Project AKAY Approach: A Reading Intervention for Non-Readers

Leizel H. Pelatero*

Department of Education, Marawoy Elementary School, Lipa City, 4217, Batangas, Philippines

***Corresponding author:** Leizel H. Pelatero, leizel.pelatero@deped.gov.ph

Abstract: The Project Adequate Knowledge Acquisition for Young Learners (AKAY) approach serves as an intervention designed to support Grade 4 students who have experienced significant cognitive challenges due to the COVID-19 pandemic. This approach places a strong emphasis on the advantages of homogenous grouping in the teaching process. Its main objective is to assist students in acquiring fundamental skills, including knowledge of the alphabet, letter sounds, reading of consonant-vowel-consonant (CVC) pattern words, numerical comprehension, handwriting of names, and following simple directions. This study delved into the implementation of the Project AKAY approach for Grade 4 students attending Marawoy Elementary School in Lipa City during the 2022–2023 academic year. The researcher aimed to assess the reading proficiency of these students using the Philippine Informal Reading Inventory (PHIL-IRI) assessment both before and after the implementation of the approach. The study also examined the extent to which the Project AKAY approach was utilized to guide students in acquiring these essential skills. Additionally, the research explored the challenges faced by teachers in implementing the Project AKAY approach and their strategies for overcoming these challenges. The study employed a descriptive quantitative research design and employed purposive sampling as the chosen sampling technique. Data collection relied on the PHIL-IRI assessment tool and interviews as research instruments. The collected data underwent thorough analysis, including statistical treatments such as frequency and percentage calculations. Ultimately, the research findings indicated that the Project AKAY approach effectively served as an intervention for non-readers.

Keywords: Reading; Homogenous group; Non-readers; Adequate knowledge

1. Introduction

The onset of the COVID-19 pandemic in early 2020 ushered in a substantial transformation in the landscape of education. While the issue of students' reading proficiency had long been a concern in the nation, the pandemic exacerbated the situation. In many countries, including the Philippines, schools were either fully or partially closed, learning groups were reorganized, and students and teachers had to navigate extended absences from school to curb the spread of the virus [1].

Notably, data from the Programme for International Student Assessment (PISA) indicated that a large portion of Filipino students performed below the desired level in reading, with approximately 80% struggling to attain the required reading competency. This deficiency in fundamental reading and comprehension skills contributed to poor performance in subjects like English, Mathematics, and Science. To address this issue, the Department of Education (DepEd) introduced the "Hamon: Bawat Bata Bumabasa" (3Bs Initiatives) to promote read advocacy and ensure that every student achieves grade-level reading proficiency. However, the pandemic presented unexpected challenges, requiring teachers to adapt to remote teaching, students to self-regulate their learning at home, and parents to play a more active role in their children's education. Consequently, education policies, administration, and practices became keenly interested in understanding how these learning conditions impacted students' accomplishment, especially in reading – a fundamental skill essential for overall academic success and societal engagement. Furthermore, it became evident that the pandemic affected different study groups to varying degrees, even within the same educational system. Recent studies underscored the unpreparedness of schools, instructional methods, and stakeholders (including school administrators, teachers, students, and parents) for a crisis of the magnitude of the COVID-19 pandemic.

Despite these challenges, DepEd remained committed to ensuring continuity in education and the development of an intellectually empowered population. To achieve this, literacy was deemed essential, leaving no students behind. Schools were tasked with bridging the learning gap exacerbated by the pandemic. This presented unique difficulties, as physical in-person teaching was not always feasible, parents faced work-related constraints, and some lacked the literacy skills to assist their children effectively. In such trying times, the vulnerabilities of certain students were amplified, potentially leading to long-lasting repercussions for individuals and society. It became imperative for education systems to address learning disparities while nurturing student resilience to mitigate these adverse effects.

Efforts to mitigate these challenges included various interventions. Fortunately, in 2022, schools began to reopen, offering hope for bridging the pandemic-induced learning gap. The sight of students returning to school energized teachers and the education community. The initial week back in school was designed to ease students back into the learning process gently. By the second week, reading assessments were conducted using the PHIL-IRI tool. The results, while expected, were disheartening, with a significant number of Grade 4 students falling into the "frustration level" category for reading Tagalog. Out of 279 students, 173 struggled with reading, and 40 were classified as non-readers, unable to write their names or recognize letters and their corresponding sounds. Teachers notice their lack of confidence and slow progress.

In response to these challenges, Grade 4 teachers at Marawoy Elementary School initiated an intervention known as Project AKAY, which stands for "Adequate Knowledge Acquisition for Young Learners." This project was conceived after careful observation and assessment. The term "akay/akayin" in Filipino translates to "guide," signifying its mission to assist struggling students, particularly in reading, through the creation of a conducive reading environment, effective teaching strategies, and family support. Non-reader students were grouped in homogenous classes based on their reading abilities, as it was believed that tailored instruction could increase their engagement. This approach allowed teachers to create engaging lessons at the student's instructional level, maintaining their interest. In addition, Project AKAY led to increased collaboration among teachers, as Grade 4 teachers sought guidance and materials from their Grade 1 counterparts, who had experience dealing with non-readers. The necessary Grade 4 competencies were provided in printed modular form, requiring teachers to exert extra effort in managing two different types of classes daily.

Marawoy Elementary School remained committed to providing quality education despite the pandemic-induced gap. Project AKAY served as a beacon of hope in bridging this divide. The results of the Philippine

Informal Reading Inventory (PHIL-IRI) assessments at the project's inception indicated progress, with 40 non-reader students initially and eventually, two becoming independent readers, 34 achieving instructional levels, and 4 remaining in the frustration level. While these outcomes show improvement, there is room for further enhancement. Success in school is closely tied to one's ability to read, a fundamental skill that serves as a foundation for all subjects. As an educator and researcher, the author embraces the challenge set forth by DepEd's "3Bs Initiatives" and remains dedicated to bridging the pandemic-induced learning gap.

2. Literature review

Reading comprehension is a multifaceted process that draws upon various foundational skills. One model of reading comprehension suggests that there are three levels of skills – literal comprehension, inferential comprehension, and evaluative comprehension – that collectively enable us to grasp the content of what we read. These levels play a significant role in assessing a student's communication skills.

As noted by Eyorcadas [2], reading encompasses a substantial part of human activities, estimated at around 85%. The process involves sensation, perception, comprehension, application, and integration, all working together to construct meaning from written symbols and words. Reading serves as a means of communication and a source of knowledge and ideas, with applications ranging from reading signs and advertisements to restaurant menus, cookbook recipes, medication instructions, and much more. Furthermore, reading holds a pivotal position in both academic and lifelong learning. However, there is a prevalent challenge in the Philippines, where a substantial number of children lack the inclination or ability to read, as reported in a 2010 article from The Philippine Star [3].

Tomas *et al.* highlighted that readers who struggle often attribute their difficulties to factors such as limited phonological awareness, inadequate alphabet knowledge, insufficient phonics proficiency, a deficient vocabulary, poor word recognition, limited fluency, and low comprehension levels [4]. These challenges are typical reasons behind students' reading deficiencies, prompting ongoing debates among educators about the effectiveness of reading intervention programs. Additionally, the existence of learners-at-risk and the absence of a reading culture pose additional challenges [4].

Akyol's study in 2014 underscored that students with severely deficient reading skills face significant academic hurdles that may escalate to social difficulties in middle and high school. Over time, these students may build emotional barriers to reading due to a history of academic setbacks and labeling. To compensate, they may rely on their hearing and perceptive abilities, attempting to remain inconspicuous. They may be more prone to antisocial behavior if they have feelings of isolation and helplessness [5].

Aquino and De Vera discussed the negative spiral that children experiencing difficulties with letter coding and word recognition can enter. As they encounter obstacles, their enjoyment of reading diminishes, leading to reduced practice and more negative reading experiences. This, in turn, may result in a reluctance to read or a passive approach to reading, where individuals merely go through the motions without actively engaging with the material. Such emotional side effects can have adverse effects on the overall school experience [6].

One strategy to address these challenges is to group students with similar abilities in one classroom, a practice known as homogeneous grouping. Bayot and Galutan argued that grouping students based on their academic level and skills can enhance engagement, as instructions can be tailored to their abilities [7]. This approach may foster higher engagement than if students were grouped to work on skills they have already mastered, potentially leading to boredom. Homogenous grouping allows teachers to design lessons that are engaging and suitable for the student's instructional levels.

Creating a positive learning environment that instills confidence in students' abilities is crucial in breaking the cycle of reading difficulties. Effective reading programs provide students with access to reading material suited to their reading levels, opportunities for discussion, and choices in reading activities, interspersed with more structured lessons, all delivered by teachers who believe in their students' potential for success.

Moreover, teachers need to adapt their instruction to match students' educational backgrounds and individual reading skills. Parents also play a pivotal role in reinforcing their children's reading skills through home mentoring and follow-up evaluations.

Strategic Marketing and Research, Inc. emphasized that reading failure is a significant national concern that cannot be solely attributed to factors like immigration, poverty, or learning English as a second language. Teaching reading is considered one of the most critical subjects, as it forms the foundation for successful teaching and learning at all educational levels. Reading proficiency is indispensable for effective learning, as reading encompasses numerous sub-skills, with comprehension being just one of them. Challenges in reading can have far-reaching consequences across various subjects [8].

Recognizing the importance of reading and aligned with the K-12 Basic Education Program, DepEd introduced the "Every Child A Reader Program" (ECARP) through DepEd Memorandum No. 402s.2004 and Administrative Order No. 324. This program aims to provide structured reading and writing instruction to public school primary students, equipping them to become independent readers and writers. ECARP is an integral component of President Benigno Aquino III's ten-point education strategy, striving to produce graduates equipped to face life's challenges [9].

Numerous readers often mistakenly believe they comprehend the text because they rely on superficial analysis as their benchmark for adequate comprehension [10]. Additionally, engaging in uninterrupted daily reading for a minimum of 30 to 60 minutes can result in enhanced vocabulary and comprehension [11]. Reading independently at one's appropriate level, in conjunction with guidance from a parent, teacher, or tutor, can expedite skill development, consequently boosting understanding and reading speed.

3. Research objectives

This study will assess the effectiveness of the Project AKAY approach as a reading intervention for non-readers by addressing the following objectives:

(1) To assess the initial reading proficiency of Grade 4 students through the pre-reading assessment conducted using PHIL-IRI.
(2) To track the ongoing progress of students' reading abilities as they engage with the Project AKAY approach.
(3) To examine how the Project AKAY approach contributes to the enhancement of reading skills among non-readers.
(4) To identify the challenges faced by teachers in the context of reading instruction.

4. Action research methodology and procedures

4.1. Research design

The selection of respondents involved the purposive sampling technique, which targeted Grade 4 students. Questionnaires were distributed to Grade 4 teachers at Marawoy Elementary School, as well as to forty Grade 4 students identified as non-readers. This study employed a quantitative research approach within a quasi-experimental design. Quasi-experimental design, as defined by Creswell [12], aims to establish a cause-and-

effect relationship between variables. The total enumeration method was used, wherein all Grade 4 students underwent individual assessments of their reading skills across the three essential components contributing to successful reading. This approach was deemed suitable for this action research, as it sought to investigate the effectiveness of the identified enrichment activity.

4.2. Participants and sampling

This study focused on forty identified Grade 4 non-readers at Marawoy Elementary School for the school year 2022–2023. These students underwent pre-test and post-test assessments using the PHIL-IRI (Philippine Informal Reading Inventory) assessment tool. Purposive sampling was employed to select respondents exclusively from among students identified as non-readers. The choice of purposive sampling was deliberate, considering the specific qualities possessed by the selected informants.

4.3. Data collection

Quantitative data for this proposed action research were collected from the respondents through the results of the pre-test and post-test assessments using the PHIL-IRI assessment tool. The data will be analyzed using descriptive interpretation. Additionally, two key questions were utilized by the researcher for the interviews conducted with the participants:

(1) What difficulties did you encounter during the project intervention?

(2) How did you overcome the challenges you faced?

Upon the completion of the intervention, the researcher collected the necessary data, with the intervention spanning an entire academic quarter. To conduct the study, the researcher obtained the necessary approvals from relevant authorities to administer the evaluation tool to the student respondents. The pre-test and post-test assessments were personally administered to the student respondents by the researcher. Subsequently, the researcher collected, checked, and retrieved the assessment tools. Interviews were conducted with Grade 4 teachers who participated in the program.

4.4. Data analysis

The collected data underwent analysis, interpretation, and evaluation by the researcher, employing appropriate statistical tools. The pre-test and post-test assessments were used to determine the reading levels of non-readers and struggling readers before and after the intervention. The data analysis utilized rating scales, as listed in **Table 1**.

Table 1. Phil-IRI oral reading rating scale

Oral reading level	Word reading score-fluency (%)	Comprehension score
Independent	97–100	14–20
Instructional	90–96	9–13
Frustration	89 and below	0–8

4.5. Ethical considerations

The researcher asked for parental approval from all the students who participated in the study. This study also complied with the Data Privacy Act of 2012, with the data and information collected being used only for this research study. The researcher kept these to validate and verify the respondents' identities.

5. Results and discussions

5.1. Reading performance before project implementation

Table 2 presents the outcomes of the pre-test conducted on the respondents to assess the reading comprehension skills of Grade 4 students.

Table 2. Reading performance of Grade 4 students

Comprehension score (%)	Interpretation	Pre-test	
		Frequency	Percentage
80–100	Independent	0	0
59–79	Instructional	0	0
58 and below	Frustration	40	100
n		40	100
Mean		0	Frustration

Table 2 displays the pre-test results regarding the reading comprehension skills of Grade 4 students. The pre-test findings reveal that all 40 students fall into the frustration level category, as indicated by the PHIL-IRI Oral Reading Profile. Furthermore, these students were categorized as non-readers.

Project AKAY was conceived with the primary goal of imparting fundamental knowledge to learners, particularly in the realm of reading. It aimed to support educational systems in addressing learning gaps and mitigating disruptions to students' educational journeys. These 40 students constituted the project's respondents.

Evidently, in the Philippines, achieving a high level of literacy and the ability to read and write are top priorities, with the government actively promoting proficient reading skills. Reading is a skill that demands consistent practice to be retained and improved. Consequently, even individuals who possess literacy skills may not necessarily consider themselves readers. Therefore, those who do not engage in reading are often referred to as having a reading disability. A non-reader is typically defined as an individual with a reading disability who experiences reading challenges that are unexpected given their age, cognitive abilities, the quality of instruction they have received, and the interventions they have undergone.

5.2. Reading performance following project implementation

Table 3 shows the results of both the pre-test and post-test assessments conducted to evaluate the effectiveness of Project AKAY.

Table 3. Reading performance of the Grade 4 participants before and after the implementation of Project AKAY

Comprehension score (%)	Interpretation	Pre-test		Post-test	
		Frequency	Percentage	Frequency	Percentage
80–100	Independent	0	0	2	5
59–79	Instructional	0	0	34	85
58 and below	Frustration	40	100	4	10
n		40	100	40	100
Mean		0	Frustration	34	Instructional

Table 3 illustrates the results of the pre-test and post-test assessments focusing on the reading skills of Grade 4 students. Comparing the pre-test and post-test scores, it is evident that post-test scores were notably higher. The pre-test results initially categorized all 40 learners as frustration level/non-readers, according to the PHIL-IRI Oral Reading Profile. However, the post-test results revealed a positive impact on their reading comprehension levels. While some students remained in the frustration level category, there was an increase in the overall percentage. Additionally, two learners achieved independent reading status, and 34 were classified as instructional readers.

A study by Repaso underscored the effectiveness of the PHIL-IRI and homogenous class grouping, as it resulted in an increased number of learners categorized under the instructional level. Homogeneous classes motivated the students to start their reading journey and provided them with fundamental guidance [13]. The two students categorized as independent readers showed an increased fondness for reading during their free time, active participation in discussions, and heightened enthusiasm following their placement in homogenous groups. This shift signifies a boost in their confidence levels, subsequently fueling their eagerness to learn more. The instructional approach incorporated realia, colored visuals, games, and songs to enhance engagement.

The post-test results affirm that the project was an effective intervention in bridging the learning gaps created by the pandemic, particularly in terms of reading proficiency. Non-readers typically struggle to recognize words efficiently, exhibit weak word recognition skills, and lack fluency. According to Combalicer, non-readers often read without proper expression, intonation, pitch, and phrasing. Furthermore, non-readers may struggle to recognize letters or words, including their names, classroom labels, signs, and other printed materials [14]. Repaso also emphasized the importance of teachers understanding the critical components of reading instruction. Students with reading disabilities required intensive direct instruction, encompassing strategies for reading comprehension, phonological awareness, phonemic awareness, phonics, vocabulary development, sentence and text structure awareness, text organization, and reading fluency [13].

5.3. Challenges encountered by teachers

Teachers encountered various challenges when guiding learners in the initial stages of reading, encompassing issues related to time, student focus/interest, and parental support (**Table 4**).

Table 4. Challenges of teachers in line with reading

Challenges of teachers	Teachers' experience
Time-consuming	"The preparation doubled, for regular face-to-face class, printing of modules for Project AKAY learners so they can also answer task given to regular students…"
Lack of learners' focus	"It is hard to teach them letters or the basics at their age because of their attention…"
Lack of remediation at home	"It is difficult to do it alone when parents/guardians are not cooperative in terms of their children's progress…"

Table 4 illustrates the challenges faced by teachers. The teachers responsible for Project AKAY were subject instructors who dedicated substantial time to preparing materials for the program, which required them to start from the very basics. As a result, these beginning readers needed to establish connections between written words and their known spoken vocabulary, understand the composition of words from letters, and grasp the concept that each letter represents distinct sounds within words. Research by McCoach suggested that children progress through developmental stages in their reading skills, with their focus shifting as they age. Consequently, letter recognition may not necessarily align with the interests of older students [15].

Another strategy involves collaborating with parents to identify issues and formulate classroom

intervention strategies. In many cases, these interventions prove effective, negating the need for additional assistance. However, this approach may pose a challenge if parental support is lacking [4]. **Table 5** outlines the strategies employed by teachers when confronting challenges.

Table 5. Strategies of teachers for those challenges

Challenges of teachers	Teachers' strategies
Time-consuming	"Division of labor is the most effective way since there are 8 dedicated teachers…"
Lack of learners' focus	"Different motivation was used and also the integration of technology helps…"
Lack of remediation at home	"Continuous communication with the student's parents/guardians…"

Teachers utilized a variety of strategies, including the division of labor, which involves task specialization within a production process – an essential concept in boosting productivity. The study results also highlight the importance of devising alternative plans for various situations to address teaching-related challenges. One respondent emphasized the need to remain prepared and flexible, always having a contingency plan or intervention in place to tackle challenges. This proactive approach included instances where teachers invested personal resources in purchasing materials and spending extra time at school. Teachers are renowned for their creativity and adaptability, consistently devising innovative approaches to capture students' attention, particularly through the use of various strategies, including games. These strategies are effective in engaging students and maintaining their interest. The challenges faced by teachers were ultimately offset by the positive progress observed in their students.

6. Conclusions and recommendations

Based on the findings of the study, the following conclusions have been drawn:
(1) The COVID-19 pandemic has had a significant impact on education and has resulted in a lack of confidence among students.
(2) Teachers employed a variety of strategies and methodologies in implementing the project intervention.
(3) The challenges faced by the respondents during the implementation of the project intervention were effectively addressed, thanks to their passion and determination.
(4) The Project AKAY approach proved to be an effective reading intervention in bridging the educational gaps caused by the pandemic.
(5) The formation of homogenous groups created a conducive learning environment.

Based on these conclusions, the following recommendations are suggested for consideration:
(1) The Department of Education should continue to study the feasibility of implementing homogenous classes in larger schools.
(2) Similar studies should be conducted to explore students' perceptions of being in homogenous classes.
(3) Project AKAY should be encouraged for adoption in all schools, especially those with a high number of non-reader students.
(4) Schools should provide support to teachers in developing beginner-level reading materials to facilitate the implementation of the project.
(5) Schools should involve key stakeholders in strategic planning for the integration of 21st-century skills into the school curriculum.
(6) Teachers should be empowered to take the lead and embrace the project as part of their teaching

practices.

(7) Schools should prepare to embrace new ideas, shift mindsets, and adopt a paradigm that promotes various interventions to address educational gaps.

Disclosure statement

The author declares no conflict of interest.

References

[1] Meink S, Fraillon J, Striethot R. 2022. The Impact of the COVID-19 Pandemic on Education: International Evidence from the Responses to Educational Disruption Survey (REDS). 2022, United Nations Educational, Scientific and Cultural Organization (UNESCO), Paris.

[2] Eyorcadas J. Reading Challenges and Strategies of Non-Readers. 2010, Davao Del Norte State College.

[3] San Juan R. Philippines Lowest in Reading Comprehension among 79 Countries, Philippine Star, 2010. Viewed 15 January 2023. https://www.philstar.com/headlines/2019/12/03/1974002/ philippines-lowest-reading-comprehension-among-79-countries

[4] Tomas MJL, Villaros ET, Galman SMA, 2021, The Perceived Challenges in Reading of Learners: Basis for School Reading Programs. Open Journal of Social Sciences, 9(5): 107–122. https://doi.org/10.4236/jss.2021.95009

[5] Akyol H, Çakiroğlu A, Kuruyer HG, 2014, A Study on the Development of Reading Skills of the Students Having Difficulty in Reading: Enrichment Reading Program. International Electronic Journal of Elementary Education, 6(2): 199–212.

[6] Aquino MG, De Vera PV, 2014, Development of Learning Material for Grade 7 Struggling Readers. TESOL International Journal, 13(1): 23–40.

[7] Bayot A, Galutan G, 2019, Project REAL: A Reading Intervention in Developing the Foundational Reading Skills of Struggling Readers of the Grade Two Pupils of Southville Elementary School. Ascendens Asia Journal of Multidisciplinary Research Abstracts, 3(2H). https://ojs.aaresearchindex.com/index.php/AAJMRA/article/view/10451

[8] Factors Affecting Reading Ability in School Age Children, Strategic Marketing & Research, Inc., 2013. Viewed 15 January 2023. https://silo.tips/download/factors-affecting-reading-ability-in-school-age-children

[9] Gillaco MM, 2014, Level of Word Recognition and Reading Comprehension: A Basis for a Reading Program. Asia Pacific Journal of Education, Arts and Sciences, 1(15): 69–75.

[10] McNamara D. Reading Comprehension Strategies: Theories, Interventions, and Technologies. 2007, Psychology Press, New York.

[11] Rolle JB, Ogot LA. OpeRA and CoREADor: Intervention Programs to Improve Reading Comprehension Skills in English of Selected Grade 5 Pupils of Tagaytay City Central School. In: 4th Cavite Research Conference Book of Abstracts 2019, 2019, The Department of Education, Philippines, 87–88.

[12] Creswell JW. (2014). Research Design: Qualitative, Quantitative, and Mixed Methods Approaches. 4th ed. 2014, SAGE Publications, California.

[13] Repaso S, 2018, Improving the English Oral Reading Level of Grade IV -Ilang -Ilang Through AHHORA (A Half-Hour Oral Reading Activity). The Quezonian Educators, 5(2).

[14] Combalicer LF Jr. The 2017 Kalilayan Regional Research Conference for Education (KRRReCE), September 21–23, 2017: Remedial Reading Teaching Strategies Relative to Reading Comprehension Skills and Academic Performance among Grade 7 Students in Binulasan Integrated School. 2017, The Department of Education, Philippines.

[15] LaRue A, Kelly BB. Transforming the Workforce for Children Birth Through Age 8: A Unifying Foundation. 2015, National Academies Press, Washington.