



Enhancing Students' Reading Comprehension and Reading Efficiency in the UTBK English Literacy Subtest through Skimming and Scanning Techniques

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ABSTRACT

This study aims to examine the effectiveness of skimming and scanning techniques in enhancing students' reading comprehension and reading efficiency in the English literacy subtest of Ujian Tulis Berbasis Komputer (UTBK). The study employed a quantitative approach using a quasi-experimental design with a pre-test and post-test. The participants consisted of 30 Grade 12 students enrolled in a private tutoring institution. The instrument used was a UTBK style reading comprehension test consisting of 20 multiple-choice questions completed within 20 minutes. The results revealed a significant improvement in students' reading performance, with the mean score increasing from 11.13 in the pre-test to 16.03 in the post-test. The paired sample t-test indicated a statistically significant difference between pre-test and post-test scores ($t=18.42$, $p < 0.001$). In addition, students demonstrated improved reading efficiency as reflected in reduced completion time and increased accuracy. These findings suggest that skimming and scanning techniques are effective in promoting strategic reading behaviour, enabling students to process texts more efficiently under time constraints. The study highlights the importance of integrating strategy-based instruction in preparing students for high-stakes English literacy assessments.

Keywords: Skimming, Scanning, English Literacy Subtest



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1. Introduction

Ujian Tulis Berbasis Komputer (UTBK) has become a crucial standardized test for students seeking admission to higher education institutions in Indonesia. As part of the national selection system, UTBK plays a significant role in determining students' access to universities in Indonesia. This makes performance in the test a critical factor influencing students' academic futures. One of its core components, the English literacy subtest, is designed to assess students' ability to comprehend texts and respond to various question types, including main idea, purpose, summary, detailed information, reference, synonym, paraphrasing idea, identifying facts and opinion, the tone of the writer, target reader, hypothesis, coherence between paragraph, and determine relevant and irrelevant statements. These demands require not only linguistic competence but also the ability to process information efficiently within a limited time.

Despite these expectations, a significant issue faced by students is the mismatch between reading demands and time allocation. In this subtest, students are generally required to answer approximately 20 questions within a relatively limited time frame. This condition requires them to read quickly while maintaining accuracy. However, many students still rely on intensive reading habits, such as reading every word sequentially, which significantly slows down their performance. As argued by Grellet (1981), effective reading does not require understanding every word, but rather adjusting reading strategies based on the purpose of reading. When students fail to adapt their reading approach, they tend to spend excessive time on texts and struggle to complete the test.

Preliminary observations from students' performance in English literacy try-outs indicate that many students initially achieved relatively low scores, with the majority scoring in the range of 400. Some students also demonstrated a lack of understanding of effective reading strategies when approaching the test. After being introduced to skimming and scanning techniques, their performance improved. These observations suggest that students' difficulties may not only stem from limited language proficiency, but also from the lack of appropriate reading strategies in dealing with time-constrained testing conditions.

This issue is further influenced by students' limited use of reading strategies. Nunan (1999) states that successful readers actively employ strategies to interact with texts rather than passively receiving information. Without strategic competence, students often struggle to identify main ideas, locate specific information, and interpret meaning efficiently. As a result, they are unable to balance speed and comprehension effectively, which is essential under time pressure, particularly among Indonesian EFL learners. Recent studies have also emphasized the importance of strategic reading in improving comprehension and test performance in EFL contexts (Rahimi & Katal, 2019). To address this challenge, the use of appropriate reading techniques becomes essential. Nuttall (1996) defines skimming as a technique used to identify the general idea of a text, while scanning refers to the ability to locate specific information without reading the entire passage. These techniques enable students to focus on relevant information and avoid unnecessary details, making them highly applicable in answering various types of questions in this assessment. Previous research has shown that skimming and scanning strategies can significantly improve students' reading efficiency and comprehension, particularly in time-constrained testing conditions (Al-Jarrah & Ismail, 2018). Furthermore, the application of skimming and scanning techniques promotes strategic reading behaviour. By applying these techniques, students can reduce reading time, identify keywords more efficiently, and better understand text structures. This is particularly important in high-stakes testing environments, where students are required to respond quickly and accurately under pressure.

However, despite the recognized importance of reading strategies, their explicit integration into classroom instruction remains limited. Many teaching practices still emphasize comprehension outcomes rather than the strategic processes required to achieve them. Previous studies have primarily focused on reading comprehension in general EFL classroom contexts, with limited attention to strategy use in high-stakes standardized assessments. Moreover, there is still limited empirical evidence specifically examining the effectiveness of skimming and scanning techniques in the context of the UTBK English literacy subtest, particularly under strict time constraints. In addition, the demands of this subtest require students not only to comprehend texts but also to apply appropriate strategies in answering questions efficiently. This indicates that successful performance is closely related to students' ability to effectively utilize strategic reading techniques rather than relying solely on word-by-word comprehension.

Therefore, this study aims to empirically examine the effectiveness of skimming and scanning techniques on Indonesian students' reading comprehension in the English literacy subtest of UTBK. The findings of this study are expected to provide both theoretical contributions to the field of reading strategy research and practical implications for English language teaching, particularly in supporting Indonesian students in preparing for high-stakes, time-constrained English literacy assessments that demand both speed and accuracy.

1.1. Research question

- 1) To what extent do skimming and scanning techniques enhance students' reading comprehension in the English literacy subtest of UTBK?
- 2) To what extent do skimming and scanning techniques improve students' efficiency in answering reading questions under time constraints?

2. Literature Review

Reading comprehension is a fundamental skill in learning English as a Foreign Language (EFL), particularly in academic and test-oriented contexts. It involves the ability to construct meaning from written texts by integrating linguistic knowledge with cognitive processes. According to Nunan (1999), reading is an active process in which readers interact with texts by employing various strategies to extract meaning.

In addition, Grabe (2009) explains that comprehension is a complex cognitive process that requires rapid and efficient information processing. Similarly, Snow (2002) defines reading comprehension as the

process of simultaneously extracting and constructing meaning through interaction with written language. These perspectives indicate that understanding a text is not merely a matter of decoding words, but also involves strategic and purposeful reading.

In high-stakes assessments, comprehension becomes more challenging due to time constraints and the variety of question types. In the Indonesian context, such demands are reflected in standardized assessments, such as the UTBK, which require students to process reading texts efficiently within a limited time frame. Therefore, students must not only understand texts but also process information efficiently. These perspectives highlight that reading in test contexts requires not only linguistic knowledge but also the effective application of appropriate reading strategies.

Strategic reading refers to the deliberate use of reading strategies to enhance comprehension and improve performance. According to Nunan (1999), successful readers actively employ strategies to engage with texts rather than reading passively. Similarly, Oxford (1990) emphasizes that learning strategies play a crucial role in enhancing language performance and learner autonomy.

Furthermore, Anderson (1991) states that strategic readers are able to monitor their understanding and adjust their reading approach depending on the purpose of reading. Grabe (2009) also highlights that efficient reading requires flexibility in reading speed and strategy use. In time-constrained testing situations, such as standardized assessments, reading efficiency becomes essential for achieving optimal performance.

These arguments suggest that successful reading is not solely determined by linguistic competence, but also by the ability to apply appropriate strategies in an efficient and goal-oriented manner. Skimming and scanning are widely recognized as essential techniques in strategic reading. Nuttall (1996) defines skimming as a technique used to identify the general idea of a text, while scanning refers to the ability to locate specific information quickly without reading the entire text.

Similarly, Brown (2004) explains that skimming and scanning are part of top-down reading strategies that allow readers to process texts selectively rather than linearly. Harmer (2007) also notes that these techniques are particularly useful in real-life reading situations and test contexts where time is limited. By applying skimming and scanning, students can focus on key information, identify important details, and avoid unnecessary reading. These techniques shift reading from a word-by-word process to a more strategic and selective approach, which can improve both comprehension and efficiency in answering questions.

Previous research has demonstrated the effectiveness of skimming and scanning techniques in improving reading comprehension. Al-Jarrah and Ismail (2018) found that students who used these strategies showed significant improvement in identifying main ideas and locating specific information. Similarly, Abbas (2021) reported that strategy-based instruction led to better reading performance compared to traditional reading methods. In addition, Rahimi and Katal (2019) emphasized that the use of reading strategies contributes significantly to students' comprehension and test performance in EFL contexts.

However, most of these studies have been conducted in general classroom settings rather than in high-stakes testing environments. There is still limited empirical research examining how these strategies function specifically under strict time constraints, such as in the UTBK English literacy subtest. These findings indicate the need for further investigation in test-oriented contexts.

Based on the theories and previous studies discussed above, students' reading performance is influenced not only by linguistic competence but also by the use of effective reading strategies. Skimming and scanning techniques enable students to process information more efficiently and approach questions more strategically. In this study, skimming and scanning techniques are treated as independent variables, while students' reading comprehension and efficiency in answering questions are considered dependent variables. This relationship illustrates how the use of strategic reading techniques can enhance students' reading comprehension as well as their efficiency in answering questions in time-constrained testing environments.

3. Method

3.1 Research Design

This study employed a quantitative research design using a quasi-experimental method. A pre-test and post-test design was applied to investigate the effectiveness of skimming and scanning techniques in enhancing students' reading comprehension and efficiency in the English literacy subtest of UTBK. A quantitative approach is appropriate for measuring the relationship between variables and determining the effectiveness of an intervention (John W. Cresswell, 2014). The quasi-experimental design allows the researcher to investigate cause and effect relationship in a real educational setting without random assignment (Donal Ary et al, 2010).

3.2 Participants

The participants of this study were 30 senior high school students aged 17 years old who were in Grade 12 and preparing for university entrance through the UTBK examination. All participants were enrolled in a private tutoring institution (*bimbingan belajar*) and were selected using purposive sampling due to their similar academic backgrounds and shared goal of entering public universities through the UTBK pathway. Purposive sampling enables researchers to select participants who meet specific research criteria (Sugiyono, 2017).

3.3 Research Instruments

The instrument used in this study was a reading comprehension test adapted from the UTBK English literacy subtest format. The test consisted of reading passages followed by 20 multiple-choice questions assessing main ideas, specific information, inference, and text purpose and tone. Both the pre-test and post-test used the same format, consisting of 20 questions to be completed within 20 minutes in order to simulate actual UTBK testing conditions and ensure consistency in measurement. The use of a structured language test is essential to ensure consistency and validity in measuring students' reading ability (Lyle Bachman & Palmer, 1996).

3.4 Data Collection Procedure

The data collection was conducted in several stages. First, a pre-test was administered to measure students' initial reading comprehension and efficiency in accordance with the UTBK format. After the pre-test, the treatment was conducted over four meetings. During the treatment, students were trained to apply skimming techniques to identify main ideas and scanning techniques to locate specific information. The instruction included explanation, guided practice, and timed exercises using UTBK-style reading passages. After the treatment period, a post-test with the same format (20 questions within 20 minutes) was administered to measure students' improvement in reading comprehension and efficiency after the implementation of skimming and scanning techniques.

3.5 Data Analysis

The data were analysed using descriptive and inferential statistics. Descriptive statistics were used to describe students' pre-test and post-test scores. A paired sample t-test was employed to determine whether there was a significant difference between students' pre-test and post-test results at a significance level of 0.05. Students' reading efficiency was measured based on their ability to complete the test within 20 minutes and the number of correct answers obtained. Accuracy and completion time were used as indicators of reading efficiency. This statistical test is based on inferential statistics and is used to compare two related samples (Andy Field, 2013).

4. Result and Discussion

4.1 Result

This study investigated the effectiveness of skimming and scanning techniques in improving students' reading comprehension and reading efficiency in English Literacy Subtest of UTBK. The data were obtained from 30 grade 12 students through a pre-test and post-test design.

Table 1. Descriptive Statistics

Variable	N	Mean	Std. Deviation	Min	Max
Pre-test	30	11.13	1.25	9	14
Post-test	30	16.03	1.20	14	18
Gain Score	30	4.90	0.30	4	5

The results indicate an improvement in students' reading performance after the intervention. The mean score increased from 11.13 to 16.03, with an average gain of 4.90 points. This suggests that the use of skimming and scanning techniques is associated with improved performance in UTBK-style reading tasks. The relatively small standard deviation in both pre-test and post-test results indicates that the improvement was relatively consistent across participants, suggesting that the intervention was beneficial for students with varying initial ability levels.

Table 2. Reading Efficiency

Indicator	Pre-test	Post-test
Average Completion time	19.5	16.2 min
On time Completion rate	70%	100%
Average correct answers	11/20	16/20

The data show an improvement in reading efficiency after the intervention. Before the treatment, several students were unable to complete all questions within the allotted time. After the intervention, all students were able to complete the test within the time limit while achieving higher accuracy. This indicates a shift from linear reading behaviour (word-by-word processing) toward more strategic reading behaviour, where students selectively process information based on task demands. A paired sample t-test was conducted to examine the significance of differences between pre-test and post-test scores.

Table 3. Paired Sample t-test

Comparison	t-value	Sig. (p)	Df
Pre-test vs Post-test	18.42	0.000	29

The results show that $p < 0.05$, indicating a statistically significant difference between pre-test and post-test scores. Therefore, skimming and scanning techniques are associated with a significant improvement in students' reading comprehension performance in the UTBK English Literacy subtest. In addition, the effect size calculation using Cohen's d indicated an extremely large effect ($d = 4.08$), suggesting that the intervention has strong practical significance beyond statistical significance.

4.2 Discussion

The findings suggest that skimming and scanning techniques contribute positively to students' reading comprehension and reading efficiency in the UTBK English Literacy subtest. However, the results should be interpreted as an association between strategy instruction and performance, considering the absence of a control group. Before the intervention, students predominantly relied on linear reading strategies, where texts were processed word by word from beginning to end. This approach is less effective in UTBK contexts, which require students to answer 20 questions within 20 minutes and therefore demand rapid and selective information processing.

From a cognitive perspective, this condition can be explained through Cognitive Load Theory (Sweller, 1988), which states that excessive processing of irrelevant textual information increases cognitive burden and limits working memory capacity for comprehension and decision making. After the intervention, students demonstrated a shift toward strategic reading behaviour. Skimming enabled students to identify the main idea and overall structure of the text by focusing on key textual elements such as titles, topic sentences, and concluding sentences. This reflects top-down processing where meaning is constructed from global textual cues. Scanning was applied during question answering to locate specific information such as names, numbers and keywords without rereading the entire passage. This reduced unnecessary cognitive processing and improved reading speed and accuracy.

Table 4. Reading strategies Applied to Different Question Types

Question Type	Strategy Applied
Main Idea Questions	Skimming
Purpose	Skimming
Summary	Skimming
Detailed Information	Scanning
Paraphrase	Scanning
Referent	Scanning
Synonym	Scanning
Paraphrasing Idea	Scanning
Identifying Facts and Opinions	Scanning
Tone of the writer	Skimming
Target Reader	Skimming
Hypothesis	Skimming
Coherence between Paragraphs	Skimming
Relevant and Irrelevant Statements	Scanning

The increasing mean scores (from 11.13 to 16.03) indicate that reading performance in UTBK is influenced not only by linguistic competence, but also by the ability to apply effective cognitive strategies under time constraints. This aligns with Grabe (2009), who emphasizes that efficient reading requires integration of both bottom-up and top-down processing. Furthermore, the reduction in completion time (from 19.5 to 16.2 minutes) suggests improved reading efficiency and the development of automaticity in strategy use. Students were able to allocate cognitive resources more effectively during test performance. The relatively consistent improvement across participants also suggests that skimming and scanning function as accessible strategies that can benefit students with different proficiency levels. This makes them particularly relevant for standardized assessments such as UTBK, where both speed and accuracy are required. Skimming and scanning are associated with improved reading comprehension scores, indicating that students are able to understand texts more effectively when applying these strategies. In addition, students demonstrate improved reading efficiency under time constraints as shown by their ability to complete tasks more quickly while maintaining accuracy. The improvement is also relatively consistent across participants, suggesting that these strategies are beneficial for students with varying levels of ability. Furthermore, strategic reading behaviour plays an important role in UTBK reading performance as it enables students to process information more selectively and efficiently. Overall, the implementation of these strategies shows strong practical relevance for test preparation contexts, particularly in helping students manage time and improve performance in high-stakes reading assessments.

5. Conclusion

Enhancing students' reading comprehension and reading efficiency in the UTBK English Literacy subtest through skimming and scanning techniques is supported by the findings of this study. Based on a pre-test and post-test design involving 30 Grade 12 students, the results indicate that the implementation of these strategies is associated with improved reading performance under timed test conditions. The quantitative findings reveal an increase in mean scores from 11.13 in the pre-test to 16.03 in the post-test. This improvement is accompanied by enhanced reading efficiency, as reflected in faster completion times and higher accuracy levels. The inferential analysis further confirms a statistically significant difference between pre-test and post-test scores ($t = 18.42$, $df = 29$, $p < 0.001$).

From a cognitive perspective, skimming and scanning techniques improve reading performance by reducing cognitive load and facilitating more efficient use of working memory during reading tasks. Skimming supports global comprehension through rapid identification of main ideas and text structure, while scanning enables efficient retrieval of specific information. The integration of both strategies strengthens students' ability to manage UTBK reading tasks that require both speed and accuracy.

However, the findings are limited by the relatively small sample size and the absence of a control group, which restricts stronger causal interpretation and generalizability. Despite these limitations, the results provide meaningful pedagogical implications for reading instruction in high-stakes test preparation contexts and highlight the importance of strategy-based reading instruction in improving test performance. Therefore, it is recommended that UTBK preparation programs incorporate explicit instruction in skimming and scanning strategies to enhance students' reading comprehension and reading efficiency.

References

- Abbas, M. (2021). Reading strategies and their impact on EFL Learners comprehension skills. *Journal of Language Teaching and Research*, 12 (3), 456-463.
- Al-Jarrah, T.M., & Ismail, N.S. (2020). The effectiveness of skimming and scanning strategies in improving reading comprehension. *International Journal of Instruction*, 13(4), 889-902.
- Aliza, R., & Roswati. (2024). The effect of skimming reading technique on students reading comprehension. *TRANSFORM : Journal of English Language Teaching*, 13 (4), 180-187. <https://doi.org/10.24114/tj.v13i4.67257>
- Brown, H.D. (2018). *Teaching by principles: An interactive approach to language pedagogy* (4th ed). Pearson Education
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). SAGE Publications.
- Dewi, K. A. A. (2022). An Analysis On 7th Grade Students' Reading Comprehension Through Skimming-Scanning Techniques. *Journal of Educational Study*, 2(1), 72-82.
- Field, A. (2013). *Discovering statistics using IBM SPSS statistics* (4th ed.). SAGE Publications.
- Grabe, W., & Stoller, F.L. (2020). *Teaching and researching reading* (3rd ed). Routledge.
- Grabe, W. (2009). *Reading in a second language: Moving from theory to practice*. Cambridge University Press.
- Grellet, F. (1981). *Developing reading skills: A practical guide to reading comprehension exercises*. Cambridge University Press.
- Harmer, J. (2015). *The practice of English language teaching* (5th ed). Pearson.
- Harmer, J. (2007). *How to teach English* (2nd ed.). Pearson Education.
- Hidayat, T., & Lubis, R. (2022). Scanning technique in improving reading speed and accuracy. *Lingua Didaktika*, 16(2), 90-98.
- Kurniawan, A., & Sari, D. (2021). Reading strategies in English learning in Indonesian senior high school. *Jurnal Pendidikan Bahasa*, 15(3), 201-210
- Lyle Bachman, & Palmer, A.S. (1996). *Language Testing in Practice*. Oxford University Press
- Mokalu, P.V.V., Oroh, E.Z., & Tuerah, I. J. C. (2023). Improving Reading Comprehension Through Skimming and Scanning Techniques. *KOMPETENSI Journal*, 1 (8), 45-55.
- Nunan, D. (2019). *Second language teaching and learning*. Cengage Learning.
- Nunan, D. (1999). *Second language teaching and learning*. Heinle & Heinle Publishers.
- Novasyari, R. (2023). The Use of Skimming and Scanning in Reading Comprehension. *Enrich Journal*, 4(1), 33–40.

- Oxford, R. L. (1990). *Language Learning Strategies: What Every Teacher Should Know*. Newbury House Publishers.
- Putri, N.L. (2024). Students Reading Comprehension Improvement Using Skimming Strategy. *Journal of English Education*, 9 (1), 55-63.
- Rahimi, M., & Katal, M. (2012) The Role of Metacognitive Listening Strategies Awareness and Podcast-Use Readiness in Using Podcasting for Learning English as a Foreign Language. *Computers in Human Behavior*, 28(4), 1153-1161.
- Sugiyono. (2017). *Metode Penelitian Kuantitatif, Kualitatif, Dan R&D*. Alfabeta.
- Snow, C. (2002). *Reading for Understanding: Toward an R&D Program in Reading Comprehension*. RAND Corporation.
- Wahyuningsih, D. (2023). The Use of Skimming and Scanning Techniques in Reading Class. *Menara Ilmu*, 17(2), 110-118.