

Improving Students' Reading Comprehension Through The Know, Want, Learn (KWL) Technique

Dian Sartin Tiwery

English Education, Program Studi Diluar Kampus Utama, Universitas Pattimura

Corresponding e-mail: dian.tiwery.21@gmail.com

ABSTRACT

This study aimed to improve students' reading comprehension through the implementation of the Know-Want-Learn (KWL) strategy in an Intensive Reading class within the English Education Program at Pattimura University, PSDKU Southwest Maluku. The research employed a Classroom Action Research (CAR) design consisting of two cycles, each following the stages of planning, action, observation, and reflection. Data were collected through reading comprehension tests, classroom observations, and student interviews. In Cycle 1, only 64.7% of students met the minimum mastery criterion, and several behavioral challenges—such as low engagement and limited question formulation—were observed. After revising instructional strategies in Cycle 2, all students (100%) achieved mastery, and significant improvements were noted in cognitive engagement, peer interaction, and learner autonomy. Interview data supported these findings, revealing increased metacognitive awareness, motivation, and confidence. The results indicate that the KWL strategy, when integrated with reflective teaching and peer collaboration, is effective in enhancing reading comprehension and active learning in EFL contexts. This study highlights the strategy's adaptability for use in rural, resource-limited higher education settings.

Keywords: *KWL strategy, reading comprehension, Classroom Action Research, EFL, student engagement, metacognition.*

INTRODUCTION

Reading comprehension is an essential skill in second and foreign language acquisition, especially in academic contexts where English texts are the primary source of information. Comprehension goes beyond decoding; it includes interpreting meaning, evaluating ideas, and integrating textual information with existing knowledge (Grabe & Stoller, 2011). In EFL contexts, many learners struggle with comprehension due to linguistic barriers and cognitive overload, which hinder their ability to engage critically with texts (Anderson, 2003).

In Indonesia, particularly in under-resourced or rural regions, students often face additional challenges such as limited access to reading materials, teacher-centered instruction, and a lack of strategy-based reading instruction. These factors reduce learner autonomy and decrease students' confidence in reading English (Nunan, 2003). When reading is treated merely as a passive activity, students become disengaged, which ultimately stifles the development of deeper reading comprehension skills (Nation, 2009).

To address these challenges, educators have increasingly turned to interactive strategies that emphasize student engagement and metacognitive development. One such method is the

Know-Want-Learn (KWL) technique, developed by Ogle (1986), which encourages learners to activate prior knowledge, formulate questions, and reflect on new understanding. This strategy is particularly effective in helping students approach texts with purpose and improve their self-regulated learning habits (Vacca & Vacca, 1999).

Research in different educational contexts has affirmed the efficacy of the KWL technique. For example, Alrawi and Alghazo (2015) found significant improvements in EFL students' comprehension levels when the KWL strategy was used in Jordanian classrooms. Fisher and Frey (2004) showed that KWL charts helped middle school students improve text recall and analytical reading. Similarly, Zarei and Aghajani (2014) demonstrated that Iranian students using the KWL method performed better on comprehension tests than those in traditional reading classes.

In Southeast Asia, studies have also supported the use of KWL. Wahyuni (2017), in an Indonesian high school setting, found that the technique improved students' engagement and understanding of narrative texts. Rahman and Mulyadi (2020) applied the KWL strategy to vocational students and reported greater learner participation and higher test performance. While these findings are promising, most of the studies focus on secondary education, leaving a gap in understanding how KWL functions at the tertiary level.

Furthermore, few studies have examined the use of the KWL strategy in remote or geographically isolated universities, such as Pattimura University's PSDKU Southwest Maluku campus. Students in this context often encounter compounded challenges: linguistic difficulty, poor access to English texts, and a lack of exposure to interactive learning models. As such, applying the KWL strategy in this setting may offer unique insights into its adaptability in marginalized learning environments (Suparman, 2015).

Another limitation in existing research is the lack of methodological depth. Many KWL studies use pre-test/post-test models without capturing the nuances of the teaching-learning process. There is a need for iterative, reflective approaches—such as Classroom Action Research (CAR)—that allow educators to adjust instructional techniques based on student feedback and performance (Kemmis & McTaggart, 1988). CAR can be particularly useful in fine-tuning how the KWL strategy is implemented to address diverse learner needs.

Given these gaps, this study aims to investigate the implementation of the KWL technique to improve reading comprehension among English Education students at Pattimura University in a rural Indonesian context. The research is guided by the following questions:

1. *How does the implementation of the KWL technique affect students' reading comprehension of narrative texts?*
2. *What instructional challenges and student responses emerge during the implementation of the KWL strategy in the classroom?*
3. *How can classroom action research cycles be used to refine the application of the KWL technique to better support EFL learners in a rural university context?*

METHOD

This study employed a Classroom Action Research (CAR) design, grounded in the cyclical model proposed by Kemmis and McTaggart (1988). CAR is particularly effective for educators seeking to improve classroom practice while conducting systematic, reflective inquiry. It follows a cycle of four stages: planning, action, observation, and reflection. The researcher, who also served as the classroom teacher, used this model to introduce, monitor, and adjust the use of the Know-Want-Learn (KWL) strategy to enhance reading comprehension. By involving students in reflective and structured reading activities across two implementation cycles, CAR allowed the researcher to adapt instruction based on real-time student feedback and performance (Kemmis & McTaggart, 1988; Burns, 2010).

The participants in this study were 17 undergraduate students enrolled in the Intensive Reading course of the English Education Study Program at PSDKU Pattimura University, located in Southwest Maluku. A purposive sampling method was used, given that the target group was already part of the researcher's classroom and was known to struggle with reading comprehension. Based on institutional placement results and a diagnostic pre-test, students were determined to be at a lower-intermediate (A2–B1) English proficiency level in terms of the Common European Framework of Reference (CEFR). Most participants exhibited limited vocabulary knowledge, a lack of strategic reading skills, and low self-confidence when engaging with English texts, common characteristics of learners at this level (Nation, 2009; Grabe & Stoller, 2011).

To ensure methodological triangulation, the study employed a mix of quantitative and qualitative instruments. Reading comprehension tests served as the primary quantitative instrument, administered at the beginning (pre-test) and end of each cycle (post-tests). Each test consisted of 20 multiple-choice questions based on narrative texts suited to A2-B1 proficiency. These questions targeted four areas of comprehension: vocabulary recognition, sentence-level understanding, referent identification, and inferential reasoning. The scoring rubric awarded 1 point per correct answer, with a maximum score of 20. The Minimum Mastery Criterion (KKM) was set at 70%, equivalent to 14 correct answers. Students scoring 14–16 were classified as having achieved mastery, while those scoring 17–20 were categorized as demonstrating advanced mastery.

In addition to the tests, structured observation sheets were used to document classroom behaviors and engagement during KWL-based activities. Observations focused on five main domains: cognitive engagement (e.g., initiating questions), behavioral engagement (e.g., completing the KWL chart), emotional response (e.g., motivation and reduced anxiety), and social interaction (e.g., collaboration with peers), and displaying visible enthusiasm (e.g., smiling or expressing interest). Observations were conducted by both the researcher and a collaborating lecturer to reduce bias and increase reliability (Creswell, 2012).

To capture student perspectives, semi-structured interviews were conducted with three randomly selected students after each cycle. Sample interview questions included: "Which

part of the KWL chart helped you understand the reading best?", "What difficulties did you face during the 'Want to Know' phase?", and "How has the KWL strategy affected your interest in reading English?" These interviews allowed for deeper insights into learner experiences and informed instructional adjustments for the second cycle.

All qualitative data—including observation notes, student KWL charts, and interview transcripts—were subjected to thematic analysis following Braun and Clarke's (2006) framework. Initial codes such as "active questioning," "vocabulary gap," and "peer learning" were identified and grouped into broader themes like "metacognitive engagement" and "collaborative learning." This approach enabled the researcher to capture recurring patterns and triangulate them with quantitative test results, thereby offering a holistic understanding of the intervention's impact (Braun & Clarke, 2006; Miles, Huberman & Saldaña, 2014).

Ethical considerations were observed throughout the study. Participants were informed about the study's objectives, procedures, and their voluntary involvement. Written informed consent was obtained prior to data collection. To maintain confidentiality and protect participant identity, pseudonyms were used in all records and reporting. As the researcher was also the course instructor, potential conflicts of interest were mitigated by involving a co-observer during classroom observation and anonymizing data during analysis. The research was conducted in accordance with institutional ethical guidelines and received clearance from the English Education Program coordinator.

FINDINGS AND DISCUSSION

This section presents the findings of the two-cycle Classroom Action Research (CAR) designed to improve students' reading comprehension using the Know-Want-Learn (KWL) technique. As outlined in the Methodology section, data were collected through reading comprehension tests, structured classroom observations, and student interviews. The findings are presented in the standard CAR structure: Planning, Action, Observation, and Reflection for each cycle. The impact of the KWL technique is analyzed based on student performance, engagement, and perception, as measured across quantitative and qualitative instruments.

Findings from Cycle 1

In Cycle 1, the researcher developed and implemented lesson plans integrating the KWL strategy into two intensive reading sessions. The learning materials were designed to activate prior knowledge, guide students in setting learning goals, and support reflection. Students were introduced to the KWL chart and practiced using it with narrative texts.

Student Engagement with Reading Tasks in Cycle 1

A behavioral frequency observation method was employed during the KWL-based lessons in Cycle 1. Observers used a tally system to document the occurrence of specific student behaviors that reflected levels of engagement and interaction with the KWL strategy. Five

observable behaviors were identified prior to the lessons: asking a question during the reading task, completing all sections of the KWL chart, participating in peer discussion during the “Want to Know” (W) phase, requiring repeated teacher prompts for task initiation, and displaying visible enthusiasm such as smiling or expressing interest. During the lesson, two observers independently recorded each time a student demonstrated one of these behaviors. At the end of the session, frequencies were totaled and converted into percentages to determine how many of the 17 students exhibited each behavior at least once. Table 1. Show the classroom observation result of the student’s engagement with reading using the KWL strategies. Classroom observations in Cycle 1 revealed that students were initially unfamiliar with the KWL process, leading to hesitation and low confidence in the “W” (Want to Know) stage. Participation was uneven; while a few students engaged actively, others remained passive, indicating a need for more scaffolding and modeling by the teacher.

Table 1. Frequency of Observed Behaviors

Observed Behavior	Frequency	% of Students
Asked a question during reading task	7	41%
Completed all sections of the KWL chart	9	53%
Engaged in peer discussion during “W” phase	5	29%
Needed repeated teacher prompts for task initiation	11	65%
Displayed visible enthusiasm (e.g., smiles, laughter)	6	35%

Test Results

Post-test scores after Cycle 1 showed modest improvement. Eleven out of seventeen students (64.7%) met or exceeded the Minimum Mastery Criterion (KKM) of 70% (14 out of 20 correct). However, six students did not reach the target, highlighting challenges related to vocabulary and comprehension strategies.

Table 2. Cycle 1 Reading Test Results

Mastery Level	Number of Students	Percentage
Below Mastery (<14)	6	35.3%
Meets Mastery (14–16)	9	52.9%
Advanced (17–20)	2	11.8%
Total	17	100%

Findings from Cycle 2

Based on reflections from Cycle 1, several adjustments were made. The teacher provided more guided examples, used modeling strategies for the “W” phase, and conducted vocabulary

previewing exercises before reading. The classroom setup also encouraged pair work to support peer discussion and collaborative thinking during KWL completion.

Student Engagement with Reading Taska in Cycle 2

During Cycle 2, classroom observations revealed a notable increase in student engagement and active participation compared to the initial cycle as shown in the table 2 below.

Table 3. Student Engagement with Reading Task in Cycle 2

Observed Behavior	Frequency	% of Students
Asked a question during reading task	13	76%
Completed all sections of the KWL chart	16	94%
Engaged in peer discussion during “W” phase	14	82%
Needed repeated teacher prompts for task initiation	3	18%
Displayed visible enthusiasm (e.g., smiles, laughter)	12	71%

To evaluate the impact of instructional adjustments made after Cycle 1, a comparison of observed student behaviors was conducted across both research cycles. The focus remained on five key indicators of engagement: asking questions, completing the KWL chart, participating in peer discussions during the “Want to Know” phase, requiring repeated teacher prompts, and displaying visible enthusiasm. As illustrated in the comparison chart 1 Cycle 2 demonstrated clear improvements across all positive engagement behaviors.

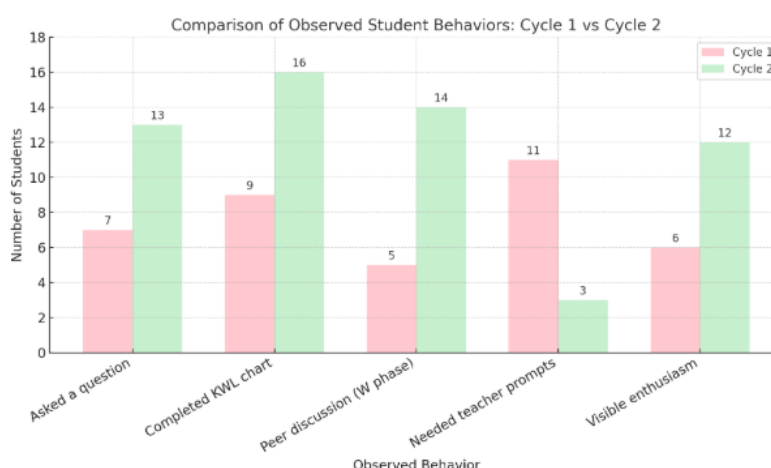


Chart 1. Comparison of students' engagement in cycle 1 and 2.

The number of students who asked questions during reading increased from 7 in Cycle 1 to 13 in Cycle 2, indicating a substantial rise in cognitive involvement. Similarly, full completion of the KWL chart rose from 9 to 16 students, and peer collaboration during the W phase increased from 5 to 14 students—more than doubling. In contrast, the number of students needing repeated teacher prompts dropped significantly from 11 to just 3, highlighting

increased learner autonomy. Additionally, expressions of visible enthusiasm rose from 6 to 12 students, reflecting a more motivated and emotionally engaged classroom environment. These findings suggest that the refined pedagogical approach in Cycle 2 led to more meaningful, self-directed participation among students.

Cycle 2. Reading Test Results

The reading comprehension post-test results in Cycle 2 demonstrated substantial improvement. All seventeen students (100%) met or exceeded the KKM, indicating that the refined KWL implementation and instructional support addressed previous shortcomings.

Table 4. Cycle 2 Reading Test Results

Mastery Level	Number of Students	Percentage
Below Mastery (<14)	0	0%
Meets Mastery (14–16)	10	58.8%
Advanced (17–20)	7	41.2%
Total	17	100%

To assess the effectiveness of the KWL strategy on students' reading comprehension, test results from Cycle 1 and Cycle 2 were compared. The results show a clear improvement in reading mastery following the instructional adjustments made after Cycle 1 as illustrate in the chart2 below.

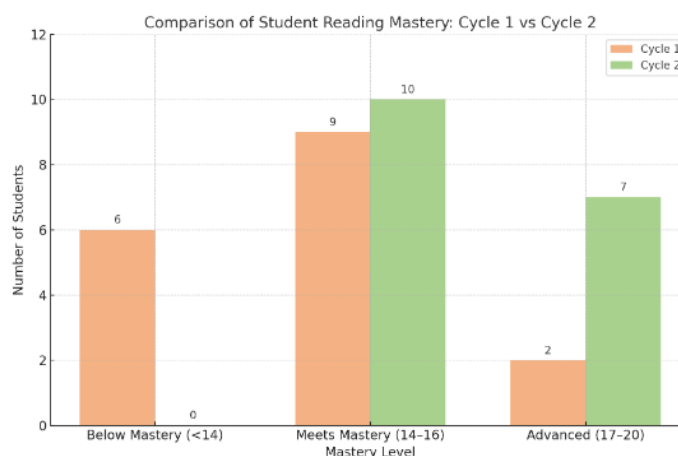


Chart 2. Comparison of student Reading Mastery between Cycle 2 and 2.

In the first cycle, only 11 out of 17 students (64.7%) achieved the Minimum Mastery Criterion (KKM) of 70%, with 6 students (35.3%) scoring below mastery level, 9 students (52.9%) meeting the mastery range (14–16 correct answers), and only 2 students (11.8%) reaching advanced mastery (17–20 correct answers). In contrast, by Cycle 2, all 17 students (100%) achieved or exceeded the KKM. Of these, 10 students (58.8%) fell within the mastery range

and 7 students (41.2%) achieved advanced mastery. No student remained below the mastery threshold. These results indicate a significant increase in overall reading comprehension performance and suggest that the instructional refinements—such as improved modeling, vocabulary support, and clearer guidance—were effective in helping all students reach or surpass the target competency level.

Student Interview Results

To gain deeper insight into how students experienced the KWL strategy and the revised classroom activities in Cycle 2, post-lesson interviews were conducted with six randomly selected students. Their reflections revealed four interconnected elements such as 1) increased awareness of reading strategy, 2) improved confidence and participation, 3) supportive learning environment, and 4) Perceived Relevance and Motivation.

Increased Awareness of Reading Strategy

A prominent theme in all interviews was students' enhanced awareness of how to approach texts strategically. They emphasized how the KWL chart helped them structure their thinking before, during, and after reading. One student noted, "I used to read without any plan. But now I ask what I want to know, and I look for it in the text." This growing metacognitive awareness mirrors the rise in cognitive engagement observed in Cycle 2 and illustrates how students began to take ownership of their comprehension process.

This deeper strategic awareness served as a foundation for another important development: greater confidence and willingness to participate in classroom discussions.

Improved Confidence and Participation

With the scaffolding provided by the KWL framework, students reported feeling more confident in articulating their thoughts and answers. They felt better prepared to engage in classroom tasks and less anxious about making mistakes. One student shared, "I'm not afraid now to say my answer because I know what I'm talking about." This increased self-assurance was evident in the observation data, where participation in peer discussions and reduced need for teacher prompts showed strong gains. Confidence, in turn, fostered a stronger sense of community and encouraged more collaborative learning behaviors, which shaped the classroom environment.

Supportive Learning Environment

Another consistent theme was the value of peer interaction, especially during the "Want to Know" phase. Students appreciated the opportunity to brainstorm with classmates, which often clarified their own questions and deepened their engagement. As one participant expressed, "When I talk to my friend, I get more ideas. We help each other fill the KWL chart." This collaborative spirit reflects the 82% rate of peer discussion observed in Cycle 2 and

illustrates how social interaction contributed to building a more inclusive and interactive learning space. A more collaborative and safe learning environment also appeared to positively influence students' emotional connection to reading, leading to increased enjoyment and interest.

Perceived Relevance and Motivation

Finally, students reported that reading activities felt more meaningful and engaging during Cycle 2. The process of identifying personal questions before reading and reflecting afterward helped make the material feel more relevant. One student remarked, "Now reading feels like something I want to do, not just something the teacher gives." This motivational shift is consistent with the increased expressions of visible enthusiasm (71%) and reinforces the idea that metacognitive strategies like KWL can also enhance emotional engagement.

These elements are aligned with and support the quantitative findings from classroom observations and reading test results. They reflect a shift in students' approach to reading, their classroom engagement, and their growing autonomy as learners.

DISCUSSION

The findings of this study demonstrate that the application of the Know-Want-Learn (KWL) technique significantly improved students' reading comprehension, participation, and engagement in the English Education program at Pattimura University. Through two cycles of Classroom Action Research (CAR), students progressed from passive recipients of information to more reflective and strategic readers. The improvement was evident not only in the test scores—where 100% of students achieved the mastery level by Cycle 2—but also in observable behaviors and student-reported experiences. These outcomes align with the study's objective to evaluate how KWL influences reading comprehension in an EFL context and how its iterative application can refine instructional practice.

One of the most notable impacts of the KWL strategy was on students' metacognitive engagement with texts. As reported in both the observations and interviews, students in Cycle 2 were more likely to ask questions, complete the KWL chart meaningfully, and reflect critically on what they had learned. The number of students asking questions during reading rose from 41% in Cycle 1 to 76% in Cycle 2, suggesting an increasing ability to activate prior knowledge and monitor comprehension—core components of metacognitive reading strategies (Ogle, 1986; Grabe & Stoller, 2011). Interview data confirmed that students became more aware of reading as a process, with one student remarking that KWL helped them "read with a plan." This supports earlier research by Zarei and Aghajani (2014), who found that KWL fosters deeper text engagement in EFL learners.

The intervention also led to improvements in student confidence and classroom participation, as evidenced by the sharp decline in the number of students needing repeated teacher prompts—from 65% in Cycle 1 to just 18% in Cycle 2. This trend was reinforced by students'

own reflections; many expressed a growing sense of ownership over their learning and a reduction in fear of making mistakes. These findings are consistent with Fisher and Frey's (2004) assertion that structured reading strategies like KWL empower students by clarifying expectations and reducing reading anxiety.

A critical factor in this transformation was the creation of a more supportive and interactive learning environment, facilitated by peer collaboration and revised teacher guidance. Observational data showed a dramatic increase in peer discussion during the "W" phase—from 29% to 82%—indicating a shift from teacher-centered to more learner-centered instruction. Interview participants highlighted the value of peer discussion in helping them formulate questions and build ideas collaboratively. This supports Vygotsky's social constructivist view of learning, which emphasizes the importance of interaction and scaffolding in cognitive development (Vacca & Vacca, 1999).

Furthermore, the data indicate a noticeable rise in students' intrinsic motivation. The percentage of students displaying visible enthusiasm nearly doubled between cycles, and students consistently described the reading process as "more interesting" and "less boring" in their interviews. This increase in affective engagement likely contributed to the sustained improvement in comprehension skills, as students were not only performing tasks but also finding personal meaning in them. The motivational effect of KWL is well-documented in earlier research (Wahyuni, 2017; Rahman & Mulyadi, 2020), and this study reinforces those findings within a rural university EFL context.

Finally, the success of the second cycle reflects the strength of the Classroom Action Research model in adapting instruction to meet learner needs. By systematically reflecting on the challenges of Cycle 1—such as unclear instructions and limited vocabulary support—the researcher was able to revise lesson plans, introduce modeling techniques, and scaffold question-generation more effectively in Cycle 2. This iterative refinement of practice, based on student data, illustrates the core value of CAR as both a pedagogical and professional development tool (Kemmis & McTaggart, 1988; Burns, 2010).

CONCLUSION

Based on the findings of this Classroom Action Research, it can be concluded that the implementation of the Know-Want-Learn (KWL) technique significantly enhanced students' reading comprehension, engagement, and confidence in an EFL context. Through two iterative cycles, the strategy not only helped students organize their thoughts and monitor their understanding but also fostered a more active and collaborative learning environment. Improvements were evident in reading test scores, behavioral observations, and student feedback, all of which highlighted greater metacognitive awareness and motivation. The study also demonstrates the value of reflective, data-driven instruction, as adjustments made after Cycle 1 led to full mastery by all students in Cycle 2. Therefore, the KWL strategy—when combined with thoughtful scaffolding and classroom interaction—proves to be an effective approach for developing reading comprehension in tertiary-level EFL learners, particularly in resource-limited or rural educational settings.

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