



IMPROVING SPELLING SKILLS OF STUDENTS THROUGH PROJECT (SEGAW) SPELLING ENHANCEMENT THROUGH GADGET AND ALTERNATIVE WORKSHEETS

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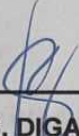
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APPROVAL SHEET

This research entitled "" prepared and submitted **IMPROVING SPELLING SKILLS OF STUDENTS THROUGH PROJECT (SEGAW) SPELLING ENHANCEMENT THROUGH GADGET AND ALTERNATIVE WORKSHEETS** by **Christine A. Cimagala, Mayiet C. Colegado, and Marlene L. Matugas** to the Schools Division Research Committee of DepEd-Gingoog City has been examined and is recommended for presentation to the Regional Office X as BERF-funded research.

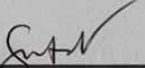
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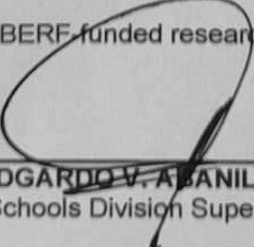
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IMPROVING SPELLING SKILLS OF STUDENTS THROUGH PROJECT (SEGAW) SPELLING ENHANCEMENT THROUGH GADGET AND ALTERNATIVE WORKSHEETS

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ABSTRACT

This action research aimed to help students become language proficient, improve their English Spelling Ability and increase the performance standard from 75 to 80 for the school year 2022-2023 of Grade 9 Respect students of Bal-ason National High School, Division of Gingoog City, Misamis Oriental. A questionnaire of 10 items was adopted from the study of Gentry (2015) that served as the pretest and post-test. Frequency and Mean were used to determine the performance of students during pretest and post-test. The T-test was used to determine the significant difference of the Spelling Ability of students before and after the intervention was made through project SEGAW (Spelling Enhancement through Gadgets and Alternative Worksheets.) Result revealed that there was a statically difference between the performance of the students proving that there was a significant effect of the intervention towards the Spelling Ability of students. The study concluded that gadgets and alternative worksheets with the integration of Mnemonic device help learners became language proficient, hence it also made the English class more interactive with the aid of technology since students of today's generation were known as technological savvy. Overall, this research paper provides valuable insights into enhancing spelling abilities through the integration of technology and mnemonic strategies. It presents a well-structured and documented study, and the results suggest that such interventions can significantly improve students' spelling skills. Further research and applications of this approach in other educational contexts could be explored.

KEYWORDS: *Spelling Skills, Gadgets, Worksheets*

Context and Rationale

Spelling is an essential literacy skill and an important language component that can have a significant effect on students' future education and occupational status (Nahari, 2016). The concept of spelling has been defined differently by various researchers over the years. Puspandari (2017) defines spelling as a process of representing the spoken language in a written form that consists of a sequence of letters composed to form words in their generally accepted usage. On the other hand, Mpiti (2012) defines spelling as a process that encompasses several skills: phonological, morphological, syntax, and semantic knowledge, as well as the ability to formulate words based on visual memory along with applying the orthographic rules. Moreover, Perveen and Akram (2014) define spelling as the method for writing words in their correct and acceptable forms. In other words, it is a process of assembling the letters of a given language in accordance with their correct sequence according to the official orthographical rules of that language otherwise; it would be viewed as a spelling error. (Hwang & Wu, 2014).

According to Erion et al. (2009), spelling is a vital pre-requisite skill for people to be able to express themselves through written communication as opposed to oral communication. Erion et al. (2009) continues by expressing the great importance of acquiring the skill for reading fluency in this process. In addition, Kosmac (2010) adds to the conversation by informing us that learning to spell is not just important, but fundamental to acquiring further academic knowledge. Yet, (Cubukcu, 2017) stated that the integration of gadgets, such as tablets and computers, into education has transformed how spelling and worksheet activities are delivered. Research has shown that digital learning platforms can engage students more effectively than traditional methods, offering interactive spelling games, auto-correction features, and instant feedback.

In addition, Ahmed (2017) views spelling as a linguistic method that deals with phonemic orthography. In other words, spelling is the process of word formation by

representing the oral language by using the conventional, accepted individual letters according to the rules of that language. According to Johnson (2008), spelling is the act of recognizing or mimicking oral or spoken words by the equivalent correct sequence of letters taking into consideration phonological and alphabetical skills and knowledge.

Hence, student worksheets provide a stimulus to students to carry out assessments or real activities on a particular object or problem, both individually and in groups (Cholifah & Novita, 2022). The worksheet is a guide for student that can be used in observation, experimentation, and demonstration activities to facilitate the process of investigating or solving a problem (Lestari et al., 2018) and picture series made students more active, creative, independent, and more confident in expressing their ideas (Wulandari & Ashadi, 2021). Faizah (2010) revealed that the use of picture stories with value education content is more appropriate to apply than learning that only relies on textbooks as the only source of learning (conventional).

In support for the K to 12 implementations on Basic Education Program, the Department of Education through the DepEd Memorandum s. 2019 173-1 known as 3Bs initiative or the Bawat Bata Bumabasa aims to integrate an approach to explicit reading instruction using the Six elements in combination such as Oral language, Phonological Awareness, Phonics, Vocabulary and Spelling, Fluency and Comprehension to produce productive and responsible citizens equipped with essential and competencies for life-long learners. It is evident that spelling skill is one of the main components to attaining basic reading and comprehension among our learners. Interestingly, according to the *International Journal*, vol. 11 (2022) Mobile learning constitutes the prominent and popular form of 21st century studentcentered learning applications worldwide. These applications generally provide a framework for peer learning and reviews. Examples include WhatsApp, Telegram, Google Classroom, Duolingo, Kahoot and Kaizala. Additionally, Khemchandhani (2022) that Spelling

Master, Kids Spelling Learning, Grammarly, Ultimate English Spelling Quiz and Spelling Master are mobile learning applications that can also be used for language teaching and learning, particularly spelling.

As English teachers, it has been one of our observations that several of our students incurred several misspelled words every time we require them to write sentences and paragraphs during class drills. Every now and then, during the class, we promptly corrected misspelled words to ensure that they learned the correct ones. However, this concern became a pressing issue to us. Identified learners for the study were determined because of one incident that the English Program Supervisor conducted a random spelling test in English the result was not good because majority of the students got less than the 75% of the performance standard. In response to the result the researchers conducted a pretest using the adopted worksheets of Gentry (2015), among the 34 students of Grade 9 Respect of Bal-ason National High School who took the test, result showed that 30 or 89% of them got less than 75% of the performance standard. The In Grade 9 section Respect, we conducted an assessment on spelling and out of 34 students, 89% or 30 students got less than 75% of the spelling quiz during the 2nd Quarter. When the researchers conducted an interview with these students, most of them revealed that they often used Jejemon language in typing or chatting using their gadgets while others don't have time to read and consult dictionary for vocabulary and correct spelling of words. An assessment from The Princeton Review – TPR Prep Review by Katzman and Robinson (1981) was conducted to measure their knowledge and mastery of Spelling Skills, but the result of the assessment showed that 89% of the class shows poor spelling ability in spelling that needs to be addressed.

With this context, as their English teacher, we wanted to help them improve their Spelling ability through the implementation of Project SEGAW which would hopefully help

them to attain the improvement of their Spelling Ability that would be vital for their Writing Skills.

Intervention, Innovation, and Strategy

To help our students improved their spelling skills, this intervention is conceptualized. Project SEGAW which is an acronym for **S**pelling **E**nhancement through **G**adget and **A**lternative **W**orksheets was designed to allow learners to access spelling quizzes using their cellphones, tablets, and answer interactive worksheets in spelling that will consist of Mnemonic devices, and familiarization of the spelling rules and Vocabulary words. The used of gadgets were implemented in order to suit in the capabilities of learners which were considered as Technological Savvy, a mnemonic device is a memory technique that can help increase one's ability to recall and retain information. According to Johnson (1993), the mnemonic method may help improve LD students' ability to spell. Howard (2008) suggested that using a mnemonic approach to spelling sight words improved students' spelling skills as compared to the traditional method. Project SEGAW is anchored on this literature where for the students to improve their spelling skills, a mnemonic strategy will be integrated into the process of the intervention. Students will be exposed also to different words given and defined for understanding and to help them recall the words.

To ensure the successful implementation of the project the following will be conducted:

A. IDENTIFIED THE FOCUS PROBLEM

Data analysis of English Spelling Skills

❖ Conducted Orientation for Parents and Students

To ensure proper coordination and implementation of the project that allowed them to understand the process and be guided on the activities that the students were able to accomplish.

❖ Conducted Pre-assessment of learners.

To measure the student's ability in Spelling using the interactive worksheets.

B. PLANNED AND CONCEPTUALIZED AN INTERVENTION

- Printed and Designed Worksheets

- Installed Spelling Quiz App

To ensure the accessibility of the materials using modern technology and blended with the demands of the modern world.

Implementation:

Conducted 30-minute enrichment Classes every Tuesday and Friday for 3 months every 3:30-4:10 in the Afternoon to have a systematic implementation of the project SEGAW, 30 students were given 30 DepEd tablets from the TechEd Bal-ason Innovation will be installed by the Spelling Quiz App and downloaded with the adopted worksheets of Gentry (2015). During the 12 weeks Spelling Worksheets and Spelling Quiz App alternately administered. Weekly the researchers will conduct assessment to know the significant effect of the intervention implemented. To assist the effectiveness of the intervention given, a post test conducted. For the data analysis, we'll be using the Mean, Frequency and T-Test. On other hand, teaching and learning spelling via various mobile learning platforms are remarkably beneficial for mastering English Language, as also opined by Mohamad (2021). These platforms act as a medium to transfer spelling knowledge via mobile learning as emphasized

in 21st century education. The findings from the studies portrayed the use of four platforms in the mobile learning trends in supporting the mastery of spelling, namely, mobile apps, spell-checker apps, word prediction apps and text messaging apps. These applications generally provide a framework for peer learning and reviews.

- to ensure the progress of students' ability in spelling using Project SEGAW.
- expose students to different strategies adopted from mnemonic strategies that could help them remember how to spell the words. This, strategy will be integrated within the spelling app and worksheets.

D. - Monitor students' performance through Weekly Assessment

It helped monitor the progress of individual students or the class. They provided regular checkpoints to gauge how well students grasped the material and made academic progress. It aided tracking of the student's progress on the implementation of Project SEGAW and adjusted to possible glitches and challenges. Furthermore, weekly assessments reinforced learning by encouraging regular review and practice, enhancing retention of the material.

Post-Implementation:

E. Conduct Post Assessment

Conducting post-assessments for learners was important as they evaluated learning outcomes, identified knowledge gaps, and measured progress. They provided feedback on teaching methods, promoted student accountability, and facilitated curriculum improvement. It helped identify the significant difference of the intervention implemented from pre assessment to post assessment.

Action Research Questions

This research aimed to test the effectiveness of Project SEGAW in improving the spelling ability of learners. Specifically, it aimed to:

1. What is the performance of the students before and after the intervention?
2. Is there a significant difference in the performance of English Spelling Ability of students before and after the implementation of the Project SEGAW?

Action Research Method

A. Participants

The study was conducted at Bal-ason National High School, Bal-ason, Gingoog City presently considered as one of the Medium School in the division. The participants of the study were the 30 students of Grade 9 Respect of Bal-ason National High School whom determined and identified through to the conducted pretest assessment.

B. Data Gathering Methods

In the data gathering process, A questionnaire of 10 items Multiple Choice test adopted from the study of Gentry (2015) were administered to the students as the pretest and post-test. Once the data will be available, the mean will be calculated to find the absolute value of difference between the means. After, standard deviation will also be calculated from the mean so that a t-test shall be performed to identify if there is a significant difference in the performance of the participants before and after the implementation of the intervention.

C. Data Analysis Plan

The study used the Multiple-Choice Test questionnaire adopted from Gentry (2015) composed of 10 items in identifying the scores and abilities of learners in spelling. Individual Scores of learners added together to get the percentage of response and the mean to determine the performance of the students. Standard Deviation will also be calculated to get the T-test analysis. T-test will be used to find the significant difference of the result gathered from the pretest and posttest. "Once the T-test was calculated, it helped determine if the treatment given was effective or not."

The following scoring procedure guided the organization of the data needed to address the problems of the study:

Range	Point Value	Interpretation	Description
9-10	5	Excellent in Spelling	Students consistently spell words with very few or no errors. Demonstrate a strong grasp of spelling rules and patterns.
7-8	4	Proficient in Spelling	Students spell words correctly most of the time. Occasional errors are minor and do not hinder overall understanding.
5-6	3	Satisfactory Spelling	Students spell words correctly in most instances. Some errors are noticeable but do not significantly impede communication.

3-4	2	Needs Improvement	Students frequently misspell words, affecting readability. Errors may indicate gaps in understanding spelling rules.
0-2	1	Poor Spelling	Students consistently misspell words, making the text difficult to comprehend. Serious deficits in spelling skills are evident, requiring immediate attention.

Discussion of Results and Reflection

This part includes the discussion of results and reflection of the study. The data presented in this part follows the arrangement of the problems as set in this action research.

Upon the administration and conduct of the pretest and post-test, the collected data or the result were evaluated and analyzed.

Problem No.1 What is the performance of the students before and after the intervention?

Table 1 shows the spelling performance of the students before and after the intervention.

Table 1

Spelling Performance of Students (before and after Project SEGAW)

Range	Pretest			Range	Posttest		
	N	%	Spelling Level		N	%	Spelling Level
9-10	0	0	Excellent	9-10	28	93.3	Excellent
7-8	2	6.7	Proficient	7-8	2	6.7	Proficient
5-6	13	43.3	Satisfactory	5-6	0	0	Satisfactory
3-4	8	26.7	Needs Improvement	3-4	0	0	Needs Improvement
0-2	7	23.3	Poor	0-2		0	Poor
Total	30	100		Total	30	100	
Mean		4.10		Mean		9.77	
Description		Needs Improvement		Description		Excellent	

The table illustrates that the spelling performance of students before and after the implementation of “Project SEGAW”. Before the project, most of the students were in the “Satisfactory” or lower spelling proficiency categories, with 23.3% falling into the “Poor” range. The mean score on the pretest was 4.10, indicating an overall low level of spelling ability among the students. After the project, there was a remarkable improvement in spelling performance. A whopping 93.3% of students achieved an "Excellent" level of spelling proficiency, while the remaining 6.7% remained "Proficient." No students scored in the lower categories of "Satisfactory," "Needs Improvement," or "Poor" in the posttest. The mean score in the posttest increased substantially to 9.77, highlighting a significant enhancement in the overall spelling skills of the students following the implementation of "Project SEGAW." This data suggests that the project had a positive and transformative impact on the students' spelling abilities, elevating most of them to an "Excellent" spelling level.

Based on the students interview guidelines, Student A stated that “ *Ganahan kayo ko mag tubag sa mga pangutana sa kada level Ma’am sa spelling app ug worksheets kay naa siya clue nga ihatag sa ibabaw para naa ko giya sa akong mga tubag*”. Student B added that “ *Madasig ka mag tubag sa mga pangutana Ma’am sa Spelling App kay dili man ka maka padayon sa lain level kung sayop ang imong tubag kinahanglan pa gyod nimo balikan ug kumpletohon ang level para makapadayon ka*”. Student C also cited “ *Sayon tubagon ang worksheets tungod sa naa gihatag nga guide sa word nga gipangita unya ang spelling app pd ganahan ko kay gamit man sa cellphone madala ra nako bisan asa ko padulong ug malingaw ko magdula kay naa ko mahibal an nga words*”.

The increase of the students’ performance is due to the intervention applied called Project SEGAW with the use of the gadgets through Spelling Quiz application and alternative worksheets. The findings of the study confirmed the result of the study of Sheng Yu (2013) pointed out that learning English using the mobile phone is more effective than the traditional way not to mention conveniences, he also emphasized that using interactive multimedia tools to learn English can improve the ability in all the four phases of language learning. It was also supported by the study of (Ertmer et al., 2012) that the use of gadgets boosted the teacher's enthusiasm and allowed the teacher to develop a sharing community in which any teacher may look at the developed worksheet and use, amend, and alter other teachers' worksheets based on their needs.

Furthermore, Salmah (2016) commented that technology offers modern educational tools for learning English as a foreign language. The research findings clearly described those 35 students (97.2%) believed that smartphone and tablet apps (i.e., Learn English Grammar, Dictionary. com, dictionaries, and thesauri) can improve their English language learning, while 29 students (80.5%)

indicated that word processing software (i.e., Google Docs and Microsoft Word) can have a positive impact on their English language learning.

Problem No. 2: Is there a significant difference in the performance of English Spelling Ability of students before and after the implementation of the Project SEGAW?

Table 2

T-Test for the Differences in Students' Level of Spelling Ability

Comparison	Mean	T-Value	Sig
Pre-Test	4.10	-15.216	.000S
Post-Test	9.77		

Table 2 presents the results of a t-test used to assess the differences in students' spelling abilities before and after Project SEGAW was implemented.

The result showed that the pre-test mean score was 4.10 and the post-test mean score was 9.77 and the t-test yielded a highly significant negative t-value of -15.216 ($p < 0.001$). This indicates a substantial and statistically significant improvement in spelling abilities after the intervention, with students performing significantly better in the posttest.

Based on Parents and students interview guides, Parent A stated that “*“Nabantayan nako Ma’am na mas ganahan akong anak mag answer sa spelling quiz app kay naa naman gud siya clue sa dili pa ka mag tubag unya madasig ang bata nga wala gyod siya sayop sa answer kay dili man siya maka adto sa lain level”* Parent B added that “*Akong nabantayan sa spelling app ganahan kaayo akong anak mag tubag sa mga pangutana kay gamit man ang cellphone unya ang naka tsada kay dili na manginahanglan sa internet para maka adto ka sa lain level”*. Parent C also stated that “*Tsada siya kay ang tubag sa bata mahibalan dayon kung sayop kay ibalik man gyod siya sa level kung asa siya masayop.*

Combining worksheets with digital tools can be effective. Research suggests that a blended approach, incorporating both traditional worksheets and digital activities, can lead to better spelling outcomes (Harris & Miller, 2020).

One advantage of gadgets is their ability to adapt to individual student needs. Personalized spelling apps can adjust difficulty levels based on a student's performance, catering to both struggling and advanced spellers (Hawkins et al., 2018).

Moreover, several studies suggest that the integration of gadgets, such as tablets and interactive whiteboards, can enhance spelling instruction. Interactive spelling apps and games engage students, making learning more enjoyable and effective (Tossell, 2017).

Digital tools offer immediate feedback, which helps students identify and correct spelling errors (Tillman et al., 2019). This instant feedback can lead to improved spelling skills.

X. Action Plan

Objective	Activities for Roll out	Person Involved	Remarks
To ensure information dissemination and the process of implementation of Project SEGAW.	School Session LAC	Teachers	Accomplished
To implement and integrate Project SEGAW all throughout the school.	School Roll-out	Teachers and Students	Accomplished
To present and share good practices in school in developing English Spelling Ability of Students.	Division Research Forum	Teachers	

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