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Effect of Peer Tutoring on Students' Academic Achievement in the Subject of English at Grade 10

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Abstract

Peer tutoring has emerged as a very important tool to impact learning among students. This research focuses on the impact of peer tutoring on students' achievement in the English language of grade 10 students of District Haveli Kahuta in Azad Jammu and Kashmir. The current study was experimental and used a pre-test and a post-test to measure the difference between a control and an experimental group in terms of students' achievement. The researchers employed the Paired Random Sampling technique of forty learners who were put into two equal groups (20 students in each group). The pupils in the first group (Experimental) were taught through the peer tutoring method while the pupils in the second group (control) went through the lecture method. T-Test was employed to compare students' achievement. The current study concluded that peer tutoring expedites students' learning in the subject of English by making their understanding crystal clear. It also enhanced skill development and helped students to gain insight into their subject matter. Moreover, it would be better if peer tutoring is practiced in schools to enhance teaching teaching-learning process.

Keywords: Tutor, Tutee, Peer Tutoring, Lecture Method, Pre-Test and Post-Test, Academic Achievement

Introduction

Education is the basis of personal and social growth, shaping the future of people with skills and knowledge essential to contributing to the development of society. As the world continues to develop, education must adapt to confirm that every student, regardless of background or ability, has an equal opportunity to succeed in life and achieve their goals. According to Goodlad, (1998) peer tutoring improves learning for all children, irrespective of academic level. Traditional teaching methods, such as lectures and rote memorization, have restricted students' ability to learn new concepts and discover different things on their own. The one-sizefits-all approach fails to account for individual differences, and it is high time that we include new and advanced techniques in our classrooms that increase students' attention and build up their confidence. According to Cohen, (1986) peer tutoring is an exchange of information between students with different degrees of knowledge in which the tutee receives support or understanding while the tutor gives information. Peer tutoring nurtures genuine conversation, increases student involvement, and promotes a love of learning (Smith, 2019). framework of language learning, peer tutoring was found as a purposeful practice and collaboration platform that allows students to develop their language expertise in a cooperative and inspiring setting (Topping, 2005). The social constructivist theory, on which peer tutoring is created, holds that learning occurs when people interrelate and work together. Peer tutoring is an outstanding way to promote active engagement and mutual support because it supports

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the evidence that learners can reach a higher level of understanding with the direction of more well-informed peers, as supported by Vygotsky's Zone of Proximal Development (ZPD) (Vygotsky,1978). Bandura's Social Learning Theory also highlights the importance of displaying, imitation, and observation in learning (Bandura, 1997). Peer tutoring involves pupils observing how their peers solve challenges and using those methods for their education. This creates an atmosphere where learning becomes a collective activity and helps students gain academic expertise. Cooperative learning promotes critical thinking and cognitive abilities, according to cognitive theories like Piaget's emphasis on peer interaction (Piaget, 1970). Through peer tutoring, students are encouraged to express their ideas clearly, improve their comprehension through conversation, and modify their cognitive agendas in response to criticism from their peers. Both the tutee and the tutor gain knowledge from this mutually beneficial process, which improves their understanding of the subject matter. Peer tutoring has been widely studied as a language learning aid, and studies have found that it advances social skills, cognitive development, and academic achievement (Bowyer-Crane & Snowling, 2013). Peer tutoring has been traced back to ancient Greece where it was used as a substitution model for knowledge acquisition. With time, it became apparent that peer-to-peer interactions are qualitatively different from teacher-student relationships, providing detailed advantages in learning settings. Despite wide research on peer tutoring, its impact on the Grade 10 students' academic performance in the English language has not so far been discovered. Critical English skills include reading, writing, and speaking, critical areas for fitness at college and beyond. Studies showing how peer tutoring affects these areas will be important for instructing and policy decisions. Teaching strategies that address the requirements of different learners are becoming more and more necessary as nations place greater importance on English language proficiency, particularly for students who speak other languages as their first language (Galloway, N., Kriukow, J., & Numajiri, K., 2021). This study focuses on assessing the impact of peer tutoring on the academic achievement of Grade 10 English students. In this regard, the research seeks to contribute to existing knowledge and make practical recommendations concerning the integration of peer tutoring into secondary education curricula.

Statement of the Problem

While peer tutoring is known to improve academic performance, its detailed impact on Grade 10 students' English achievement is not well understood. Many students face challenges in reading comprehension, writing, and verbal communication, which disturb their self-confidence and improvement. Moreover, traditional teaching methods often do not meet all students' needs, creating achievement gaps. This study aims to examine how peer tutoring affects English language skills in Grade 10 students, providing insights to improve educational practices and student outcomes.

Research Questions:

- Which is more effective in enhancing the English performance of students: peer tutoring or traditional instruction?
- What are the differences in English outcomes between peer tutoring and traditional instruction for secondary students?
- To what extent is peer teaching a successful strategy in improving the English academic achievement of students?

Review of related literature

Types of Peers Tutoring Peer tutoring (also known as peer-assisted learning, peer education, child-teach-child, mutual instruction, and collaborative learning) has been a useful education approach for a long time. Early instances involved the transfer of information through the use of young people as substitute teachers (Falchikov, 2001). In essence, peer tutoring involves two or more individuals, identified as tutors and tutees, engaging in a learning process.

Historical Context

As revealed in early Roman and Hindu style education, where the student body used common instruction, peer tutoring has its roots in some of the first forms of partnership in the education sector (Gordon, 2005). Early in the ninth century, European schools recognized structured peer-tutoring systems like "simultaneous instruction," "decurions," and the "monitorial system," in which scholars accept the roles of tutors and tutees (Gordon, 2005). It increases motivation and thought and provides fresh viewpoints on academic content (Eisenkopf, 2010). "A set of practices and methods that service peers as one-on-one teachers to give individualized instruction, practice, repetition, and concept elucidation" is how (Utley and Mortweet, 1997) define peer tutoring (p. 9). Research has confirmed the effectiveness of the interference.

Benefits of Peer Tutoring

It is often accepted that peer tutoring is an easy and cost-effective method (Gök, 2018). According to research by (Güvey Aktay and Gültekin 2015), peer connections improve academic and social involvement by encompassing outside of the classroom and involving help, correction, group projects, discussions, and advice during breaks. Profounder participation in reading and writing exercises is stimulated by this collaboration. Research backs up the claim that peer tutoring helps students improve their abstract learning, problemsolving abilities, and systematic process skills (Crouch & Mazur, 2001; Sayer, Marshman & Singh, 2016). Both tutors and tutees receive academic assistance, according to studies like those by (Fuchs, Fuchs, Mathes, & Simmons, 1997), however, the teacher's involvement in these events is typically minor. In addition, to refining academic results, peer tutoring nurtures better attitudes toward education (Roswal, Mims, Evans & Smith, 1995), self-directed learning, and positive social interactions (Shanahan, 1998). Close peer relations foster a greater appreciation for education and a devotion to improving academic achievement, according to Burrows and McCaslin (2002). While (King, Staffieri, and Adelgais, 1998) stressed how reciprocal teaching endorses questioning, description, monitoring, and organizing capabilities through role-switching, Cohen, Kulik, and Kulik (1982) revealed that peer tutoring improved reading and math skills. According to Gass and Mackey (2017), this setting strengthens discussion and group meaning-making. Additionally, peer tutoring raises critical life skills like understanding and partnership, which boost confidence and foster positive relationships (Johnson & Johnson, 1983). Peer tutoring, according to Goodlad (1979), is "humanly rewarding," strengthening social ties and giving children a sense of direction. This dynamic diminishes annoyance and behavioral problems by refining both tutors and tutees how to communicate effectively and offer quick assistance without taking the place of qualified coaching (Topping & Ehly, 1998).

Empirical Studies

A high school computer science class, (Wolfe,2018) examined the effects of peer tutoring and found that it boosted academic achievement and endorsed relationships among students. Research on cognitive domains like knowledge, comprehension, and application was extended by (Ullah, I., Kaleem, M., & Aamir, S. M., (2020), who discovered that peer tutoring greatly improved academic achievement. However, according to cognitive level, indicating that peer tutoring methods had to be improved to accommodate different learning requirements (Duran, D., Flores, M., Oller, M., & Ramírez, M.,2019). Reading in Pairs curriculum improved EFL students' reading comprehension and conversational fluency. This study braced the idea that structured peer tutoring enhances social and knowledgeable involvement. Sanchez-Aguilar's, (2021) study on activities and insights in a bilingual classroom exposed that peer tutoring fosters motivation, teamwork, and effective learning through peer rectification and clarification. Furthermore, Marieswari and Prema, (2016) conducted investigational research on Class VIII pupils and found that tutors and tutees significantly enhanced their academic performance in English. Greenwood et al. (2001) underscored the efficiency of the Class Wide Peer Tutoring Learning Management System (CWPT-LMS) in urban elementary schools by

proving that ELL students made a significant literateness gain. Hidayah, (2014) measured the influence of peer tutoring on grammar proficiency and found that students' understanding of the simple past tense improved meaningfully. In the evaluation of a 12-week peer tutoring intervention with elementary school pupils, Parker et al., (2023) found that the children's language skills pointedly improved and that supportive tutor-student relationships were vital. According to (Akhtar, Saeed, and Ayub, 2019), peer tutoring considerably improved the writing skills of Pakistani students in Grade XI. The study of the advantages of peer tutoring for underachievers, employed t-tests and found that the tutored group pointedly improved (Flores et al., 2018).

Gaps in Literature

The body of research on peer tutoring shows that it works well for raising motivation, improving academic achievement, and developing healthy social skills in a variety of age groups and educational settings. Research on the effects of peer tutoring on children at vital educational stages is missing since it focuses on particular grades, like Grade 10, and courses, like English. Few studies look at the long-term impacts on academic performance and knowledge retaining, while the majority show evidence of short-term academic advantages. This study is important because it proposes to offer experimental proof of how well peer tutoring improves the English language proficiency of students in Grade 10. By being aware of its effects, teachers can use peer tutoring to seal in the gaps in conservative teaching strategies and meet the needs of students with different learning styles. Teachers, school officials, and representatives can use the findings to learn the best ways to introduce peer tutoring programs that will increase students' confidence and academic achievement. The study also adds to the body of knowledge on cooperative learning and provides helpful recommendations for enhancing secondary English instruction.

Methodology

Research design (Nature of study)

The research was quantitative and the method of study was a True experimental design known as a "pre-test-post-test control group design". Pre-test and post-test methods were used to evaluate the reading comprehension skills of the learners (Shuttleworth, 2009). The Equivalent Groups A design with a pre-test and post-test was thought to be more suitable for this study. Two groups were chosen from the total number of students in this design. The equality of groups was ensured by equating the students of both groups based on pre-test results using pair random sampling, with one group designated as the experiment group and the other as the control group.

The research design was represented symbolically.

Table 1:

R	Experimental	O ₁	X	O_2
R	Control	O_1		O_2

- **R**: Participants are assigned at random to either the experimental or control group.
- O₁: Before the intervention, a pretest was administered to evaluate baseline performance.
- **X**: Only the experimental group received the intervention or treatment (in this example, peer tutoring).
- O₂: After the intervention, a posttest was administered to gauge its impact.

(Mills, G. E., Airasian, P. W., & Gay, L. R., 2012)

Sample and Sampling technique

The selection of Govt Girls High School, a higher secondary institution in the Government sector in district Haveli Kahuta, was based on purposive selection. Forty (40) students were

selected on their willingness to participate in the study through a **pair random sampling** technique.

Research tool

Research tools are important tools for data collection. Pre-test and post-test were developed as research instruments with the help of the supervisor and were validated by two educational experts and English language expert. The academic achievement test consists of 30 multiple-choice questions, each with four answer choices. The score for each question was 1. These items were prepared from the three lessons of the textbook of the 10th class. The test was arranged by setting up the textual material in table of specification.

Data Collection

Data was collected through above mentioned self-developed research tool. Duration of the research was two months (September, 2024 and October, 2024). The sample was divided into two groups (experimental and control group) of equal nature on pre-test scores. Experimental groups were further divided into two groups based on their test scores; Tutors and Tutees. Tutors were given proper instruction and training based on the nature of the contents to be presented for treatment. Students have no prior experience with peer instruction therefore they were first informed about peer teaching. Tutor and tutee roles were assigned randomly through a coin flip, ensuring an unbiased process without considering prior academic performance. The study followed a reciprocal peer tutoring model, where tutor and tutee roles alternated weekly. This ensured that all participants experienced both roles, promoting collaborative learning. Moreover, research ethics were given utmost importance while data collection.

Data Analysis

Table 1

Pre-Test	Groups	N	Mean	SD	Т	df	Sig
	Control	20	9.5500	3.11997	0.46	38	0.963
	Experimental	20	9.5000	3.66348	0.46		

Table 2

Post Test	Groups	N	Mean	SD	Т	df	Sig
	Control	20	14.3000	2.77394	-2.449	38	0.19
	Experimental	20	17.0500	4.18613			

Table 3

Control Group		N	Mean	SD	T	df	Sig
	Pretest	20	9.55	3.120	-4.646	19	<0.001
	Posttest	20	13.95	2.585			

Table 4

Experimental		N	Mean	SD	T	df	Sig
	Pretest	20	9.50	3.663	-9.281	19	<0.001
	Posttest	20	17.10	4.204			

Findings

- 1) The pre-test means scores of the experimental group (M=9.50, SD=3.66) and control group (M=9.55, SD=3.12) did not change statistically pointedly (t=0.46, p=0.963). (Table#1)
- 2) The post-test mean score for the experimental group was 17.05, whereas the control group was 14.30. The experimental group outclassed the control group by an average of 2.75 points. (p=0.019, t=-2.449) There was a statistically weighty modification. (Table#2)

- 3) The mean score of the control group enhanced by 4.40 points, from 9.55 on the pre-test to 13.95 on the post-test. An improvement was statistically noteworthy (t=-4.646, p<0.001). (Table#3)
- 4) The experimental group showed a distinguished improvement of 7.60 marks, with their mean score increasing from 9.50 in the pre-test to 17.10 in the post-test. A significant enhancement was seen (t=-9.281, p<0.001). (Table#4)

Conclusions:

- 1. Before the intervention, both groups' academic performance was equivalent, ensuring a fair baseline for assessing the effectiveness of peer tutoring. (Table#1)
- 2. The experimental group, which got peer tutoring, outperformed the control group in terms of scores, suggesting that peer tutoring was a more successful method of raising academic achievement. (Table#2)
- 3. The control group's performance improved somewhat as a result of regular classroom instruction, but not as much as the experimental group. (Table#3)
- 4. Compared to traditional classroom instruction, peer tutoring produced a significantly higher improvement in academic achievement. The 7.60-point difference demonstrates how well peer tutoring had improved students' learning outcomes. (Table#4)

Discussion

Research Question 1: Which is more effective in enhancing the English academic outcome of students: peer tutoring or traditional instruction?

The results of the study showed that peer tutoring progressed students' academic performance more efficiently than old-style education. The pre-test results showed no significant differences between the experimental group (peer tutoring) and the control group (traditional training), signifying that both groups started at comparable intellectual levels. However, the academic performance of the experimental group had pointedly improved by the post-test (p-value = 0.019), while the improvement of the control group was not statistically significant (p = 0.19). Supporting research indicates that peer tutoring improved academic accomplishment. Peer connections during reading, writing, and even breaks foster cooperation by allowing students to support, analyze, and exchange ideas with one another (Güvey Aktay and Gültekin, 2015). Combined peer connections increased students' interest and understanding of the material, which was perhaps why the experimental group showed a major improvement. Additionally, peer teaching improved students' problem-solving skills and concept attainment success (Sayer, Marshman, and Singh, 2016 and Crouch and Mazur, 2001). The experimental group's significant development in academic performance in English during this study was due to the peer teaching technique, which stimulated peer support and collaborative learning.

What are the differences in English academic outcomes between peer tutoring and traditional instruction for secondary students?

The study found considerable differences in academic outcomes between groups receiving traditional instruction and peer tutoring. The experimental groups' post-test scores established a greater and statistically significant rise (p = 0.019), despite the control group's modest improvement. While the control group's improvement from 9.55 to 13.95 was encouraging but less marked, the experimental group's mean scores increased from 9.50 to 17.10. This outcome was consistent with previous peer tutoring research. Studies showed that peer teaching nurtured cooperative learning, which enhanced academic performance. (Fraser, Beaman, Diener, and Kelem, 1977) highlighted the advantages of peer feedback strategies for student learning. Peer feedback encouraged positive, non-evaluative connections that fostered a collaborative learning atmosphere and enhanced understanding and memorization of the material. This was most likely one of the primary causes of the experimental group's greater academic improvement.

To what extent is peer teaching a successful strategy in improving the English academic performance of students?

In this study, the peer tutoring strategy intensely enhanced students' academic performance in English. The experimental group's post-test scores intensely improved with a t-value of -9.281 (p < 0.001), signifying that peer tutoring had a significant impact on their learning. The outcomes were in line with Shanahan's (1998) findings that peer teaching enhanced the learning environment by creating more positive social relationships. The experimental group's peer relationships most likely assisted in their academic success and social dynamics. The peer tutoring technique encouraged active engagement as students worked together to strengthen topics and assist one another's learning. This relationship was vital to successful peer teaching. According to Crouch and Mazur, (2001) peer teaching had a positive effect on students' concept-learning and problem-solving abilities, which is consistent with the results of this study. The improvement in the experimental group proposed that peer teaching is an effective strategy for encouraging increased understanding and improved academic performance in English.

Recommendations

The study's assumptions lead to the following recommendations for enhancing English language proficiency through peer tutoring:

Peer tutoring incorporation in secondary education: Schools should consider including peer tutoring programs in their curricula, especially in English, as the study proves that it enhances students' academic achievement. When joint with traditional teaching methods, peer tutoring can produce an appealing and self-motivated learning environment.

Organized Peer Tutoring Programs: To ensure the effectiveness of peer tutoring, schools should implement structured programs with clear plans for both tutors and tutees. Tutors must be properly trained, roles must be well-defined, and there must always be suitable teacher supervision.

Training and Support for Teachers: Teachers ought to have teaching on the proper usage of peer tutoring approaches. Professional development courses on peer tutoring can teach teachers how to plan lessons, select relevant materials, and provide the support that tutors and tutees need.

Pairing Strategies: Care should be taken while selecting tutors and tutees. By corresponding students with corresponding strengths and weaknesses, the tutoring process can be more successful. Random pairing, as used in this study, may promote equality even if pairing based on specific requirements may also improve results.

Focus on Collaboration and Active Contribution: Peer tutoring programs should be designed to promote assistance and active participation, where tutors and tutees engage with the material. Everyone advances in both teaching and learning when tutors and tutees alternate roles, which frequently promotes deeper understanding and retention.

Ongoing Assessment and Response: Regular assessments of tutors' and tutees' progress should be a part of the peer tutoring program. Measuring students' performance helps them succeed educationally.

Parent and Guardian Connection: Schools could ask parents to sponsor peer tutoring programs to ensure that students have a supportive setting both at home and school. Encouraging parental participation can increase students' motivation and engagement. **Adaptation for various Learning Surroundings:** Peer tutoring programs can be made to order to meet the needs of various classes and students with varying levels of English proficiency.

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