Wordwise: A Supplement for Enhancing Level of Vocabulary of Grade 7 Students in Pedro Guevara Memorial National High School

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Abstract

In response to the Philippines' low reading proficiency ranking based on the 2018 PISA results, the study titled "WORDWISE: A SUPPLEMENT FOR ENHANCING LEVEL OF VOCABULARY OF GRADE 7 STUDENTS IN PEDRO GUEVARA MEMORIAL NATIONAL HIGH SCHOOL" set out to assess the efficacy of a researcher-made vocabulary supplement in raising the vocabulary levels of Grade 7 students. For the purpose of tracking vocabulary growth independently, four groups of Grade 7 students were chosen using convenience sampling and an experimental design. When creating the intervention and research instruments, professional guidance was sought.

The study tackled a number of important issues. It began by assessing the WordWise features' usability, design, content, and degree of interactivity. Secondly, it evaluated the degree of vocabulary growth concerning usage, correlation, scope, and complexity. The study also looked at how well students performed on WordWise Exercises and the Screening Test Class Reading Record (STCRR).

Students expressed great pleasure with the WordWise supplement's design, usability, interactivity, and substance in their feedback. They commended its extensive content, broad vocabulary coverage, lucid explanations, and useful applications. Its aesthetically pleasing layout, readable fonts and colors, useful images, and logical organization all drew praise. Notable usability elements that were emphasized included progress tracking, easy navigation, unambiguous directions, and entertaining activities. The tool's overall effectiveness in raising vocabulary levels was attributed to the interactive elements, which were found to be both enjoyable and helpful for vocabulary acquisition.

Additionally, students showed mastery in relationship, depth, usage, and breadth as well as other areas of language application and knowledge. This shows that students' vocabulary growth was significantly and diversely aided by the WordWise technology.

Students also demonstrated strong performance on the WordWise Exercises and the STCRR, suggesting that the WordWise supplement had a beneficial effect on vocabulary and reading comprehension assignments. Nevertheless, statistical study failed to uncover any meaningful relationships between vocabulary expansion and WordWise features—Interactivity, Design, Content, and Usability. This is consistent with the null hypotheses HO1 and HO2, which propose, respectively, that there is no meaningful relationship between WordWise attributes and students' results in the WordWise Exercises and STCRR.

Higher scores on the STCRR compared to the WordWise Exercises, as indicated by the paired t-test, suggest a potential difference in assessment focus and skill evaluation between the two tasks. Despite the encouraging outcomes of the WordWise tool, further research is needed to explore the variables driving vocabulary development among Grade 7 students.

As seen by the paired t-test, higher results on the STCRR relative to the WordWise Exercises point to a possible distinction in the assessment focus and skill evaluation between the two tasks. Even though the WordWise tool produced encouraging results, more investigation is required to determine the factors influencing vocabulary development in students in Grade 7.

1. Introduction

Given the Philippines' consistently low reading comprehension score, as evidenced by multiple Program for International Student Assessment (PISA) assessments, immediate action is necessary to solve this educational issue. The nation's reading competence is still considerably behind the worldwide average, despite global developments. This is demonstrated by its rankings, which place it 79th out of 79 participating countries in 2018 and 77th out of 88 in 2022. These depressing figures highlight how urgently creative solutions are needed to raise Filipino students' reading rates (OECD12, 2019, 2023a).

The reading comprehension dilemma is the main emphasis of this study, which focuses on Pedro Guevara Memorial National High School students in Grade 7. Since 15-year-old children are assessed by PISA every three years, focusing on this grade level enables a planned intervention that coincides with the schedule of upcoming examinations. A critical turning point in a student's academic career occurs in grade 7, which offers chances for reading skill development as well as hurdles.

Given the complexity of reading comprehension, this study focuses on vocabulary development, which is a fundamental component required for proficient reading. The researcher developed the WordWise supplement by drawing inspiration from academic literature, including the work of Sari and Kurniawan17 (2019) on the advantages of supplemental materials for language learning. Based on the curriculum rules of the Philippine school system, WordWise was carefully designed to meet the English language proficiency requirements for Grade 7.

Utilizing an Alice in Wonderland theme, the WordWise tool combines instructional rigor with student engagement by exploiting the story's whimsical charm to spark students' imaginations. Using freely available resources, including Canva visuals, for instructional objectives, the tool's design achieves a harmonious blend of pedagogical effectiveness and aesthetic appeal. This methodical technique demonstrates the researcher's dedication to creating a resource that students can relate to and use to improve their vocabulary.

Effective collaboration and evidence-based initiatives are critical for bringing about significant change in the ever-evolving educational context. In order to support educators, administrators, and policymakers in their endeavor to develop a generation of skilled and competitive Filipino learners, this study aims to provide light on the reading comprehension crisis, suggest novel interventions, and provide empirically derived insights. This goal is summed up in the title, "WORDWISE: A SUPPLEMENT FOR ENHANCING LEVEL OF VOCABULARY OF GRADE 7 STUDENTS IN PEDRO GUEVARA MEMORIAL NATIONAL HIGH SCHOOL".

1.1 Statement of the Problem

Specifically, the study sought to answer the following questions:

1. What is the level of the WordWise features with regards to:
   1.1 content;
   1.2 design;
   1.3 interactivity; and
   1.4 usability?
2. What is the extent of vocabulary development as to:
   2.1 relationship;
   2.2 depth;
   2.3 usage; and

2.4 breadth?
3. What is the level of students' performance in terms of:
    3.1 Screening Test Class Reading Record (STCRR); and
    3.2 WordWise Exercises?
4. Does the WordWise features have significant effect on the vocabulary development of Grade 7 students?
5. Does the WordWise features have significant effect on the students' performance?
6. Is there a significant difference between the performance of Grade 7 students in the Screening Test Class Reading Record (STCRR) and WordWise Exercises?

2. Methodology

The researcher utilized the experimental research design for the purpose of the inquiry where the effectiveness of the WordWise tool was put to the test based on its features (content, design, interactivity, and usability). To facilitate the testing, the researcher gathered the STCRR data of the Grade 7 student to get their initial vocabulary levels. After this step, the supplement was then implemented over the course of a week. Once the students were through with the activities and discussion in the supplement, the WordWise exercises' score were collected. While it is common to have a control group for an experimental research design, the context of the research was mainly focused on in-group comparisons instead to assess the efficacy of the intervention. By using the experimental research design, the researcher aimed to contribute insights and takeaways into the potentials of supplementary materials in the enhancement of vocabulary of students as a proactive response to the consistent low performance of the Philippines in the 2018 and 2022 PISA results.

3. Results and Discussion

This chapter was drafted with the intention of presenting, analyzing, and interpreting, the findings of the study that the researcher conducted to determine the effectiveness of the "WordWise" tool in supplementing the vocabulary and potentially helping to enhance the reading comprehension of Grade 7 students at Pedro Guevara Memorial National High School located in Santa Cruz, Laguna. Through the contents of this chapter, the researcher sought to clarify the data gathered from the administration of the assessments and the corresponding survey.

Level of the WordWise Features

The level of the WordWise tool's features included content, design, interactivity, and usability. These features were statistically determined by using the mean and standard deviation.

Table 1. Level of the WordWise Features with regards to Content

Indicators	Mean	SD	Remarks
1. The content of the vocabulary supplement was relevant to my learning needs.	4.52	0.63	Strongly Agree
2. The vocabulary supplement covered a wide range of useful words.	4.40	0.71	Strongly Agree

3. The explanations provided for each word or phrase were clear and easy to understand.	4.44	0.68	Strongly Agree
4. The examples provided helped me grasp the meaning of the words better.	4.58	0.61	Strongly Agree
5. Overall, I found the content of the vocabulary supplement valuable for improving my vocabulary skills.	4.58	0.60	Strongly Agree

Overall Mean = 4.50
Standard Deviation = 0.65
Verbal Interpretation = Very High

Table 1 shows the level of WordWise features with regards to content. Respondents strongly agree that examples provided by the WordWise tool help them grasp the meaning of the word better. The students also found the content of the vocabulary supplement valuable for vocabulary improvement (M = 4.58). Moreover, the students also noted that the WordWise vocabulary supplement covered a wide range of useful words (M = 4.40).

The overall mean of 4.50 and the standard deviation of 0.65 indicated a very high level of assessment of the content of the WordWise tool. This meant that the explanations provided for each word or phrase were effective in facilitating understanding, and the content of the vocabulary supplement was effectively tailored to meet the specific learning needs of the users

Table 2. Level of the WordWise Features with regards to Design

Indicators	Mean	SD	
1. The layout of the vocabulary supplement was visually appealing.	5.00	0.00	
2. The fonts and colors used in the supplement were easy to read and good to look at.	4.92	0.27	
3. The organization of the content within the supplement was logical and easy to follow.	4.76	0.43	
4. The visuals (e.g., illustrations, diagrams) helped enhance my understanding of the vocabulary.	4.86	0.35	
5. Overall, I was satisfied with the design of the vocabulary supplement.	5.00	0.00	

Overall Mean = 4.91
Standard Deviation = 0.29
Verbal Interpretation = Very High

Table 2 depicts the level of WordWise tool's design feature. The overall mean of 4.91 indicated that the design was highly regarded by the students.

Table 3. Level of the WordWise Features with regards to Interactivity

Indicators	Mean	SD	
1. I find using the "WordWise" tool enjoyable.	4.79	0.46	
2. I would recommend the "WordWise" tool to my classmates to improve their vocabulary.	4.54	0.68	
3. The interactive features of the supplement facilitated my understanding of the vocabulary.	4.55	0.59	
4. Using the "WordWise" tool has made vocabulary learning easier for me.	4.69	0.50	
5. Overall, I found the interactive components of the supplement beneficial for my learning experience.	4.62	0.52	

Overall Mean = 4.64
Standard Deviation = 0.56
Verbal Interpretation = Very High

Table 3 showcases the students' perceived level of the WordWise tool's interactivity. The overall mean of 4.64 and the standard deviation of 0.56 showed that the students identified the supplement's interactivity levels to be exceptional.

Table 4. Level of the WordWise Features with regards to Usability

Indicators	Mean	SD	
1. WordWise is easy for me to use and navigate.	4.38	0.63	
2. The instructions provided in WordWise are clear and easy to understand.	4.51	0.60	
3. I can easily track my progress and see how much I've learned using WordWise	4.43	0.61	

	4.61	0.52
4. **WordWise provides a variety of engaging activities and exercises.**		
5. **I can use WordWise independently without needing help from a teacher or parent.**	4.43	0.63

Overall Mean = 4.64
Standard Deviation = 0.56
Verbal Interpretation = Very High

Table 4 demonstrates the students' rating of the usability feature of the WordWise tool. The overall mean of 4.64 and the standard deviation of 0.56 indicated that the students perceived the supplement to be highly usable.

Extent of Vocabulary Development

Vocabulary development of the students comprises relationship, dept, usage and breadth. This was statistically measured by using mean and standard deviation.

Table 5. Extent of Vocabulary Development as to Relationships

Score	f	%	Descriptive Equivalent
9 - 10	102	82.26	Outstanding
7 - 8	22	17.74	Very Satisfactory
5 - 6	0	0.00	Satisfactory
3 - 4	0	0.00	Fairly Satisfactory
0 - 2	0	0.00	Did not meet Expectation
Total	**124**	**100**	

Weighted Mean 9.35
SD 0.77
Verbal Interpretation *Outstanding*

Based on their test results, students' vocabulary development was evaluated, and Table 5 shows the degree of vocabulary growth in terms of relationships. Eighty-two percent of the students obtained scores between nine and ten, which is an exceptional degree of vocabulary growth concerning connections. A lesser percentage of students (17.74%) received marks in the range of 7 to 8, which indicates an extremely satisfactory performance. Remarkably, not a single student fit into the categories of not meeting expectations, reasonably satisfactory, or satisfactory. The exceptional degree of vocabulary development in this area is further shown by the weighted mean score of 9.35, with a standard deviation of 0.77 suggesting a rather narrow dispersion of scores around the mean. Overall, the results suggest that students demonstrated exceptional proficiency in understanding and utilizing vocabulary in the context of relationships, showcasing a high level of achievement in this particular aspect of vocabulary development.

Table 6. Extent of Vocabulary Development as to Depth

Score	f	%	Descriptive Equivalent
9 - 10	99	79.84	Outstanding
7 - 8	25	20.16	Very Satisfactory
5 - 6	0	0.00	Satisfactory

Score	f	%	Descriptive Equivalent
3 - 4	0	0.00	Fairly Satisfactory
0 - 2	0	0.00	Did not meet Expectation
Total	**124**	**100**	
Weighted Mean		9.25	
SD		0.83	
Verbal Interpretation		*Outstanding*	

Table 6 presents the distribution of results across students and shows the degree of vocabulary development. The vast majority of students, or 79.84%, received scores in the 9–10 range, indicating an exceptional degree of in-depth vocabulary development. A lower percentage of students—20.16%—obtained ratings that were between 7 and 8, which is indicative of an extremely good performance. Remarkably, not a single student received a score that fell into the satisfactory, moderately satisfactory, or did not meet expectation categories. The excellent degree of vocabulary development is further highlighted by the weighted mean score of 9.25, and the standard deviation of 0.83 indicates that the scores are relatively closely clustered around the mean. Overall, the findings point to students' outstanding ability to understand and use vocabulary in depth, indicating a high degree of success in this area of vocabulary development.

Table 7. Extent of Vocabulary Development as to Usage

Score	f	%	Descriptive Equivalent
9 - 10	103	83.06	Outstanding
7 - 8	21	16.94	Very Satisfactory
5 - 6	0	0.00	Satisfactory
3 - 4	0	0.00	Fairly Satisfactory
0 - 2	0	0.00	Did not meet Expectation
Total	**124**	**100**	
Weighted Mean		9.31	
SD		0.75	
Verbal Interpretation		*Outstanding*	

Table 7 shows the distribution of results across students and the level of vocabulary development in terms of usage. The vast majority of students, or 83.06%, received scores in the 9–10 range, demonstrating an exceptional degree of vocabulary usage proficiency. A lower percentage of students—16.94%—obtained ratings that fell between 7 and 8, indicating an extremely good performance. Remarkably, not a single student received a score that fell into the satisfactory, moderately satisfactory, or did not meet expectation categories. The exceptional degree of vocabulary development in usage is further shown by the weighted mean score of 9.31, and a standard deviation of 0.75 indicates a reasonably tight clustering of scores around the mean.

Table 8. Extent of Vocabulary Development as to Breadth

Score	f	%	Descriptive Equivalent
9 - 10	98	79.03	Outstanding
7 - 8	26	20.97	Very Satisfactory
5 - 6	0	0.00	Satisfactory
3 - 4	0	0.00	Fairly Satisfactory
0 - 2	0	0.00	Did not meet Expectation
Total	**124**	**100**	
Weighted Mean		9.19	

SD	0.76
Verbal Interpretation	*Outstanding*

The breadth of vocabulary development is displayed in Table 8. With a score in the "Outstanding" range, the majority of respondents (79.03%) demonstrated a high level of vocabulary breadth. Furthermore, 20.97% of participants were categorized as "Very Satisfactory". The categories "Satisfactory," "Fairly Satisfactory," and "Did not meet Expectation" were not filled by any responders. The respondents' exceptional level of vocabulary breadth is further confirmed by the weighted mean score of 9.19, which also indicates a high degree of consistency among the responses due to the relatively low standard deviation of 0.76.

Table 9. Level of Students' Performance in terms of Screening Test Class Reading Record (STCRR)

Score	f	%	Descriptive Equivalent
49 - 60	34	*27.42*	Outstanding
37 - 48	90	*72.58*	Very Satisfactory
25 - 36	0	*0.00*	Satisfactory
13 - 24	0	*0.00*	Fairly Satisfactory
0 - 12	0	*0.00*	Did not meet Expectation
Total	**124**	**100**	
Weighted Mean		46.85	
SD		2.69	
Verbal Interpretation		*Outstanding*	

Based on the Screening Test Class Reading Record, Table 9 shows the performance level of the students (STCRR). The findings show that while 72.58% of the students fell into the "Very Satisfactory" category (37–48), 27.42% of the students received scores in the "Outstanding" range (49–60). The categories of "Satisfactory," "Fairly Satisfactory," and "Did not meet Expectation" were not filled by any student. Based on the STCRR, the weighted mean score of 46.85 with a standard deviation of 2.69 confirms the students' overall exceptional performance level.

Table 10. Level of Students' Performance in Terms of WordWise Exercises

Score	f	%	Descriptive Equivalent
81 - 100	112	*90.32*	Outstanding
61 - 80	12	*9.68*	Very Satisfactory
41 - 60	0	*0.00*	Satisfactory
21 - 40	0	*0.00*	Fairly Satisfactory
0 - 20	0	*0.00*	Did not meet Expectation
Total	**124**	**100**	
Weighted Mean		46.85	
SD		2.69	
Verbal Interpretation		*Outstanding*	

The performance level of the students with regard to the WordWise Exercises is displayed in Table 10. According to the data, a noteworthy proportion of students, specifically 90.32%, obtained scores that were in the "Outstanding" level (81-100). Conversely, a lower percentage, 9.68%, received ratings that fell within the "Very Satisfactory" range (61–80). Interestingly, not a single kid received a score in the "Fairly

Satisfactory," "Satisfactory," or "Did not meet Expectation" categories. The weighted mean score of 46.85, with a standard deviation of 2.69, confirms the remarkable achievement reported in the STCRR and adds to the evidence of exceptional student performance in the WordWise Exercises.

Table 11. Test of Difference Between the Performance of Grade 7 Students in Screening Test Class Reading Record (STCRR) and WordWise Exercises

	WordWise		STCRR		Mean Differenc e	95% Confidence Interval of Difference		t	df	Sig (2-tailed)
	Mn	**SD**	**Mn**	**SD**		**L**	**U**			
performance	46.85	7.24	85.95	15.61	17.13	10.43	1.318	2.55	122	0.000

*Legend: *Significant at 0.05*

The results of the test measuring the variation between Grade 7 students' performance on the WordWise Exercises and the Screening Test Class Reading Record (STCRR) are shown in Table 11. The two exams' mean performance differences are 17.13, with a 95% confidence interval that spans from 10.43 to 23.83. With 122 degrees of freedom, the paired t-test produced a t-value of 1.318, which led to a significance level of p < 0.05. These results reveal that students scored better on the Screening Test Class Reading Record (STCRR) than on the WordWise Exercises, with a statistically significant difference in performance between the two assessments.

Table 12. Regression Analysis on the WordWise Features on the Vocabulary Development of Grade 7 Students

Relationships	**B**	**SE**	**β**	**t**	**p**
Constant	9.208	2.796		3.293*	0.001
Content		0.251	0.206	0.82	0.414
Design		0.617	-0.04	-0.06	0.953
Interactivity		0.262	-0.25	-0.96	0.339
Usability		0.212	0.125	0.589	0.557
R-squared			.013		
Adjusted R-squared			-.02		
Standard Error of the Estimate		.773			
F(4, 119)				.389	.816
Depth	**B**	**SE**	**β**	**t**	**p**
Constant	12.25	3.04		4.03*	0.000
Content		0.273	0.108	0.394	0.695
Design		0.671	-0.54	-0.81	0.42
Interactivity		0.285	-0.02	-0.09	0.932
Usability		0.23	-0.16	-0.69	0.492
R-squared			.013		
Adjusted R-squared			-.02		
Standard Error of the Estimate		.841			
F(4, 119)				0.403	.806
Usage	**B**	**SE**	**β**	**t**	**p**
Constant	12.13	2.718		4.462and	0.000

	B	SE	β	t	p
Content		0.244	0.018	0.074	0.941
Design		0.6	-0.46	-0.77	0.441
Interactivity		0.255	-0.27	-1.05	0.296
Usability		0.206	0.139	0.674	0.502
R-squared			.022		
Adjusted R-squared			-.01		
Standard Error of the Estimate		.752			
F(4, 119)				.664	.618
Breadth	**B**	**SE**	**β**	**t**	**p**
Constant	9.579	2.768		3.46*	0.000
Content		0.249	0.027	0.107	0.915
Design		0.611	-0.05	-0.09	0.929
Interactivity		0.259	-0.27	-1.04	0.302
Usability		0.21	0.224	1.07	0.287
R-squared			.014		
Adjusted R-squared			-.02		
Standard Error of the Estimate		.766			
F(4, 119)				.427	.789

*p < 0.05

The effects of WordWise features on students' vocabulary development in Grade 7 are examined by a multiple regression analysis, which yielded results shown in Table 12. Regression coefficients (B) show how, while keeping other variables constant, the dependent variable (vocabulary development) changes for every unit change in the independent variable (WordWise features).

The direction and strength of each WordWise feature's link with vocabulary acquisition are indicated by the regression coefficients for Content, Design, Interactivity, and Usability. The fact that the p-values for each of these coefficients are more than 0.05 indicates that none of them are statistically significant.

Furthermore, the regression model as a whole does not fit the data well, as shown by the non-significant result (F(4, 119) with p > 0.05) of the overall model's F-test, which evaluates the joint significance of all independent variables.

These results suggest that the null hypothesis, "Is there a significant effect of WordWise features on the vocabulary development of Grade 7 students?" is accepted at the 0.05 level of significance. Based on this data, it appears that there is no substantial relationship between vocabulary development in Grade 7 students and WordWise features.

Table 13. Regression Analysis on the WordWise Features on the Students' Performance

Screening Test Class Reading Record (STCRR)	B	SE	β	t	p
Constant	55.15	9.625		5.729*	0.000
Content		0.865	0.059	0.069	0.945
Design		2.124	-3.3	-1.56	0.123
Interactivity		0.902	1.069	1.186	0.238
Usability		0.729	0.602	0.825	0.411
R-squared			.053		
Adjusted R-squared			.021		
Standard Error of the Estimate		2.662			
F(4, 119)				1.654	.165

WordWise Exercises6	B	SE	β	t	p
Constant	89.66	14.22		6.305*	0.000
Content		1.278	-0.82	-0.64	0.522
Design		3.138	-2.51	-0.8	0.425
Interactivity		1.332	1.25	0.938	0.35
Usability		1.077	1.459	1.354	0.178
R-squared			.041		
Adjusted R-squared			.009		
Standard Error of the Estimate		3.933			
F(4, 119)				1.282	.281

*p < 0.05

The findings of a multiple regression analysis examining the impact of WordWise features on students' performance as determined by the WordWise Exercises and the Screening Test Class Reading Record (STCRR) are presented in Table 13. When all other variables are held constant, the regression coefficients (B) show how student performance changes for every unit change in the corresponding WordWise characteristic.

The direction and strength of the relationships between content, design, interaction, and usability and students' success are shown by the regression coefficients for both the STCRR and WordWise Exercises. The fact that the p-values for each of these coefficients are more than 0.05, however, indicates that none of them are statistically significant.

Additionally, the F(4, 119) with p > 0.05 results from the F-test of the overall model for the WordWise Exercises and STCRR show that the regression models are not very good at describing the variation in students' performance depending on WordWise attributes.

Therefore, the null hypothesis "Is there a significant effect of WordWise features on students' performance?" is accepted at the 0.05 level of significance, indicating that this analysis does not support the notion that there is a statistically significant relationship between WordWise features and students' performance.

The impact of WordWise features on students' performance in the Screening Test Class Reading Record (STCRR) and WordWise Exercises is examined by regression analysis in Table 13.

4. Conclusion and Recommendation

In interpretation of the aforementioned findings, the study has drawn the following conclusion:

This part hosts a synthesis of the findings and practical implications of the study. A holistic presentation of the significance of the inquiry is presented by means of an examination of whether the results align with the objectives that the researcher set out to achieve within the scope and limitations of the research.

Students rated the WordWise tool highly for its content, interactivity, design, and usefulness. Students appreciated its useful material, broad vocabulary coverage, clear explanations, and real-world applications. The aesthetically beautiful layout, readable fonts and colors, logical structure, and helpful graphics received positive feedback. While easy navigation, straightforward instructions, progress tracking, and engaging activities were rated as outstanding usability features, interactive elements were thought to be amusing and beneficial for vocabulary comprehension. Overall, the tool's great feedback demonstrates how effective it is at increasing vocabulary levels.

Students demonstrated outstanding competency in vocabulary understanding and application in all domains; most received high marks in relationship, depth, usage, and breadth. This shows that students' vocabulary growth benefited greatly from the WordWise tool in a number of ways.

Students performed exceptionally well on the WordWise Exercises and the Screening Test Class Reading Record (STCRR), with the majority achieving exceptional scores. This indicates that students' performance in vocabulary and reading comprehension (STCRR) tasks was positively impacted by the WordWise supplement.

The null hypothesis (HO1) was supported by the regression analysis's failure to find a statistically significant link between vocabulary acquisition and WordWise attributes (Content, Design, Interactivity, and Usability). As a result, there is insufficient data to challenge HO1, suggesting that WordWise features may not have a major effect on the vocabulary growth of students in Grade 7.

According to the null hypothesis HO2, the regression analysis was unable to find a statistically significant correlation between WordWise features and students' performance in the STCRR and WordWise Exercises. Therefore, there is not enough data to rule out HO2, indicating that WordWise features might not have a significant impact on students' performance.

Higher scores on the STCRR were shown by the paired t-test, which also showed a significant performance difference between the WordWise Exercises and the STCRR. This shows that even while students did well on both tests, they probably did significantly better on the STCRR than the WordWise Exercises, maybe because each exam assessed different skills and had a different focus.

The following courses of action are hereby recommended based on the conclusions derived from the study. The following recommendations are aimed at helping those involved in the teaching-learning process for vocabulary development in making informed decisions to optimize outcomes.

1. Since Grade 7 students have responded favorably to the WordWise tool's features—which include content, design, interactivity, and usability—English teachers may want to consider creating vocabulary interventions based on these metrics. By using this method, it would be possible to guarantee that students are actively involved in the creation of learning aids.

2. Seeing as the WordWise features did not have a statistically significant impact on vocabulary development in 7th grade students, English teachers should look at other factors in order to improve learning outcomes.

3. The significant improvement in students' STCRR and WordWise exercises scores suggest that English teachers might decide to incorporate comparable resources into their lesson plans. These instruments can be used as benchmarks for monitoring student development over time as well as assessing efficacy.

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