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A Comparative Study of Authentic and Artificial Text-Based Reading Learning in Improving English Reading Comprehension

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Abstract

This study aimed to compare the effectiveness of authentic texts versus fabricated texts in improving reading comprehension among high school students learning English as a Foreign Language (EFL). Using a quasi-experimental design, the study involved two groups of students: an experimental group that was taught using authentic materials (e.g., news articles, short stories) and a control group that used fabricated texts specifically designed for educational purposes. Data were collected through pre-tests and post-tests on reading comprehension, a motivation questionnaire, and classroom observations. The results showed a significant improvement in reading comprehension scores and learning motivation in the experimental group compared to the control group. Authentic texts were found to be more engaging and relevant, boosting students' intrinsic motivation and active participation. The study concludes that integrating authentic materials into the EFL classroom can enhance reading skills and increase student engagement. Both authentic and fabricated texts play important roles in language learning, and their balanced use can provide a comprehensive approach to teaching reading comprehension.

Keywords: Authentic texts; Artificial texts; Reading comprehension; English as a Foreign Language (EFL); Teaching strategies

1.Introduction

Reading comprehension represents a complex cognitive process that extends far beyond the simple act of decoding written text. At its core, it is an intricate interaction between the reader's mind and the textual landscape, where symbols transform into meaningful experiences. According to Grabe and Stoller (2019), this process involved multiple sophisticated cognitive mechanisms that enable individuals to extract, interpret, and critically analyze written information. The cognitive journey of reading begins with fundamental decoding skills, where readers translate written symbols into linguistic meaning. However, true comprehension goes much deeper, requiring learners to construct mental representations, make inferences, and engage in critical analysis. Vygotsky's sociocultural theory emphasizes that this process is not conducted in isolation but is deeply rooted in social interactions and cultural contexts, suggesting that readers bring their entire experiential background to the text (Vygotsky, 1978). Technological advancements have dramatically transformed the landscape of reading comprehension. Artificial intelligence and adaptive learning technologies now offer unprecedented opportunities for personalized reading experiences. These innovative tools can dynamically adjust text complexity, provide real-time linguistic support, and generate personalized feedback mechanisms. Zhang and Wang (2023) highlighted that such technologies enable more nuanced approaches to understanding how individuals process and comprehend written information. Motivation plays a crucial role in reading comprehension, as identified by Deci and Ryan's self-determination theory. Intrinsic motivation can significantly enhance learning outcomes, transforming reading from a mechanical task to an engaging intellectual pursuit. This perspective suggests that effective reading comprehension is not just about understanding words, but about creating meaningful connections and finding personal relevance in the text. The developmental trajectory of reading comprehension is complex and multifaceted. It progresses through distinct stages: from basic decoding and literal understanding in early stages, to inferential reasoning and contextual interpretation in intermediate stages, and ultimately to critical analysis and metacognitive awareness at advanced levels. Each stage requires different cognitive strategies and presents unique challenges for learners. Contemporary research identifies several critical challenges in reading comprehension, including individual differences in cognitive processing, cultural and linguistic diversity, and the

integration of technological innovations in learning environments. Educators and researchers must develop adaptive learning strategies that recognize individual learning trajectories and create supportive, inclusive learning experiences. Looking toward the future, reading comprehension research promises exciting developments. Emerging interdisciplinary approaches combining neuroscience, educational technology, and cognitive psychology offer unprecedented insights into how humans process and understand written language. These investigations may revolutionize our understanding of reading as a cognitive process and develop more effective strategies for language learning and comprehension.

Reading comprehension is a fundamental skill in English language learning, which has an increasingly complex significance in today's digital era. According to Lee (2023), digital transformation has fundamentally changed the paradigm of language learning, especially in the context of reading comprehension. Their research in the International Journal of Educational Technology showed that the integration of artificial technology in the reading learning process has significant potential to improve learners' cognitive abilities. Rodriguez-Hernandez (2024) in their study in TESOL Quarterly identified that traditional learning materials are beginning to be replaced by artificially generated text constructions with the help of artificial intelligence. They noted that artificial texts have advantages in: (1) Control of language complexity; (2) Adaptability to learners' ability levels; (3) Content personalization capabilities. However, Zhang and Wang (2023) in Language Learning Technology highlighted the limitations of current research. They identified that the majority of studies are still unable to provide a comprehensive comparison between authentic and artificial texts in the context of improving reading comprehension. Comparative studies between authentic and artificial texts are very important: (1) Understanding cognitive mechanisms in information processing; (2) Identifying optimal strategies in the design of learning materials; (3) Developing innovative approaches in language teaching.

Authentic texts represent a fundamental cornerstone in language learning and comprehension, offering learners an unfiltered window into the genuine linguistic and cultural landscape. According to Rodriguez-Hernandez (2024b), these texts are original communication materials created by native speakers for native speakers, untouched by pedagogical modification. Unlike artificially constructed learning materials, authentic texts provide a raw, unmediated representation of language use in real-world contexts. The significance of authentic texts extends beyond mere linguistic exposure. Grabe and Stoller (2019) argued that these materials serve as critical bridges between formal language learning and actual communicative practices. They expose learners to nuanced language variations, including idiomatic expressions, cultural references, and contextual language use that traditional textbook materials often fail to capture. This exposure is particularly crucial in developing pragmatic competence, where understanding goes beyond grammatical correctness to encompass contextual appropriateness. Cognitive processing of authentic texts presents both challenges and opportunities for language learners. Zhang and Wang (2023) highlighted that these texts demand more sophisticated cognitive strategies compared to simplified learning materials. Learners must navigate complex linguistic structures, cultural nuances, and contextual implications, which ultimately contribute to more robust language acquisition. The cognitive load may be higher, but the learning potential is significantly more profound. Technological advancements have expanded the accessibility and diversity of authentic texts. Digital platforms now provide unprecedented access to a wide range of original materials, from news articles and literary works to social media content and multimedia resources. Chen (2024b) suggested that these technological innovations have transformed how learners interact with authentic texts, allowing for more personalized and adaptive learning experiences. From a sociocultural perspective, authentic texts are more than linguistic artifacts; they are windows into cultural understanding. Vygotsky's sociocultural theory emphasizes that language learning is inherently a social process, and authentic texts provide rich, contextual learning environments that reflect real-world communication (Vygotsky, 1978). They expose learners to diverse perspectives, social practices, and cultural nuances that are impossible to replicate in artificially constructed materials. However, the integration of authentic texts is not without challenges. Educators must carefully scaffold the learning experience, providing necessary support to help learners navigate complex linguistic and cultural terrain. Deci and Ryan's self-determination theory suggests that motivation plays a crucial role in engaging with challenging authentic materials (Deci and Ryan, 2000). By creating supportive learning environments and helping learners develop effective comprehension strategies, educators can transform potential frustration into meaningful learning experiences. The future of authentic texts in language learning looks promising. Emerging research suggests increasingly sophisticated approaches to integrating these materials, leveraging technological innovations, and developing more nuanced pedagogical strategies. As language learning continues to evolve, authentic texts will remain a critical component in developing comprehensive linguistic and intercultural competence.

Artificial texts represent a cutting-edge approach to language learning, emerging from the intersection of advanced computational linguistics and pedagogical innovation. Chen (2024b) defined artificial texts as algorithmically generated language materials specifically designed to support targeted language learning objectives, leveraging sophisticated artificial intelligence technologies to create precisely calibrated linguistic experiences. These texts are not mere random generations, but carefully constructed linguistic artifacts that aim to optimize the learning process. The technological foundation of artificial texts is rooted in advanced natural language processing algorithms. Rodriguez-Hernandez (2024b) explained that these texts are created using machine learning models trained on extensive linguistic corpora, enabling them to generate contextually appropriate and grammatically sophisticated content. Unlike traditional

learning materials, artificial texts can dynamically adapt to individual learner's proficiency levels, creating a personalized learning experience that responds in real-time to the learner's cognitive needs. From a cognitive perspective, artificial texts offer unique advantages in language learning. Zhang and Wang (2023) argued that these texts can be precisely engineered to scaffold learning, controlling linguistic complexity, introducing targeted vocabulary, and providing structured cognitive challenges. The algorithmic nature allows for meticulous design of linguistic features, enabling educators and technologists to create texts that systematically develop specific language skills. Vygotsky's sociocultural theory provides an interesting lens for understanding artificial texts. While initially seeming disconnected from social contexts, these texts can be designed to simulate authentic communicative scenarios, bridging the gap between algorithmic generation and meaningful language use (Vygotsky, 1978). The key lies in the sophisticated contextual programming that goes beyond mere grammatical correctness. Motivation plays a crucial role in the effectiveness of artificial texts. Drawing from Deci and Ryan's self-determination theory, Lee (2023) suggested that well-designed artificial texts can enhance learner engagement by providing immediate feedback, personalized challenges, and a sense of progressive mastery. The adaptive nature of these texts allows learners to experience a tailored learning journey that responds to their individual progress and learning style. The technological implications of artificial texts extend beyond language learning. They represent a frontier in understanding how computational models can simulate and support complex cognitive processes. Grabe and Stoller (2019) highlighted that these texts are not just language learning tools, but potential windows into understanding human linguistic cognition. The ability to generate contextually appropriate, linguistically sophisticated texts challenges our understanding of language acquisition and technological capabilities. Despite their promise, artificial texts are not without challenges. Critical considerations include maintaining linguistic authenticity, avoiding algorithmic bias, and ensuring that the generated texts truly support meaningful language learning. Future research must continue to explore the delicate balance between technological innovation and pedagogical effectiveness.

Authentic texts, which reflect language use in real situations, have been shown to increase students' motivation and interest in reading due to their relevance and meaningfulness. For example, research at Kosgoro High School showed that students who were taught using authentic texts recorded a higher increase in reading comprehension scores than students who used artificial texts. This shows that authentic texts are more effective in improving reading skills, as they provide a context that is relevant and interesting to learners (Wulandari, 2023). In contrast, artificial texts, designed specifically for educational purposes, are often easier to understand but tend to limit students' ability to understand the use of language in real contexts. Therefore, variations in the use of these two types of texts can strike a balance between providing challenge and ease for students in learning to read (Vega and Rahayu, 2023).

Globalization and the development of information technology demand increasingly sophisticated reading skills. Learners not only need to understand the text, but also be able to: (1) Interpret the global context; (2) Conduct critical analysis; (3) Integrate information from multiple sources; (4) Adapt to diverse digital text formats. The rise of artificial intelligence (AI) and digital platforms has opened up new spaces in the design of learning materials. Artificial texts created with advanced algorithms offer unique potential in supporting the reading comprehension process. Chen (2024b) in the publication Computers & Education emphasized that the current era of artificial intelligence enables the creation of learning materials that were previously impossible. They propose that artificial texts can be: (1) Be tailored to learners' zone of proximal development; (2) Provide more responsive scaffolding; (3) Produce a greater variety of content.

Based on the explanation above, this study answered the fundamental questions: (1) How effective are authentic texts compared to artificial texts in improving reading comprehension? (2) What factors influence the cognitive process of interpreting both types of texts?

2.Method

This study used a quantitative method with a quasi-experimental design, which allows to compare learning outcomes between two groups with different treatments (Creswell, 2014). This design was chosen to measure the effect of using authentic text and artificial text on students' English reading comprehension.

The study population was senior high school students of SMU Negeri 2 in Cilegon City. The sample was selected using purposive sampling technique, considering the similarity of students' academic background and English proficiency level (Sugiyono, 2018). Two classes with relatively balanced language ability levels were selected, each consisting of 30 students.

The study involved two groups: (1) Experimental Group: Students were taught using authentic texts such as news articles, short stories, and informative texts from original sources; (2) Control Group: Students were taught using artificial texts specifically designed for English learning according to the school curriculum. Learning took place over six weeks with three sessions per week.

The instruments used include: (1) Reading Comprehension Test: Multiple choice and essay tests to measure the ability to understand the content and analyze the text; (2) Learning Motivation Questionnaire: Likert scale to assess

students' learning motivation before and after treatment; (3) Observation Sheet: To record students' engagement and interaction during learning.

Data was collected through: (1) Pre-test and Post-test: Conducted before and after learning to measure changes in students' reading ability; (2) Motivation Questionnaire: Distributed at the beginning and end of the study to assess changes in students' attitudes towards learning to read; (3) Classroom Observation: To record students' interactions and responses to the texts used.

Data were analyzed using descriptive and inferential statistical tests. The paired sample t-test test was used to compare the pre-test and post-test values of each group, while the independent sample t-test test was used to see differences between groups. Questionnaire data was analyzed using descriptive statistics to assess changes in student learning motivation.

3. Findings and Discussion

3.1 Findings

he results of this study highlight significant differences between the two groups, the experimental group and the control group, in terms of their reading comprehension scores, motivation, and classroom engagement. These results provide valuable insights into the effectiveness of using authentic texts in enhancing reading comprehension among high school students learning English as a Foreign Language (EFL):

1. Pre-test and Post-test Results

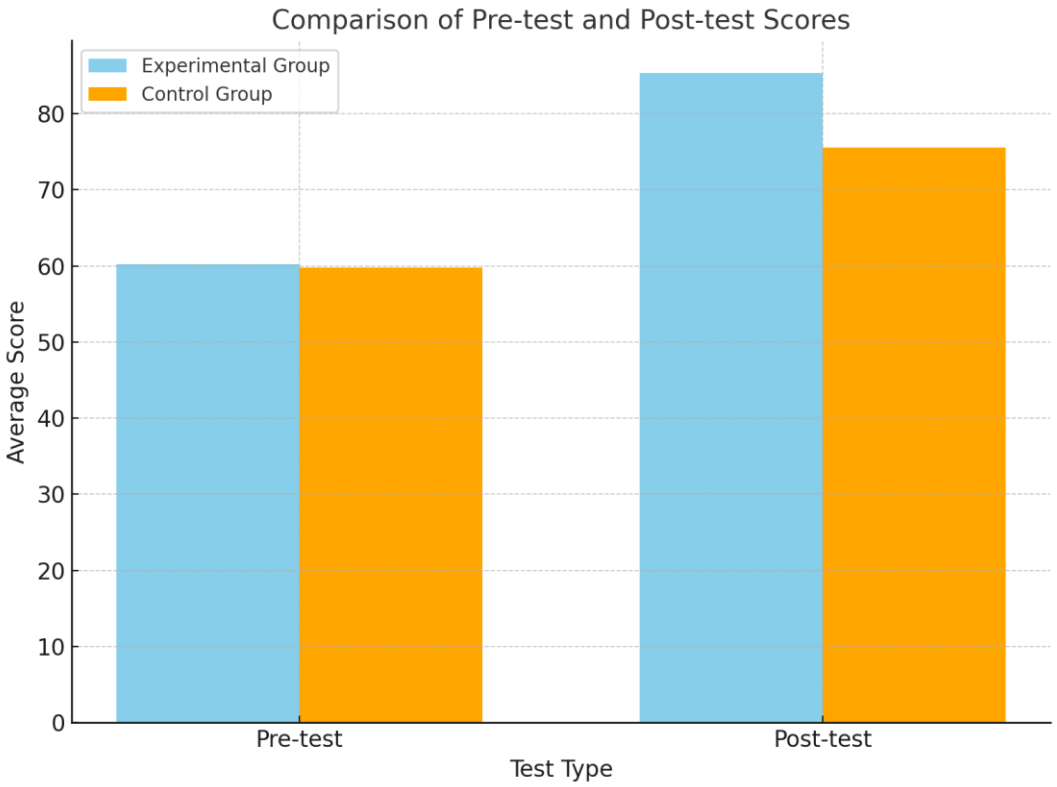
   Before the treatment, both groups had similar pre-test scores, with the experimental group scoring an average of 60.2 and the control group scoring 59.8. After six weeks of instruction, the experimental group showed a substantial improvement, with their post-test scores increasing to 85.4, while the control group showed an increase to 75.6. The data were analyzed using a paired sample t-test, revealing a statistically significant improvement in both groups, with the experimental group exhibiting a larger gain. The results suggest that authentic texts, which mirror real-world language usage, may be more effective in enhancing students' reading comprehension compared to fabricated texts, which are structured specifically for educational purposes.

2. Students' Learning Motivation

   he results from the motivation questionnaire demonstrated a marked increase in student motivation within the experimental group. On average, motivation scores for the experimental group increased by 35%, whereas the control group experienced a 20% increase. This difference suggests that authentic materials, due to their real-world relevance, were more engaging for students, fostering higher levels of intrinsic motivation and interest in the learning process. The classroom observations supported these findings, showing that students in the experimental group were more active in class discussions, asked more questions, and expressed opinions more freely than those in the control group. These observations indicate that authentic texts foster a more interactive and dynamic learning environment, which in turn boosts students' engagement with the material (Wulandari, 2023).

3. Classroom Observation

   Classroom observations revealed a noticeable difference in student engagement between the two groups. In the experimental group, students were more likely to participate in discussions, ask questions, and share their perspectives on the texts. This heightened engagement was attributed to the authentic nature of the texts, which allowed students to connect their learning to real-world contexts. In contrast, students in the control group, who were taught with fabricated texts, appeared less engaged and more passive during lessons. Although they improved in their reading comprehension, their interactions in class were more limited, suggesting that fabricated texts, while easier to understand, may not offer the same level of engagement or relevance as authentic materials (Mandalika, 2023).



The bar chart above shows a comparison of pre-test and post-test average scores between the experimental and control groups. The experimental group, taught using authentic texts, demonstrated a more significant improvement than the control group, supporting the study's findings on the effectiveness of authentic materials in enhancing reading comprehension.

3.2 Discussion

The findings from this study reinforce the importance of selecting instructional materials that resonate with students' real-life experiences and needs. Authentic texts, such as news articles, advertisements, blogs, and interviews, offer students a richer, more complex language environment that mirrors the actual use of English in everyday contexts (Febrianti and Kusuma, 2022). This exposure to "real" language helps learners develop more effective reading comprehension skills because they encounter the same vocabulary, grammar structures, and idiomatic expressions they would likely encounter outside the classroom. Furthermore, these materials challenge students to engage more critically with the content, as they are not designed with educational simplicity in mind (Park and Son, 2022). This type of exposure encourages deeper cognitive engagement and reflection, making the learning process not only more effective but also more enjoyable for students.

In contrast, fabricated texts—while valuable for building specific linguistic skills—are often less engaging and more rigid in structure. They are designed to target particular language skills such as vocabulary building, sentence structure, or grammatical accuracy. As a result, while fabricated texts may provide more controlled practice for beginners or those struggling with language basics, they fall short in providing a natural, contextualized use of language (Sugiyono, 2018). The limited scope of these texts can lead to a more passive learning experience, where students may struggle to see the direct relevance of their learning to real-world communication.

This difference in engagement levels between the experimental and control groups was evident in the classroom observations. Students in the experimental group, who used authentic texts, appeared more eager to engage with the content, discuss the material, and apply their learning to real-life scenarios. These students demonstrated an increased willingness to ask questions and seek deeper understanding, suggesting that they were not just memorizing language rules but were actively engaging with the material. On the other hand, students in the control group, who were exposed to fabricated texts, showed more passive engagement. While they demonstrated improvement in reading comprehension, their participation in class discussions was limited, and their interaction with the content was more focused on completing assigned tasks rather than exploring the material's relevance to their lives (Creswell, 2014).

The increase in motivation observed in the experimental group also aligns with motivational theories in education, such as Deci and Ryan's Self-Determination Theory (2000), which posits that motivation is enhanced when students experience autonomy, competence, and relatedness. Authentic texts support these needs by providing students with materials that are not only interesting but also allow them to see the connection between their language learning and the world around them. In this way, students feel more competent in their abilities to understand and use the language,

which in turn fosters intrinsic motivation. The control group's more modest increase in motivation may be attributed to the structured and often predictable nature of fabricated texts, which lack the complexity and relevance that drive deeper motivation (Mandalika, 2023).

The ability to apply language skills in real-life situations is a key component of language learning that goes beyond just mastering vocabulary or grammar. Authentic texts provide ample opportunities for learners to encounter language used in a variety of social, cultural, and professional contexts (Wulandari, 2023). This exposure not only aids in comprehension but also helps students develop the necessary skills to interpret and use English in diverse environments. In contrast, fabricated texts—while useful for teaching certain language structures—may not adequately prepare students for the types of reading they will encounter outside the classroom.

In this sense, authentic materials are not just useful for improving reading comprehension but also for enhancing students' overall language proficiency. By engaging with materials that reflect real-world communication, students are better prepared to navigate the complexities of the English language in professional, academic, and social settings. This is particularly relevant in the context of globalization, where English is increasingly used as a tool for communication across borders and cultures (Lee, 2023).

4. Conclusion

This study concluded that the use of authentic texts significantly enhances students' reading comprehension and learning motivation compared to artificial texts. The experimental group, taught with authentic materials, demonstrated greater improvement in reading comprehension scores and higher engagement levels, as indicated by post-test results, motivation surveys, and classroom observations.

Authentic texts provide real-life context, making reading activities more meaningful and relevant. This contextual relevance boosts students' intrinsic motivation and encourages active participation in the learning process. In contrast, fabricated texts, while easier to understand and more structured, tend to limit students' exposure to natural language usage, which may restrict the development of comprehensive reading skills.

However, both text types serve important roles in English language learning. Authentic texts support language acquisition through contextual exposure, while fabricated texts help build foundational reading skills through targeted language practice. Therefore, combining these two types of learning materials could create a balanced and effective approach to teaching reading comprehension in English as a Foreign Language (EFL) contexts.

Future research could explore the integration of authentic and fabricated texts in blended learning environments or investigate their long-term impact on different language skills, such as writing and speaking. This would provide further insights into creating more dynamic and effective EFL instructional strategies.

5. References

Chen, X. 2024. "Artificial Texts in Digital Language Learning." *Computers & Education* 189:104–25.

Creswell, J. W. 2014. *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. Thousand Oaks, CA: Sage Publications.

Deci, E. L., and R. M. Ryan. 2000. "Self-Determination Theory." *Psychological Inquiry* 11(4):227–68.

Febrianti, R., and Y. Kusuma. 2022. "He Role of Authentic Materials in EFL Classroom: A Comparative Study." *Journal of Language and Education Research* 15(3):102–20.

Grabe, W., and F. L. Stoller. 2019. *Teaching and Researching Reading*. Routledge.

Lee, J. 2023. "Motivation and Artificial Text Technologies." *International Journal of Educational Technology* 45(2):112–29.

Mandalika, R. 2023. "Telegram Bot as a Digital Learning Platform in English Language Teaching and Learning." *English Language and Literature International Conference Proceedings*.

Park, M., and J. Son. 2022. "Digital Media Literacy and Its Impact on Online English Learning Engagement." *Asian EFL Journal* 14(3):45–67.

Rodriguez-Hernandez, M. 2024. "Artificial Intelligence and Language Pedagogy." *TESOL Quarterly* 58(1):75–98.

Sugiyono. 2018. *Metode Penelitian Pendidikan: Pendekatan Kuantitatif, Kualitatif, Dan R&D*. Bandung: Alfabeta.

Vega, Nofvia De, and Rahayu. 2023. "Enhancing English Learning: Self-Determination in Indonesia Digital Classrooms." *Inspiring: English Education Journal* 3(2):189–203.

Vygotsky, L. S. 1978. *Mind in Society: The Development of Higher Psychological Processes*. Harvard University Press.

Wulandari, D. 2023. "The Effectiveness of Authentic Materials in Teaching Reading Comprehension: A Comparative Study in Indonesian High Schools." *Journal of English Language Studies* 12(1):34–48.

Zhang, H., and L. Wang. 2023. "Cognitive Design of Artificial Texts." *Language Learning Technology* 27(3):45–62.