Word Detective Context-Clue Intervention Program: Towards Improving Vocabulary and Spelling Skills of Grade 6 Pupils

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ABSTRACT

This study investigated the effectiveness of the Word Detective Context-Clue Intervention Program in improving the vocabulary and spelling skills of Grade 6 pupils of Tumauini North Central School. It also examined the learners' baseline profile, changes in pretest and posttest performance, the magnitude of the intervention effect, and the needs, practices, and challenges identified through exploratory interviews.

The study employed an exploratory sequential mixed-method design integrated with a quasi-experimental nonequivalent pretest-posttest control group design. Sixty Grade 6 pupils participated, with 31 in the control group and 29 in the experimental group. The exploratory phase used pupil and teacher interviews and available assessment and Phil-IRI records, while the quantitative phase used the researcher-developed 50-item Vocabulary and Spelling Achievement Test before and after the eight-week intervention. Data were analyzed through frequencies, percentages, descriptive statistics, Wilcoxon Signed-Rank Test, Mann-Whitney U Test, and Cohen's d.

Results showed that both groups significantly improved in vocabulary and spelling from pretest to posttest ($p < .001$). Raw posttest scores did not significantly differ between the groups in Vocabulary ($U = 435.5$, $p = .840$) or Spelling ($U = 433.0$, $p = .812$); however, gain scores significantly favored the experimental group in Vocabulary ($U = 117.5$, $p < .001$) and Spelling ($U = 140.5$, $p < .001$). The intervention produced large effect sizes for Vocabulary ($d = 1.26$) and Spelling ($d = 1.33$). Exploratory interview findings further highlighted dependence on external help, difficulty connecting word meaning with correct spelling, unsystematic use of context clues, and preference for guided and repeated interactive practice.

The findings indicate that structured context-clue instruction combined with contextual spelling practice can strengthen vocabulary and spelling development among Grade 6 pupils. The Word Detective routine may therefore serve as a practical literacy support strategy, particularly for learners who begin with developing or beginning levels of performance.

Keywords: context-clue strategies, vocabulary skills, spelling skills, Word Detective Intervention Program, Grade 6 pupils, quasi-experimental research, literacy intervention

INTRODUCTION

Vocabulary and spelling are foundational literacy skills that influence how learners understand texts and express ideas in writing. Vocabulary knowledge allows pupils to follow information, connect ideas, and make inferences, while accurate spelling supports clear written communication. In elementary education, these skills extend beyond English because pupils also encounter academic language in Science, Araling Panlipunan, Mathematics word problems, and other learning areas.

The need to strengthen language and literacy remains evident in the Philippine context. OECD (2023) reported that only about 24% of Filipino students in PISA 2022 reached at least Level 2 proficiency in reading. The Department of Education Regional Office III (2024) likewise emphasized language, reading, literacy, and

other foundational competencies under the MATATAG Curriculum. These conditions reinforce the importance of school-based interventions that address concrete literacy difficulties at the classroom level.

At Tumauini North Central School, the concern was reflected in the reported National Achievement Test performance in English of 48.23% and in classroom observations showing that several Grade 6 pupils had difficulty understanding unfamiliar English words and spelling them correctly in meaningful sentences. Learners who could not determine a word's meaning independently often relied on the teacher or dictionary, guessed without checking the sentence, or avoided using unfamiliar words in writing. Such practices limited independent vocabulary development and weakened the connection between word meaning and written form.

Context-clue instruction offers a direct way to address this difficulty. Context clues are hints surrounding an unfamiliar word that help readers infer meaning through definitions, synonyms or restatements, antonyms or contrasts, examples, and general inference. Rather than memorizing meanings in isolation, learners examine the sentence or paragraph, connect surrounding information, and decide which meaning fits. Che Ani et al. (2025) reported improved vocabulary acquisition and learner confidence after contextual-clue strategy instruction, while Oclarit and Casinillo (2021) found that context-clue use strengthened reading comprehension among elementary learners.

Meaningful vocabulary instruction also requires repeated encounters with words. Manyak et al. (2021) emphasized rich, repeated, and meaningful vocabulary experiences connected with reading and writing. This principle is especially relevant to spelling because pupils may recognize a word orally but still fail to reproduce its correct letter pattern. Integrating meaning, pronunciation, spelling analysis, and sentence use can therefore help learners establish stronger connections between word form and word meaning.

The Word Detective Context-Clue Intervention Program was developed to operationalize these principles through the routine LOOK-LINK-INFER-CHECK-SPELL. Pupils first identified the unfamiliar word, linked it with nearby clues, inferred a possible meaning, checked whether the meaning fit the context, and then spelled and used the word correctly. The program combined explicit teacher modeling, guided practice, pair discussion, spelling reinforcement, and independent application across eight weeks.

The use of two intact Grade 6 sections allowed the study to compare the intervention with traditional vocabulary and spelling instruction. Because individual random assignment was not feasible in the school setting, a quasi-experimental approach was used. De La Torre (2021) similarly employed pretest-posttest control and experimental groups in examining context-clue instruction, while Capili and Anastasi (2024) noted that carefully planned quasi-experimental designs can provide useful evidence when randomized assignment is not possible.

This study therefore examined whether the Word Detective Context-Clue Intervention Program produced meaningful improvement in the vocabulary and spelling performance of Grade 6 pupils and whether the learners' reported needs and practices supported the design of the intervention.

Objectives of the Study

Generally, the study aimed to determine the effect of the Word Detective Context-Clue Intervention Program on the vocabulary and spelling skills of Grade 6 pupils of Tumauini North Central School.

Specifically, it sought to answer the following questions:

1. What was the baseline profile of the pupils in terms of pretest score category and Phil-IRI reading ability?

2. What were the pretest and posttest mean scores of the control and experimental groups in vocabulary and spelling skills?

3. Was there a significant difference between the pretest and posttest scores within the control group and within the experimental group?

4. Was there a significant difference in the vocabulary and spelling performance of the control and experimental groups after the implementation of the intervention?

5. What was the effect size of the Word Detective Context-Clue Intervention Program on the pupils' vocabulary and spelling skills?

6. What learner needs, practices, and challenges from the exploratory interviews were considered in finalizing the intervention and research instruments?

METHODOLOGY

The study used an exploratory sequential mixed-method design with a quasi-experimental nonequivalent pretest-posttest control group design. The exploratory phase reviewed available assessment and Phil-IRI records and gathered information from selected pupils and the English teacher to identify vocabulary and spelling needs and refine the intervention and instruments. The quantitative phase compared two intact Grade 6 sections: the control group received traditional vocabulary and spelling instruction, while the experimental group received the eight-week Word Detective Context-Clue Intervention Program. Both groups completed the same pretest and posttest skill domains.

Sampling Design

The study was conducted at Tumauini North Central School in Tumauini North District, Isabela, during School Year 2025-2026. Purposive sampling was used because the study targeted Grade 6 sections with identified vocabulary and spelling needs. Sixty pupils were included in the final data set, with 31 pupils in the control group and 29 pupils in the experimental group. Individual random assignment was not conducted because intact sections were used; therefore, baseline comparability was examined through pretest scores and relevant profile variables.

Research Instruments

The principal quantitative instrument was the researcher-made 50-item Vocabulary and Spelling Achievement Test (VSAT). Form A was used for the pretest and Form B for the posttest. Items 1-25 assessed vocabulary through definition, synonym/restatement, antonym/contrast, example, and general-inference clues, while Items 26-50 assessed spelling accuracy in contextual sentences. A Pupil Profile Sheet and Phil-IRI Reading Ability Record provided baseline information. An Exploratory Interview Guide gathered learner and teacher responses on vocabulary strategies, spelling difficulties, and preferred instructional activities. A Post-Intervention Feedback Guide and an Intervention Fidelity Checklist supported implementation review and instructional refinement.

Validation of the Research Instruments

The instruments underwent expert validation for relevance, clarity, grade-level appropriateness, and alignment with the study objectives. The validation report in the study indicated an overall mean rating of 3.88 out of 4.00 and an S-CVI/Ave of .96, with retained items obtaining I-CVI values of .80 or higher. These values exceeded the study's adopted criteria of .78 for I-CVI and .90 for S-CVI/Ave and were interpreted as evidence of excellent content validity. The instruments were also pilot-tested with non-participant Grade 6 pupils, and revisions were made based on item analysis and reliability review. The validity criteria were consistent with the content-validity thresholds cited from Shi et al. (2012).

Statistical Design

1. Frequency counts and percentages summarized pretest score categories and Phil-IRI screening and reading classifications.

2. Mean, standard deviation, minimum, and maximum values described pretest and posttest vocabulary and spelling performance.

3. The Wilcoxon Signed-Rank Test determined significant pretest-to-posttest changes within the control and experimental groups.

4. The Mann-Whitney U Test compared baseline scores, raw posttest scores, and gain scores between the two groups.

5. Cohen's d quantified the magnitude of the difference in mean gain scores, using .20, .50, and .80 as small, medium, and large-effect benchmarks, respectively.

6. Exploratory interview responses were summarized through content summary and response clustering to identify recurring learner needs, practices, and challenges.

The level of significance was set at .05. Nonparametric procedures were used for the reported within-group and between-group comparisons based on the characteristics of the data and applicable statistical requirements.

Ethical Considerations

The research protocol underwent ethics review and appropriate institutional approval before data collection. Permission was secured from the school and concerned education and graduate-school authorities. Because the participants were minors, written informed consent was obtained from parents or legal guardians, while pupils provided assent using age-appropriate and child-friendly language. Participation was voluntary, and withdrawal was allowed without penalty or effect on grades. Participant names were replaced with codes, and test scores, Phil-IRI information, and interview responses were handled confidentially and used only for research and legitimate instructional purposes. The control group continued to receive regular instruction, and the intervention materials could subsequently be shared for remediation or enrichment, thereby supporting fairness, beneficence, non-maleficence, confidentiality, and respect for participants.

RESULTS AND DISCUSSIONS

Baseline Profile of the Grade 6 Pupils

Table 1. Baseline Profile of the Pupils According to Pretest Score Category

Category	Ctl f	%	Exp f	%	Total f	%
Advanced	0	0	0	0	0	0
Proficient	1	3.2	1	3.4	2	3.3
Approaching Proficiency	10	32.3	6	20.7	16	26.7
Developing	18	58.1	11	37.9	29	48.3
Beginning	2	6.5	11	37.9	13	21.7
Total	31	100	29	100	60	100

Note. Pretest categories were based on the combined 50-item VSAT: 45-50 = Advanced, 40-44 = Proficient, 35-39 = Approaching Proficiency, 25-34 = Developing, and 0-24 = Beginning.

Table 1 shows that baseline performance was concentrated in the lower score categories. Of the 60 pupils, 29 (48.3%) were Developing and 13 (21.7%) were Beginning. Sixteen pupils (26.7%) were Approaching Proficiency, only two (3.3%) were Proficient, and none were Advanced. The experimental group also began with a larger share of Beginning pupils (37.9%) than the control group (6.5%), indicating that the experimental section entered the study with more pronounced initial difficulty.

The baseline distribution confirms the instructional need identified in the study. The pattern is consistent with the broader literacy concern reported by OECD (2023), which showed that only a minority of Filipino learners

reached baseline reading proficiency in PISA 2022. It also supports the MATATAG emphasis on foundational language and literacy skills (Department of Education Regional Office III, 2024). In practical terms, the intervention addressed a foundational need rather than an enrichment concern for many of the participants.

Table 2. Baseline Phil-IRI Screening Status of the Control and Experimental Groups

Screening Status	Ctl f	%	Exp f	%	Total f	%
Need not take graded passage (GST >= 14)	24	77.4	20	69	44	73.3
Need graded passage (GST < 14)	7	22.6	9	31	16	26.7
Total	31	100	29	100	60	100

Note. GST = Group Screening Test. A GST score of 14 or higher meant that no further graded Phil-IRI passage was required.

Most pupils, 44 of 60 (73.3%), did not need to proceed to the graded Phil-IRI passage, while 16 (26.7%) required further assessment. The proportion requiring a graded passage was higher in the experimental group (31.0%) than in the control group (22.6%). The screening result identified pupils who needed further reading assessment but did not, by itself, classify them as Independent, Instructional, or Frustration readers.

Table 3. Phil-IRI Reading Ability of Pupils Who Took the Graded Reading Passage

Reading Ability	Ctl f	%	Exp f	%	Total f	%
Independent	1	14.3	0	0	1	6.3
Instructional	0	0	0	0	0	0
Frustration	6	85.7	9	100	15	93.8
Total assessed	7	100	9	100	16	100

Note. Percentages refer only to the 16 pupils who proceeded to the graded Phil-IRI passage.

Among the 16 pupils who took the graded passage, 15 (93.8%) were classified at the Frustration level and one (6.3%) was Independent; no pupil in this subgroup was at the Instructional level. All nine experimental pupils who proceeded to graded reading were classified at Frustration. Although these figures cannot be generalized to the entire sample, they identify a subgroup requiring substantial scaffolding. Shitiba et al. (2023) linked weak reading and writing skills with barriers to quality learning, suggesting the importance of slower modeling, repeated examples, and guided support for pupils with pronounced reading difficulty.

Table 4. Baseline Comparability of the Control and Experimental Groups Based on Pretest Scores

Skill	Group	N	Rank	U	p
Vocabulary	Control	31	35.08	307.5	0.035
	Experimental	29	25.6		
Spelling	Control	31	34.03	340	0.105
	Experimental	29	26.72		
Total VSAT	Control	31	34.56	323.5	0.063
	Experimental	29	26.16		

Note. Mann-Whitney U tests were used; alpha = .05.

The control group had a significantly higher baseline Vocabulary mean rank than the experimental group, U = 307.5, p = .035. Baseline differences were not significant for Spelling, U = 340.0, p = .105, or total VSAT, U = 323.5, p = .063. The Vocabulary imbalance is important because the groups were intact classes rather than randomly assigned individuals. As Capili and Anastasi (2024) noted, quasi-experimental studies can still provide useful evidence when baseline differences are explicitly considered. This finding therefore strengthens the value of examining gain scores rather than relying only on final raw scores.

Pretest and Posttest Performance in Vocabulary and Spelling

Table 5. Pretest and Posttest Scores of the Control and Experimental Groups

Group	Skill	Pre M	Pre SD	Post M	Post SD
Control	Vocabulary	16.42	2.36	18.23	2.03
Control	Spelling	15.65	2.78	17.55	2.43
Experimental	Vocabulary	14.34	3.76	17.76	3.47
Experimental	Spelling	13.72	4.22	17.79	3.27

Note. M = mean; SD = standard deviation.

Both groups obtained higher mean scores after the instructional period. The control group increased from 16.42 to 18.23 in Vocabulary and from 15.65 to 17.55 in Spelling. The experimental group increased from 14.34 to 17.76 in Vocabulary and from 13.72 to 17.79 in Spelling. Thus, the experimental group began lower in both areas but finished very close to the control group in Vocabulary and slightly higher in Spelling.

The improvement in both groups is understandable because regular teaching, practice, and repeated exposure can promote learning. However, the experimental group's movement from lower starting means toward comparable posttest performance is consistent with the value of rich and repeated vocabulary encounters emphasized by Manyak et al. (2021). It also parallels the improvement reported by Che Ani et al. (2025) after contextual-clue instruction. The descriptive pattern suggests that structured context work helped the experimental pupils close much of the initial gap, although inferential tests were needed to determine whether improvement differed significantly.

Differences Between Pretest and Posttest Scores Within Groups

Table 6. Wilcoxon Signed-Rank Results for Pretest-Posttest Differences

Group	Skill	Pre M	Post M	Gain	Z	p
Control	Vocabulary	16.42	18.23	1.81	-4.95	< .001
Control	Spelling	15.65	17.55	1.9	-4.93	< .001
Experimental	Vocabulary	14.34	17.76	3.41	-4.788	< .001
Experimental	Spelling	13.72	17.79	4.07	-4.633	<.001

Note. All comparisons used the Wilcoxon Signed-Rank Test; alpha = .05.

All four pretest-to-posttest comparisons were statistically significant at $p < .001$. The control group gained 1.81 points in Vocabulary and 1.90 points in Spelling, whereas the experimental group gained 3.41 points in Vocabulary and 4.07 points in Spelling. The negative Z values reflect the Wilcoxon test-statistic convention and do not indicate score decreases because the posttest means and mean gains were higher.

The significant improvement in the control group demonstrates why a comparison class was necessary: learning can occur through ordinary classroom exposure even without the specialized intervention. De La Torre (2021) similarly used a control-and-experimental arrangement when examining context-clue instruction. The larger gains of the experimental group are consistent with Oclarit and Casinillo (2021) and Che Ani et al. (2025), whose studies showed beneficial outcomes from context-clue strategies. This suggests that the Word Detective routine added instructional value beyond regular vocabulary and spelling practice.

Between-Group Differences After the Intervention

Table 7. Mann-Whitney U Results for Posttest and Gain-Score Comparisons

Measure	Skill	Ctl Rank	Exp Rank	U	p
Posttest	Vocabulary	30.95	30.02	435.5	0.84

Posttest	Spelling	29.97	31.07	433	0.812
Gain	Vocabulary	19.79	41.95	117.5	< .001
Gain	Spelling	20.53	41.16	140.5	<.001

Note. Independent-group comparisons used the Mann-Whitney U Test; alpha = .05.

Raw posttest scores did not significantly differ between the groups in Vocabulary, U = 435.5, p = .840, or Spelling, U = 433.0, p = .812. In contrast, gain-score comparisons significantly favored the experimental group in Vocabulary, U = 117.5, p < .001, and Spelling, U = 140.5, p < .001. The experimental group therefore ended at statistically comparable raw posttest levels but demonstrated substantially greater growth from its lower baseline.

This pattern is instructionally important because the experimental group started lower, especially in Vocabulary, yet improved at a faster rate. Context-clue instruction provides learners with a repeatable procedure for deriving meaning from text rather than waiting for meanings to be supplied. Widyaningsih and Ratmanida (2023) linked context-clue use with reading achievement, while Che Ani et al. (2025) reported positive vocabulary outcomes. The present gain-score pattern suggests that the Word Detective routine may be especially useful as a catch-up or remediation strategy for pupils who begin with weaker vocabulary and spelling performance.

Magnitude of the Word Detective Intervention Effect

Table 8. Effect Size of the Word Detective Context-Clue Intervention Program

Skill	Ctl Gain	Exp Gain	Diff	Pooled SD	d	Effect
Vocabulary	1.81	3.41	1.61	1.27	1.26	Large
Spelling	1.9	4.07	2.17	1.63	1.33	Large

Note. Cohen's d was computed from the difference in group mean gain scores using the pooled gain-score standard deviation; d >= .80 was classified as large.

The intervention produced large effects in both outcomes. Vocabulary yielded d = 1.26, while Spelling yielded d = 1.33. Both values were well above the study's .80 benchmark for a large effect, and the effect was slightly larger for Spelling. These values indicate that the difference in improvement between the experimental and control groups was not only statistically detectable but also practically substantial.

The large effects support the program's integration of meaning and spelling rather than treating the two areas as unrelated drills. Manyak et al. (2021) emphasized repeated and meaningful vocabulary encounters connected with reading and writing, while Che Ani et al. (2025) documented substantial vocabulary improvement following contextual-clue instruction. The present effect sizes suggest that repeatedly seeing, pronouncing, analyzing, writing, and applying words in context can provide strong practical benefits for both vocabulary and spelling development.

Learners' Needs, Practices, and Challenges from the Exploratory Interviews

Table 9. Response Clusters from the Exploratory Interview Findings

Theme	Response Pattern	Program Response
Dependence on external help	Learners relied on the teacher, dictionary, or guessing when words were unfamiliar.	Explicit LOOK-LINK-INFER-CHECK modeling and evidence-based meaning tasks.
Difficulty linking meaning and spelling	Learners could recognize or understand words but omitted, substituted, or reordered letters in writing.	Retain the SPELL step, pronunciation, repeated written use, and contextual spelling.

Unsystematic use of context clues	Some learners reread or noticed contrast/example words but could not consistently identify or verify clues.	Teach clue types explicitly and move from guided to independent mixed-clue tasks.
Preference for guided, interactive practice	Learners favored examples, pair work, games, sentence making, and immediate feedback.	Use modeling, pair/group work, short contextual texts, notebooks, and exit tasks.

The exploratory interview component identified four recurring response clusters: dependence on external help for unfamiliar words, difficulty retaining correct spelling even when meaning was recognized, emerging but inconsistent use of surrounding clues, and preference for guided, interactive, and repeated practice. Together, these patterns showed that learners needed a clear strategy for independent vocabulary inference and repeated opportunities to connect meaning with correct written form.

The findings support the structure of the Word Detective program. Jaikrishnan and Ismail (2021) emphasized the importance of vocabulary-learning strategies that help learners become more independent, while Manyak et al. (2021) highlighted repeated and meaningful exposure to words. Che Ani et al. (2025) further demonstrated that explicit contextual-clue instruction can improve vocabulary acquisition and confidence. The interview findings therefore reinforced the use of teacher modeling, the LOOK-LINK-INFER-CHECK-SPELL routine, pair discussion, sentence application, and repeated spelling practice in the final intervention design.

WORD DETECTIVE CONTEXT-CLUE INTERVENTION PROGRAM

Rationale

The results showed that many pupils began with Developing or Beginning vocabulary-and-spelling performance, while a subgroup of pupils who proceeded to the graded Phil-IRI passage demonstrated pronounced reading difficulty. Although both groups improved over time, the experimental group achieved significantly greater gains and large effect sizes in Vocabulary and Spelling. The exploratory interview findings also pointed to dependence on teacher-provided meanings, difficulty retaining correct spelling, inconsistent use of surrounding clues, and a preference for guided and interactive practice. These findings support a structured intervention that combines explicit context-clue instruction, repeated contextual spelling, scaffolding, peer interaction, and independent application.

Program Goal

Within eight weeks, the Word Detective Context-Clue Intervention Program provides Grade 6 pupils with a repeatable strategy for determining unfamiliar word meanings and spelling target words accurately in context through the LOOK-LINK-INFER-CHECK-SPELL routine.

SMART Objectives

1. Specific: Teach the five context-clue types—definition, synonym/restatement, antonym/contrast, example, and inference—through the LOOK-LINK-INFER-CHECK-SPELL routine.

2. Measurable: Monitor vocabulary and spelling progress through guided tasks, exit tickets, vocabulary notebooks, and the pretest-posttest VSAT.

3. Achievable: Provide teacher modeling, guided practice, pair work, and independent application during each weekly phase of the eight-week program.

4. Relevant: Focus on the learner needs identified in the baseline results and exploratory interviews, particularly vocabulary inference, spelling retention, and strategy independence.

5. Time-bound: Complete the intervention, review, and posttest within an eight-week implementation period.

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Table 10. Eight-Week Word Detective Intervention Implementation Matrix

Week	Focus	Key Strategies / Activities	Expected Output	Persons Involved	Resources	Success Indicators / Means of Verification
1	Orientation, diagnostic review, and introduction to context clues	Review pretest needs; introduce Word Detective concept and LOOK-LINK-INFER-CHECK-SPELL; model sample clues.	Baseline awareness and learning contract	English teacher; pupils	Pretest summary; sample sentences; routine guide	Pupils can state the routine and identify unfamiliar words and nearby clues.
2	Definition clues	Teacher modeling; guided sentence analysis; underline direct meaning clues; spell target words.	Identification of direct definition clues	English teacher; pupils	Sentence strips; activity sheets; vocabulary notebook	Guided tasks and exit ticket show correct identification of definition clues.
3	Synonym / restatement clues	Pair matching; restatement signal words; short paragraph practice; pronunciation and spelling transfer.	Inference using similar words or restatements	English teacher; pupils	Word cards; paragraph sheets; notebooks	Pupils justify meaning using synonym/restatement evidence and spell target words.
4	Antonym / contrast clues	Teach contrast signals; sentence completion; pair explanation; spelling reinforcement.	Inference using opposites and contrast signals	English teacher; pupils	Contrast cards; sentence tasks	Pupils identify contrast signals and infer meanings with fewer prompts.
5	Example clues	Use example lists, categories, context cards, short games, and sentence construction.	Inference using examples and categories	English teacher; pupils	Context cards; game materials; worksheets	Pupils infer category meaning and use/spell target words in new sentences.
6	Inference / general context clues	Paragraph detective work; evidence marking; oral justification; guided support for struggling readers.	Use of multiple details to infer meaning	English teacher; pupils	Short passages; highlighters; scaffolded sheets	Pupils combine details and explain why an inferred meaning fits the passage.
7	Mixed context clues and spelling in writing	Mixed-clue texts; pair discussion; vocabulary notebooks; sentence and short-paragraph writing.	Integrated clue use and accurate contextual spelling	English teacher; pupils	Mixed-clue texts; notebooks; writing sheets	Pupils identify clue types, infer meanings, and spell target words in authentic writing.
8	Review, independent application, and posttest	Review game; independent reading task; VSAT Form B; learner reflection and feedback.	Measured improvement and reflection	English teacher; pupils	Review materials; VSAT Form B; feedback guide	Posttest completed; gains documented; feedback gathered for refinement.

Monitoring and Evaluation

Implementation was monitored through the Intervention Fidelity Checklist, attendance records, guided-practice outputs, vocabulary notebooks, exit tasks, and pretest-posttest performance. The checklist tracked lesson focus, time allocation, modeling, guided and paired practice, spelling work, and assessment completion.

Expected Outcome

Consistent implementation is expected to strengthen independent context-clue use, spelling accuracy, and targeted support for pupils who need additional reading and vocabulary scaffolding.

CONCLUSION

The following conclusions were drawn from the findings of the study:

1. The pupils generally began with limited vocabulary and spelling mastery. Nearly half were classified as Developing and more than one fifth as Beginning, while none reached the Advanced category. Among the 16 pupils who required a graded Phil-IRI passage, 15 were at the Frustration level. Baseline comparison also showed that the control group started significantly higher in Vocabulary, although Spelling and total VSAT scores did not significantly differ.

2. Both control and experimental groups obtained higher posttest mean scores in Vocabulary and Spelling. The experimental group began with lower means but reached posttest scores that were close to the control group in Vocabulary and slightly higher in Spelling.

3. There were significant pretest-to-posttest improvements within both groups in Vocabulary and Spelling, with all Wilcoxon p-values below .001. The experimental group, however, achieved larger mean gains of 3.41 in Vocabulary and 4.07 in Spelling compared with 1.81 and 1.90 in the control group.

4. The groups did not significantly differ in raw posttest Vocabulary or Spelling scores, but they differed significantly in gain scores for both skills. The experimental group therefore demonstrated significantly greater growth from baseline even though the groups ended at statistically comparable raw posttest levels.

5. The Word Detective Context-Clue Intervention Program produced large practical effects, with Cohen's $d = 1.26$ for Vocabulary and $d = 1.33$ for Spelling. This indicated substantial improvement associated with the intervention relative to the control group's gains.

6. The exploratory interviews identified learner dependence on external help, difficulty connecting word meaning with correct spelling, inconsistent use of surrounding clues, and preference for guided, interactive, and repeated practice. These needs supported the inclusion of explicit context-clue instruction, spelling reinforcement, teacher scaffolding, collaborative activities, and meaningful word application in the intervention.

RECOMMENDATION

Based on the findings and conclusions of the study, the following recommendations are proposed:

1. English teachers may continue and refine the Word Detective Context-Clue Intervention Program as a structured vocabulary-and-spelling support strategy, particularly for Grade 6 pupils classified as Beginning or Developing on the VSAT.

2. Pupils who require graded Phil-IRI assessment and demonstrate Frustration-level reading performance should receive additional scaffolding through shorter passages, teacher modeling, oral reading support, repeated examples, and guided pair work.

3. Vocabulary meaning and spelling practice should remain integrated through repeated word exposure, pronunciation, spelling analysis, sentence construction, and contextual application rather than isolated copying or memorization.

4. School heads and English coordinators may consider using the intervention materials for remediation, enrichment, and Learning Action Cell discussions after local review, while maintaining clear session objectives, equivalent instructional time, and fidelity monitoring.

5. Future replications should account carefully for baseline differences between intact groups through larger samples, additional sections or schools, more closely matched groups, and baseline-adjusted analyses such as ANCOVA when assumptions are met. A delayed posttest may also be used to examine retention.

6. Future researchers may examine the Word Detective program across other grade levels and learner groups and may include additional outcomes such as reading comprehension, independent strategy use, confidence, and long-term retention.

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