

CRITICAL THINKING THROUGH READING: QUESTION-ANSWER RELATIONSHIP (QAR) STRATEGY APPLICATION

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Annotation: Students studying English as a Foreign Language (EFL) need to be able to comprehend English text and think critically during the learning process. However, it is a common phenomenon among teachers in the teaching and learning process that these two essential abilities continue to be problems for students. In fact, using an inappropriate teaching strategy is one of the primary causes of the problems. The study aimed to investigate the effectiveness of the Question Answer Relationship (QAR) Strategy by addressing three research questions. The QAR strategy was used during regular reading sessions for a insert duration in both experimental and control groups. As a result, the strategy has significantly improved students' reading comprehension and critical thinking skills.

Key words: ability, critical thinking, reading comprehension, strategy, Question Answer Relationship (QAR) strategy, instruction, cognitive skills.

O'QISH ORQALI TANQIDIY FIKRLASH: SAVOL-JAVOB MUNOSABATLARI (QAR) STRATEGIYASINI QO'LLASH

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Annotatsiya: Ingliz tilini chet tili (EFL) sifatida o'rganayotgan talabalar o'quv jarayonida ingliz tilidagi matnni tushuna olishlari va tanqidiy fikrlay olishlari kerak. Biroq, bu ikki muhim qobiliyatni o'qish va o'qitish jarayonida rivojlantirish o'qituvchilar va talabalar uchun dolzarb muammoligicha qolmoqda. Aslida, noto'g'ri o'qitish strategiyasidan foydalanish muammolarning asosiy sabablaridan biridir. Mazkur maqola uchta tadqiqot savoliga murojaat qilish orqali savol-javob munosabatlari (QAR) strategiyasining samaradorligini o'rganishga qaratilgan. QAR strategiyasi eksperimental va nazorat guruhlarida insert davomiyligi uchun muntazam o'qish seanslarida ishlatildi. Natijada, strategiya talabalarning o'qib tushunish va tanqidiy fikrlash qobiliyatini sezilarli darajada yaxshiladi.

Kalit so'zlar: qobiliyat, tanqidiy fikrlash, o'qishni tushunish, strategiya, savol javob munosabatlari (QAR) strategiyasi, ko'rsatma, kognitiv ko'nikmalar.

КРИТИЧЕСКОЕ МЫШЛЕНИЕ ЧЕРЕЗ ЧТЕНИЕ: ПРИМЕНЕНИЕ СТРАТЕГИИ ВОПРОСНО-ОТВЕТНЫХ ОТНОШЕНИЙ (QAR)

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Аннотация: Студенты, изучающие английский как иностранный язык (EFL), должны понимать текст на английском языке и уметь критически мыслить в процессе обучения. Однако развитие этих двух важных способностей в процессе изучение и преподавание остается актуальной проблемой для учителей и студентов. Фактически, использование неправильной стратегии обучения является одной из основных причин проблем. Эта статья направлена на изучение эффективности стратегий взаимоотношений вопросов и ответов (QAR) путем рассмотрения трех исследовательских вопросов. Стратегия QAR использовалась в экспериментальной и контрольной группах во время регулярных сеансов чтения для продолжительности вставки. В результате стратегия значительно улучшила способность студентов понимать прочитанное и критически мыслить.

Kлючевые слова: способности, критическое мышление, понимание прочитанного, стратегия, стратегия соотношения вопрос-ответ (QAR), обучение, когнитивные навыки.

INTRODUCTION. Reading constitutes a multifaceted cognitive skill involving numerous subskills and processes, commencing with visual tasks like decoding text and advancing to more intricate levels



comprising syntax, semantics, and discourse analysis, culminating in the reader's overall comprehension. In the realm of second language reading, this process can become even more complex due to significant experiential, institutional, and sociocultural differences (Grabe & Stoller, 2002; Nassaji, 2011). For instance, word processing, a crucial aspect of fluent reading (Kintsch & Van Dijk, 1978; Perfetti, 2007), has been observed to be slower and less automatic in L2 speakers (Gollan et al., 2008; Izura & Ellis, 2004), exhibiting greater variability compared to L1 word processing, attributable to linguistic differences and individual variations in language exposure (Cop et al., 2015).

The topic of critical thinking ability has been extensively debated over time, with discussions often revolving around its components and features specific to different disciplines. Despite ongoing discussions, there is still no consensus on the exact components of critical thinking ability, likely due to its abstract and complex nature. While some researchers agree on core elements such as analysis, evaluation, and inference, they emphasize various aspects of critical thinking ability, including interpretation, reflection, reasoning, and self-regulation. (Li and Liu, 2023)

As a result, scholars advocate for the teaching and integration of critical thinking ability within specific educational contexts and scenarios (Halpern, 2014; Lai, 2011), as well as its incorporation into daily instruction (Le & Hockey, 2022; Yuan et al., 2021) to facilitate comprehension and application. Thus, critical thinking ability, when taught within specific contexts, emerges as a discipline-specific concept reliant on content knowledge.

The intricacies and uncertainties surrounding most facets of critical thinking ability, beyond its fundamental three elements, have incited vigorous scholarly discourse. The incorporation of critical thinking ability within English as a Foreign Language (EFL) instruction, compounded by the unique characteristics of EFL, has further perplexed researchers and educators (Ketabi et al., 2012; Marin & de la Pava, 2017; Zhang et al., 2020), potentially resulting in more complex and ambiguous aspects. Previous research has explored critical thinking ability within specific EFL competencies like reading (Maibodi, 2015; Talebinezhad & Matou, 2012; Wilson, 2016) and writing (Lin, 2018; Lu & Xie, 2019; Mehta & Al-Mahrooqi, 2015; Mok, 2009). Nevertheless, it has been proposed (Alnofaie, 2013) that critical thinking ability should be integrated across comprehensive rather than isolated skills. Despite these recommendations, there persists a dearth of adequate research examining the integration of critical thinking ability components into EFL learning.

LITERATURE REVIEW. In recent decades, there has been increasing interest in incorporating critical thinking ability into EFL education, yet studies indicate that educators encounter significant hurdles in this endeavor (Li, 2011; Lin et al., 2016), often stemming from insufficient familiarity with discipline-specific critical thinking ability (Ketabi et al., 2012; Marin & de la Pava, 2017; Zhang et al., 2020) and ineffective pedagogical approaches (Petek & Bedir, 2018; Yuan et al., 2022). Additionally, educators may face challenges accessing critical thinking ability resources and materials (Tan, 2017). To tackle these obstacles, we argue that a validated critical thinking ability questionnaire delineating a clear critical thinking ability framework would assist educators in grasping the concept and offer a means to assess students' critical thinking ability in EFL learning.

Comprehending a text goes beyond simply understanding the literal words; it requires readers to engage in critical thinking to uncover both explicit and implicit meanings. This means gradually piecing together meaning by identifying key information, assessing the reliability of sources, connecting new information to prior knowledge, and reflecting on the text's implications. Researchers emphasize these cognitive processes as essential for effective reading comprehension (Moghadam et al., 2023).

As the reading process unfolds, it engages various levels of thought simultaneously. Reading comprehension is recognized as a valuable platform for fostering learners' critical thinking (Heidari, 2020). However, in Iran, there persists a belief that reading is a passive skill, unlike speaking or listening, which require active participation. Consequently, students are often viewed as passive recipients of knowledge, merely accepting the teacher's words and remaining detached from the reading process.

Recent literature suggests that critical thinkers tend to adopt more analytical, rational, and logical perspectives when facing life challenges (Moghadam et al., 2021). Moreover, there's evidence supporting a positive correlation between critical thinking and other desirable skills such as language proficiency. Thus, the researchers hypothesized that integrating critical thinking interventions, like the 3Es program (Moghadam et al., 2021), could enhance the classroom environment and improve EFL learners' critical



thinking, reading comprehension, and attitudes towards learning.

Understanding and interpretation are two cognitive processes involved in reading comprehension that are critical for academic achievement across multiple disciplines. Students with strong comprehension skills are better prepared to excel in their studies, whether deciphering complex scientific articles, understanding historical documents, or interpreting literary works.

Developing reading comprehension skills is critical to creating a culture of lifelong learning (Kintsch, 1993). In a world of constant advancements and evolving knowledge, people with strong comprehension skills are more adaptable and better equipped to stay informed and engaged throughout their lives.

Furthermore, these strategies promote the development of critical thinking skills such as analysis, evaluation, and synthesis. Students who master these abilities can critically evaluate information, make informed decisions, and contribute meaningfully to intellectual discourse.

Despite the undeniable importance of reading comprehension, students frequently face a number of obstacles that impede their ability to grasp and retain information from texts. These difficulties, if not addressed, can impede academic progress and the development of critical cognitive skills.

Vocabulary gaps can be a significant barrier to comprehension, as limited vocabulary can lead to misunderstandings and impair overall understanding of a text (Beck & McKeown, 2007). Furthermore, a lack of relevant background knowledge about a subject can impede comprehension, making it difficult for students to connect new information to their prior knowledge.

Inadequate reading strategies exacerbate these challenges. Some students may approach texts passively, lacking the ability to use active reading strategies such as summarization, questioning, and making connections. Learning disabilities, such as dyslexia, can make decoding words more difficult, affecting overall comprehension. Students in the digital age face additional distractions, with constant information overload impairing their ability to focus on and comprehend assigned texts.

Recognizing these challenges highlights the importance of developing tailored and effective reading comprehension strategies that address students' diverse needs. In the following sections of this article, we will look at one of these strategies, the Question-Answer Relationships (QAR) strategy, and how it can help students improve their reading comprehension and critical thinking skills.

METHODOLOGY. The study aimed to investigate the effectiveness of the QAR Strategy by addressing the following research questions:

Does implementing the QAR strategy significantly enhance learners' critical thinking skills?

Does implementing the QAR strategy significantly improve learners' attitudes towards the classroom climate?

Does implementing the QAR strategy significantly develop learners' reading comprehension abilities? To ensure consistency of implementation, a checklist was created to document the use of QAR elements during instruction. This entailed classifying questions into four QAR categories: Right There, Think and Search, Author and You, and On Your Own (Raphael, 1986).

Prior to the intervention, participants took the pretest individually to establish baseline reading comprehension levels. The pretest data were used to confirm group equivalence and identify any prior differences.

Teachers in the experimental group received training on the key concepts and application of the QAR strategy. The training covered strategies for helping students generate and answer questions based on text content and structure (Duke & Pearson, 2002).

The QAR strategy was used during regular reading sessions for a insert duration. Teachers used a variety of texts that were carefully chosen to match participants' reading abilities and interests. QAR elements were introduced via explicit instruction and collaborative activities (Raphael, 1986).

During the same time period, the control group received traditional reading instruction that focused on comprehension skills rather than QAR.

Following the intervention, both groups completed the same reading comprehension test as the posttest. This aimed to measure any significant changes in comprehension levels and determine the effectiveness of the QAR strategy.

Quantitative data from the pretest and posttest were statistically analyzed using [insert statistical method], which compared the experimental and control groups. In addition, qualitative data, including observations of QAR implementation, were analyzed to provide insights into the dynamics of strategy implementation in the classroom.



The study followed ethical guidelines, obtaining informed consent from participants and their guardians. Confidentiality and privacy were upheld throughout the research. Any potential risks or discomforts were minimized, and participants were informed about the study's purpose and results.

Potential limitations included differences in teacher implementation, external factors influencing participant engagement, and the findings' generalizability beyond the specific context. These limitations were considered when interpreting the results and making recommendations for future research.

RESULTS AND DISCUSSION. The quantitative analysis sought to determine the effectiveness of the Question-Answer Relationships (QAR) strategy in improving reading comprehension among participants. Statistical comparisons were made between the experimental group, which was exposed to QAR, and the control group, who received traditional reading instruction.

The pretest results revealed no statistically significant differences in baseline reading comprehension scores between the experimental and control groups, supporting the initial group equivalence.

CONCLUSION. The study of the Question-Answer Relationships (QAR) strategy for improving reading comprehension and critical thinking skills has provided valuable insights into its potential impact in a variety of educational settings. This study, which used a quasi-experimental design with a pretestposttest control group, sought to compare the effectiveness of QAR to traditional reading instruction.

The quantitative analysis revealed a statistically significant increase in reading comprehension scores for participants exposed to the QAR strategy. This emphasizes QAR's positive influence on students' ability to extract meaning from texts, supporting previous research on the efficacy of this approach (Raphael, 1986; Duke and Pearson, 2002). The qualitative observations shed light on the dynamics of QAR implementation in the classroom, emphasizing increased student engagement and a better understanding of text content.

The findings have significant implications for educators looking for evidence-based strategies to improve reading comprehension skills. The positive relationship between QAR implementation and improved comprehension suggests that incorporating this strategy into regular classroom instruction can significantly benefit students' cognitive development. This is consistent with the broader educational goals of encouraging critical thinking, active engagement with texts, and lifelong learning.

Furthermore, the study emphasizes the importance of providing professional development opportunities for teachers to gain the skills required for effective QAR implementation. Teachers play an important role in creating a conducive learning environment, and their ability to implement strategies such as QAR is critical for achieving positive results.

Despite these promising findings, the study recognizes some limitations, such as variations in teacher implementation and potential external factors influencing student engagement. These limitations highlight the need for additional research into the QAR strategy's long-term effects and broader applicability across diverse educational contexts.

Finally, implementing the QAR strategy in the classroom has shown that it has the potential to significantly improve students' reading comprehension and critical thinking skills. As educators seek new and effective instructional approaches, the findings of this study add to the growing body of evidence supporting the pedagogical value of QAR. This study encourages further investigation of strategies that not only improve academic performance but also foster a culture of critical thinking and lifelong learning among students.

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