

3F-PT technique in improving the spelling and vocabulary skills of grade 2 pupils at Sta. Rita Elementary School

Ivy Hipolito Casupanan^{1*}, Lady Grace Fabeliña Madriaga²

¹Ramon Magsaysay State University, Zambales, Philippines

²Sta. Rita Elementary School, Zambales, Philippines

*Corresponding author: ivy.casupanan@gmail.com

ARTICLE INFO

DOI:10.46223/HCMCOUJS.
soci.en.15.2.3180.2025

Received: January 10th, 2024

Revised: January 23rd, 2024

Accepted: February 02nd, 2024

Keywords:

improve; spelling; technique;
vocabulary

ABSTRACT

This study aimed to evaluate the impact of the three Fridays spelling day and a post-test on the last Friday of the month (3F-PT) technique in improving the spelling and vocabulary skills of Grade 2 pupils at Sta. Rita Elementary School. The research focused on 138 Grade 2 pupils during the academic year 2020 - 2021 and investigated the level of spelling and vocabulary skills on the pre-test and post-test of the experimental group taught using the 3F-PT technique and the control group taught using the traditional method. Mean scores, standard deviations, paired t-test and t-test for independent samples were used as statistical tools for analysis. Findings revealed that the pre-test scores of the both control group and experimental group had a very satisfactory level of spelling and vocabulary skills. However, the experimental group recorded a lower mean score and was seemingly more heterogeneous than the control group based on their standard deviations before the intervention. After the treatment, the post-test scores indicated a significant gain and improvement in spelling and vocabulary skills of learners when exposed to the 3F-PT technique. It is recommended to extend the duration of applying the 3F-PT technique in order to attain more positive results in the spelling and vocabulary skills of Grade 2 learners. Teachers working with lower spelling and vocabulary skills are encouraged to recommend the use of the 3F-PT technique as an alternative teaching method.

1. Introduction

Spelling is an essential part of our everyday lives. Spelling, according to Prim-Ed (2022), strengthens writing, reading, and vocabulary. In email and other forms of formal communication in business and commerce, we used correct spelling. Applying for a job, filling out a questionnaire, and completing official documentation all require a basic understanding of spelling and grammar.

Spelling is a complex skill that is an essential part of writing. Good spelling is also a social expectation, and helps communicate a written message clearly. According to the Department of Education (2019), spelling requires students to draw on a wide range of English language knowledge. This knowledge includes phonological (knowledge of language's sound structure), orthographic (knowledge of written symbols), morphemic (knowledge of the smallest parts of words that carry meaning), and etymological (knowledge of word origins).

Teaching spelling is a difficult task for teachers and educators. Not to mention that technology has made spellcheckers available for free online. Social media now accepts abbreviated messages and acronyms. To make matters worse, most people do not care. With the advent of this technology, there has been much discussion about the importance of teaching children to spell. One disadvantage of spell check, for example, is that a child must be able to start the word accurately and correctly pronounce the majority of the letters. But what happens if the student misspells 'does' as 'dose'? The computer spell check will not recognize this as an incorrect word, so the student will continue to use incorrect spelling, and the reader of the document will be perplexed (Kid Sense, 2023). This claim is consistent with the observation of Terry (2023) that spell check can only get you so far. This software or app can't always identify what word you're trying to spell. You might even have written a word that is a word but is not the word you planned to write.

Poor spelling skills can result to a lack of confidence and poor academic performance. Because spelling and reading are linked, improving spelling skills is an important step toward improving reading skills. According to Adoniou (2016), teaching spelling benefits both reading and writing. Understanding how words and language work helps with vocabulary development. This, in turn, improves reading comprehension and the decisions made when writing written texts. While it is acknowledged that spelling ability is unrelated to intelligence, poor spelling can have an impact on performance across the board. In consonant, Nagy and Scoot (2000), explained that vocabulary learning is at the heart of language development. Vocabulary can assist in saying what we mean. It is also thought to be a good predictor of students' overall performance.

So how can spelling and vocabulary be taught more effective and relevant to the needs of the learner? Is it still in the traditional way which is every Monday or is there any other day to best do the activity? Though it is still in debate on what day is the best way to have spelling and vocabulary, Walls (2023) proposed that spelling and vocabulary be taught for 10 minutes per day, Monday through Friday. However, Meier (2008) believes that Friday spelling tests should be discontinued. Students are given new words on Monday, "practice" them throughout the week, take a test on Friday, and then misspell the words on Monday.

It is in this context that the researcher decided to conduct a study on the use of the Three Fridays spelling day and a post-test on the last Friday of the month (3F-PT) technique to find out whether or not this method will improve the spelling and vocabulary skills of pupils.

The study aimed to find out the effectiveness of 3F-PT Technique in improving the spelling and vocabulary skills of Grade 2 pupils at Sta. Rita Elementary School S.Y. 2020 - 2021. Specifically, it sought answers to the following questions:

1. What is the level of spelling and vocabulary skills on the pre-test and post-test of the experimental group taught using the 3F-PT Technique and control group taught using the traditional method?
2. Is there a significant difference in the level of spelling and vocabulary skills on the Pre-Test and Post-Test of the Experimental Group taught using the 3F-PT Technique and Control Group taught using the traditional method?

2. Theoretical basis

This section provides a summary of theories and empirical literature that served as the basis of this research.

Spelling is the ability to arrange letters correctly in order to form words that are widely understood. Reading, writing, and spelling are all considered aspects of literacy. According to Kid Sense (2023), accurate spelling is essential for a child's success in school because spelling is required to pass assessments. Learning to spell allows a child to form a strong connection between letters and sounds, and learning high-frequency sight words' (words that cannot be easily sounded out) will help a child with both reading and writing. The better a child knows a word, the more likely they will be to recognize it in unfamiliar texts, spell it correctly, and use it appropriately in their own speech and writing.

Moreover, Adoniou (2016) added that teaching spelling helps with reading and writing and vice versa. Understanding how words and language work helps with vocabulary development. This, in turn, improves reading comprehension and the decisions made when writing written texts. While it is acknowledged that spelling ability is unrelated to intelligence, poor spelling can have an impact on performance across the board.

Furthermore, spelling ability is seen as a prerequisite for academic success since it is connected to improvements in general literacy, according to Alderman and Green (2011). Accurate word spelling is positively correlated with future academic success, as viewed by educators. It has been suggested that there is a strong correlation between students' academic motivation and their spelling success or failure. Spelling is a predictor of future success in the classroom.

Nonetheless, Terry (2023) clarified that spelling proficiency affects both academic and personal success. When you first start working, a typo on your resume might actually make the difference between getting an interview or not.

Reading, writing, spelling, and vocabulary are all related. Vocabulary learning is at the core of language development, according to Nagy and Scott (2000). A significant amount of research indicates that vocabulary and students' comprehension and reading skills are related. (National Institute of Child Health and Human Development, 2000)

Social constructivist theory holds that children diligently construct knowledge and that learning cannot be separated from its social context. According to Williams and Pao (2014), spelling should be taught to students through real-world writing assignments rather than through memorization of lists of pre-set word lists that are taken out of context. Giving students a list of words to look up and memorize does not result in true comprehension. "If children can see the value of communicating with their spelling words in everyday life, they will want to learn for mastery - and not just to get a perfect score on a test." (Alderman & Green, 2011, p. 601).

Spelling has been described as the 'linguistic counterpart' to decoding by Walls (2023). It is a productive process in which sounds are heard and represented with letters, whereas decoding is a receptive process in which letters are seen, and sounds are pronounced. In this regard, Ehri (1989) stated that spelling aids in the development of students' phonemic awareness and knowledge of the alphabetic principle. Orthographic patterns (the ways sounds are spelled) will become easier to remember as knowledge of the spelling system grows.

Traditionally, teachers in primary schools provided spelling lists based on word lists or vocabulary learned in the textbook. Students were occasionally asked to correct spelling errors in their own writing papers or those of their peers. They were also expected to write each correction many times for extra practice (Westwood, 2005). It was a systematic approach in the sense that students' spelling needs were addressed, and parents and teachers were aware of how to handle spelling in schools. This traditional approach, however, has significant flaws. The main flaw was

that children could memorize words from lists but frequently misspelled them when they used them later in their writing (Beckham-Hungler & Williams, 2003).

Some researchers argue that decoding, like spelling, should always be taught from sound to print. The traditional print-to-sound approach to phonics can be seen as teaching the code ‘backwards’ for three key reasons: first, many sounds are represented in different ways, and with more than just one of the 26 alphabet letters; second, many alphabet names bear little resemblance to the sounds they represent; and third, this approach does not follow the ‘logic of history’ according to which speech evolved at least 30,000 years before writing; (Moats, 1998). As a result, teaching from sounds first enables teachers to teach sound-to-letter relationships logically, recognize the diversity of sound-spelling relationships, and cover more content more efficiently by avoiding the ‘one-letter/one-sound trap’ as discussed by Allcock (2008). The Australian Curriculum: English (ACAR, 2014), on the other hand, recommends spelling strategies based on phonic, visual, and morphemic knowledge, such as the use of sound, letter relationships, and knowledge of spelling rules, compound words, prefixes, suffixes, morphemes, and less common letter combinations.

Walls (2023) proposed that spelling and vocabulary be taught for 10 minutes per day, Monday through Friday. However, Meier (2008) believes that Friday spelling tests should be discontinued. Students are given new words on Monday, “practice” them throughout the week, take a test on Friday, and then misspell the words on Monday. Meanwhile, Cordova et al. (2019) discovered that removing assignments during the weekend has a negative effect on students’ performance, while adding assignments during the weekend has a positive effect. However, Chen (2021) concluded that less homework allows students to devote more time to extracurricular activities and spend more quality time with their families.

In Hashemi and Ghalkani’s (2016) study on the impact of different teaching strategies on teaching spelling to kindergarten children, all participants in all groups made significant progress, with the exception of those in the control group who received no treatment.

In the case of Philippines, spelling is usually taught every Monday with drill and lecture activity of 05 (five) spelling words and a post-test every last Monday of the month. Whereas, 3F-PT Technique of the researcher is based on her experience of teaching English and made effective use of it during the time. It makes use of test paper consisting of 05 (five) multiple choice questions. Each number consists of an explanation for certain words to be spelled. It has four choices. It is a 3-day spelling day (every Friday) and a post-test every last Friday of the month.

To test the effectiveness of the 3F-PT Technique in improving the spelling and vocabulary skills of Grade 2 pupil-respondents, the following hypothesis will be tested:

1. There is no significant difference in the level of spelling and vocabulary skills on the Pre-Test and Post-Test of the Experimental Group taught using the 3F-PT Technique and Control Group taught using the traditional method.
2. There is no significant difference on the level of spelling and vocabulary skills between the control group and the experimental group.

3. Methodology

3.1. Participants of the study

This study involved one hundred thirty-eight (138) Grade 2 pupils of Sta. Rita Elementary School in Olongapo City for the school year 2020 - 2021. The participants were the

four sections namely Grapes, Orange, Cherry and Apple. These learners were purposely selected because of the nature of being an intact class where random assignment is not possible. Grapes and Orange were assigned as experimental group with sixty-nine (69) participants while Cherry and Apple were assigned as control group with sixty-nine (69) participants respectively. The distribution of participant is displayed in Table 1.

Table 1

Distribution of Participants

Sections	Experimental Group	Control Group	Total
II - Grapes	34	-	
II - Orange	35	-	
II - Cherry	-	34	
II - Apple	-	35	
Total	69	69	138

Note. Schools Division Office of Olongapo City, Department of Education - Region III

Source. The researcher's data analysis

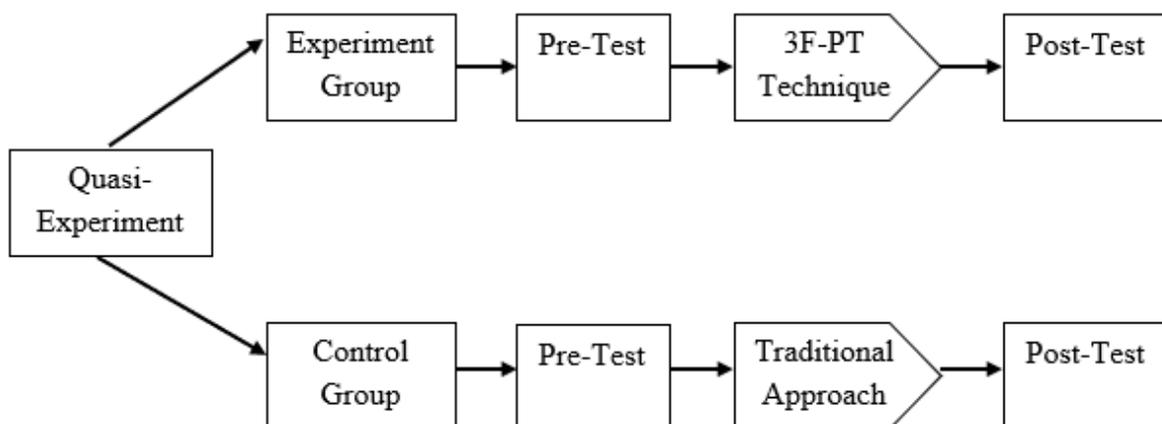
3.2. Research design

This study employed the quasi-experimental research design. According to Thomas (2023), a quasi-experimental design aims to establish a cause-and-effect relationship between an independent and dependent variable, just like a true experiment would. Unlike an actual experiment, a quasi-experiment does not use random assignment. Rather, subjects are grouped according to non-random criteria. The nature of this design is quantitative. The scientific method was utilized to collect data in an orderly, quantifiable, and impartial manner using probabilities and “p” values. This ensured the results were rigorous and could be replicated with different populations.

The study made use of Pre-Test - Post-Test Equivalent-Group Design. The illustration of the design is shown in Figure 1.

Figure 1

Pre-Test - Post-Test Equivalent-Group Design



Source. The data are from “Pretest-posttest designs” by S. Martyn, 2009 (<https://explorable.com/pretest-posttest-designs>)

As reflected, the experimental group was exposed to treatment using the 3F-PT Technique in teaching spelling and vocabular while the control group was taught using the traditional method. After the intervention, the pre-test and post-test were compared to check the gain in scores and effectiveness of both methods.

This study utilized the pre-test and post-test developed by the researcher as an instrument in collecting the data. It was piloted, validated and item-analyzed for reliability. The pre-test and post-test were consisted of 15 spelling and vocabulary words with their corresponding description or meaning. In the test, students were asked to match the given clue with the correct word using a multiple-choice option. The correct answer was spelled correctly in the given choices. The spelling and vocabulary words used in this test are BLAZE, HAY, FAMILY, STONE, HAPPY, LITTLE, DATE, ANTHILL, RICE, CASH, LAKE, DESK, HOME, ROSE and FINE. These 15 items were the same words used in the pre-test and post-test. However, these words were re-arranged in the post-test.

The criteria for marking were the same in both tests, where 15/15 is the perfect score. The scoring scale used to qualitatively describe the level of performance of the students in the pre-test and post-test were presented below:

Interval	Level of Performance
0 - 2	Needs Improvement
3 - 5	Fairly Satisfactory
6 - 8	Satisfactory
9 - 11	Very Satisfactory
12 - 15	Outstanding

In the pre-treatment phase, the pre-test was administered to both the experimental and control group in order to assess the level of spelling and vocabulary skills of the learners. After evaluating the scores and making sure that both groups are equivalent and have the same chance of receiving knowledge, the researcher proceeded to treatment phase by applying the use of 3F-PT Technique in teaching spelling and vocabulary. A series of 05 spelling and vocabulary words with meaning was taught to experimental group every Friday and post-test on every last Friday over an eight-week period of time. Whereas, in the control group, the traditional method of teaching spelling and vocabulary every Monday and post-test every last Monday of the month was applied. The treatment phase is divided into 02 cycles. Week 01 - 04 is labelled as cycle 01 and Week 05 - 08 is labelled as cycle 02. In the post treatment phase, the post-test was administered using the same components from the pre-test to identify the level of spelling and vocabulary skills of pupils.

The data gathered was analyzed using the mean to determine the average percent of the scores of the learners in the pre-test and post-test, standard deviation to estimate the variability of the total score population, paired t-test to determine if there is a significant difference between the means of pre-test and post-test of the experimental group and control group and t-test for independent samples to determine if there is a significant difference between the post-test of the experimental group and control group.

4. Result and discussion

4.1. Level of spelling and vocabulary skills of the learners

In order to measure the effect of 3F-PT Technique in improving the spelling and vocabulary skills of Grade 2 pupils, a 15-item pre-test and post-test before and after the

intervention was administered using a scoring scale of 0 - 15 to determine the level of performance of learner where 12 - 15 is Outstanding, 9 - 11 is Very Satisfactory, 6 - 8 is Satisfactory, 3 - 5 is Fairly Satisfactory, 0 - 2 is Needs Improvement. The results of the analysis are presented in Tables 2 and 3.

Level of spelling and vocabulary skills of the learners before and after the application of the 3F-PT Technique in cycle 1

Table 2

Level of Spelling and Vocabulary Skills of Pupils in Cycle 1

Groups	Pretest			Posttest		
	Mean	SD	Level of Performance	Mean	SD	Level of Performance
II - Cherry	11.65	2.23	Outstanding	12.82	2.11	Outstanding
II - Apple	11.03	2.33	Very Satisfactory	13.46	1.31	Outstanding
Control	11.34	2.23	Very Satisfactory	13.14	1.77	Outstanding
II - Grapes	10.03	3.09	Very Satisfactory	13.53	1.33	Outstanding
II - Orange	11.06	2.57	Very Satisfactory	13.34	1.39	Outstanding
Experimental	10.55	2.76	Very Satisfactory	13.43	1.36	Outstanding

Note. Legend: 12 - 15 (Outstanding), 9 - 11 (Very Satisfactory), 6 - 8 (Satisfactory), 3 - 5 (Fairly Satisfactory), 0 - 2 (NI). The data are from "What is a likert scale? | Guide & examples" by P. Bhandari and K. Nikolopoulou, 2023, pp. 1-2. Copyright 2023 by Scribbr

As shown in Table 2, the control group recorded a pre-test means scores of 11.34 out of 15, and the experimental group 10.55 out of 15 during cycle 1. This implies that both groups obtained a satisfactory level of spelling and vocabulary skills. However, it can be noted that the experimental group had a lower mean score and was seemingly more heterogeneous than the control group, as evidenced by their standard deviations of 2.76 and 2.23, respectively. Higher value of SD indicates a more heterogeneous group. In contrast, during the posttest, the control group had improved to an outstanding level of spelling and vocabulary skills with a mean score of 13.14 out of 15. This may be accounted for by the fact that the pupils who belong to this group were way better in spelling and vocabulary and that even when exposed to the traditional technique, they still managed to enhance their spelling and vocabulary skills.

Moreover, after the application of the intervention of the 3F-PT Technique, results of the posttest revealed that the experimental group had improved their spelling and vocabulary skills to an outstanding level with a mean score of 13.43 out of 15 and a standard deviation of 1.356 - now not only with higher mean score but more homogeneous than the control group. This implies that the application of the 3F-PT Technique had not only enhanced the learners' level of spelling and vocabulary skills but eliminated variances among the learners as well.

The findings conform with the study of Westwood (2005) that the traditional method of teaching spelling is effective and systematic in a way that student's spelling needs were addressed. In consonant, the results support the study of Hashemi and Ghalkani (2016) that different teaching strategies in teaching spelling aside from traditional methods can improve the spelling skills of learners. Conversely, the study contradicts the idea of Meier (2008) that teachers should abandon the practice of Friday spelling tests.

Level of spelling and vocabulary skills of the learners before and after the application of the 3F-PT Technique in cycle 2

Table 3

Level of Spelling and Vocabulary Skills of Pupils in Cycle 2

Groups	Pretest			Posttest		
	Mean	SD	Level of Performance	Mean	SD	Level of Performance
II - Cherry	7.97	3.57	Satisfactory	11.91	2.54	Outstanding
II - Apple	7.80	4.42	Satisfactory	11.29	3.11	Very Satisfactory
Control	7.88	3.99	Very Satisfactory	11.59	2.84	Outstanding
II - Grapes	8.79	3.58	Very Satisfactory	12.88	2.24	Outstanding
II - Orange	9.09	3.77	Very Satisfactory	11.94	2.68	Outstanding
Experimental	8.94	3.65	Very Satisfactory	12.41	2.50	Outstanding

Note. Legend: 12 - 15 (Outstanding), 9 - 11 (Very Satisfactory), 6 - 8 (Satisfactory), 3 - 5 (Fairly Satisfactory), 0 - 2 (NI). The data are from "What is a likert scale? | Guide & examples" by P. Bhandari and K. Nikolopoulou, 2023, pp. 1-2. Copyright 2023 by Scribbr

As reflected in Table 3, the control group garnered a pre-test mean score of 7.88 out of 15 and the experimental group 8.94 out of 15 during cycle 2. This implies that the control group obtained a satisfactory level while the experimental group obtained a very satisfactory level of spelling and vocabulary skills. It can be noted that the experimental group had a higher score and was seemingly homogenous than the control group, as evidenced by their standard deviations of 3.65 and 3.99, respectively. Higher value of SD indicates a more heterogeneous group. However, during the post-test, the control group had improved to an outstanding level of spelling and vocabulary skills, with a mean score of 11.59 out of 15 and an SD of 2.84. Moreover, the experimental group also improved to an outstanding level, with a mean score of 12.41 out of 15 and SD of 2.5.

Overall, the findings showed that the level of spelling and vocabulary skills of learners had improved in both cycles 1 and 2 using the traditional method and 3F-PT Technique. The lower mean scores in cycle 2 can be attributed to the difficulty level of words used during the drills and activities of spelling day.

The findings are in agreement with the study of Westwood (2005) that the traditional method of teaching spelling is effective and systematic in a way that student's spelling needs were addressed. In consonant, the results support the study of Hashemi and Ghalkani (2016) that different teaching strategies in teaching spelling aside from traditional methods can improve the spelling skills of learners. Conversely, the study contradicts the idea of Meier (2008) that teachers should abandon the practice of Friday spelling tests.

4.2. Difference in the Level of spelling and vocabulary skills of the learners

Paired t-test was employed to measure the significant difference between the pre-test and post-test of the experimental group taught using the 3F-PT Technique and the control group taught using the traditional method in improving the spelling and vocabulary skills of Grade 2 pupils. The results of the analysis are presented in Tables 4 and 5.

The difference in the level of spelling and vocabulary skills of the control group before and after the application of the traditional method in cycles 1 and 2

Table 4

Paired Samples T-test between Pre-test and Post-test of Control Group

Cycle 1	Paired Differences			t	Df	Sig. (2-tailed)	Interpretation
	Mean	S.D.	Std. Error Mean				
II-Cherry	1.176	2.622	.450	2.616	33	.013	Significant
II-Apple	2.429	2.019	.341	7.117	34	.001	Significant
Control	1.812	2.403	.289	6.263	68	.001	Significant
Cycle 2	Paired Differences			t	Df	Sig. (2-tailed)	Interpretation
	Mean	S.D.	Std. Error Mean				
II-Cherry	3.941	1.39	.239	16.517	33	.001	Significant
II-Apple	3.486	2.09	.354	9.859	34	.001	Significant
Control	3.710	1.78	.215	17.284	68	.001	Significant

Source. The data are from "IBM Support" by IBM SPSS Statistics Version 27, 2020. Copyright 2020 by IBM Corporation

Paired t-test was used to check the significant difference between the pre-test and post-test scores of the control group. As gleaned from the table, the paired differences between the pre-test and post-test in cycle 1 were 1.176 for class Cherry, 2.429 for class Apple, and an overall paired difference of 1.812. These differences were tested statistically at a .05 level of significance.

Results showed that t-computed values of ($t = 2.661$) for class Cherry, ($t = 7.117$) for class Apple, and an overall t-computed for the control group of ($t = 6.263$) are greater than the t-critical of ($t = 1.99$). Moreover, when these t-values are transformed into computed p-values, all yielded ($p = 0.001$), which is less than 0.05. This prompted the rejection of the null hypotheses; hence, there are significant differences between the pretest and posttest scores of the control group in cycle 1. The data provide sufficient evidence to conclude that the use of traditional method in teaching spelling and vocabulary is effective.

Furthermore, as shown in cycle 2, the paired differences between the pre-test and post-test were 3.941 for class Cherry, 3.486 for class Apple, and an overall paired difference of 3.710. These differences were tested statistically at a .05 level of significance.

Results showed that t-computed values of ($t = 16.517$) for class Cherry, ($t = 9.859$) for class Apple, and an overall t-computed for the control group of ($t = 17.284$) are greater than the t-critical of ($t = 1.99$). Moreover, when these t-values are transformed into computed p-values, all yielded ($p = 0.001$), which is less than 0.05. This prompted the rejection of the null hypotheses; hence, there are significant differences between the pretest and posttest scores of the control group in cycle 2. The data provide sufficient evidence to conclude that the use of traditional methods in teaching spelling and vocabulary which is done every Monday and a post-test every last Monday of the month, is effective. This also implies that the learners in the control group were still able to show improvement in their spelling and vocabulary skills even when exposed to the traditional method.

The findings are in agreement with the study of Westwood (2005) that the traditional method of teaching spelling is effective and systematic in a way that student's spelling needs were addressed. In addition, the results partially agree with the idea of Meier (2008) that teachers should abandon the practice of Friday spelling tests since traditional methods were done on Monday.

The difference in the level of spelling and vocabulary skills of the experimental group before and after the application of the 3F-PT Technique in cycles 1 and 2

Table 5

Paired Samples T-test between Pre-test and Post-test of Experimental Group

Cycle 1	Paired Differences			t	Df	Sig. (2-tailed)	Interpretation
	Mean	S.D.	Std. Error Mean				
II-Grapes	3.500	3.067	.526	6.653	33	.001	Significant
II-Orange	2.286	2.066	.349	6.545	34	.001	Significant
Experimental	2.284	2.660	.320	9.007	68	.001	Significant
Cycle 2	Paired Differences			t	Df	Sig. (2-tailed)	Interpretation
	Mean	S.D.	Std. Error Mean				
II-Grapes	4.09	2.417	.414	9.864	.33	.001	Significant
II-Orange	2.86	1.912	.323	8.841	34	.001	Significant
Experimental	3.464	2.25	.270	12.808	68	.001	Significant

Source. The data are from "IBM Support" by IBM SPSS Statistics Version 27, 2020. Copyright 2020 by IBM Corporation

Paired t-test was used to check the significant difference between the pre-test and post-test scores of the experimental group. As gleaned from the table, the paired differences between the pre-test and post-test in cycle 1 were 3.500 for class Grapes, 2.286 for class Orange, and an overall paired difference of 2.284. These differences were tested statistically at a .05 level of significance.

Results showed that t-computed values of ($t = 6.653$) for class Grapes, ($t = 6.545$) for class Orange, and an overall t-computed for the control group of ($t = 9.007$) are greater than the t-critical of ($t = 1.99$). Moreover, when these t-values are transformed into computed p-values, all yielded ($p = 0.001$), which is less than 0.05. The data provides sufficient evidence to reject the null hypotheses; hence, there are significant differences between the pretest and posttest scores of the experimental group in cycle 1. The data also provide sufficient evidence to conclude that the use of the 3F-PT Technique in teaching spelling and vocabulary is effective.

In addition, as shown in cycle 2, the paired differences between the pre-test and post-test were 4.09 for class Grapes, 2.86 for class Orange, and an overall paired difference of 3.464. These differences were tested statistically at a .05 level of significance.

Results showed that t-computed values of ($t = 9.864$) for class Grapes, ($t = 8.841$) for class Orange, and an overall t-computed for the control group of ($t = 12.808$) are greater than the t-critical of ($t = 1.99$). Moreover, when these t-values are transformed into computed p-values, all yielded ($p = 0.001$), which is less than 0.05. The data provides sufficient evidence to reject the null hypotheses; hence, there are significant differences between the pretest and posttest scores of the experimental group in cycle 2. The data also provide sufficient evidence to conclude that the use of the 3F-PT Technique in teaching spelling and vocabulary is effective.

The findings are in agreement with the study of Hashemi and Ghalkani (2016) that different teaching strategies in teaching spelling aside from traditional methods can improve the spelling skills of learners. The 3F-PT Technique, as an alternative teaching method, improved the spelling and vocabulary skills of learners. Conversely, the study contradicts the idea of Meier (2008) that teachers should abandon the practice of Friday spelling tests. Well, in fact, the 3F-PT Technique is done every Friday.

Difference in the level of spelling and vocabulary skills between the experimental group and control group in cycles 1 and 2

Table 6

T-test for Independent Samples between The Experimental and Control Group

Cycle 1	T	df	Sig. (2-tailed)	Interpretation
Posttest	1.842	136	.068	Not Significant
Cycle 2	T	df	Sig. (2-tailed)	Interpretation
Posttest	1.782	136	.077	Not Significant

Source. The data are from "IBM Support" by IBM SPSS Statistics Version 27, 2020. Copyright 2020 by IBM Corporation

T-test for independent samples was used to check the significant difference between the post-test scores of experimental and control groups. As reflected in the table, computed t-values of ($t = 1.842$) and ($t = 1.782$) for cycle 1 and cycle 2 were recorded, respectively. These differences were tested statistically at a .05 level of significance. Results show that these t-values are lesser than the t-critical of ($t = 1.99$). Moreover, when these t-values are transformed into computed p-values, cycle 1 yielded ($p = 0.068$) and cycle 2 ($p = 0.077$), which are greater than 0.05. The data provides sufficient evidence to not reject the null hypotheses; hence, there are no significant differences between the posttest scores of the experimental and control groups in cycles 1 and 2. The data also provide sufficient evidence to conclude that both the use of the 3F-PT Technique and the traditional method in teaching spelling and vocabulary are effective. This implies that teaching spelling and vocabulary using the traditional method as confirmed by Westwood (2005) is effective and systematic in a way that students spelling needs were addressed and parents and teachers knew how to handle spelling in schools This also mean that teaching spelling whether Monday or Friday is possible and fruitful. Meanwhile, the use of the 3F-PT Technique is an effective alternative teaching approach in terms of spelling and vocabulary skills. This supports the study of Hashemi and Ghalkani (2016) that different teaching strategies in teaching spelling aside from traditional methods can improve the spelling skills of learners.

5. Conclusions and recommendations

5.1. Conclusion

Based on the findings, it is concluded that the use of the three-Fridays spelling day and a post-test on the last Friday of the month (3F-PT) Technique is effective in increasing the spelling and vocabulary skills of Grade 2 pupils as reflected in the significant gain in scores between the pre-test and post-test of the experimental group. Although both groups had improved, the experimental group showed a greater rate of improvement when exposed to the 3F-PT Technique compared to the improvement of the control group taught using the traditional approach.

Significant differences in the pre-test and post-test mean scores of the control group exposed using the traditional method of teaching spelling and vocabulary every Monday indicated learners' improvement in their spelling and vocabulary skills.

Both the traditional method and the 3F-PT Technique are effective strategies for teaching spelling and vocabulary skills.

5.2. Recommendations

It is recommended that the 3F-PT Technique should be used by English teachers and school heads as an alternative teaching method since it was concluded and found to improve the spelling and vocabulary literacy of pupils. However, traditional and other teaching approaches should be taken into consideration because not all teaching methods apply in every situation.

A combination of the 3F-PT approach and other differentiated instructions works well to meet each student's individual interests, needs, and strengths. In addition, teachers are encouraged to extend the duration of applying the 3F-PT technique longer to attain more positive results in the spelling and vocabulary skills improvement of the Grade 2 learners.

A parallel study may be conducted using a true experimental research design in which random assignment of participants is possible.

ACKNOWLEDGEMENTS

The researchers would like to acknowledge President Ramon Magsaysay State University, the Commission on Higher Education (CHED) and the Department of Education (DepEd) for giving us a chance to conduct this research and to the study's respondents for their cooperation and encouragement to take part in the study.

The researchers have no competing interests to declare relative to the study.

References

- Australian Curriculum, Assessment and Reporting Authority (ACARA). (2014). *The Australian curriculum*. Australian Curriculum. <http://www.australiancurriculum.edu.au/>
- Adoniou, M. (2016). *Spelling it out*. Cambridge University Press.
- Alderman, G., & Green, S. (2011). *Social powers and effective classroom management: Enhancing teacher-student relationships*. Sage Journals. <https://journals.sagepub.com/doi/10.1177/1053451211406543>
- Allcock, J. (2008). *Switch on to spelling*. MJA Publishing.
- Bhandari, P., & Nikolopoulou, K. (2023). *What is a likert scale? | Guide & examples*. Scribbr. <https://www.scribbr.com/methodology/likert-scale/>
- Beckham-Hungler, D., & Williams, C. (2003). Teaching words that students misspell: Spelling instruction and young children's writing. *Language Arts*, 80(4), 299-309.
- Chen, G. (2021). *Homework-free weekends: The ongoing debate over how much homework is too much*. Publicschoolreview. <https://www.publicschoolreview.com/blog/homework-free-weekends-the-ongoing-debate-over-how-much-homework-is-too-much>
- Cordova, C., Pagtulon-an, E., & Tan, D. (2019). *No assignment policy: A boon or a bane?* Researchgate. https://www.researchgate.net/publication/330184834_No_assignment_policy_a_boon_or_a_ban

- Department of Education. (2019). *Literacy teaching toolkit: Spelling*. Victoria State Government. <https://www.education.vic.gov.au/school/teachers/teachingresources/discipline/english/literacy/writing/Pages/litfocusspelling.aspx>
- Ehri, L. (1989). The development of spelling knowledge and its role in reading acquisition and reading disability. *Journal of Learning Disabilities*, 22(6), 356-365.
- Hashemi, A., & Ghalkani, O. (2016). *Teaching spelling to kindergarten children*. Academypublication. <http://www.academypublication.com/issues2/jltr/vol07/04/13.pdf>
- IBM SPSS Statistics Version 27. (2020). *IBM support*. IBM <https://www.ibm.com/support/pages/downloading-ibm-spss-statistics-27>
- Kid Sense. (2023). *Why is spelling important?* Childdevelopment. <https://childdevelopment.com.au/areas-of-concern/literacy/spelling/>
- Meier, D. (2008) *No more friday spelling test*. Readingrockets. <https://www.readingrockets.org/blogs/sound-it-out/no-more-friday-spelling-tests>
- Moats, L. (1998). Teaching decoding. *American Educator*, Spring/Summer, 22(1), 1-9.
- Martyn, S. (2009). *Pretest-posttest designs*. Explorable. <https://explorable.com/pretest-posttest-designs>
- Nagy, W. A., & Scoot, J. A. (2000). *Vocabulary processes*. Amazon. https://s3-eu-west-1.amazonaws.com/s3euw1-ap-pe-ws4-cws-documents.riprod/9781138087279/18_Nagy_%26_Scott%2C_Vocabulary_Processes.pdf
- National Institute of Child Health and Human Development. (2000). *Report of the national reading panel: Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction: Reports of the subgroups*. (NIH Publication No. 00-4754). Government Printing Office. <http://www.nichd.nih.gov/publications/pubs/nrp/documents/report.pdf>
- Prim-Ed. (2022). *Why spelling is important in writing*. <https://www.prim-ed.ie/blog/post/why-spelling-is-important-in-writing/>
- Schools Division Office of Olongapo City (n.d.). *Republic of the Philippines Department of Education - Region III*. <https://deped-olongapo.com>
- Terry, B. (2023). *What causes problems with spelling?* Scholarwithin. <https://scholarwithin.com/spelling-problems#>
- Thomas, L. (2023). *Quasi-experimental design | Definition, types & examples*. Scribbr. <https://www.scribbr.com/methodology/quasi-experimental-design/>
- Walls, H. (2023). *Teaching spelling in primary and intermediate schools*. Theeducationhub. <https://theeducationhub.org.nz/teaching-spelling-in-primary-and-intermediate-schools/>
- Westwood, P. (2005). *Spelling: Approaches to teaching and assessment* (2nd ed.). ACER Press.
- Williams, J. P., & Pao, L. S. (2014). Developing a new intervention to teach text structure at the elementary level. In H. L. Swanson, K. R. Harris, & S. Graham (Eds.), *Handbook of learning disabilities* (pp. 361-374). The Guilford Press.

