprehension of students in the experimental class before the PORPE strategy treatment was 76.24. However, in the control class treated with the SQ3R strategy, the average score of the student's abilities in the pre-test activities was 78.03.
2. The average reading comprehension of the students in the experimental class after the PORPE strategy treatment was 82.63. However, in the control class treated with the SQ3R strategy, the average score of the students' activity ability after the test was 83.97.
3. Based on the completion of the hypothesis, the known Asymp. Sig. (2-tailed) posttest is 0.296, which exceeds 0.05. That is, Ho is accepted and Ha is rejected. As for Ho, there is no significant difference in learning results when using PORPE and SQ3R strategies.

Based on the findings of the conducted research, several recommendations can be proposed. Firstly, both the PORPE and SQ3R strategies can be considered viable alternatives for teaching reading comprehension during the learning process. Teachers can incorporate these strategies to enhance students' understanding and engagement with the texts they are studying.

Secondly, it is essential to improve the monitoring process of student practice when utilizing the PORPE and SQ3R techniques. Close monitoring allows for the timely identification and correction of student errors, leading to better learning outcomes.

DOI : 10.22236/ie.vil

Thirdly, it is important to create a conducive and comfortable learning environment from the beginning when introducing the PORPE and SQ3R techniques. Creating such conditions will help students focus better and increase their receptiveness to the strategies. Lastly, this study should be viewed as a preliminary investigation, and further interpretation is needed. It would be beneficial for other researchers interested in studying reading learning strategies to expand on this research, as reading is one of the fundamental pillars of learning. By conducting more in-depth studies, a comprehensive understanding of effective reading strategies can be developed, benefiting both teachers and students in the learning process.

REFERENCES

Atmajati, A., Aliim Hidayat, R., & Astuti, Y. W. (n.d.-a). *Peningkatan Keterampilan Menulis Siswa Melalui Metode Sq3r Pada Pembelajaran Tematik Kelas V Sd Sampangan*.

Atmajati, A., Aliim Hidayat, R., & Astuti, Y. W. (n.d.-b). *Peningkatan Keterampilan Menulis Siswa Melalui Metode Sq3r Pada Pembelajaran Tematik Kelas V Sd Sampangan*.

Enggar, Y., & Wibowo, W. (2020). An Analysis Of English Teachers' Strategies In Teaching Reading Comprehension. In *JALL (Journal of Applied Linguistics and Literacy* (Vol. 4, Issue 1). https://jurnal.unigal.ac.id/index.php/jall/indexhttps://jurnal.unigal.ac.id/index.php/jall/index

Febriyanti, E. R., Fadilla, R., Pasani, C. F., & Amelia, R. (2022). NovoLearning: A strategic response to large class problems in teaching non-English department students. *JOALL (Journal of Applied Linguistics and Literature)*, *7*(2), 395–412. https://doi.org/10.33369/joall.v7i2.20117

Fitriyah, F., & Arfani, S. (n.d.). *Using Survey-Question-Read-Recite-Review (SQ3R) Method….(Fitryah and Sri Arfani.*

Hadi, A., Stai, D., Gersik, A.-A., & Lombok Barat, K. (2018). The Effectiveness Of Porpe (Predict, Organize, Rehearse, Practice, And Evaluate) Method To Teach Reading Viewed From Students' Self-Esteem. *Jurnal Studi Keislaman Dan Ilmu Pendidikan*, *6*.

Harianto, E. (2020). Keterampilan Membaca dalam Pembelajaran Bahasa. In *DIDAKTIKA* (Vol. 9, Issue 1). https://jurnaldidaktika.org/

Hasibuan, A., Irmayana, A., Sabda, K., Aritonang, L., Pendidikan, I., & Selatan, T. (2022). The Effect Of Porpe Method (Predict, Organize, Rehearse, Practice, Evaluate) On Students' Reading Comprehension Of Report Text At The Eleventh Tkj Students Of Smk Negeri 1 Lumut In 2021/2022 Academic Year. In *Oktober* (Vol. 5, Issue 3).

Istiqamah, I., & Normuliati, S. (2019). Pelatihan Metode Membaca SQ3R untuk Siswa Madrasah Tsanawiah Raudhatusyubban. *PengabdianMu: Jurnal Ilmiah Pengabdian Kepada Masyarakat*, *4*(1), 24–29. https://doi.org/10.33084/pengabdianmu.v4i1.552

Ningrat, D. A., Setiawan, H., & Palembang, U. T. (2022). *Improving Eighth Graders' Reading Comprehension On Descriptive Text Through Porpe Strategy* (Vol. 3, Issue 2).

DOI : 10.22236/ie.vil

Pajriahasrikandi. (2017). *The Use of PORPE (Predict, Organize, Rehearse, Practice, Evaluate) Strategy in Teaching Reading Comprehension* (Vol. 1, Issue 2).

Pendidikan Guru Sekolah Dasar, J., FIP Lantai, G. B., Setiabudhi, J., Fadillah, A., & Heryanto, D. (2019). Penerapan Strategi Porpe Untuk Meningkatkan Kemampuan Membaca Pemahaman Siswa Kelas V Sd. In *JPGSD* (Vol. 4).

Pendidikan, J., Indonesia, B., Bahasa, F., & Seni, D. (2016). *Implementasi Teknik Porpe Dalam Upaya Meningkatkan Kemampuan Membaca Pemahaman Mahasiswa Gede Mahendrayana* (Vol. 11, Issue 01).

Pentury, H. J. (2017). Pengembangan Kreativitas Guru Dalam Pembelajaran Kreatif Pelajaran Bahasa Inggris. In *Faktor Jurnal Ilmiah Kependidikan* (Vol. 4).

Permata Sari, I., Septi Andrini, V., & PGRI Nganjuk, S. (2023). *The Effectiveness of Porpe Method In Students' Reading Comprehension Of Report Text For Senior High Schools Students At The Tenth Grade of Sma Negeri 3 Nganjuk In The Academic Year Of 2021/2022*. *18*(1), 44–56.

Sakinah, W. P., & Ibrahim, N. (2023a). *ELSE (Elementary School Education Journal) Pengaruh Metode Sq3r Terhadap Keterampilan Membaca Pemahaman Siswa Kelas IV Di Sekolah Dasar*. *7*(1).

Simpson, M. L., Stahl, N. A., & Hayes, C. G. (1989). PORPE: A Research Validation. In *Source: Journal of Reading* (Vol. 33, Issue 1).

Sinaga, D. S., & Sibarani, B. (n.d.). *The Effect of Applying Predict, Organize, Rehearse, Practice, Evaluate (PORPE) Strategy on Students' Reading Comprehension*.

Smk, R., & Watansoppeng, M. (2022a). Meningkatkan Keterampilan Membaca Melalui Penerapan Metode Sq3r Pada Siswa Kelas X Smk Muhammadiyah Watansoppeng. *Jurnal Inovasi Pendidikan Kejuruan*, *2*(1).

Suharyono, O. :, & Abstrak. (2022). *Meningkatkan Hasil Belajar Peserta Didik Dengan Metode Sq3r Mapel Ips Materi Kegiatan Ekonomi Kelas Vii Smp Negeri 15 Semarang Semester 2 Tahun Ajaran 2021/2022* (Vol. 18, Issue 2). https://www.zonareferensi.com/pengertian-

Wati, E. (2021). The Improvement of Reading Comprehension Ability in Explanation Text with PORPE Strategy. *International Journal of Elementary Education*, *6*(1), 149–157. https://doi.org/10.23887/ijee.v6i1

Wiryani, Y. (n.d.). Journal of English Language Teaching Improving Reading Comprehension Of Senior High School Students By Using Porpe Strategy. *Journal of English Language Teaching*, *6*(1). http://ejournal.unp.ac.id/index.php/jelt

Yanti, S., Negeri, S., & Kepulauan, S. R. (2022). *Penerapan Metode Sq3r Untuk Meningkatkan Keterampilan Membaca Teks Narrative Pada Mata Pelajaran Bahasa Inggris*. *2*(1).

Aisah, Binti & Agung Setyawan.(2020). Pengaruh Penggunaan Metode Survey, Question, Read, Recite, Review (SQ3R) terhadap Pembelajaran Kelas V SDN Demangan 2 Bangkalan.

DOI : 10.22236/ie.vil

Creswell, John W. (2012). Educational research: planning, conducting, and evaluating quantitative and qualitative research.

Tarigan, Henry Guntur. (1985). Membaca dalam Kehidupan. Bandung: Angkasa.

Brown, H. D. (2004). Teaching by Principles an Interactive Approach to Language Pedagogy. New York. Longman.

Arikunto, Suharsimi. (2006). Prosedur Penelitian, Suatu Pendekatan Praktik. Jakarta: Rineka Cipta.

Van Valin, R.D. and R.J. Lapolla. (1997). *Syntax: Structure, Meaning, and Function*. New York: Cambridge University Press.

Hutchinson, Tom and Alan Waters (1987), English for Specific Purposes: a learning-centred approach: Cambridge University Press