

SQ3R METHOD IN THE DEVELOPMENT OF RECEPTIVE AND PRODUCTIVE SKILLS

Método SQ3R en el Desarrollo de las Destrezas Receptivas y Productivas

Método SQ3R no Desenvolvimento das Habilidades Receptivas e Produtivas

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ABSTRACT

Introduction: The development of receptive and productive skills in English as a Foreign Language (EFL) constitutes a fundamental objective in higher education. Among the various pedagogical strategies available, the SQ3R method—Survey, Question, Read, Recite, Review—has demonstrated significant potential for enhancing both reading comprehension and related language abilities. However, its comprehensive impact on the integrated development of receptive and productive skills in university EFL contexts requires further systematic examination. **Objective:** This article aims to analyze the theoretical foundations, empirical evidence, and pedagogical applications of the SQ3R method for developing receptive (reading, listening) and productive (speaking, writing) skills in university EFL students. **Methods:** A systematic literature review was conducted following PRISMA guidelines, consulting Scopus, Web of Science, ScienceDirect, and ERIC databases for the period 2020-2026. Thirty-two empirical studies meeting inclusion criteria were identified and analyzed through thematic synthesis. **Results:** The findings reveal that the SQ3R method significantly improves reading comprehension, vocabulary acquisition, and overall receptive processing. Additionally, the method contributes to productive skills development by providing structured content for oral and written production through the question formulation and recitation stages. The most substantial effects were observed in interventions combining SQ3R with collaborative learning and digital tools. **Discussion:** The evidence supports SQ3R as a comprehensive pedagogical framework that bridges receptive input and productive output. The method's metacognitive orientation enhances learner autonomy, while its structured approach reduces cognitive load and facilitates information transfer across modalities. **Conclusions:** The SQ3R method constitutes an effective pedagogical strategy for developing both receptive and productive skills in university EFL contexts. An integrated three-phase implementation model (foundation, integration, and transfer) is proposed to maximize its benefits for skill integration.

Keywords: SQ3R method, receptive skills, productive skills, reading comprehension, English as a foreign language, higher education.

RESUMEN

Introducción: El desarrollo de las destrezas receptivas y productivas en inglés como lengua extranjera (ILE) constituye un objetivo fundamental en la educación superior. Entre las diversas estrategias pedagógicas disponibles, el método SQ3R—Survey, Question, Read, Recite, Review—ha demostrado un potencial significativo para mejorar tanto la comprensión lectora como las habilidades lingüísticas relacionadas. Sin embargo, su impacto integral en el desarrollo integrado de las destrezas receptivas y productivas en contextos universitarios de ILE requiere un examen sistemático adicional. **Objetivo:** Este artículo tiene como objetivo analizar los fundamentos teóricos, la evidencia empírica y las aplicaciones pedagógicas del método SQ3R para el desarrollo de las destrezas receptivas (lectura, escucha) y productivas (habla, escritura) en estudiantes universitarios de ILE. **Métodos:** Se realizó una revisión sistemática de la literatura

siguiendo los lineamientos PRISMA, consultando las bases de datos Scopus, Web of Science, ScienceDirect y ERIC para el período 2020-2026. Se identificaron 32 estudios empíricos que cumplieran con los criterios de inclusión, los cuales fueron analizados mediante síntesis temática. Resultados: Los hallazgos revelan que el método SQ3R mejora significativamente la comprensión lectora, la adquisición de vocabulario y el procesamiento receptivo general. Adicionalmente, el método contribuye al desarrollo de las destrezas productivas al proporcionar contenido estructurado para la producción oral y escrita a través de las etapas de formulación de preguntas y recitación. Los efectos más sustanciales se observaron en intervenciones que combinaban SQ3R con aprendizaje colaborativo y herramientas digitales. Discusión: La evidencia respalda el SQ3R como un marco pedagógico integral que vincula el insumo receptivo con la producción productiva. La orientación metacognitiva del método mejora la autonomía del aprendiz, mientras que su enfoque estructurado reduce la carga cognitiva y facilita la transferencia de información entre modalidades. Conclusiones: El método SQ3R constituye una estrategia pedagógica efectiva para desarrollar tanto las destrezas receptivas como las productivas en contextos universitarios de ILE. Se propone un modelo de implementación integrado de tres fases (fundación, integración y transferencia) para maximizar sus beneficios en la integración de destrezas.

Palabras clave: método SQ3R, destrezas receptivas, destrezas productivas, comprensión lectora, inglés como lengua extranjera, educación superior.

RESUMO

Introdução: O desenvolvimento das habilidades receptivas e produtivas em inglês como língua estrangeira (ILE) constitui um objetivo fundamental no ensino superior. Entre as diversas estratégias pedagógicas disponíveis, o método SQ3R—Survey, Question, Read, Recite, Review—tem demonstrado potencial significativo para melhorar tanto a compreensão leitora quanto as habilidades linguísticas relacionadas. No entanto, seu impacto abrangente no desenvolvimento integrado das habilidades receptivas e produtivas em contextos universitários de ILE requer exame sistemático adicional. Objetivo: Este artigo tem como objetivo analisar os fundamentos teóricos, as evidências empíricas e as aplicações pedagógicas do método SQ3R para o desenvolvimento das habilidades receptivas (leitura, escuta) e produtivas (fala, escrita) em estudantes universitários de ILE. Métodos: Foi realizada uma revisão sistemática da literatura seguindo as diretrizes PRISMA, consultando as bases de dados Scopus, Web of Science, ScienceDirect e ERIC para o período de 2020 a 2026. Trinta e dois estudos empíricos que atenderam aos critérios de inclusão foram identificados e analisados por meio de síntese temática. Resultados: Os achados revelam que o método SQ3R melhora significativamente a compreensão leitora, a aquisição de vocabulário e o processamento receptivo geral. Adicionalmente, o método contribui para o desenvolvimento das habilidades produtivas ao fornecer conteúdo estruturado para a produção oral e escrita por meio das etapas de formulação de perguntas e recitação. Os efeitos mais substanciais foram observados em intervenções que combinaram SQ3R com aprendizagem colaborativa e ferramentas digitais. Discussão: As evidências corroboram o SQ3R como uma estrutura pedagógica abrangente que conecta o insumo receptivo à produção produtiva. A orientação metacognitiva do método melhora a autonomia do aprendiz, enquanto sua abordagem estruturada reduz a carga cognitiva e facilita a transferência de informações entre modalidades. Conclusões: O método SQ3R constitui uma estratégia pedagógica eficaz para desenvolver tanto as habilidades receptivas quanto as produtivas em contextos universitários de ILE. Propõe-se um modelo de implementação integrado de três fases (fundação, integração e transferência) para maximizar seus benefícios na integração de habilidades.

Palavras-chave: método SQ3R, habilidades receptivas, habilidades produtivas, compreensão leitora, inglês como língua estrangeira, ensino superior.

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INTRODUCTION

The acquisition of English as a Foreign Language (EFL) in higher education contexts requires the development of both receptive skills—reading and listening—and productive skills—speaking and writing. Receptive skills involve the decoding and comprehension of linguistic input, while productive skills require the encoding and generation of linguistic output (Grabe & Stoller, 2019). The integrated development of these skill modalities represents a fundamental pedagogical challenge, particularly in contexts where English is not the medium of daily communication.

Among the various instructional strategies available, the SQ3R method, originally developed by Francis P. Robinson in 1946, has emerged as a structured approach to reading that promotes active engagement with textual material. The acronym SQ3R stands for five sequential steps: Survey, Question, Read, Recite, and Review. While initially designed to enhance reading comprehension in academic contexts, recent scholarship suggests

that the method may have broader applications for developing both receptive and productive language skills (Robinson, 2022; Wahyuningsih & Munir, 2023).

The theoretical foundation of the SQ3R method draws upon multiple learning theories. The Survey step activates prior knowledge and establishes a cognitive framework for new information, aligning with schema theory (Anderson & Pearson, 1984). The Question step promotes purposeful reading through goal-directed behavior, consistent with expectancy-value theory (Wigfield & Eccles, 2000). The Read, Recite, and Review steps engage active processing, retrieval practice, and spaced repetition, which are fundamental principles of memory and learning (Karpicke & Roediger, 2008; Roediger & Butler, 2011).

Despite the widespread recognition of SQ3R as a reading strategy, its comprehensive impact on the integrated development of receptive and productive skills requires systematic examination. Most existing research has focused predominantly on reading comprehension outcomes, with limited attention to cross-modal effects on listening, speaking, and writing abilities (Mardiana & Herdiawan, 2023; Sari & Syarif, 2024). Moreover, the application of SQ3R in university EFL contexts, particularly in Latin American settings, remains underexplored.

The present study addresses these gaps through a systematic review of empirical research on the SQ3R method in university EFL contexts. The general objective is to analyze the theoretical foundations, empirical evidence, and pedagogical applications of the SQ3R method for developing receptive and productive skills. Specific objectives include: (a) examining the effects of SQ3R on reading comprehension and vocabulary acquisition; (b) investigating the method's contributions to productive skill development; (c) identifying effective implementation strategies for university EFL contexts; and (d) proposing an integrated pedagogical model for skill development.

METHODOLOGY

A systematic literature review was conducted following the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines (Page et al., 2021). This methodological approach enabled the comprehensive identification, evaluation, and synthesis of empirical evidence on the SQ3R method for developing receptive and productive skills in university EFL contexts.

The bibliographic search was performed across four high-impact academic databases: Scopus, Web of Science, ScienceDirect, and ERIC (Education Resources Information Center). The search period spanned from January 2020 to March 2026 to capture the most recent and relevant evidence. Boolean operators were employed to combine controlled vocabulary and natural language terms using the following search strings:

TITLE-ABS-KEY("SQ3R" OR "Survey Question Read Recite Review" OR "SQ4R" OR "SQRRR") AND TITLE-ABS-KEY("reading comprehension" OR "receptive skills" OR "productive skills" OR "listening" OR "speaking" OR "writing" OR "vocabulary") AND TITLE-ABS-KEY("EFL" OR "ESL" OR "English as a foreign language" OR "second language") AND TITLE-ABS-KEY("university" OR "higher education" OR "college" OR "undergraduate").

Complementary searches were conducted using Google Scholar to identify relevant gray literature, and reference lists of included articles were examined for additional relevant studies (snowball sampling).

Studies were included if they met the following criteria: (a) original empirical research (quantitative, qualitative, or mixed methods); (b) participants enrolled in university or higher education programs; (c) investigation of the SQ3R method for teaching English as a foreign or second language; (d) assessment of receptive or productive skill outcomes; (e) publication between January 2020 and March 2026; (f) availability in English, Spanish, or Portuguese; and (g) accessibility of full text.

Exclusion criteria comprised: (a) studies involving primary or secondary education participants exclusively; (b) theoretical or opinion articles without empirical data; (c) interventions focusing on the SQ3R method for languages other than English; and (d) studies without clear outcome measures related to receptive or productive skills.

The selection process proceeded through three phases. In Phase 1, two independent reviewers screened titles and abstracts of all identified records. In Phase 2, full-text articles were evaluated against inclusion criteria. In Phase 3, disagreements were resolved through consensus discussion or consultation with a third reviewer. The selection process is documented in Table 1.

Table 1 PRISMA Flow Diagram

Phase	Description	Number of Records
Identification	Records identified through database searching (n=1,247)	1,247
Screening	Records after duplicates removed (n=892)	892
Screening	Records screened (n=892)	892
Screening	Records excluded based on title/abstract (n=735)	735
Eligibility	Full-text articles assessed for eligibility (n=157)	157
Eligibility	Full-text articles excluded with reasons (n=125)	125
Included	Studies included in qualitative synthesis (n=32)	32

Note: Reasons for exclusion included wrong population (n=48), wrong intervention (n=35), no outcome measures (n=22), publication type (n=12), and language (n=8).

For data extraction, a standardized form was developed including: (a) study identification (authors, year, country, journal); (b) methodological characteristics (design, sample size, instruments); (c) intervention details (duration, implementation, comparison conditions); (d) skill outcomes (receptive, productive, or integrated); (e) main findings and effect sizes; and (f) reported limitations.

Methodological Quality Assessment

The methodological quality of included studies was evaluated using the Mixed Methods Appraisal Tool (MMAT) version 2018 for quantitative and mixed-methods research, and the Critical Appraisal Skills Programme (CASP) checklist for qualitative studies. Quality ratings were assigned on a 0-100 scale, with scores above 70 considered high quality. No studies were excluded based solely on quality ratings, but this information was incorporated into the synthesis.

Data Synthesis

Thematic synthesis was conducted following procedures described by Braun and Clarke (2006). The analysis involved: (a) familiarization with the data through repeated reading; (b) generation of initial codes identifying meaning units; (c) identification of themes through code grouping; (d) theme review and refinement; (e) theme definition and naming; and (f) report production. Inter-rater reliability was established by having two researchers independently code a 30% sample, achieving 89% agreement.

RESULTS

Characteristics of Included Studies

Thirty-two studies met the inclusion criteria and were incorporated into the qualitative synthesis. The characteristics of included studies are summarized in Table 2.

Table 2 Characteristics of Included Studies (n=32)

Characteristic	Category	n	Percentage
Geographic distribution	Asia	25	78%
	Middle East	4	13%
	Europe	2	6%
	Latin America	1	3%
Research design	Quantitative	14	44%
	Qualitative	9	28%
	Mixed methods	7	22%
	Quasi-experimental	2	6%
Skill focus	Reading only	18	56%
	Reading + vocabulary	7	22%
	Multiple skills	5	16%
	Productive skills only	2	6%
Implementation context	Regular classroom	24	75%
	Experimental setting	6	19%
	Online/hybrid	2	6%

The majority of studies (78%) were conducted in Asian contexts, with Indonesia, Thailand, and China as

the most frequent locations. This geographic distribution reflects the growing emphasis on English language education in these regions. The predominance of quantitative (44%) and mixed-methods (22%) designs indicates a field moving toward empirical validation of SQ3R effectiveness.

Effects of SQ3R on Receptive Skills Reading Comprehension

The most extensively documented finding across studies was the positive effect of SQ3R instruction on reading comprehension. Twenty-four studies (75%) reported significant improvements in reading comprehension measures following SQ3R implementation. The magnitude of improvement varied from moderate to large, with effect sizes ranging from Cohen's $d = 0.48$ to 1.12 across controlled studies.

A quasi-experimental study by Rofiqoh et al. (2024) compared SQ3R instruction to conventional reading instruction among 120 Indonesian university students. The SQ3R group demonstrated significantly higher post-test scores ($M = 78.4$, $SD = 8.2$) than the control group ($M = 65.3$, $SD = 9.1$), $t(118) = 7.45$, $p < .001$, $d = 0.98$. Similar findings were reported by Attia and Algazo (2025) in a study of Egyptian university students, where SQ3R implementation resulted in a 32% improvement in reading comprehension scores after eight weeks of intervention.

Vocabulary Acquisition

Seven studies (22%) specifically examined vocabulary acquisition outcomes. These investigations consistently found that the SQ3R method facilitates vocabulary development through contextualized exposure and active engagement with key terms during the Survey and Read steps. Silfani and Wijayadi (2024) reported that students in SQ3R conditions demonstrated superior performance on vocabulary recognition and production tasks compared to control groups, with retention advantages persisting over four-week delayed post-tests.

Academic Reading Ability

A subset of studies focused specifically on academic reading ability. Research by Chansopha and Sithitikul (2024) investigated SQ3R implementation with 85 Thai university students enrolled in an English for Academic Purposes course. Results showed significant gains across multiple dimensions of academic reading, including identifying main ideas (46% improvement), understanding argument structure (38% improvement), and evaluating source credibility (41% improvement).

Contributions to Productive Skill Development Speaking Skills

While less extensively studied, evidence suggests that SQ3R can contribute to speaking skill development through the Question and Recite steps. The Question step requires students to formulate questions based on their survey of the text, which promotes oral question construction. The Recite step involves verbal rehearsal of information, which provides structured speaking practice.

A study by Bekleyen (2023) investigated speaking outcomes in addition to reading comprehension among university EFL students. Participants who received SQ3R instruction demonstrated greater fluency in oral summaries of academic texts ($M = 42.3$ words per minute) compared to controls ($M = 34.8$ words per minute). However, the authors noted that speaking gains were incidental rather than directly targeted, suggesting that explicit integration of oral production is needed for optimal outcomes.

Writing Skills

The transfer of SQ3R skills to writing was examined in four studies. The Question step provides a framework for generating content for written responses, while the structure of SQ3R models organizational patterns for written output. Wahyuningsih and Munir (2023) documented improvements in writing organization among students who practiced summarizing text content through written recitation tasks. These students demonstrated more coherent paragraph structure and more appropriate use of transition signals compared to controls.

Integrated Skill Development

The most promising findings concern integrated skill development. Five studies examined the effects of SQ3R on multiple language skills simultaneously. The methodology by Prokhorova and Shestakova (2025) integrated SQ3R elements into extensive reading programs for heterogeneous English language groups at a non-linguistic

faculty in a Russian university. Their findings indicated that SQ3R-based instruction facilitated transfer of skills across modalities, with participants showing concurrent improvement in reading comprehension, vocabulary use, and oral communication.

Implementation Factors Affecting Effectiveness

Explicit Instruction Component

The effectiveness of SQ3R implementation was consistently associated with the provision of explicit strategy instruction. Studies where students received direct instruction in each of the five steps, with modeling and guided practice, demonstrated larger effects than studies where SQ3R was simply introduced without systematic training.

A study by Sari and Syarif (2024) compared conditions with and without explicit instruction. The explicit instruction condition showed a 41% improvement in reading comprehension, while the minimal instruction condition showed only 12% improvement. This finding underscores the importance of pedagogical scaffolding in SQ3R implementation.

Duration and Dosage

Interventions ranging from 8 to 16 weeks produced larger effects than shorter interventions. A dose-response relationship was observed, with each additional week of SQ3R instruction associated with a 2-3% increase in outcome measures. The study by Rofiqoh et al. (2024) found that sustained implementation across a full academic semester was necessary for skill transfer to occur.

Collaborative Learning Integration

Studies that combined SQ3R with collaborative learning arrangements produced larger effects. Pair work during the Question and Recite steps allowed students to externalize their thinking and receive peer feedback, which enhanced both comprehension and production. Collaborative SQ3R was particularly effective for improving oral recitation fluency and generating diverse question types.

Technology Integration

Two studies investigated the integration of digital tools with SQ3R instruction. The implementation of SQ3R using electronic books and digital annotation tools was associated with enhanced outcomes compared to traditional paper-based implementation. Sattaphuthorn and Prasansaph (2023) reported that SQ3R with e-book integration produced superior reading comprehension gains ($d = 1.12$) compared to traditional SQ3R ($d = 0.78$).

Student Perceptions of SQ3R

Qualitative data from student interviews and open-ended responses provided insight into learner experiences with the SQ3R method. Four main themes emerged from thematic analysis:

Enhanced Comprehension and Retention

Students consistently reported that SQ3R improved their understanding and memory of text content. Typical comments included: "I can remember more after using the SQ3R steps" and "The survey step helps me know what to expect before I start reading."

Increased Engagement

Many students noted that SQ3R transformed reading from a passive activity into an active, engaging process. The requirement to formulate questions before reading was frequently cited as particularly valuable for maintaining focus and purpose.

Metacognitive Awareness

Students reported increased awareness of their own reading processes through SQ3R implementation. They described being more conscious of their comprehension gaps and better able to monitor their understanding as they read.

Initial Challenges and Adaptation

Students also reported initial challenges with SQ3R implementation. The method was perceived as time-consuming, particularly during the initial learning phase. Students who persisted reported that the time

investment decreased as the steps became automatic. Some students adapted the method to their personal preferences, modifying the sequence or combining steps.

DISCUSSION

The results of this systematic review provide strong evidence for the effectiveness of the SQ3R method in developing both receptive and productive skills among university EFL students. The consistent positive effects on reading comprehension align with previous research demonstrating the value of structured reading strategies (Grabe, 2009; Koda, 2005).

The finding that SQ3R produces the largest effects when implemented with explicit instruction, adequate duration, and collaborative learning arrangements has important pedagogical implications. These moderating factors suggest that SQ3R is not a “plug-and-play” intervention but rather requires careful implementation planning. The dose-response relationship observed across studies indicates that sustained implementation is necessary for skill development and transfer.

The effectiveness of SQ3R can be understood through multiple theoretical lenses. From the perspective of schema theory (Anderson & Pearson, 1984), the Survey step activates relevant prior knowledge and establishes mental frameworks for text information. The Question step promotes purposeful reading by creating cognitive expectations, consistent with research on question generation and comprehension (Rosenshine et al., 1996).

From cognitive load theory (Sweller, 1988), the structured nature of SQ3R may reduce extraneous cognitive load by providing procedural guidance for text processing. The segmentation of reading into discrete steps with clear purposes allows students to allocate cognitive resources more efficiently.

From information processing theory, the Recite step engages retrieval practice, which strengthens memory representations more effectively than passive review (Karpicke & Roediger, 2008). The Review step incorporates spaced repetition, another well-established memory enhancement technique (Cepeda et al., 2006).

A novel contribution of this review is the documentation of cross-modal transfer effects. The finding that SQ3R skills transfer from reading to speaking and writing supports a competence-based view of language proficiency, where underlying cognitive abilities—such as organizing information, generating questions, and identifying main ideas—apply across modalities.

The transfer observed may be explained by the hierarchical nature of SQ3R skills. Lower-level skills such as word recognition and sentence processing are modality-specific, but higher-level skills such as main idea identification, information organization, and question generation are modality-general. Once students develop these higher-level skills through reading practice, they can apply them to production tasks.

Several studies directly compared SQ3R with alternative reading strategies. The study by Al-Mutairi (2024) compared SQ3R with the KWL (Know-Want-Learn) method among Kuwaiti university students. Both methods produced significant improvements, but SQ3R yielded larger effects for text recall while KWL produced larger effects for question generation. These differences suggest that method selection should be guided by specific learning objectives.

The comparative study by Rofiqoh et al. (2024) found that SQ3R was more effective than strategy instruction focusing on single skills. The integrated nature of SQ3R—combining pre-reading, during-reading, and post-reading strategies—appears to provide advantages over piecemeal strategy instruction.

Several limitations of the existing evidence base must be acknowledged. First, the geographic concentration of research in Asia limits generalizability to other educational contexts. The cultural emphasis on structured learning and academic achievement in some Asian countries may have enhanced the effectiveness of the SQ3R method. Replication studies in Latin American and African contexts are needed.

Second, most studies focused on short-term outcomes, typically measured immediately after intervention. Long-term follow-up studies are needed to assess the durability of SQ3R effects. Only three studies included delayed post-tests beyond four weeks, and none tracked outcomes beyond one semester.

Third, the quality of implementation was variable across studies. While all studies reported using the SQ3R method, the fidelity of implementation was often not systematically assessed. Studies with higher implementation fidelity tended to produce larger effects, suggesting that poor implementation may have

attenuated results in some studies.

Fourth, few studies examined SQ3R effects on listening comprehension. The application of SQ3R principles to listening—surveying listening materials, generating questions before listening, active listening with purpose, reciting key points, and reviewing—remains largely unexplored despite its logical appeal.

An Integrated Pedagogical Model for SQ3R Implementation

Based on the synthesized evidence, an integrated pedagogical model for SQ3R implementation is proposed. The model comprises three phases: Foundation, Integration, and Transfer.

Phase 1: Foundation (Weeks 1-4)

- Explicit instruction of each SQ3R step with modeling and think-aloud demonstration
- Guided practice with teacher support and immediate feedback
- Mastery of individual steps before sequential integration

Phase 2: Integration (Weeks 5-10)

- Sequential implementation of all five SQ3R steps as an integrated routine
- Collaborative implementation with pair and group work during Question and Recite steps
- Gradual release of responsibility from teacher-led to student-directed

Phase 3: Transfer (Weeks 11-16)

- Application of SQ3R skills to authentic academic texts
- Transfer tasks requiring oral and written production based on SQ3R-generated content
- Self-monitoring and reflection on strategy use and outcomes

The model incorporates three key principles derived from the evidence: explicitness (direct instruction in strategy use), scaffolding (gradual reduction of support), and integration (connecting reading input to speaking and writing output).

CONCLUSIONS

The SQ3R method constitutes an effective pedagogical strategy for developing both receptive and productive skills in university EFL contexts. The systematic review provides robust evidence that SQ3R significantly improves reading comprehension, the most extensively documented outcome, and contributes to vocabulary acquisition, academic reading ability, and—to a lesser extent—productive skill development.

The effectiveness of SQ3R is enhanced by explicit strategy instruction, sustained implementation across academic semesters, integration with collaborative learning arrangements, and incorporation of digital tools. These moderating factors should guide pedagogical decision-making when implementing SQ3R in university EFL classrooms.

The cross-modal transfer of SQ3R skills suggests that the method may serve as a comprehensive framework for integrated language instruction. The structured nature of SQ3R provides a scaffold for organizing content for oral and written production, making it a valuable tool for addressing multiple learning objectives simultaneously.

Recommendations for pedagogical practice include: (a) providing explicit instruction in SQ3R steps with modeling and guided practice; (b) implementing SQ3R over a full academic semester rather than as a short-term intervention; (c) incorporating pair and group work during the Question and Recite steps; (d) integrating SQ3R with digital tools when possible; and (e) designing transfer tasks that require application of SQ3R-generated content to speaking and writing activities.

Future research should address identified gaps: (a) replication studies in diverse geographical and cultural contexts, particularly Latin America; (b) longitudinal studies examining long-term retention and skill transfer; (c) investigation of SQ3R effects on listening comprehension; (d) systematic comparison of SQ3R with alternative integrated-skills approaches; and (e) examination of SQ3R implementation in online and hybrid learning environments.

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Conflict of Interest:

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