

Enhancing First-Year English Teaching Students' Reading Skills Through the SQ5R Method at Mahamakut Buddhist University Lanna Campus

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Received: May 19, 2026
Revised: July 25, 2026
Accepted: August 6, 2026

Abstract

This research aimed to 1) determine the efficiency of the developed SQ5R instructional plans based on the 80/80 standard criterion, 2) compare first-year students' English reading skills before and after implementing the SQ5R method, and 3) investigate first-year students' perceptions of learning English reading through the SQ5R method. The target group of this study consisted of 40 first-year English Teaching students at Mahamakut Buddhist University, Lanna Campus. The study employed a one-group pretest-posttest design. Research instruments included SQ5R lesson plans, proficiency assessments, and a perception questionnaire.

The findings revealed that first, the developed instructional model demonstrated high effectiveness with an efficiency index (E1/E2) of 80.31/84.13, exceeding the 80/80 criterion. Second, the post-test mean score of students' English reading skills (84.13) was significantly higher than the pre-test mean score (59.69) at the .05 level ($t = -13.00$). Third, students expressed a high level of positive perception toward learning English reading through the SQ5R method ($\bar{x} = 3.66$), particularly valuing its utility for future language learning. These results indicate that the SQ5R method is an effective instructional tool for improving the English reading skills of first-year English Teaching students.

Keywords: SQ5R method, English reading skills, English teaching students

Introduction

In the Thai educational context, a study by Sangcharoon (2010) evaluated the improvement of ninth-grade students' English reading and writing abilities at Satri Phatthalung School using the SQ5R metacognitive method, which consists of survey, question, read, recite, reflect, revise, and record. Thirty-two students enrolled in a semester-long English Fundamental Course participated in the study. The results showed that students' skills in answering literal, reinterpretation, and inference questions significantly improved. Additionally, their writing skills improved in areas such as organization, reactivity, summarization, and language quality. The study emphasized the importance of metacognitive techniques like SQ5R in fostering active

reading comprehension and deeper knowledge retention. Kammunkun et al. (2020) examined English-speaking anxiety among first-year English and Communication majors at a public institution in northeastern Thailand. Using a questionnaire based on recognized anxiety assessment models, the study revealed that students had a high level of speaking anxiety, with an average mean score of 3.50. The primary sources of this anxiety were students' attitudes toward language learning, fear of examinations, and concerns about perceived incompetence, followed by their ideas about language acquisition. Students' capacity to communicate successfully in English was severely hampered by these variables, especially when speaking spontaneously, being afraid of making mistakes, and being in new circumstances. The study highlights the need for targeted interventions to reduce speaking anxiety and enhance students' oral communication skills.

Phrakittisarasuthee and Sinak (2024) investigated the contribution of extracurricular activities on improving students' English language proficiency at Mahamakut Buddhist University in 2024. Their findings underscored the importance of organized extracurricular activities in integrating language skill development with interpersonal engagement. According to the results, these kinds of activities helped students develop critical soft skills like confidence, collaboration, and cultural awareness in addition to their language proficiency. The authors underlined that well-thought-out extracurricular activities may function as useful venues for real-world language usage, enhancing formal classroom instruction and promoting comprehensive language learning.

Sakulchinwattanachai et al. (2023) state that reading comprehension in English is one of the four skills and is crucial for developing both speaking and listening comprehension. If students lack the basic skills of speaking and listening, it is challenging to gather information for reading. In practice, reading materials come from a variety of sources, including official documents, textbooks, newspapers, journals, and other audiovisual aids such as television, radio, tape recordings, and online platforms like YouTube. Therefore, Wills (1986) states that English reading proficiency is a skill that can and should be continuously promoted, as it remains valuable throughout a learner's life. Reading is the process of acquiring knowledge from written material. To support EFL learners who face difficulties in reading comprehension, educators have developed various instructional strategies. One such method is the SQ5R approach, originally proposed by Robinson (1941, p. 22) stated that as an extension of the SQ3R methodology. Survey, question, read, recite, reflect, revise, and record are the seven processes that make up the SQ5R technique. By encouraging active interaction with literature, this methodical technique improves comprehension and memory of the material. The SQ5R approach is a useful tool in language instruction as studies have shown how well it works to improve EFL students' reading comprehension.

Students at Buddhist universities in Thailand, particularly those at the Faculty of Humanities and Education at Mahamakut Buddhist University Lanna Campus, are expected to be proficient in English communication. However, B.A. students frequently face challenges in acquiring effective reading and communication skills in English. A study by Atipanyo et al. (2020) explored the use of Aesop's Fables to enhance students' English reading skills at the Faculty of Humanities, Mahamakut Buddhist University Lanna Campus. Although pupils' reading skills generally improved, the study discovered that there was notable gender-based variations. In

particular, female students did better than their male counterparts in reading abilities including literal, inferential, and critical. In order to further develop their abilities, students also said that they needed more experience with reading, vocabulary development, and grammar studies. The study emphasises how crucial customised teaching methods are to meeting the demands of a wide range of learners and fostering fair language development.

Students enrolled in the Bachelor of Arts program at Mahamakut Buddhist University Lanna Campus face several challenges in attaining English language proficiency. These include limited access to reading materials, fear of speaking, a curriculum that does not adequately meet the demands of interactive learning, and a lack of opportunities for real-world language use. Such barriers can impede academic progress and limit future career opportunities. The current study aims to investigate the effectiveness of the SQ5R method—an organized reading technique involving survey, question, read, recite, reflect, revise, and record—in improving first-year students' English reading abilities in order to solve these problems. The particular goals are to determine the effectiveness of the SQ5R method in improving first-year students' English reading skills, compare students English reading skills before and after being taught using the SQ5R method and investigate first-year students' perceptions of learning English reading through the SQ5R method.

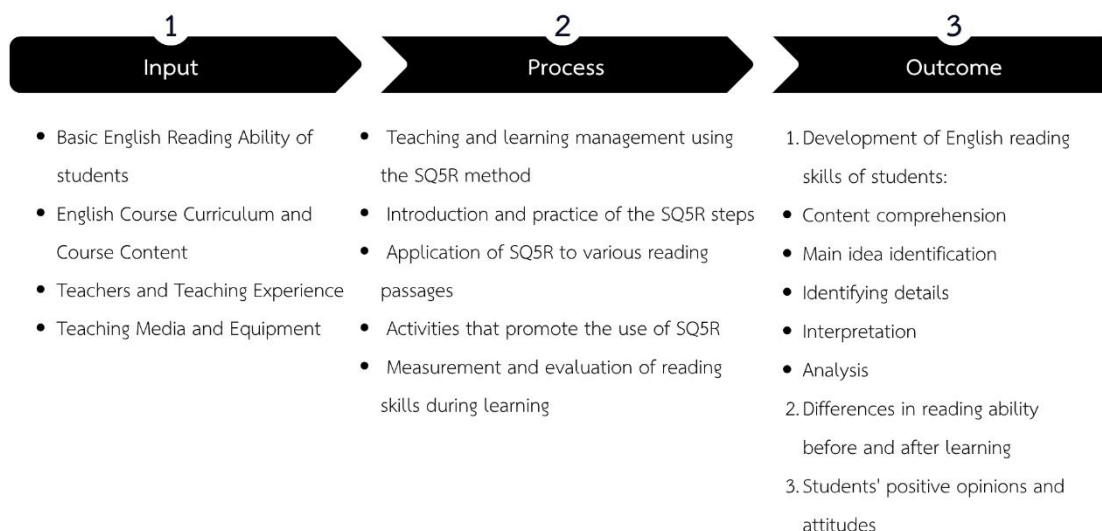
Specifically, preliminary assessments indicated that these first-year students critically lacked cognitive sub-skills in main idea identification and textual interpretation. When encountering dense academic texts, they relied heavily on passive, word-for-word translation, which severely overloads their cognitive working memory. The developed SQ5R instructional model directly addresses these deficits by introducing a structured cognitive routine. The preparatory Survey and Question stages enable students to establish purpose-driven reading goals, while the subsequent Record, Recite, Review, and Reflect phases systematically externalize text processing, reducing mental fatigue and helping readers accurately synthesize information.

The purpose of this study is to methodically investigate how the SQ5R approach enhances English reading skills in English. By examining its effects, the study aims to provide insights for developing effective teaching strategies that improve both understanding and retention. Ultimately, the findings aim to support students' academic success and prepare them for future career opportunities by strengthening a critical language skill necessary for professional achievement and lifelong learning.

Conceptual Framework of the Study

Figure 1

Conceptual Framework of the Study of SQ5R Method



The conceptual framework of this study is designed to illustrate the systematic integration of the SQ5R method into English reading instruction, aiming to enhance the reading proficiency of first-year students. As presented in Figure 1, the framework is structured into three primary components: Input, Process, and Outcome.

The Input Component serves as the foundation, comprising students' prior English reading comprehension skills, the established curriculum and course content, teacher expertise, and necessary instructional media and equipment. This leads into the Process Component, which focuses on the systematic implementation of the SQ5R method, involving the structured introduction and practice of its seven steps, engagement with diverse reading passages, and ongoing formative evaluation to monitor skill development. Finally, the Outcome Component reflects the intended results, specifically the measurable improvement in English reading proficiency—characterized by enhanced content comprehension, main idea identification, and critical analysis—alongside the cultivation of students' positive attitudes and autonomy toward the learning process, as illustrated in the model below.

Research Objectives

1. To determine the efficiency of the developed SQ5R instructional plans based on the 80/80 standard criterion
2. To compare first-year students' English reading skills before and after implementing the SQ5R method
3. To investigate first-year students' perceptions of learning English reading through the SQ5R method

Research Methodology

The research methodology adopts a quasi-experimental action research design with a one-group pretest-posttest approach, employing purposive sampling of 40 first-year English teaching students at Mahamakut Buddhist University, Lanna Campus. While a Dependent Samples t-test analyzes internal changes, the study prioritizes ecological validity within this specific institutional context. Research instruments included four SQ5R-based lesson plans, a standardized English reading achievement test (administered as both pre-test and post-test), and a 5-point Likert scale questionnaire to assess students' perceptions. Data collection involved a systematic process of pre-testing, instructional intervention via the SQ5R framework, and post-testing, followed by the administration of the perception survey. The gathered data were statistically analyzed using Mean ($\bar{x}$), Standard Deviation (S.D.), and Efficiency Criteria (E1/E2), while a Paired Samples t-test was employed to determine the significant difference between pre-test and post-test scores at a .05 significance level.

1. Research Instruments

The research instruments utilized in this study were categorized into two main types: instructional and data collection tools. The instructional instruments consisted of four detailed lesson plans based on the SQ5R method (survey, question, read, recite, record, reflect, and review), specifically designed for English reading instruction. The data collection instruments included:

1.1 An English Reading Achievement Test, used as both a pre-test and post-test to measure linguistic progress.

1.2 A Perception Questionnaire featuring a 5-point Likert scale, designed to investigate students' attitudes toward the SQ5R learning process.

2. Research Instrument Validation

To ensure the quality and accuracy of the instruments, Content Validity was established through the Index of Item-Objective Congruence (IOC). Three experts in the field of English Language Teaching (ELT) and Educational Measurement reviewed the lesson plans, test items, and questionnaire to ensure they aligned with the research objectives and were culturally appropriate for the university context. Only items with an IOC score between 0.67 and 1.00 were retained. Additionally, the achievement test and questionnaire were tried out with a non-sample group of students to calculate the reliability coefficient using Cronbach's Alpha, ensuring the tools provided consistent and dependable results.

3. Data Collection

The data collection process was carried out systematically over a period of six weeks in the 2025 academic year. Initially, the pre-test was administered to the 40 participants to establish a baseline of their reading proficiency. Subsequently, the researcher implemented the instructional treatment using the developed SQ5R lesson plans, focusing on active engagement and the reflect step. After the completion of the lessons, the post-test was conducted to measure improvement. Finally, students were asked to complete the perception questionnaire to provide qualitative and quantitative feedback on their learning experience.

4. Data Analysis

The researcher initiated the development of the SQ5R Metacognitive Transformation teaching guide book by conducting a comprehensive needs analysis and literature review of EFL pedagogy and Metacognitive Theory. To ensure the quality of the instructional materials, the content validity was assessed using the Item-Objective Congruence (IOC) index. Evaluated by five experts, the lesson plans and materials yielded IOC values between 0.8 and 1.00, significantly exceeding the 0.60 minimum threshold. This rigorous validation process, followed by refinements based on expert suggestions, ensured that the model was pedagogically sound and aligned with the academic requirements of the first-year students.

The efficiency of the instructional model was evaluated using the E1/E2 = 80/80 standard criterion. In this analysis, E1 represents the efficiency of the learning process measured through formative scores during the six-week intervention, while E2 reflects the efficiency of the learning outcomes derived from summative post-test results. By analyzing the relationship between the process and the final outcome scores, the researcher could objectively determine if the SQ5R method effectively facilitated knowledge transfer and met the established proficiency benchmarks for instructional materials.

To measure the improvement in English reading skills, the researcher employed a Dependent Samples t-test to compare pre-test and post-test scores. This statistical analysis focused on the mean ($\bar{x}$) and standard deviation (S.D.) of students' achievement before and after the implementation of the SQ5R method. The t-test was utilized to determine the statistical significance of the progress made by the 40 participants. This comparison provides the quantitative evidence needed to verify whether the metacognitive transformation significantly enhanced the students' analytical reading skills at the .05 significance level.

Finally, the researcher investigated student perceptions using a five-point Likert-type scale and open-ended questions, adapted from established scholarly frameworks. The questionnaire's content validity was verified with an IOC score of 0.98, and its reliability was confirmed through a try-out with a similar population using Cronbach's Alpha coefficient. The resulting alpha value (α) of 0.832 indicated a good reliability level. Data from the questionnaire were analyzed using mean and standard deviation, while the open-ended responses underwent content analysis to provide a descriptive summary of how the students perceived the utility and impact of the SQ5R method on their future language learning.

Research Results

The results of this study are presented in accordance with the three research objectives.

1. The results of the determination of the efficiency of the developed SQ5R instructional plans based on the 80/80 standard criterion

1.1 E1 E2 of lesson plans

Results of the analysis of the efficiency (E1/E2) of the lesson plans for using the SQ5R method in improving first-year students' English reading skills of English teaching students, by finding the efficiency of the process.

Table 1*Results of the Analysis of the Efficiency (E1/E2) of the Lesson Plans*

Assessment	N	Percentage (%) of each	Percentage (%)	$\bar{x}$
During Instruction Process (E1)	40	1st lesson: 68.63% S.D. = 16.87 2nd lesson: 87.13% S.D. = 8.46 3rd lesson: 82.63% S.D. = 8.77 4th lesson: 82.88% S.D. = 7.84	80.31%	13.05
Post-test Product (E2)			84.13%	12.49

According to Table 1, the efficiency of the learning process (E1) was 80.31, and the efficiency of the learning outcome (E2) was 84.13. Thus, the lesson plans demonstrated an efficiency level of 80.31/84.13, which is higher than the established criteria of 80/80.

Table 2*Results of the Comparison of Learning Achievement before and after Being Taught Using the SQ5R Method*

Test	N	$\bar{x}$	S.D.	t	p
Pretest	40	59.69	14.01	-13.00	.000
Posttest	40	84.13	12.49		

From Table 2, the comparison of the pre-test and post-test learning achievement of the 40 participants showed a t-test value (t) of -13.00 and a p-value (p) of .000, indicating that the post-test learning achievement was significantly higher than the pre-test at the .05 level.

Table 3

Results of the First-year Students' Perceptions of Learning English Reading through the SQ5R Method

No.	Questions	Mean	SD	Interpretation
1	The SQ5R method has helped me better understand the content of my English reading.	3.40	1.10	Moderate
2	Using the "Survey" step helps me to get a good overview of the content before reading.	3.52	.98	Moderate
3	Asking "questions" before reading helps me to have a purpose in reading.	3.40	1.00	Moderate
4	The "Read" step allows me to read content more efficiently.	3.70	.68	High
5	Taking notes "Record" helps me remember what I read better.	3.52	.90	High
6	Self-review "Recite" helps me understand the material better.	3.57	.93	High
7	The "Review" step helps to enhance your understanding of the content you have read.	3.72	.96	High
8	"Reflection" allows me to apply my knowledge.	3.77	.91	High
9	Overall, I feel that the SQ5R method is useful for learning English reading.	3.75	1.05	High
10	I would like to see the SQ5R method used in learning English in the future.	4.25	4.86	High
Total		3.66	.75	High

Table 3 presents the results of the first-year students' perceptions of learning English reading through the SQ5R method. The perceptions toward the SQ5R method encountered by first-year students in learning English reading were overall at a high level ($\bar{x} = 3.66$, S.D. = 0.75). When examining individual aspects, it was observed that most respondents would like to see the SQ5R method used in learning English in the future ($\bar{x} = 4.25$), followed closely by the perception that reflection allows them to apply their knowledge ($\bar{x} = 3.77$), and the feeling that the SQ5R method is useful for learning English reading overall ($\bar{x} = 3.75$), which were all rated at a high level. The perception that the review step helps to enhance understanding ($\bar{x} = 3.72$), followed by the read step allowing for more efficient reading ($\bar{x} = 3.70$), self-review recite helping to understand the material better ($\bar{x} = 3.57$), taking notes record helping to remember better ($\bar{x} = 3.52$), and the survey step helping to get a good overview ($\bar{x} = 3.52$), while the SQ5R method helping to better understand the content ($\bar{x} = 3.40$), and asking

questions helping to have a purpose in reading ($\bar{x} = 3.40$) were also interpreted at a high and moderate level, respectively.

Discussion

The findings of this study provide a comprehensive understanding of how the SQ5R method functions within a Buddhist higher education context. The following sections discuss the integration of these variables in detail.

1. The current problems in English reading comprehension faced by the first-year English Teaching students at Mahamakut Buddhist University, Lanna Campus

The preliminary investigation and pre-test results revealed that first-year English teaching students at Mahamakut Buddhist University, Lanna Campus, faced significant reading comprehension challenges, primarily due to a lack of systematic strategies and limited vocabulary. These students predominantly engaged in passive word-for-word translation, a struggle that aligns with Nuttall (1996, p. 10) observation regarding the failure to utilize top-down processing to interact with texts. Furthermore, the findings reflect the reading bottleneck described by Aebersold and Field (1997, p. 15) stated that, where a lack of effective monitoring and prior knowledge leads to frustration with complex structures. Ultimately, consistent with Anderson (2003, p. 73) stated that, the absence of metacognitive awareness serves as a major barrier to deep comprehension, underscoring the urgent necessity for a structured framework like the SQ5R method to transform students into proficient and self-regulated readers.

2. Implementation of the Developed SQ5R Instructional Model to Enhance the English Reading Proficiency of First-Year Students at Mahamakut Buddhist University, Lanna Campus

The findings confirm the effectiveness of the SQ5R instructional model in significantly enhancing English reading skills, as demonstrated by the post-test mean score ($\bar{x} = 84.13$) significantly exceeding the pre-test mean ($\bar{x} = 59.69$). By integrating academic content with structured stages-survey, question, read, respond, record, recite, and review-the model facilitated improvements in comprehension accuracy and critical thinking, helping students transition from passive decoding to strategic interaction with texts. Although the initial implementation of the SQ5R instructional model presented challenges, such as students' limited vocabulary and their ingrained habit of word-for-word translation, the structured nature of the method gradually transformed their approach to academic texts. This observation aligns with the concerns of Klingner et al. (2007, p. 77) who noted that while second-language learners may initially struggle with the cognitive demands of multi-step strategies, consistent practice leads to significantly improved comprehension and fluency. As the students moved through the record and recite stages, they began to overcome the linguistic anxiety often associated with complex English texts. This supports the theory of Horwitz (2001) who emphasized the importance of a predictable pedagogical framework in reducing language learning anxiety.

Furthermore, the collaborative environment fostered during the review phase allowed students to clarify conceptual misunderstandings, a process that Vygotsky (1978, p. 86) identified as essential for cognitive development within the Zone of Proximal Development. Consequently, despite the early difficulties, the persistent application of the SQ5R model empowered the first-year English teaching

students to engage with academic texts more autonomously and accurately, ultimately bridging the gap between their baseline abilities and the level of proficiency required at the university level.⁶

3. Evaluation of the Effectiveness of the Developed SQ5R Instructional Model Through Pre- and Post-Implementation Comparison

The evaluation of the developed SQ5R Metacognitive Transformation Model demonstrates its significant effectiveness in enhancing the reading proficiency of first-year EFL teacher candidates at Mahamakut Buddhist University, Lanna Campus. Through a systematic comparison of pre- and post-implementation results, the findings reveal that the post-test mean score ($\bar{x} = 84.13$) was significantly higher than the pre-test mean ($\bar{x} = 59.69$) at the .05 significance level, with the instructional model achieving a high efficiency index (E1/E2) of 80.31/84.13. This quantitative progress, coupled with the students' highly positive perceptions and increased professional confidence, confirms that the structured SQ5R framework effectively bridges the gap between baseline literacy and the advanced analytical skills required for future English educators. This improvement is consistent with the theoretical framework proposed by Robinson (1970, p. 25), who introduced the systematic reading strategies to help learners organize information more effectively and improve retention. Furthermore, the success of this implementation supports the findings of Holschuh and Aultman (2009, p. 121), who emphasized that active engagement during the question and read phases transforms passive readers into active learners, leading to higher academic achievement. Finally, as suggested by McWhorter (2012, p. 158) stated that, the recite and review stages are critical for linguistic reinforcement, equipping students with the metacognitive skills necessary to monitor and regulate their comprehension of complex English texts. Overall, the substantial increase in the mean scores demonstrates that the SQ5R instructional model is an effective tool for enhancing the reading proficiency of first-year English teaching students at Mahamakut Buddhist University Lanna Campus. Crucially, although the post-test summative score (E2 = 84.13) marginally outpaced the formative process score (E1 = 80.31) by 3.82%, this gap does not imply that the final assessment was overly simplistic. Instead, it reflects the progressive metacognitive reinforcement embedded within the six-week SQ5R implementation. As learners gained continuous experience with structured recording and reflecting, their linguistic anxiety gradually faded, leading to superior knowledge retention and higher proficiency on the final post-test than during the initial, demanding process stages.

Conclusion

The study concludes that the implementation of the SQ5R Metacognitive Transformation Model effectively addressed the significant reading challenges faced by first-year English Teaching students at Mahamakut Buddhist University, Lanna Campus, who initially lacked foundational proficiency and systematic reading strategies. By integrating a structured six-week teaching guide comprising seven sequential stages- survey, question, read, recite, record, review, and reflect- the instructional model successfully transformed 77.5% of beginner-level students into active, strategic learners. This success is quantitatively validated by an efficiency index (E1/E2) of 80.31/84.13, which exceeded the 80/80 criterion, and a significant improvement in learning achievement, with post-test mean scores ($\bar{x} = 84.13$, S.D. = 12.49) significantly higher than pre-test mean scores ($\bar{x} = 59.69$, S.D. = 14.01) at the .05

level ($t = -13.00$, $p = .000$). Furthermore, the structured nature of the model reduced language anxiety and fostered student-centered participation, confirming that the SQ5R method is a highly reliable and effective tool for bridging the proficiency gap and enhancing the academic reading abilities of EFL teacher candidates.

Recommendations

Recommendations for Practical Implementation

1. Future English reading instruction should place greater emphasis on students' learning motivation, as motivation plays a crucial role in sustaining engagement and encouraging active participation in the systematic stages of the SQ5R method.
2. Buddhist institutions are encouraged to integrate structured reading strategies, such as the SQ5R method, into both academic and Dhamma-related courses. This integration can support students in effectively communicating and comprehending Buddhist teachings in English.
3. Instructors should provide continuous encouragement and psychological support, including anxiety-reduction techniques and constructive feedback, to help students build confidence, particularly during the reflect and review stages of the reading process.
4. Future studies should investigate the integration of AI-assisted scaffolding or digital logbooks within the Record and Review stages of the SQ5R framework to examine how modern technology balances cognitive allocation and vocabulary acquisition for contemporary EFL learners.

Recommendations for Future Research

1. Future research should examine the long-term impact of the SQ5R instructional model on students' reading retention, as well as their ability to transfer these strategies to other language skills such as writing or speaking.
2. Subsequent studies could apply the developed SQ5R model to different student levels or larger sample groups across other Buddhist universities to evaluate its broader effectiveness and adaptability in diverse academic contexts.
3. Researchers may compare the use of general English texts and subject-specific Buddhist content within the SQ5R framework to determine which type of content more effectively enhances reading proficiency and cognitive engagement in EFL learners.
4. Further studies should investigate the integration of educational technologies or AI-assisted tools within the SQ5R stages to explore how digital scaffolding can further enhance the effectiveness of the record and review processes for contemporary learners.

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