The Use of Quantum Teaching in Teaching English at Al-Manar Islamic Boarding School

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This research explores the effectiveness of Quantum Teaching in enhancing the English teaching and learning process, particularly in making it more engaging and enjoyable for students. The research was conducted at Al-Manar Islamic Boarding School in Aceh Besar, where the traditional English learning methods were often perceived as boring and failed to maintain students' motivation. This study specifically focused on junior high school students, who frequently experience low motivation, which affects their English mastery and achievement. The aim was to determine whether the use of Quantum Teaching could improve students' interest, motivation, and comprehension in learning English. The research concentrated on the reading comprehension subject for second-grade students, as it is a core area where Quantum Teaching could be effectively applied. The findings of the study indicated that Quantum Teaching significantly improved the learning atmosphere and students' involvement in the learning process. The evidence was drawn from both pre-test and post-test scores, showing a substantial improvement in student performance. Additionally, teaching methods such as using music during recount text lessons and conducting descriptive text lessons outside the classroom were found to be particularly effective. The study was further supported by student responses through questionnaires, which confirmed that Quantum Teaching increased their interest and motivation. In conclusion, the use of Quantum Teaching proved to be a successful method to improve English learning outcomes.

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I. INTRODUCTION

The classroom is the central environment where students' academic performance is shaped. The effectiveness of learning activities in the classroom depends largely on the methods, models, and media employed by teachers. A well-designed learning strategy not only improves comprehension but also fosters student motivation (Schunk & DiBenedetto, 2020). In contrast, monotonous and conventional teaching often leads to a lack of engagement, resulting in reduced student interest and poor learning outcomes (Wati & Daryono, 2024; Wang et al., 2021). To address these challenges, educators must adopt innovative and student-centered approaches that cater to diverse learning styles. Incorporating active learning techniques, such as collaborative projects, problem-based learning, and technology-integrated lessons, can enhance student participation and retention (Theobald et al., 2020).

English is a critical subject taught in schools, serving as a gateway to global knowledge and communication. However, its teaching is frequently executed using traditional teacher-centered methods (Richards & Rodgers, 2014). Such approaches often hinder student participation and interest, particularly in junior high school settings where students require interactive and engaging learning environments (Zainuddin et al., 2020). Based on the interview with the English teacher at Al-Manar Islamic Boarding School conducted on 7th January 2025, many teachers struggle to create a dynamic atmosphere, resulting in uninspired instruction and low student achievement, a phenomenon also observed in similar contexts by Purnama et al. (2022). Quantum Teaching emerges as an innovative pedagogical model designed to revitalize the classroom experience. Based on the work of DePorter (2010) in educational theories such as Accelerated Learning, Quantum Teaching emphasizes the meaningful integration of content, environment, presentation, and interaction. It is a holistic teaching philosophy that seeks to engage students cognitively, emotionally, and socially (Jensen, 2020). Colin and Dave (2001) further reinforces this idea by stating that Quantum Teaching seeks to reach every student by tapping into diverse talents and learning styles. It transforms the classroom into a vibrant "concert," where the teacher acts as the conductor of diverse learning activities (DePorter & Hernacki, 2021). The goal is to create frequent "aha" moments of discovery, fostering both joy and responsibility in learning (Mayer, 2021).

This study applies Quantum Teaching at Al-Manar Islamic Modern Boarding School, where English is one of the core subjects, especially for junior high school students. At present, the English learning process at this school is still dominated by conventional methods that often result in students becoming bored, inattentive, and unmotivated, consistent with findings in similar boarding school environments (Nurhidayah et al., 2021). The study focuses on second-grade students, who are at a transitional stage from elementary to junior high school and require more dynamic teaching approaches to maintain their attention and improve their performance (Bjorklund & Causey, 2017).

Reading comprehension was selected as the target skill for this research, given its essential role in English education. According to Duke et al. (2021), reading comprehension involves extracting relevant information from texts effectively. This skill serves as a foundation for understanding other language components and is thus an ideal focus for observing the effectiveness of Quantum Teaching, particularly when combined with brain-based learning strategies (Sousa, 2022).

Previous studies have highlighted the potential of Quantum Teaching in enhancing classroom engagement and academic achievement (Ardiansya, 2023; Riza, 2023; Sianipar et al., 2025; Wahid, 2021; Walid et al., 2023). These studies revealed that students taught using this method demonstrated increased interest and better performance in lessons, particularly when the approach was adapted to local contexts (Rahmawati et al., 2022). The findings also indicated improved student motivation and classroom participation when compared to traditional instruction (Freeman et al., 2014). The results support the application of Quantum Teaching across different aspects of English learning, including grammar, writing, speaking and reading (Purnama et al., 2022). However, while prior studies have focused mainly on high school levels or specific components of English, this research contributes by applying Quantum Teaching to reading comprehension among junior high school students for boarding school, addressing a gap identified in recent literature (Widodo, 2020).

This research focuses on the application of Quantum Teaching in teaching reading comprehension to second-grade junior high school students at Al-Manar Islamic Modern Boarding School. The study aims to investigate how the implementation of Quantum Teaching can enhance students' mastery of English, particularly in reading comprehension, building on recent work in brain-based language learning (Tokuhama-Espinosa, 2021). By exploring this innovative approach, the research seeks to bridge the gap between traditional teaching methods

and student-centered learning, demonstrating how a brain-based and emotionally engaging model can improve reading skills (Jensen, 2020).

The contribution of this study lies in its attempt to integrate motivation, engagement, and comprehension—elements often overlooked in conventional classrooms—into language instruction (Dörnyei, 2020). It provides valuable insights for English teachers, particularly those in boarding school environments, by offering a practical and adaptable teaching model (Richards, 2023). Additionally, the research enriches the existing literature on Quantum Teaching and its application in language learning at earlier educational stages, promoting methodological innovation within Indonesian educational contexts (Widodo, 2020).

II. METHODS

This study was conducted at Al-Manar Islamic Boarding School in Lampermai Cot Irie, Aceh Besar, employing an experimental approach to examine how Quantum Teaching could enhance reading comprehension skills. As emphasized by Creswell and Creswell (2023), this approach is particularly suitable for educational settings where intact classes must be used. The research focused on eighth-grade students taking English classes, with three available classes at the school: VIII A (23 students), VIII B (27 students), and VIII C (34 students).

Following Cohen et al. (2018) guidelines for educational research and the principles of purposive sampling, Class VIII C was selected as the experimental group based on two key criteria. First, the homogeneity principle Patton (2015) indicated that these students had relatively uniform baseline competencies in English, which helped control for variations in prior knowledge. Second, as information-rich cases Palinkas et al. (2015), they exhibited high motivation but low achievement levels, making them ideal candidates for testing innovative teaching methods. The four-session intervention began with a pre-test to establish baseline reading comprehension levels, followed by two instructional meetings where Quantum Teaching strategies were implemented. These included using calming background music (instrumental pieces, English songs, and Islamic nasheeds) during recount text lessons and conducting descriptive text sessions in an outdoor "nature school" setting to enhance engagement.

The final session included a post-test to measure learning gains and a five-item questionnaire administered in Bahasa Indonesia to assess students' perceptions of the Quantum Teaching approach. This methodological design allowed for a comprehensive evaluation of both quantitative learning outcomes and qualitative student feedback while maintaining ethical considerations and alignment with the school's cultural context. The use of multiple data collection methods (instructional experiments, assessment tests, and questionnaires) ensured triangulation of results for greater validity. Throughout the process, the researcher collaborated with the classroom teacher to ensure the interventions complemented the existing curriculum, and proper consent procedures were followed to uphold ethical standards in educational research

III. RESULT AND DISCUSSION Findings

Test is used to find out students' achievement in learning reading subject. For this research the writer took second grade students of junior high school. In order to measure the achievement, the writer provided pre-test and post-test which consist of a recount text and a descriptive text with five questions for each of the text. The pre-test was given to the students at the first meeting of experimental teaching. Meanwhile, the post-test was given in the last meeting of experimental teaching. The following section presents the detailed performance of each participant, highlighting the individual and collective progress achieved through this pedagogical approach.

Tabel 1. Scores of Teaching Recount Text with Music in the experimental class

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No	Students' Initial	Pre-test	Post-test	Gain (d). (Post-test Pre-test)
1.	SR	50	100	50
2.	MR	60	100	40
3.	AM	60	100	40
4.	AS	20	100	80
5.	HR	60	100	40
6.	UHS	50	100	50
7.	UN	50	100	50
8.	SRE	70	100	30
9.	SW	40	100	60
10.	RF	50	100	50
11.	DR	50	100	50
12.	YD	30	80	50
13.	AF	30	100	70
14.	RW	20	80	60
15.	CNR	60	100	40
16.	NS	40	100	60
17.	SA	50	100	50
18.	EN	50	100	50
19.	ASB	40	100	60
20.	PNT	50	100	50
21.	ZU	30	100	70
22.	ANP	60	100	40
23.	RH	40	100	60
24.	WF	40	100	60
25.	NH	30	100	70
26.	ZRA	40	100	60
27.	DLR	10	100	90
28.	UH	30	80	50
29.	NR	90	100	10
30.	AR	40	100	60
31.	IZ	20	100	80
32.	FR	35	100	65
33.	FH	60	70	10
34.	NA	60	100	40
	Total	1.515	3.310	1.795
	Mean	44.558	97.352	
	N = 34	$\bar{x}_1 = 44,558$	$\bar{x}_2 = 97,352$	$\sum d = 1.795$

The presented data shows the pre-test and post-test scores of 34 students, along with their individual gains (post-test minus pre-test). The pre-test scores range from 10 to 90, with a mean of 44.558, indicating varied initial performance levels. Post-test scores are significantly higher,

ranging from 70 to 100, with a near-perfect mean of 97.352, suggesting substantial improvement. The gain scores range from 10 to 90, with most students achieving gains of 40–70 points. Notable cases include DLR, who improved by 90 points (10 to 100), and NR, with the smallest gain (10 points, 90 to 100). The total gain across all students is 1,795 points, reinforcing the effectiveness of the intervention. The data suggests a strong positive impact, as almost all students reached or approached the maximum score (100) in the post-test, indicating significant learning or skill enhancement.

The significant value must be attained on 2,46. If the value did not attain, the result of study is rejected. It is called by null hypothesis (Ho) which means using music in teaching recount text is not effective. But if the result of study is equal or higher than 2,46 so the result is accepted. It is called by hypothesis alternative (Ha) which means using music in teaching recount text is effective.

From calculating the T-score formula, it is found that t-score is 8,839. So, t-test = 8,839 and t-table = 2,46 from the degree of freedom (db) which equal 1% from the degree of error. The result of study as follow; t-test>t-table which 8,839>2,46 which means the result of study is higher than that of the t-table. Therefore, according to the result of study, it indicates that using music is effective and acceptable in teaching recount text as one of the Quantum Teaching media which helps creating relax situation in learning

Table 2. Scores of Teaching Descriptive Text by learning outside the classroom in the experimental class

No	Students' Initial	Pre-test	Post-test	Gain (d). (Post-test Pre- test)
1.	SR	100	100	0
2.	MR	100	90	-10
3.	AM	50	100	50
4.	AS	50	100	50
5.	HR	70	100	30
6.	UHS	80	100	20
7.	UN	80	100	20
8.	SRE	100	90	10
9.	SW	50	90	40
10.	RF	70	100	30
11.	DR	60	100	40
12.	YD	50	90	40
13.	AF	80	100	20
14.	RW	80	80	0
15.	CNR	60	100	40
16.	NS	40	100	60
17.	SA	80	90	10
18.	EN	50	80	30
19.	ASB	60	100	40
20.	PNT	80	100	20
21.	ZU	80	80	0
22.	ANP	60	80	20
23.	RH	35	80	45
24.	WF	70	90	20
25.	NH	50	55	5
26.	ZRA	50	100	50
27.	DLR	25	40	15
28.	UH	70	80	10
29.	NR	40	60	20
30.	AR	50	100	50

31.	IZ	60	90	30
32.	FR	45	80	35
33.	FH	20	90	70
34.	NA	70	80	10
	Jumlah	2.115	3.015	890
	Rata-Rata	62,205	88,676	
	N = 34	$\bar{x}_1 = 62,205$	$\bar{x}_2 = 88,676$	$\sum d = 890$

The data presents the pre-test and post-test scores of 34 students in an experimental class that studied descriptive text through outdoor learning. Initially, the students' pre-test scores varied widely, ranging from 20 to 100, with an average score of 62.205, indicating a moderate baseline understanding of the subject. After the outdoor learning intervention, post-test scores showed significant improvement, with results ranging from 40 to 100 and an average of 88.676. This notable increase suggests that the outdoor learning method was effective in enhancing the students' descriptive writing skills.

A closer examination reveals that the majority of students (27 out of 34) demonstrated progress, with individual gains ranging from 5 to 70 points. The highest improvement was seen in student FH, who gained 70 points (20 to 90), while the smallest gain was 5 points (NH: 50 to 55). However, there were exceptions: two students (MR and SRE) experienced a decline of 10 points each, and three students (SR, RW, and ZU) showed no change in their scores. Despite these outliers, the overall trend was positive, with 15 students (44%) achieving post-test scores between 90 and 100. The total gain across all students was 890 points, averaging approximately 26.18 points per student, further supporting the effectiveness of the outdoor learning approach. While the results are encouraging, the variations in individual performance suggest that the method may not be equally beneficial for all students. Some learners may require additional support or alternative strategies to achieve similar improvements. Further statistical analysis, such as a paired t-test, could provide deeper insights into the significance of these findings and help refine the teaching approach for broader applicability.

The critical value to be attained is 2.46. If the value is not attained, the result of the study is rejected. This is referred to as the null hypothesis (Ho), which means that teaching descriptive text through learning outside the classroom is not effective. However, if the result of the study is equal to or higher than 2.46, the result is accepted. This is called the alternative hypothesis (Ha), indicating that teaching descriptive text through learning outside the classroom is effective.

From the calculation using the T-score formula, the obtained t-score is 7.905. Thus, t-test = 7.905, while t-table = 2.46 (based on the degree of freedom (df) at a 1% significance level). The study's result shows that t-test > t-table (7.905 > 2.46), meaning the result exceeds the critical value. Therefore, it can be concluded that teaching descriptive text through learning outside the classroom is effective as a Quantum Teaching medium in creating an enjoyable learning environment.

To evaluate the effectiveness of Quantum Teaching in English instruction, the researcher also distributed a questionnaire to gather students' perceptions after implementing the method. The questionnaire, consisting of five key questions, was administered during the final meeting of the study. This timing allowed students to reflect on their learning experiences after receiving the Quantum Teaching treatment, which had been delivered during the second and third sessions. The questions were specifically designed to assess students' opinions on various aspects of the method, such as engagement, comprehension, and overall effectiveness in improving their English skills. To ensure accuracy in analysis, the researcher translated the responses into English, facilitating a clearer interpretation of the data. This step was crucial for

maintaining consistency, especially since the study aimed to contribute to broader discussions on innovative teaching strategies in language education. By systematically collecting and analyzing student feedback, the researcher gained valuable insights into the practical application and reception of Quantum Teaching in the classroom. The following table presents the results of the questionnaire, detailing students' opinion of Quantum Teaching in English learning.

Table 3. Students' opinion about Teaching Learning Process through Quantum Teaching Method (using
music and studying outside class)

No	Options	Frequency	Percentage %
1	a. really interesting	31	91,1
	b. interesting	3	9
	c. slightly interesting	0	0
	d. not interesting	0	0
	Total	34	100

The data presents students' perceptions of the Quantum Teaching Method, which incorporates music and outdoor learning. An overwhelming majority of students (91.1%, 31 out of 34) found the method "really interesting," while the remaining 9% (3 students) rated it as "interesting." Notably, no students selected the options "slightly interesting" or "not interesting," indicating unanimous positive reception.

This exceptionally high approval rate (100% combined positive responses) suggests that the Quantum Teaching Method, with its use of music and outdoor settings, successfully engaged students and enhanced their learning experience. The complete absence of neutral or negative feedback highlights the method's effectiveness in creating an appealing and motivating classroom environment.

These findings align with the earlier test score improvements, reinforcing that students not only performed better academically but also enjoyed the learning process. The strong positive response could be attributed to the dynamic, multi-sensory nature of Quantum Teaching, which likely increased student motivation and participation. For future implementation, maintaining these engaging elements while addressing individual learning needs could further optimize outcomes.

Table 4. Students' opinions on whether Quantum Teaching helps Increasing Students' Learning Concentration and Interest in Learning Reading

No	Options	Frequency	Percentage %
2	a. really helps	26	76,4
	b. helps	8	24
	c. slightly helps	0	0
	d.Does not help	0	0
	Total	34	100

According to the table 4, The data reveals overwhelmingly positive student perceptions regarding Quantum Teaching's effectiveness in enhancing learning concentration and interest in reading. A strong majority of 76.4% (26 students) reported that the method "really helps," while the remaining 24% (8 students) found it "helps." Notably, zero respondents selected the neutral or negative options ("slightly helps" or "does not help"), demonstrating unanimous agreement about the method's beneficial impact.

These findings indicate that Quantum Teaching's multisensory approach that combining music and outdoor learning, successfully captured students' attention and fostered engagement with reading material. The complete absence of negative responses suggests the methodology effectively addresses common concentration challenges in classroom settings. The results

correlate with both the academic performance improvements shown in test scores and the high enjoyment levels expressed in previous feedback, presenting a consistent pattern of positive outcomes across multiple measures of educational effectiveness.

The distribution shows that while most students experienced significant benefits, nearly a quarter perceived slightly more moderate (though still positive) effects, which may warrant further investigation into individual learning preferences or implementation variations. Overall, these perceptions strongly support Quantum Teaching as a valuable pedagogical approach for boosting student focus and reading motivation.

No	Options	Frequency	Percentage %
3 a	. Learning process became more interesting and increased proclivity	23	67,6
b	being able to comprehend English text easier	7	20,5
C	. helping upgrading the text comprehension ability	4	12
d	. nothing	0	0
	Total	34	100

Table 5. What Students Get during Teaching Learning Process through Quantum Teaching Method (using music and studying outside class)

The data illustrates students' perceived benefits from the Quantum Teaching Method, which combines music and outdoor learning. A significant majority (67.6%, 23 students) reported that the primary advantage was making the learning process more interesting and increasing their motivation to learn. Another 20.5% (7 students) found the method helped them comprehend English texts more easily, while 12% (4 students) noted improvements in their text comprehension abilities. Importantly, no students reported gaining "nothing" from the method, indicating universal perceived value.

These findings demonstrate that Quantum Teaching's greatest strength lies in enhancing student engagement and enjoyment (67.6%), which likely contributes to the academic improvements seen in test scores. While fewer students directly associated the method with improved comprehension (32.5% combined), the complete absence of negative responses sug cent ga seco ent satis ım Tea

proved comprehension (32.3% combined), the complete describe of negative response
ggests all learners derived some benefit. The results reinforce that motivation and interest a
ntral to the method's effectiveness, with cognitive gains in reading comprehension being
condary but still notable outcome. This aligns with previous data showing high stude
isfaction and concentration benefits, presenting a comprehensive picture of Quantum
aching's multifaceted positive impacts.
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No **Options** Frequency Percentage % 4 strongly agree 30 88,2 a. 4 12 b. agree 0 slightly agree 0 c. disagree 0 0 d. Total 34 100

Table 6. Students' Opinion about Using Quantum Teaching Makes the Learning Process Become Alive and Not Clumsy rather than the Usual Study

The data presents an overwhelmingly positive student response to the Quantum Teaching Method's ability to create a dynamic and engaging learning environment. An exceptional 88.2% of students (30 out of 34) strongly agreed that this approach makes learning "alive and not

clumsy" compared to conventional methods, while the remaining 12% (4 students) agreed with this statement. Notably, zero respondents expressed even slight disagreement, demonstrating unanimous approval of the method's effectiveness in transforming the learning experience.

These results highlight Quantum Teaching's remarkable success in breaking away from traditional classroom monotony, with its combination of musical elements and outdoor learning creating what students perceive as a more vibrant and natural educational atmosphere. The near-total consensus (100% agreement) suggests this approach effectively addresses common student complaints about rigid, uninspiring classroom environments. The findings correlate strongly with previous tables showing improved academic performance, heightened concentration, and increased learning motivation, painting a comprehensive picture of Quantum Teaching as a holistic solution that enhances both the learning process and outcomes.

The complete absence of negative responses (0% for both "slightly agree" and "disagree") is particularly striking, indicating that the method's benefits in creating an engaging learning environment are universally recognized among participants. This level of consensus is rare in educational research and suggests Quantum Teaching's potential as a powerful alternative to conventional instructional approaches.

No	Options	Frequency	Percentage %
5	a. strongly agree	31	91,1
	b. agree	3	9
	c. slightly agree	0	0
	d. disagree	0	0
	Total	2/	100

Table 7. Students' opinion whether Quantum Teaching (Using Music and Studying outside Class) Can Be Applied in Teaching English

The data reveals an extraordinary level of student endorsement for applying Quantum Teaching methods in English language instruction. An overwhelming 91.1% of respondents (31 students) strongly agreed that this music-integrated, outdoor learning approach is suitable for teaching English, while the remaining 9% (3 students) agreed. Notably, the complete absence of neutral or negative responses (0% for both "slightly agree" and "disagree") demonstrates unanimous student support for this pedagogical innovation.

These findings suggest that students perceive Quantum Teaching as particularly well-suited to English language education, potentially due to the method's ability to create an immersive, multi-sensory learning environment. The near-unanimous approval (100% combined agreement) exceeds even the highly positive responses shown in previous tables, indicating that students see exceptional value in applying these techniques specifically to English instruction. This remarkable consensus underscores the method's potential to transform language learning by combining auditory (music) and environmental (outdoor) elements to enhance engagement and retention.

The data completes a consistent pattern across all evaluation metrics, where Quantum Teaching demonstrates: (1) improved academic performance; (2) enhanced concentration and interest; (3) tangible learning benefits; (4) transformed classroom dynamics; and (5) strong applicability specifically for English instruction. This comprehensive endorsement suggests Quantum Teaching could serve as a model for innovative language pedagogy that addresses both cognitive and affective learning domains

Discussion

The findings of this study strongly support the effectiveness of Quantum Teaching in enhancing students' reading comprehension skills, as evidenced by the significant improvement in post-test scores compared to pre-test results. The data aligns with DePorter (2010) foundational theory of Quantum Teaching, which emphasizes the importance of creating an engaging, multisensory learning environment to maximize student understanding and retention. By incorporating background music during recount text lessons and conducting outdoor learning sessions for descriptive texts, this study successfully applied Quantum Teaching principles, fostering a dynamic and emotionally stimulating classroom atmosphere.

The t-test results (8.839 for recount text and 7.905 for descriptive text), which far exceeded the critical t-table value (2.46), confirm that both Quantum Teaching strategies had a statistically significant impact on student performance. This reinforces Colin and Dave (2001) argument that Quantum Teaching facilitates deeper learning by catering to diverse learning styles, auditory (through music) and kinesthetic (through outdoor activities). The substantial gains in comprehension scores (from a mean of 44.558 to 97.352 in recount texts and 62.205 to 88.676 in descriptive texts) suggest that students not only absorbed the material more effectively but also developed greater confidence in their reading abilities.

Additionally, the questionnaire responses (with 91.1% of students finding the method "really interesting" and 88.2% strongly agreeing that it made learning "alive and not clumsy") validate Wahid (2021) and Sianipar et al. (2025) findings that Quantum Teaching boosts motivation and engagement. Students reported that the method made English lessons more enjoyable, which correlates with Duke et al. (2021) assertion that engagement is critical for reading comprehension. The fact that 67.6% of students felt the learning process became "more interesting and increased proclivity" further underscores the role of emotional and environmental factors in cognitive retention, a core tenet of Quantum Teaching.

However, the slightly lower gains in descriptive text scores compared to recount texts (average gain of 26.471 points vs. 52.794 points) suggest that outdoor learning, while effective, may require more structured scaffolding to optimize comprehension. This observation aligns with Palinkas et al. (2015) caution that experiential learning must be carefully designed to avoid distractions. Future studies could explore hybrid models that combine outdoor activities with guided reading strategies to enhance focus.

IV. CONCLUSION AND SUGGESTION

This study demonstrates the significant impact of Quantum Teaching in enhancing students' reading comprehension skills, as shown by the remarkable improvement in post-test scores compared to pre-test results. The mean score for recount texts increased from 44.558 to 97.352, while descriptive texts improved from 62.205 to 88.676, with t-test results (8.839 and 7.905, respectively) far exceeding the critical value of 2.46. These findings validate Quantum Teaching's effectiveness in creating an engaging, multisensory learning environment. Student feedback further supports this, with 91.1% finding the method "really interesting" and 88.2% strongly agreeing that it made learning more dynamic. The key advantages of Quantum Teaching include increased student engagement, improved academic performance, and adaptability to different learning environments, particularly in boarding schools where traditional methods often fail to motivate students. However, the study has limitations, including its short duration, limited sample size, and slightly lower gains in descriptive texts, suggesting that outdoor learning may require more structured implementation.

Moving forward, Quantum Teaching holds great potential for broader applications in EFL classrooms, particularly in developing other language skills like speaking and writing. Teacher training programs could incorporate this method to help educators design more interactive lessons, while future research might explore hybrid models combining Quantum

Teaching with technology or conduct longitudinal studies to assess long-term retention. Despite its limitations, this study confirms that Quantum Teaching offers a viable, innovative alternative to traditional instruction, effectively bridging the gap between theoretical pedagogy and practical classroom application. By fostering a more engaging and emotionally stimulating learning environment, Quantum Teaching not only enhances reading comprehension but also revitalizes students' overall approach to learning English. Further research and refinement of this method could unlock even greater potential for transforming language education in diverse settings.

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