Boosting English Reading Proficiency: The Efficacy of the KWL Learning Strategy

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Abstract

In the contemporary globalized society, addressing the challenges of low academic performance and limited English reading comprehension is paramount. This study investigates the potential of the KWL (Know-Want-Learned) learning strategy, a technique posited to enhance student outcomes, in bridging the observed gap between theoretical pedagogies and practical interventions. Utilizing a quasi-experimental design, diverse students from varied grades and backgrounds were divided into two groups: one exposed to the KWL technique and another receiving traditional instruction. Standardized tests were employed to measure outcomes. Notably, students undergoing KWL-based instruction exhibited significant advancements in academic performance and English reading comprehension. These findings underscore the value of integrating the KWL strategy into educational curricula. While the results are promising, further studies are warranted to understand the long-term effects and the strategy's adaptability across diverse educational settings and demographics. In essence, this research not only highlights the pressing educational challenges but also introduces an evidence-backed solution for substantial improvement.

Keywords: KWL strategy; reading comprehension; learning outcomes; academic performance

INTRODUCTION

English serves as a fundamental tool for global communication, connecting people and cultures. As it serves as a bridge to international communication, its role in basic education is strategically significant (Maru’ao, 2020). In Indonesia, where English is introduced not as a mother tongue but as a foreign language, the challenge of mastering it is accentuated (Wijaya, 2015). Given its ubiquity in international discourse, the benefits of English proficiency extend beyond communication, aiding individuals in education and career pursuits (Ningsih, 2021). Furthermore, strong English language skills can assist individuals in pursuing education. Achieving the goals of English language learning as outlined in the curriculum requires the support of all components involved in the school learning process. These objectives can be attained through reading (Astuti, 2018).
However, reading comprehension, especially in the realm of English-language texts, presents its own challenges. Students across educational spectrums, from secondary to tertiary, often find it daunting to extract meaning and interpret nuances and conclusions from these texts, which unfortunately reflects in their academic grades (Afrina, 2019). Delving deeper into reading, as pointed out by Kamayana and Carniasih (2020), is not merely about processing words but about truly understanding the writer’s intent. This involves recognizing the main ideas, interpreting authorial intent, and drawing logical inferences from the content (Tambunan & Harputra, 2023). By engaging in comprehensive reading, students can expand their knowledge base, tapping into new information and novel perspectives (Mariyam et al., 2021). A correlation seems evident between advanced reading comprehension skills and enhanced overall learning outcomes, which encapsulate a student’s academic evolution in line with educational objectives (Kesuma et al., 2021; Wicaksono & Iswan, 2019; Qiptiyyah, 2020; Dakhi, 2020).

Instructional strategies play an instrumental role in determining the outcomes of the learning process. A prominent example of these strategies is the KWL (Know, Want to know, Learned) method. This particular approach not only outlines reading objectives but also positions students at the heart of their learning journey, actively involving them at every stage—before, during, and after reading (Erfin, 2016). A standout feature of the KWL strategy is its focus on nurturing reflective thinking. As students engage with content, they are prodded to mull over fresh information and refine their questioning abilities. The KWL strategy is meticulously segmented into three distinct phases. The first, denoted as 'K', captures what students already comprehend about a topic. The subsequent 'W' phase encourages them to articulate what they aspire to discover or understand better. Finally, the 'L' phase consolidates what they have discerned after their reading endeavors.

Such structured progression not only fortifies students’ reading competencies but also equips them with the skills to articulate their viewpoints, discern central concepts, craft pertinent questions, and gauge areas where their comprehension might need further enrichment (Karmilasari, 2018). This multifaceted approach to reading has garnered significant academic attention. Studies by Inggrriyani and Aptiani (2020) and Zulaikah (2021) underscore the efficacy of the KWL strategy, specifically highlighting its prowess in bolstering students’ reading comprehension and text interpretation capabilities. Further substantiating this, research by Fitriana et al. (2021) revealed that the KWL strategy has a profound impact, reflecting an impressive average effect size of 1.54 on students’ reading comprehension aptitude. Such findings align with the work of Lipa et al. (2016), which underscores the strategy’s success in enhancing reading comprehension proficiencies.

In light of the compelling evidence supporting the KWL method, this research seeks to achieve several objectives: Firstly, to discernibly contrast the English reading comprehension abilities of students in the experimental class, taught via the KWL strategy, against those in the control class, who receive traditional instruction. Secondly, to evaluate the learning outcomes of both groups. And lastly, to pinpoint significant disparities in learning outcomes between the two sets of students.

**METHOD**

Following the guidelines set by Sudarsana (2018), this study utilized a quasi-experimental design. The research encompassed four classes of fourth-semester students.
From these, two were chosen—Class A (55 students) and Class B (56 students)—using a mix of simple random and purposeful sampling techniques. Class A was the experimental group and was taught using the KWL method, while Class B acted as the control group and was exposed to the Direct Instruction/Conventional Model. The primary data collection method focused on evaluating students’ English reading comprehension skills and their learning outcomes through a test method.

Before diving into hypothesis testing with the Multivariate Analysis of Variance (Manova), certain preliminary tests were conducted. The data’s distribution was checked for consistency using the Kolmogorov-Smirnov statistical test, applied through SPSS 24.00 for Windows, with a set significance threshold of 0.05. Additionally, Levene’s Test of Equality of Error Variance, complemented by Box’s M test, was used to ensure the data was homogeneously distributed. With these prerequisites in place, the study moved to assess its three main hypotheses. Hypotheses 1 and 2 were analyzed with an F-variant test through Manova. The third hypothesis was evaluated using criteria like Pillae Trace, Wilk Lambda, Hotelling’s Trace, and Roy’s Largest Root, all benchmarked against an $F = 5\%$ significance level. If the calculated $F$ significance value was below 0.05, the study accepted the alternative hypothesis and rejected the null one.

**FINDING AND DISCUSSION**

The data presented in this study is divided into four main categories: (1) KWL (Know Want to Know Learned) strategy-taught English language reading comprehension skills; (2) KWL (Know Want to Know Learned) strategy-achieved learning outcomes; (3) direct instruction-taught English language reading comprehension skills; and (4) learning outcomes from direct instruction. Table 1 below shows the findings of the data analysis:

<table>
<thead>
<tr>
<th>Statistic</th>
<th>A1</th>
<th>A2</th>
<th>Y1</th>
<th>Y2</th>
<th>Y1</th>
<th>Y2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Respondents</td>
<td>55</td>
<td>55</td>
<td>56</td>
<td>56</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>86.62</td>
<td>90.33</td>
<td>71.18</td>
<td>70.82</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>6.709</td>
<td>6.885</td>
<td>7.751</td>
<td>6.419</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variance</td>
<td>45.018</td>
<td>47.409</td>
<td>60.077</td>
<td>41.204</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimum Score</td>
<td>60</td>
<td>70</td>
<td>52</td>
<td>56</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum Score</td>
<td>100</td>
<td>100</td>
<td>91</td>
<td>82</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Details:
A1-Y1: English comprehension reading score from experimental class
A2-Y1: English comprehension reading score of the control class
A1-Y2: Learning outcomes score from experimental class
A2-Y2: Learning outcomes score from control class

Table 1 reveals that the experimental group outperforms the control group in English reading comprehension, with an average score of 86.62 compared to 71.18. This trend continues with the learning outcomes, where the experimental group achieved an average score of 90.33, notably higher than the control group’s 70.82. Prior to conducting the hypothesis test, a preliminary evaluation of the students’ critical thinking and teamwork abilities was done. Testing was done to ensure that the conditions of normalcy and
homogeneity were met. Data analysis came next after all the data had been collected. In order to assess whether the data followed a normal distribution, which is required for parametric statistics, the first step was to conduct a normality test on the data. Using the Kolmogorov-Smirnov test, the normality test was carried out, looking at the Kolmogorov-Smirnov value and its Sig. If the significance value was greater than $= 0.05$, suggesting a normal distribution, the normality acceptance conditions were satisfied. In contrast, the distribution was deemed non-normal if the significance value was less than 0.05. Table 2 provides the following results of the normality test in summary form:

### Table 2. Normality Test

<table>
<thead>
<tr>
<th>Variable</th>
<th>Class</th>
<th>Kolmogorov-Smirnov</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Statistic</td>
</tr>
<tr>
<td>Reading English Comprehension</td>
<td>Experiment</td>
<td>.118</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>.073</td>
</tr>
<tr>
<td>Learning Outcomes</td>
<td>Experiment</td>
<td>.113</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>.100</td>
</tr>
</tbody>
</table>

Table 2 shows that the normality test’s significance value is greater than $= 0.05$. It can be inferred that the data from both the experimental group and the control group have a normal distribution. Between the experimental and control groups in this investigation, a test for the homogeneity of variances was run. With the aid of SPSS and Box’s M test, Levene’s Test of Equality of Error Variance was used to conduct the homogeneity of variances test for this study. Table 3 shows the full computation for the variance homogeneity test:

### Table 3. Homogeneity Test

<table>
<thead>
<tr>
<th>Equality of Covariance Matrices</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Box’s M</td>
<td>1.662</td>
</tr>
<tr>
<td>F</td>
<td>.543</td>
</tr>
<tr>
<td>df1</td>
<td>3</td>
</tr>
<tr>
<td>df2</td>
<td>2161383.757</td>
</tr>
<tr>
<td>Sig.</td>
<td>.653</td>
</tr>
</tbody>
</table>

According to the table above (Table 3), where the value of $0.653 > 0.05$, it can be seen that the Box’s M value generated is 1.662 ($p = 0.653$). It can be inferred that the covariance matrix between groups is taken to be equal or homogeneous as a result. The post-test data for both the experimental and control groups have been found to be homogenous and normally distributed based on the required tests for data analysis. The hypothesis testing was done after the outcomes of the preliminary data analysis. The F-variant test with Manova analysis was used to evaluate Hypotheses 1 and 2, with the test of between-subject effects and a significant level requirement of $F = 5\%$. The null hypothesis is disproved, and the alternative hypothesis is accepted if the estimated significance value ($F$) is less than 0.05. The test calculations are shown in Table 4 below:

### Table 4. F Variant Test Results Using Test of Between Subject Effects

<table>
<thead>
<tr>
<th>Source</th>
<th>Dependent Variable</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected</td>
<td>Reading English Comprehension</td>
<td>6614.552a</td>
<td>1</td>
<td>6614.552</td>
<td>125.713</td>
<td>.000</td>
</tr>
<tr>
<td>Model</td>
<td>Learning Outcomes</td>
<td>10557.406b</td>
<td>1</td>
<td>10557.406</td>
<td>238.434</td>
<td>.000</td>
</tr>
<tr>
<td>Intercept</td>
<td>Reading English Comprehension</td>
<td>690913.795</td>
<td>1</td>
<td>690913.795</td>
<td>13131.130</td>
<td>.000</td>
</tr>
</tbody>
</table>
As shown in Table 4, the outcomes of the data analysis can be summarized as follows:

The estimated F-value for the First Hypothesis is 125.713, with df = 1 and sig = 0.000 0.05. Accordingly, the significance is 0.05. As a result, the alternative hypothesis (Ha) is accepted, and the null hypothesis (Ho) is rejected. According to the analysis, students in the experimental group who were taught using the KWL (Know Want to Know Learned) technique and those in the control group who were taught using direct teaching showed significantly different levels of English language reading comprehension. The KWL (Know Want to Know Learned) technique is superior and more successful in boosting English language reading comprehension skills during the learning process, according to the research findings.

Regarding the Second Hypothesis, the study's findings indicate that the computed F-value is 238.434 with df = 1 and sig = 0.000 0.05. This suggests a significance level of less than 0.05. As a result, the alternative hypothesis (Ha) is accepted, and the null hypothesis (Ho) is rejected. According to the results of the analysis of the second hypothesis, there is a significant difference in the learning outcomes between the experimental group of students who were taught using the KWL (Know Want to Know Learned) technique and the control group of students who were taught using direct instruction. The KWL (Know Want to Know Learned) technique is superior and more effective in enhancing student learning outcomes in the learning process, according to the research data.

A significance level criterion of F = 5% was used in the F-test for the Third Hypothesis, with decisions made utilizing the Pillai Trace, Wilk Lambda, Hotelling’s Trace, and Roy's Largest Root analyses. The alternative hypothesis is accepted, and the null hypothesis is rejected if the estimated F significance value is less than 0.05. The following Table 5 displays the test calculations:

Table 5. Multivariate Test

<table>
<thead>
<tr>
<th>Effect</th>
<th>Value</th>
<th>F</th>
<th>Hypothesis df</th>
<th>Error df</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pillai's Trace</td>
<td>.793</td>
<td>206.948b</td>
<td>2.000</td>
<td>108.000</td>
<td>.000</td>
<td>.793</td>
</tr>
<tr>
<td>Wilks' Lambda</td>
<td>.207</td>
<td>206.948b</td>
<td>2.000</td>
<td>108.000</td>
<td>.000</td>
<td>.793</td>
</tr>
<tr>
<td>Hotelling’s Trace</td>
<td>3.832</td>
<td>206.948b</td>
<td>2.000</td>
<td>108.000</td>
<td>.000</td>
<td>.793</td>
</tr>
<tr>
<td>Roy’s Largest Root</td>
<td>3.832</td>
<td>206.948b</td>
<td>2.000</td>
<td>108.000</td>
<td>.000</td>
<td>.793</td>
</tr>
</tbody>
</table>

The calculated F-values for the Pillai Trace, Wilk Lambda, Hotelling’s Trace, and Roy’s Largest Root all have a significance level of 0.000 0.05, according to the research findings, which are shown in the above table (Table 5). The alternative hypothesis (Ha) is therefore accepted, and the null hypothesis (Ho) is disproved. Accordingly, based on the analysis of the third hypothesis, it can be said that the experimental group of students who were taught using the KWL (Know Want to Know Learned) strategy and the control group of students who were taught using direct instruction showed significantly different levels of English
language reading comprehension and overall learning outcomes. In light of the research findings, it is theoretically possible to claim that the KWL (Know Want to Know Learned) approach is superior and more efficient in improving reading comprehension and learning outcomes in the learning process.

**DISCUSSION**

Several inferences have been drawn in light of the research findings. The experimental group students were taught using the KWL (Know Want to Know Learned) strategy, whereas the control group students were taught using traditional teaching methods. This difference in reading comprehension in the English language is substantial. According to the research findings, the KWL strategy is theoretically more quantifiable and efficient and improves students’ English language reading comprehension during the learning process when compared to traditional teaching methods. This is consistent with the assertion made by Asipi (2020), who argued that children taught utilizing the KWL technique have much higher reading comprehension achievement than those who do not. According to Asipi’s research, the experimental group performed higher on reading comprehension tests and demonstrated greater excitement, engagement, and enjoyment when reading texts utilizing the KWL technique.

The KWL (Know, Want to Learn, Learned) technique, according to Jewaru et al. (2020), is the most effective reading strategy for enhancing pupils’ reading comprehension abilities. Pre-reading, reading while reading, and post-reading are the three key reading processes included in the KWL method. The stages of putting the KWL technique into practice include gathering prior information, establishing clear reading objectives, and summarizing. Students should be able to fully understand the reading material through the use of this method. The KWL approach is thought to be beneficial and has been researched in multiple nations with research subjects ranging from elementary school children to high school students and college students (Puspita & Yudiantara, 2017). Additionally, by choosing this technique, the teacher hopes to improve the students’ comprehension of the text’s ideas and motivate them to read more regularly (Erlinda, 2022). As a result, the K-W-L method can be used as an alternative to encourage students’ interest in reading and to make it easier for them to understand English literature (Muntiani et al., 2019).

Moreover, the KWL strategy’s use affects the enhancement of students’ academic results. When teachers use the KWL method, learning outcomes can advance. According to Erawan (2023), cooperative learning models like the KWL (Know, Want to know, Learned) technique can enhance the results of English language learning. Suwangsih (2023) also discovered that the implementation of the KWL (Know, Want to know, Learned) technique can enhance learning outcomes since it broadens learning opportunities due to students' varied levels of prior knowledge, resulting in richer and more interesting learning materials. Satrijono et al.'s (2019) research, which demonstrated that the KWL method can also assist students in understanding the new information they acquire, supports this. This improves student learning outcomes. Because of this, the KWL technique is employed as a particular framework intended to affect student interaction patterns and increase academic learning (Wirastuti & Pramawati, 2021). Students are expected to comprehend the reading material's content and the depth of knowledge the teacher has offered through the KWL method. When
students consider what they want to know and what they have learned, KWL also helps teachers sustain students’ interest in the things they teach.

Furthermore, it is theoretically possible to conclude from the research findings that the KWL technique influences students’ learning results and their ability to comprehend texts in the English language. The know-want-learned (KWL) method is one of the learning strategies that may be used to aid in improving learning outcomes, according to Fakhrudin et al. (2022). This is in line with their opinion. The Know-Want-to-Know Learned (KWL) approach is a reading technique that consists of three fundamental elements that direct students in giving a path relating to what they already know, figuring out what they want to know, and recalling what they have learned from reading. Because students’ knowledge differs, studying with the KWL technique broadens learning and makes learning materials richer and more interesting (Ledina et al., 2020). This is supported by Wirastuti and Pramawati’s (2021) assertion that the KWL technique is employed as a particular framework intended to affect student interaction patterns and promote academic learning. Students are expected to comprehend the reading material’s content and the depth of knowledge the teacher has offered through the KWL method.

When students consider what they want to know and what they have learned, KWL also helps teachers sustain students’ interest in the things they teach. KWL has a number of advantages, including helping pupils develop active and critical reading skills and accurate knowledge, as well as a reading orientation. According to Guswita (2020), learning with the KWL strategy is carried out by students eliciting their prior knowledge and experiences on a topic (K), students can generate their own questions about what they don’t know about the topic (W), and students will try to find answers to various questions that may be posed by other students (L). Students are, therefore, more inclined to read on a certain topic in order to get the answers, and they will learn new material from the readings they have done on that topic.

CONCLUSION

The KWL method emerges as a robust strategy for educators aiming to enhance reading comprehension and overall learning outcomes in the English language. Its structured yet flexible approach ensures that students remain engaged, curious, and empowered throughout their learning journey. The research findings underscore the effectiveness of the KWL (Know, Want to Learn, Learned) technique in enhancing reading comprehension and learning outcomes in English. Students exposed to the KWL method consistently outperformed their counterparts who were taught using traditional teaching methods. This notable difference in performance indicates that the KWL strategy not only improves reading comprehension but also fosters a deeper engagement with the material.

The KWL technique stands out as an effective reading strategy because of its structured approach. By actively engaging students in the three key reading processes of pre-reading, during reading, and post-reading, it ensures they are prepared to understand, question, and reflect upon the content. Such an interactive approach makes learning materials more relatable and interesting, catering to students’ varying levels of prior knowledge. Moreover, the KWL method has a broader impact on academic results, paving the way for more enriched learning experiences.
Furthermore, the research sheds light on the effectiveness of the KWL method, but it’s essential to recognize its limitations. Predominantly, the study leans extensively on particular data types, possibly missing out on capturing the intricate dynamics of the participants’ personal experiences and insights during their learning journey. Such an approach, while instrumental for broad-based conclusions, might not always provide a comprehensive understanding of the depth and breadth of students’ experiences. By looking forward, it would be beneficial for subsequent studies to emphasize capturing these individual experiences and feelings. By diving deeper into the multifaceted journey of learners, future research can offer a more enriched perspective, thereby enhancing the applicability and value of the findings.

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