

Project TRACTS (Teacher's Reading Aid and Comprehensive Tool for Students): An Assessment

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Abstract: This study determined the status of implementation of the Teacher's Reading Aid & Comprehensive Tool for Students and its effect on the teaching efficiency in Grade 4 at Balatas Elementary School, Department of Education Naga City Division during School Year 2023-2024. To realize this, the following concerns were looked into: the status of the implementation of the Teacher's Reading Kit and enhancement interventions that can be crafted based on the salient findings of the study to address the reading difficulties of Grade Four pupils effectively. The respondents of this study were identified using the quantitative data that determines the number of Grade 4 pupils in two sections: Joy and Perseverance. A total of 79 Grade 4 pupils served as the respondents of the study. The Philippine Informal Reading Inventory (Phil-IRI) Assessment Tool was utilized as one of the evaluation tools. Simple percentage calculations and the weighted mean were used to treat the gathered data. It was concluded that teachers proposed to create and implement tailored learning plans, specialized, and looked closely at the variables that are unique to each student as well as the instructional strategies, interventions, and other elements that affect reading proficiency levels.

Keywords: Reading Aid, Comprehensive Tool, Teaching, Students, Intervention.

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I. INTRODUCTION

We live in a world where literacy is regarded with utmost importance and becoming more globalized. Knowing how to read and use the English language fluently can always give an individual the greatest advantage. In the long run, it will allow people to be more active, more prepared to explore the world and become confident global citizens. This study anchors to one of the 17 Sustainable Development Goals or SDG of the United Nations which is under *SDG Goal 4 or Quality Education which aims to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all*.

In this context, we look at the poor, struggling results in reading of the fourth-grade pupils of Balatas Elementary School and decide to think of ways to improve their chances of success in the future. One way to do it is to develop or design a sustainable reading tool and integrate it with their existing reading practices in school. Thus, we are also aiding the teachers with supplementary reading materials, which can allow them to innovate their teaching methods and approaches to the learning processes of their students.

Given the unprecedented impact of the COVID-19 pandemic on education, a comprehensive evaluation of learner reading proficiency was carried out utilizing multiple assessment tools. Various assessment tools measure the

reading and comprehension skills of MMES pupils for SY 2023-2024 such as the Albay Numeracy Assessment Tool (ALNAT), Comprehensive Rapid Literacy Assessment (CRLA), Philippine Informal Reading Inventory (Phil-IRI) Assessment Tool and Rapid Literacy Assessment (RLA) for Intermediate level. The data on these assessment tools reveal the pupil's reading abilities which led to the formation of the project TRACTS.

The School Improvement Plan (SIP) of Balatas Elementary School in DepEd Naga City Division shows that Numeracy and Literacy are some of the priority areas that need to be improved significantly for Grade IV pupils. Thus, project TRACTS provides opportunities to improve their reading and comprehension skills using sustainable learning resources or the enhanced SRA kit. Crafting a teacher's reading aid and a comprehensive tool for students will offer significant benefits to teachers, students, and schools.

II. THEORETICAL FRAMEWORK

The group believes that the following principles are related to this research: Multiple Intelligence. This theory has emerged from recent cognitive research and documents the extent to which students possess different kinds of minds and therefore learn, remember, perform, and understand in different ways," according to Gardner [1]. According to this theory, "we are all able to know the world through language,

logical-mathematical analysis, spatial representation, musical thinking, and the use of the body to solve problems or to make things, an understanding of other individuals, and an understanding of ourselves. Where individuals differ is in the strength of this intelligence - the so-called profile of intelligence -and in the ways in which such intelligence is invoked and combined to carry out different tasks, solve diverse problems, and progress in various domains. This theory is important in reading readiness and to enhance their reading abilities, because every child has their own unique way of learning and studying.

- Scaffolding (Lev Vygotsky Theory). This theory by the Psychologist Lev Vygotsky developed a theory of cognitive development that focused on the role of culture in the development of higher mental functions. Several concepts arose from theories that are important to classroom learning. This process is completed by a more competent individual supporting the learning of a less competent individual. To develop a reading readiness of a child it needs to be supported by his or her parents and teachers or her daily activities. This theory focuses on scaffolding and ZPD or zone of proximal development. This includes the ways on how to help the child in his studies and reading with the help of the person around him or her.
- Theory of Educational Productivity. According to the principle of Walberg's theory of educational productivity targeted student learning characteristics such as social, behavioral, motivational, affective, cognitive, and meta-cognitive as the set of variables with the most potential for modification that could, in turn, significantly and positively affect student outcomes DiPerna et al. [2].
- Martin Ford's Motivational Systems Theory (MST). This study was based on Martin Ford's Motivational Systems Theory (MST). This framework focuses on the individual as the unit of analysis but embeds the individual in the biological, social, and environmental contexts that are crucial to development. Ford proposed a simple mathematical formula that attempts to represent all these factors in one model. The formula for effective person-in-context functioning is:

- Achievement = (Motivation x Skill) x Responsive Environment.

III. STATEMENT OF THE PROBLEM

➤ *Specifically, this Study Seeks to Answer the Following Questions:*

- What are the results of the Philippine Informal Reading Inventory (Phil-IRI) Assessment Tool that determined the

proficiency level of the Grade 4 Balatas Elementary School pupils in the school year 2023-2024?

- What is the design of the sustainable instructional and learning material based on the needs of the pupils?

IV. RESEARCH METHODOLOGY

A. Research Design

This study used a descriptive quantitative research design to gain a deeper understanding of the proficiency level of the Grade 4 students of Balatas Elementary School in the school year 2023-2024 and to be able to propose a intervention to cater the needs of the pupils. This research design as chosen to be able to describe objectively the results of the assessment through the process of systematically collecting quantitative data such as the result of PHIL-IRI to Grade 4 students. According to Sirisilla [4], this research method, descriptive quantitative research design is the most valuable design used by scientists and researchers to gather information about a specific group of respondents or a phenomenon. As stated by Ethridge [5] this approach provides a detailed and concise description of the traits and behaviors of a certain population or subject being studied. Its ultimate goal is providing clear path in understanding current issues and problems through the process of data collection which enables them to give description to the phenomenon being studied more completely.

In this study, quantitative descriptive research design helped the researchers to understand the demographics of the students as well as pave the way for them to help categorize the proficiency level of the students based on the assessment results. For example, among the 79 students of BES, which category of student needs reading aids can be generalized through their proficiency level. It quantifies how many students needed reading interventions in such section and from which reading level to bridge the gap between struggling readers and their peers. In this context, the potential for a profound understanding and thorough descriptions of proficiency level was greatly improved.

B. Respondents of the Study

The respondents for this study were grade 4 learners enrolled at Balatas Elementary School. A total of 79 students participated, divided into two sections: Grade 4 Perseverance with 39 students and Grade 4 Joy with 40 students. All respondents undertook the Philippine Informal Reading Inventory (Phil-IRI), the assessment tool used to gauge their reading levels. This tool provided a comprehensive measure of each student's reading ability, enabling us to identify those in need of intervention. By focusing on this specific group of grade 4 students, we ensured that our research was targeted and relevant, addressing the critical reading needs of these young learners.

Table 1: Total Number of Enrollment and the Number of Pupils Tested

| Grade Level/Section | Total No. of Enrollment | Total No. of Pupils Tested | Percentage |
|---------------------|-------------------------|----------------------------|------------|
| IV-Joy | 40 | 40 | 50.63% |
| IV-Perseverance | 39 | 39 | 49.37% |
| Total | 79 | 79 | 100% |

Table 1 shows the enrollment data for Grade 4 learners, revealing a total of 79 enrolled students. Each section had a total enrollment of 39 to 40 pupils. 79 enrollees underwent the specified assessment, providing focused samples for detailed analysis. Furthermore, Grade 4 Joy tested with 40 or 50.63% weighted mean, whereas Grade 4 Perseverance was examined with a 39 or 49.37% weighted mean. Gathering feedback from the pupils and parents is anticipated to help understand their reasons for not participating in the literacy assessment.

The evaluations used to determine the pupils' reading aptitude were classified into two types. Through marking, teachers documented each learner's miscues. Reading miscues need to be thoroughly acknowledged by the teacher. This occurs when there is a discrepancy between what is written on the page and what the pupils utter during the oral reading. Furthermore, during the oral reading, the teacher examined the learner's behavior, which could aid in analyzing their reading ability.

Based on the scoring and interpretation stated under Regional Memorandum No. 363 s. 2023, students who accurately and automatically read at least 80% of the total number of high-frequency words in the paragraph are considered Established. Students who accurately and automatically read 50% of the high-frequency words in the phrases are considered Emerging. On the other hand, students who accurately and automatically read 30% of the individual words are regarded as coping.

C. Research Instruments

The primary instrument used for data collection in this study was the Philippine Informal Reading Inventory (Phil-IRI). According to DepEd Order No. 14, series of 2018, or also known as the "Implementing Guidelines on the Administration of Philippine Informal Reading Inventory (PHIL-IRI)", the ultimate goal of this reading assessment is to improve the reading proficiency of students.

The PHIL-IRI used in this study is the revised assessment tool design to determine the reading proficiency of students in elementary grades. In this study, Phil-IRI was administered to Grade 4 students at Balatas Elementary School for school year 2023-2024, the assessors used the Phil-IRI Group Screening Test (GST). This GST is a 20-item group-administered reading comprehension test intended using the English Language. This test also identifies students who need further testing. Additionally, the researchers used the PHIL-IRI Graded Passages to assess the individual performance of students in oral reading, silent reading, as well as in listening comprehension.

Moreover, with regards to the oral reading test, this test identifies miscues, the reading speed, and the assessed comprehension of the students. For non-readers, their understanding level for passages was assessed using the Listening Comprehension Test.

Phil-IRI is administered by trained reading assessment coordinators or usually by their reading advisers under standardized conditions. Hence, Phil-IRI provides reliable and valid measured of reading proficiency. The scoring of this assessment, categorized students into three levels, namely, Frustrated, Instructional, and Independent. This allows the researchers to identify which group of students should be prioritize, and it shall be students in the Frustrated level.

According to Inding [7], the process of conducting this assessment helps to determine the strength and weaknesses of students in reading, may it be in the Filipino Language or English Language. Hence, this also assists to analyze the difficulty in reading and identifying the root cause of difficulty in reading comprehension JolejoleCaube et al. [8]. Finally, in this assessment tool, intervention program can be crafted personalized to cater the unique needs or learners who have difficulty and struggle from reading and comprehension. Saraspe and Abocejo, 2020 [9].

D. Statistical Treatment

The data collected in this study were analyzed using two primary statistical tools: simple percentage calculation and the weighted mean.

- **Simple Percentage Calculation.** This was employed to determine the hierarchy of data, serving as the basis for ranking the reading levels of the students. This method allowed us to clearly identify the distribution and frequency of various reading abilities within the sample.
- **Weighted Mean.** This was used to ascertain the overall reading ability of the Grade 4 learners. By applying these statistical tools, we were able to gain a comprehensive understanding of the student's reading performance, facilitating targeted interventions for those in need.

V. RESULTS AND DISCUSSION

➤ Reading Ability Level of Grade IV Pupils

The results shown in Table 2 revealed distinct levels of reading ability among the two sections, namely Grade 4-PERSEVERANCE and Grade 4-JOY categorized into three main groups: independent, instructional, and frustration.

Table 2: Summary of Philippine Informal Reading Inventory (Phil-Iri) in Word Reading

| Reading Ability Level | 4-Perseverance | | | 4-Joy | | | Overall Result | | |
|-----------------------|----------------|--------|-----------------|---------|--------|-----------------|----------------|--------|-----------------|
| | Pretest | % | Rank | Pretest | % | Rank | Pretest | % | Rank |
| Independent | 7 | 8.86% | 2 nd | 3 | 3.79% | 3 rd | 10 | 12.65% | 3 rd |
| Instructional | 2 | 2.53% | 3 rd | 32 | 40.50% | 1 st | 34 | 43.03% | 2 nd |
| Frustration | 30 | 37.97% | 1 st | 5 | 6.32% | 2 nd | 35 | 44.30% | 1 st |
| TOTAL | 39 | 49.40% | | 40 | 50.61% | | 79 | 100% | |

Table 2 shows the results of the Philippine Informal Reading Inventory (Phil-IRI) for Word Reading among Grade IV students at Balatas Elementary School for the academic year of 2023-2024. There are three levels of word reading proficiencies. These are the Independent, Instructional, and Frustration levels. The results show that out of the total 79 participants, 10 students (12.65%) achieved the Independent level in word reading, demonstrating a high degree of proficiency. On the other hand, 34 students (43.03%) were at the Instructional level, indicating that they are at a standard pace in reading, with the teacher's guidance and prompts. Lastly, 44.30% of the students fell into the Frustration level. These 33 students are showing significant struggles with word reading.

The data reveals a concerning trend where nearly half of the students are at a Frustration level. This shows that a significant percentage of the grade level needs help with accurate and fluent word reading, a basic ability required for successful learning and understanding in all subject areas. Although a few students succeed at the Independent level, the majority require significant assistance to advance to higher competence levels, as evidenced by the comparatively smaller number of students at this level.

The 2023-2024 results of the Philippine Informal Reading Inventory (Phil-IRI) at Balatas Elementary School are consistent with previous research on the value of self-regulated learning (SRL) and individualized learning. Jin et al., [10] claim that SRL encourages learning by letting students establish their own objectives, control their own speed, and interact with the content in a way that best fits their own learning preferences. This strategy may be especially helpful in addressing the various proficiency levels found in the Phil-IRI findings.

By using self-paced and individualized learning methodologies, teachers may better meet the individual requirements of their students and help them become more proficient readers. Additionally, Al-Qadi [11] highlight the significance of reading in developing comprehension and critical thinking skills, suggesting that educators need to implement strategies that promote these abilities. Integrating SRL techniques can foster intrinsic motivation and allow students to witness their progress, which is crucial for overcoming frustration levels and achieving higher proficiency.

To improve word reading proficiency, especially among Grade 4 students who are at the Frustration reading ability level the researchers came up with five recommendations. First, create a Teacher's Reading Aid & Comprehensive Tool for Students before implementing targeted reading interventions for students at the Frustration level.

This resource bundle includes a wide range of tools and techniques designed to improve word reading ability. A fundamental element is phonemic awareness exercises, which develop abilities in mixing, segmenting, and manipulating sounds through interesting, practical tasks enhanced by visual aids. Resources such as guided practice

sheets, word banks, and phonics flashcards will also be included to help children improve their decoding skills, reading accuracy, and fluency.

Second, organize students into smaller groups based on their proficiency levels to provide more personalized instruction and practice opportunities. Third, offer professional development for teachers on effective literacy instruction strategies, emphasizing techniques that support struggling readers and incorporate self-regulated learning principles.

Fourth, encourage parents to participate in their children's reading practice at home by providing resources and guidance on how to support literacy development. Lastly, conduct regular assessments to monitor student progress and adjust instructional strategies as needed to ensure continuous improvement in reading skills.

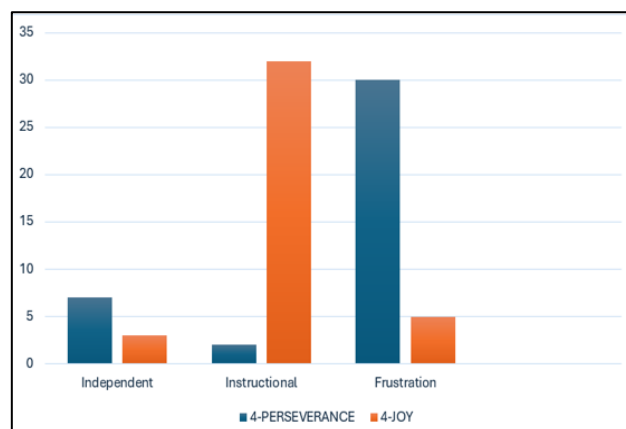


Fig 1: A Comparative Analysis of PHIL-IRI Result among the Grade 4 Classes

Significant differences in reading competence levels are found when PHIL-IRI results from Grade 4 classes are compared. The weighted mean in the Independent Level is 8.86 and 3.79%, respectively, ranking second among factors in Grade 4 Perseverance but lowest in Grade 4 Joy. All things considered, the weighted mean of students in this grade level is below the 75% limit, which suggests that they are not yet at the Independent Level of oral reading. In contrast, the majority of learners in Grade 4 Joy perform within the Instructional Level, accounting for 40.50%, while Grade 4 Perseverance records the lowest rank at 2.53%. With weighted values of 37.97% and 6.32% in Grade 4 Perseverance and Grade 4 Joy, respectively, the data, on the other hand, indicates that there are serious problems in the Frustration Level, where most students struggle with reading.

The graph shows that reading proficiency levels vary throughout factors and classes, with a significant proportion of learners functioning at the Frustration Level and the Independent Level falling short of expectations. Grade 4 Joy and Grade 4 Perseverance perform at dramatically different instructional levels, which may indicate that the two groups use different teaching methodologies or interventions. These differences highlight the necessity of focused interventions

and specific methods to meet the various demands of students with different skill levels.

There is an urgent need to close the reading proficiency gap among students, especially those who are having a frustration level of difficulty, according to the data. Poor performance at the Independent Level indicates weaknesses in the fundamentals of reading, whereas differences in the Instructional Level indicate possible differences in methods of instruction or forms of assistance. For learners to receive the help they need to improve their reading skills and overall academic development, appropriate interventions and customized approaches must be developed.

The relevance of motivation and self-regulated learning (SRL) in raising student performance and engagement is emphasized by studies by Jin et al. [12]. Teachers can establish an individualized learning environment that meets the needs of each student and encourages intrinsic motivation by coordinating their activities with the concepts of SRL.

Using this method in conjunction with the evidence-based reading interventions provides a comprehensive plan for raising reading competency in Grade 4 pupils. Along with addressing the differences in the PHIL-IRI outcomes across proficiency levels, integrating self-paced learning, tailored training, and treatments that encourage critical thinking also helps students become more motivated and successful academically overall.

It is recommended that teachers look closely at the variables that are unique to each student as well as the instructional strategies, interventions, and other elements that affect reading proficiency levels. This study can help teachers create and implement tailored learning plans, focused interventions, and specialized help to help students improve their reading skills and succeed academically. In order to guarantee continued growth in reading proficiency throughout all Grade 4 classrooms, it is also important to monitor and evaluate interventions on an ongoing basis in order to determine their efficacy and make any required modifications.

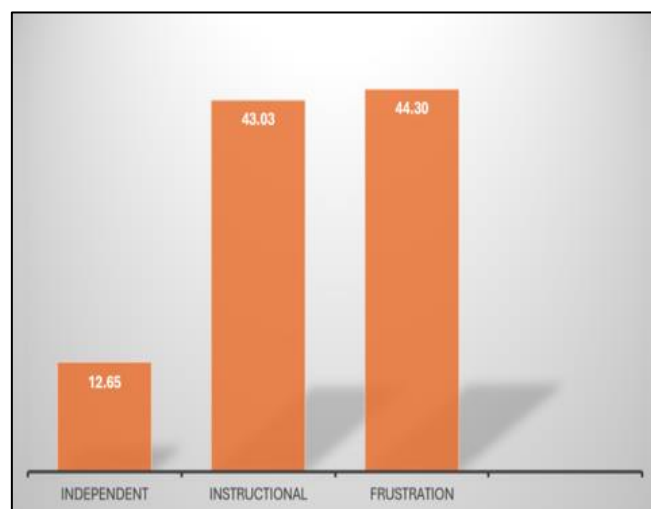


Fig 2: Overall Phil-Iri Pretest Result among Grade 4 Pupils

Interpreting the overall result shown in Figure 2, we observed that 12.65% of the Grade 4 learners were categorized as Independent, while 43.03% were at the Instructional level, and 44.30% at the Frustration level. These results imply that teachers need to assess the possible factors that contribute to the efficacy of those at the Independent level in implementing excellent practices and identify the emerging individual's needs in order to give specialized support and ensure their ongoing achievement. In addition, the learners at the Instructional Level need to alleviate their concerns, and teachers need to design and implement interventions that address pupil's identified reading challenges. Lastly, create adapted reading strategies, supplementary materials, and support systems for the learners in the Frustration Level to mitigate reading proficiency gaps.

This data proposes a framework for designing interventions and instructional modifications, developing a comprehensive understanding of the learners' individual reading skills.

VI. CONCLUSION

- A concerning challenge was revealed a trend where nearly half of the students are at a Frustration level. This shows that a significant percentage of the grade level needs help with accurate and fluent word reading, a basic ability required for successful learning and understanding in all subject areas.
- A significant proportion of learners with poor performance function at the Frustration Level and the Independent Level.
- Some differences highlight the necessity of focused interventions and specific methods to meet the various demands of students with different skill levels.
- There is an urgent need to close the reading proficiency gap among students, especially those who are having a frustration level of difficulty, according to the data.
- Learners need to receive the help that they need to improve their reading skills and overall academic development, appropriate interventions and customized approaches must be developed.

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