

EFFECT OF PROJECT BASED LEARNING ON READING COMPREHENSION IN LANGUAGE AMONG PREPARATORY STAGE LEARNERS

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ABSTRACT

Project-based learning is an instructional method centred on the learner. Students develop a question and are guided through research under the teacher's supervision (Bell, 2010). It is an authentic learning model or strategy in which students plan, implement, and evaluate projects that have real-world applications beyond the classroom (Blank and Harwell, 1997; Dickinson and Allen 1998; Westwood, 2008). The present study investigated the effect of Project based learning on reading comprehension in English Language among Preparatory Stage Learners. The study was delimited to 3rd grade students, who comes under Preparatory Stage as per the structure of Indian Education System, prescribed by the National Education Policy (2020). The present study was experimental in nature. Pre-test post-test control group design was employed to collect the data. A total of 96 students (54 urban students and 42 rural students) were selected from 2 CBSE schools (1 urban and 1 rural) by using random sampling technique. A self-constructed Reading Comprehension test was used to measure students reading comprehension in English language. Project-based learning was used to teach the Experimental group, whereas the control group was taught through traditional teaching method. The collected data was statistically examined using Mean, SD, T-Test, and ANOVA. The results of this study demonstrated a positive and significant difference between students who were taught through project-based learning and those who were taught by the conventional way. Furthermore, rural students demonstrated a significant difference in their scores on reading comprehension in contrast to urban students. Overall, project-based learning proved to be effective in developing students reading comprehension in English language.

Keywords: Project based Learning, Reading Comprehension and Preparatory Stage Learners.

Introduction

The school is a unique social space where children who will be the community's future are educated, trained, and have their personalities developed. Various teaching strategies, suitable physical space, and a positive psychological environment all assist these children's development. Every expert in education and educational psychology of teaching and learning concurs that having a purpose, making sure the classroom's physical and social surroundings are suitable, teacher and student motivation for teaching and learning, the cognitive, emotional, and motor readiness of the kids, the instructors' effective classroom management, their subject-matter expertise, and their enthusiasm for their jobs and the advancement of the students. In addition to preventing the development of behaviour and annoyance issues, the teacher works to create the ideal learning environment. According to the United Nations Educational, Scientific, and Cultural Organization (UNESCO, 2013), education institutions in the modern world must adapt continuously to meet the quickly shifting needs of the societies they serve. In formal educational environments, teaching and learning cannot occur in a vacuum. Interaction between elements of the learning environment causes it to happen. The teacher, students, material, learning

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process, and learning context are all components of the teaching-learning process in a learning environment (Arul Laurence, 2012). According to Pritchett and Beatty (2012), a school's learning environment—which includes its technology and learning resources, teaching methods, learning styles, and links to local and global contexts—is crucial. In the same way that ecology is the mix of living organisms and the physical environment, the learning environment is a composite of human activities and material systems (Omolo et al., 2020). A child-friendly and child-centred learning environment should be given in the classroom, according to RTE (2009). This will allow the child voice his opinions freely and liberate him from trauma, anxiety, and fear. According to Duruji et al. (2014), a school with a suitable learning environment helps to stimulate the intended learning outcomes that would support strong academic performance by promoting efficient teaching and learning. Modern students should have access to classrooms that accommodate both their individual and group needs. Educational leaders must create interesting and powerful physical and cultural environments in order to face this issue (Ikegbusi et al., 2021). Different classrooms and contexts have different learning environments, each with its own special components. The components that make up the learning environment have an impact on the learning curve of the student. Omolo et al. (2020) list these elements as follows: curriculum, training, and instruction; people; instructional materials, technological tools, and learning resources; and the physical environment/learning space. A favourable learning environment is not something that just happens. They should be developed by deliberate methods that would encourage learning activities in the classroom, such as positively interacting with pupils and modelling positive behaviours (Becton, 2017).

Numerous elements of the learning environment have been found to have an impact on students' motivation, engagement in the classroom, and the development of literacy and fundamental life skills (Ambrose et al., 2010). A language-rich environment is a supportive learning setting that has been thoughtfully created to offer the stimulation kids need to successfully develop their language abilities. Students actively engage in the language literacy abilities of writing and reading. In contexts where language is abundant, practitioners take advantage of every chance to communicate, engage, and promote taking turns. Practitioners in language-rich situations are ideally positioned to assist children in developing critical communication skills by fostering positive interactions with them and boosting their confidence in language use. A language-rich environment encourages children to use language in everyday situations, supports their natural linguistic development, and offers them opportunities to learn the language. According to research, children's literacy development was influenced by the kindergarten literacy frameworks (environment and experiences), (Nielson and Monson, 1996).

Project Based Learning and Reading Comprehension

As per Dijkstra et al. (2015), the learning environment encompasses the various patterns of school life experiences that have an impact on norms, values, goals, instructional strategies, the teaching-learning process, interpersonal relationships, leadership practices, and the organizational structures of the school as a whole. Instructional strategies are intentional, planned, goal-oriented learning activities that can be used to advance students from lower learning levels (such as memorizing facts and data or rote learning) to higher learning levels (such as using critical and creative thinking skills to understand complex and abstracted phenomena). To establish a helpful and encouraging learning environment, a teacher can employ a variety of teacher-centred and student-centred instructional tactics, such as: project-based education, activity-based learning, co-operative learning, collaborative learning, blended learning, experiential learning and game-based learning gives opportunities to students to practice and reflect upon what they are learning. Instructional strategies are effective at facilitating higher levels of learning because they actively involve learners in ways that force them to use diverse ways of thinking and learning. As Clark's seminal article (1983) notes, it is the quality of the instructional design that creates the conditions that can facilitate effective learning environments (Kanuka, H. (2005).

Project-based learning (PBL) is one of these strategies that encourages learner-centred instruction through creative, interactive, and exploratory activities that take place outside of the classroom (Fried-Booth, 2002). According to Beckett and Miller (2006) and Gras-Velazquez (2019), project-based learning (PBL) allows students to actively participate in the learning process, make choices, and bring their interests to the learning environment. As a result, it has a high potential to increase students' attention spans. PBL involves students actively participating in the learning process through in-depth investigation, data analysis, problem solving, conclusion generation, product creation, and knowledge sharing. The recognized approach known as Project-Based Learning (PBL) gives students 21st century skills, such as critical thinking, problem-solving, creativity, innovation, teamwork, and real-world communication abilities, but also significantly improves students' English language proficiency. PBL projects help students improve their time management, critical thinking, and feeling of accountability.

Additionally, PBL is founded on group research, teamwork, peer evaluation, and feedback, all of which enhance learners' cooperation, feeling of community, and interpersonal skills (Lou & Kim MacGregor, 2004; Railsback, 2002). Since English alone is insufficient for pupils to be proficient in the technologically demanding and fiercely competitive digital age, all of the aforementioned abilities are essential and important in the quickly evolving twenty-first century (Ananiadou & Claro, 2009; Saavedra & Opfer, 2012). Being process- and product-oriented in real-life settings is one of the other virtual aspects of PBL in an EFL environment (Grabe & Stoller 1997). Therefore, learners improve their language skills in an authentic environment, implement their life and hands-on experiences and content knowledge as well as acquire problem-solving and higher-order thinking skills and creativity (Brunetti, Petrell, & Sawada, 2003; Poonpon, 2011; Solomon, 2003).

The Buck Institute for Education (BIE) (2015) in the United States defines Project Based Learning (PBL) as an educational approach. Over the past 25 years, this institution has played a crucial part in its growth. John Dewey's pedagogy regarding the benefits of experience and reflective learning forms the basis of this approach. Every learning process is framed by Dewey as a hands-on activity where students make choices to accomplish a goal. Because they promote a cognitive and behavioural framework to construct teacher teaching as well as a social activity for learning, neuroscience and psychology are cited in the concept of learning.

William Heard Kilpatrick, a student of PBA Dewey, popularized the Project Method, which was then applied to language instruction and evolved into a student-centred learning strategy (Beckett and Gulbahar, 2006). This trend led to the development of numerous instructional frameworks and evaluation methods that enhance student engagement and foster language and content learning. PBL gives BIE students a setting in which to practice fundamental abilities like reading and math. Reading and math are not explicitly taught in this context, but students who participate in the inquiry process gain implicit abilities in a real-world setting.

The best approaches to give children in the classroom authentic reading experiences are through project-based learning, which entails forcing them to read and write for real purposes. In order to address the additional issues of inquiry that students independently generate, the initiative provides them with a real "need to read." By reading the authentic resources—which may be characterized as the foundation of knowledge that exists outside of the learning context in the context of writing and reading—the kids discover the answers. Bell (2010) asserts that Project Based Learning (PBL) assists students in becoming lifelong readers and in achieving the critical learning level necessary for success in the twenty-first century. Numerous studies on language acquisition and literacy skills have found that kids learn literacy skills through acquisition, which implies that they learn skills from their practical work rather than through explicit instruction. They develop their own strategies to improve their literacy and learning styles after being provided the opportunity to practice. Gee et al. (2001) claim that in order for students to take control of their learning style and abilities, social factors are necessary. Students may have the opportunity to practice and advance their literacy skills through project-based learning. It encompasses more than just writing and reading; it includes all facets of literacy. Due to their inability to understand the purpose of the assigned book, a number of pupils struggled to be attentive readers. Students, however, desired to be involved in a social environment that would foster their interest in reading, which PBL offers. Through autonomy, PBL gives students the chance to choose and develop their own projects, which helps them succeed. Additionally, PBL demonstrates how they can engage with their peers to enhance their reading abilities. The pupils will learn how to use their skills in society through peer interaction. As students work on their projects, they develop a range of reading skills. Students are able to teach themselves and their peers' skills in this way. (Bell, 2010). Larson and Marsh (2014) in her study mentioned about the literacy skills and argued that literacy skills are not only taught through reading novels, answering the questions, writing or rote learning but by interesting with each other.

Review of Literature

Any research project must include a thorough review of the relevant literature since it provides background information and covers all previous studies conducted on the variables chosen for the current study. It gives the conditions and context for the study problem and aids the researcher in gaining understanding of previous work. In addition to allowing the individual to learn about past performance and advancements in the relevant field, it also improves the individual's capacity to add to the prior body of knowledge by either developing the existing body of knowledge with a fresh perspective or adding something completely new. This part deals with the review of related literature wherein the research

studies related to Project based learning and the variables of this study Reading skills like reading comprehension have been presented:

A qualitative case study of a novel and distinctive high school student-directed Project-Based Learning (PBL) Virtual Reality (VR) class was first observed by Morales et al. (2013). The findings demonstrated that PBL can be successful even when teachers provide little direction. The results supported an educational strategy for a subset of kids, who merit much further research to fully realize its strong potential for self-directed and peer-mentored learning. The usefulness of environmental science projects in examining students' environmental knowledge and attitudes toward science was investigated by Balushi and Aamri (2014). According to the study, students' participation in environmental initiatives improved their scientific attitudes and environmental knowledge in a statistically significant way. The study also guarantees that PBL can be used within the school premises, with few resources, and within the time allotted by the instructor and topic guide. The purpose of Kracalli and Korur's (2014) study was to examine how project-based learning affected the academic performance, attitude, and information retention of fourth-grade science students studying "Electricity in Our Lives." According to the results of the forms, students who use the method are able to evaluate changes in their own behaviour and build their own learning. In order to determine whether Project Based Learning (PBL) affects secondary school students' cognitive, behavioural, and emotional characteristics, Cynthia and Shannon (2015) carried out a study. The study examined how 25 students' behavioural, cognitive, and emotional engagement changed when they learned two distinct chemistry units utilizing the PBL technique versus when they didn't. Tests, surveys, attendance logs, and checklists were the instruments used to gauge the degree of participation. The study's findings showed that PBL had an impact on students' cognitive engagement in a single unit. In both units, there was a high level of emotional engagement. Therefore, there was no evidence that the implementation of PBL had an impact on students' emotional engagement. The usefulness of the seven steps of the Project Based Learning Model (PjBL) in enhancing students' productive competencies was investigated by Jalinus et al. (2017). The findings demonstrated that using the seven PBL phases was a useful and efficient way to improve students' productive competencies. Oktay and Oktay (2017) attempted to find out if the Project Based Learning approach has a substantial impact on seventh-grade students' academic performance in the structure and characteristics of matter. The experimental and control groups' scores, which were derived from their "Achievement test" post-test performance, did not differ significantly, according to the data. According to the study, pre-activities based on project-based learning should be implemented to help teachers and students adjust before treatment, and discussions should be conducted based on literature. An investigation was carried out by Ahmad and Ahmad (2018) to find out how project-based learning affected the achievement and self-efficacy of student teachers. The findings demonstrated that the experimental group benefited from Project-Based Learning, as evidenced by statistically significant differences in self-efficacy and achievement scores between the experimental and control groups. A study by Huan and Cih (2019) examined the overall impact of project-based learning on students' academic performance. When compared to traditional instruction, project-based learning had a medium to substantial beneficial impact on students' academic achievement, according to the analysis, which revealed that the overall mean weighted effect size ($d+$) was 0.71. Furthermore, topic area, school location, length of teaching, and information technology support all had an impact on the mean effect size; however, educational stage and small group size had no influence. Through the use of Project Based Learning (PBL) with the support of E-Learning through Lesson Study activities, Widyaningsih et al. (2020) investigated the potential for enhancing the quality of learning in physics learning planning courses. The findings indicated that the learning environment appeared to be very enjoyable and that student-learning outcomes raised student responses to good learning. In 2022, Wiratmo, Wirawati, and Sulistyawati studied eighth-grade children at SMPN 43 Surabaya, Indonesia. Their study showed that PBL implementation greatly enhanced students' notice text reading comprehension. The results showed that PBL promoted greater student engagement and creativity in learning activities in addition to improving reading achievement. Stevkovska's 2023 study looked at PBL's application in higher education courses for English for Academic Purposes (EAP) and English for Specific Purposes (ESP). The study came to the conclusion that PBL greatly improves academic reading abilities by involving students in meaningful and cooperative projects, which fosters critical thinking and deeper learning. García, Agila, & Calahorrano examined the effects of PBL on English reading comprehension in the Ecuadorian curriculum in 2024. Through contextualized and participatory learning experiences, PBL successfully enhances reading comprehension, according to their literature analysis. However, they also identified challenges such as the need for teacher training and project adaptation to local contexts.

A review of the aforementioned studies shows that not much research has been done on project-based learning and students' English language reading abilities. Thus, the gaps in this field's study have been identified. The first research gap is that, since project-based learning has been shown to be one of the most successful methods for teaching science, the majority of studies have focused on it and students' science attainment only (Balushi and Aamri 2014). Second, it has been noted that, in contrast to an increase in students' reading comprehension, project-based learning encourages creativity and deeper thinking in middle-level pupils. Students that struggle with traditional approaches can improve their performance with PBL (Kracalli and Korur, 2014). The third research gap is that, when compared to primary school students, project-based learning has been shown to be highly effective in fostering higher order thinking skills, particularly critical, abstract, and reflective thinking, for higher grade students. Apart from this, most of the project-based learning studies have been conducted in Western countries and very few studies are found in Indian Context, so keeping in mind all these research gaps, this study was conducted to examine the effect of project-based learning on English reading comprehension among learners in the preparatory stage in Indian settings. As project-based learning has its unique relevance in creating a student-centred, highly motivated learning environment which is mandatory for enhancement of student's literacy skills specifically reading comprehension skill of learners at varied levels.

Statement of the Problem

Effect of project based learning on reading comprehension in english language among preparatory stage learners

Delimitations of the Study

- The study was delimited to the Gurdaspur city only.
- The study was confined to Urban and Rural (CBSE) schools of Gurdaspur.
- The study was delimited to Preparatory Stage students of 3rd grade only.
- This study was confined to Reading comprehension in English Language of 3rd grade students.

Objectives of the Study

- To prepare lesson plans on project-based learning for reading comprehension in English language.
- To study the effect of Project based learning on Reading Comprehension in English language among 3rd grade students.
- To study the Reading Comprehension in English language among 3rd grade students taught through Project based learning with respect to locale.
- To study the interaction between treatment and locale on the gain scores of Reading Comprehension among 3rd grade students.

Hypotheses of the Study

- There was no significant difference in the mean gain scores of Reading Comprehension in English language among 3rd grade students taught through Project based learning and Conventional learning method.
- There was no significant difference in the mean gain scores of Reading Comprehension among 3rd grade students taught through Project based learning with respect to locale.
- There was no interaction between treatment and locale on the mean gain scores of Reading Comprehension in English Language among 3rd grade students.

Methodology

Measures

A self-prepared Reading Comprehension test in English was used to measure the reading comprehension of 3rd grade students. Test items were prepared according to the syllabi of the class. A total of 60 items were prepared in the first draft of the reading comprehension test. Then expert views were taken and a final draft of the test contained 20 test items. Lesson Plans on Project-based learning were prepared to provide students better learning experiences. The steps of project- based learning model which is developed by Hosnan (2016) were followed to prepare the lesson plans and these steps are: i) Determining Project, ii) Project Steps Planning, iii) Schedule Preparation, iv) Monitoring, v) Reports, Preparation and Presentation. Rusman & Bidarra (2017) states that the advantages of the project-based learning model is that it makes learning more enjoyable and engaging.

- **Sample and Sampling Design**

In the present study, experimental design with pre-test and post-test (Experimental group and Control group) of quantitative research technique was used. A sample of 96 (54 urban students and 42 rural students) was selected from two CBSE schools of Gurdaspur city. A random sampling technique was used to select the sample. Before conducting the study and implementation of the strategy, consent from the principals of the schools was taken. Then the selected sample was divided into two groups i.e. experimental group and control group. The pre-test of both groups was taken. Experimental group was taught through project based learning and traditional teaching method was used to teach students of conventional group. After the treatment, post-test was conducted for the experimental and control group).

- **Statistical Analysis**

The data was evaluated using the relevant statistical techniques such as Mean, SD, T-test and ANOVA (Analysis of Variance).

- **Analysis and Interpretation**

Hypothesis – 1

“There exists no significant difference in the mean gain scores of Reading Comprehension in English Language among 3rd grade students taught through Project based learning and Conventional learning method”.

Table 1: Showing mean Gain Score, SD, and T- Value of Experimental and Control Group With Respect to Reading Comprehension in English Language

Group/Method	N	Mean Gain Score	S. D	df	t- Value	Remarks
Experimental Group	48	8.00	4.43	94	4.37	Significant at 0.05 level
Control Group	48	1.79	2.05			

Significant at 0.05 level**

It is evident from Table 1 which shows that the mean gain scores in Reading Comprehension in English language of the Experimental and Control Group were 8.00 and 1.79 and the value of SD for the two groups was 4.43 and 2.05 respectively. It's further indicated that the t-value of the two groups was 4.37, which was higher than the table value (1.97) at 0.05 level of confidence. Hence, there was a significant difference between the Experimental group (taught through Project based learning) and Control Group (taught through conventional learning method) on their Reading Comprehension in English language. Thus, the Null Hypothesis *“There was no significant difference in the mean gain scores of Reading Comprehension among 3rd grade students taught through Project based learning and Conventional learning method”* was rejected.

Hypothesis – 2

“There exists no significant difference in the mean gain scores of Reading Comprehension among 3rd grade students taught through Project based learning with respect to locale”.

Table 2: Showing Mean Gain Score, SD, and T- Value of Experimental and Control Group of Reading Comprehension with Respect To Locale

Variable	Gender	N	Mean Gain Score	SD	t-value	Remarks
Reading Comprehension Skill	Urban	54	5.14	4.11	2.47	Significant at 0.05 level
	Rural	42	5.56	3.42		

Significant at 0.05 level**

From the table 2, it is found that the mean gain score of urban school students 5.14 and the rural school students were 5.56. It was found that the t-value was 2.47, which was greater than the table value (1.97) at 0.05 level of confidence. So, our Null Hypothesis *“There was no significant difference in the mean gain scores of Reading Comprehension among 3rd grade students taught through Project based learning with respect to locale”* was rejected.” As a result, there was a considerable variation in the Reading Comprehension of urban and rural school students. Because the mean gain scores of rural school students were higher than the urban school students, who were taught through the Project based learning. It can conclude that rural students performed better through Project based learning. According to Kumar & Kaur (2015) study exposed that rural student performed better through innovative pedagogical methods rather than urban students. The main reason is that rural students have sharp minded and they enjoyed everything, which helps to learn easily through environmental and innovative pedagogical methods very effectively.

Hypothesis – 3

“There exists no interaction between treatment and locale on the mean gain scores of Reading Comprehension among 3rd grade students”

Table 3: Showing Summary Table of Two-Way Anova of Treatment and Locale on Reading Comprehension in English Language

Sources of Variance	Sum of Squares	Df	Mean Sum of Squares	F	Significance
Locale (A)	407.30	1	205.28	4.87	.000
Treatment (B)	105.206	1	175.565	700.660	.000
Locale * Treatment (AxB)	14.12	1	46.111	5.280	.002
Error	2056.464	93	26.231		
Total	2567.049	96			

From table 3 also reveals that f-value for the interaction effect of Locale and Treatment on Reading Comprehension of students were .002, which was significant at 0.05 level of confidence. The strong interaction effect suggests that locale and treatment (taught through Project based learning) have major impact on Reading comprehension of students. Thus, the Null Hypothesis, *“There was no interaction between treatment and locale on the mean gain scores of Reading Comprehension among 3rd grade students”* was rejected.

Discussion of Findings

The study's findings indicate a positive and significant difference between students exposed to the Project based learning and those exposed to the conventional learning method. The findings of the study are that performance of students in reading comprehension scores of experimental group is higher than the scores of controlled group. So, project-based learning has a positive and significant effect on Reading Comprehension skill of preparatory stage students. In this study, results shows that rural school students were gain higher reading comprehension skill than the urban school students, which was taught through the Project based learning. A study by Summers and Dickinson (2012) provides relevant insights. They found that students from a PBL-implemented rural high school had a significantly higher percentage of students scoring proficient or above on state assessments compared to their urban counterparts. This suggests that PBL can be particularly beneficial in rural settings, potentially due to its adaptability to local contexts and its capacity to engage students in meaningful, hands-on learning experiences. The main reason is that rural students have sharp minded and they enjoyed everything, which helps to learn easily through environmental and innovative pedagogical methods very effectively. Projects encourage teachers and learners to go beyond information presented in textbooks, create new ideas, improve and enhance social competencies, and build the foundations for automatic learning. They allow for increasing involvement of students. They help overcome significant deficits and challenges of traditional teaching methods.

Educational Implications of the Study

It has been found from various studies that project based learning benefits language learners in a drastic manner. So, educationists should make policies in concern for implementation of project-based learning at the school level and must give due consideration to teachers training for professional development. The educational implications of project-based learning are: 1) Project based learning can be effectively implemented in elementary schools to achieve various objectives and on experimental basis, it can be adopted for all subjects to improve the overall achievement of students. 2) As it plays significant role in improving achievement, teacher training colleges should be particular about providing training to use this strategy to teacher trainees. 3) Moreover, resources, in-service training and motivation should be provided to the teachers to implement blended learning strategy more effectively and meaningfully. Project based learning is efficient for inclusive classroom settings because it provides benefit to all students irrespective of their gender and learning styles. 4) Furthermore, the well-scheduled material of the reading activities that were based on is one of the potential key reasons, and it is aimed at boosting learners' success in reading comprehension. The core curriculum had a particular step that guided the instructor as well as the learners through the processes of completing each particular lesson's processes and achieving the lesson's results. Therefore, the well-planned exercises of project-based learning has a favourable impact on learners' ability to comprehend what they read. 5) In addition, the teaching approach is largely responsible for the significant improvement in the students' levels of reading comprehension. To encourage participants to take part in these project works, it should be developed to

take into consideration both the skill level of the learners and the amount of difficulty posed by the project activities themselves. To clarify, the educational program consisted of a variety of various exercises and tasks. The difficulty of these tasks ranged from simple (literal level) to moderate (inferential level) to difficult (critical level), beginning with the easiest (literal level) and working its way up to the most difficult (critical level). This variance in the difficulty of reading comprehension levels encouraged the range of questions used in reading comprehension sessions. As a result, this feature made it possible for students of varying grade levels to participate actively in the project exercises.

Conclusion

The findings of this study highlight the positive effect of Project-Based Learning (PBL) on improving reading comprehension in English, particularly among rural students. By engaging learners in meaningful, hands-on projects, Project based learning fosters deeper understanding, critical thinking, and increased motivation to read. The interactive nature of Project based learning not only enhances literacy skills but also boosts overall academic performance by making learning more relevant and engaging. Furthermore, the study suggests that Project based learning helps bridge the educational gap between rural and urban students by providing a more student-centred and experiential approach to learning. Rural students, who often face limited access to resources and traditional lecture-based teaching, benefit significantly from Project based learning emphasis on collaboration, creativity, and real-world application. In conclusion, implementing Project based learning as a teaching strategy in rural schools can be a valuable step toward improving English reading comprehension and overall academic achievement. Future research should explore long-term effects and best practices for integrating Project based learning in different educational settings to maximize its effectiveness.

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