

ADDRESSING THE LITERACY AND NUMERACY PARADOX: INITIATIVES, CHALLENGES AND FUTURE DIRECTIONS

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ABSTRACT

This study investigates the implementation, effectiveness, and challenges of literacy and numeracy initiatives in the Veruela District, Agusan del Sur, within the context of the Philippine Department of Education's National Learning Recovery Program (DepEd Order No. 013, s. 2023). With the goal of addressing learning loss and strengthening foundational skills, the research employed a quantitative design, gathering quantitative data through structured questionnaires administered to 181 teachers and administrators and 69 elementary learners from 28 public schools. Findings revealed that the literacy and numeracy programs are largely implemented across key domains, including availability of materials, teacher preparedness, learner participation, and administrative support. However, results also highlight persistent issues in resource accessibility, inconsistencies in training opportunities, and perceptual gaps between stakeholders. Correlational analysis showed that while most demographic variables among educators had no significant impact on implementation, learners' sex and age were significantly related to their engagement and perception of teacher effectiveness. Furthermore, differences in perception were found between educators and learners regarding access to learning materials and preparedness of teaching staff. These discrepancies suggest the need for strengthened communication, targeted professional development, and more equitable distribution of instructional resources. The study underscores the importance of evidence-based, inclusive strategies that recognize demographic diversity and support stakeholder collaboration. Recommendations include enhancing teacher capacity, promoting gender-sensitive and age-appropriate instruction, and fostering stronger school-community partnerships. Ultimately, the research contributes valuable insights to the ongoing discourse on literacy and numeracy development, offering a data-informed foundation for more responsive and equitable educational interventions in the Veruela District and similar rural contexts.

Keyword: Literacy, Numeracy, Program Implementation, Learning Recovery, Educational Equity

1. INTRODUCTION

Literacy and numeracy underpin a child's academic success and their lifelong learning. These areas form a foundation that can help learners thrive in an ever more complex world. However, challenges persist toward ensuring that each child achieves this proficiency. Through a thrust to overcome gaps in literacy and numeracy, the Philippines has seen to the involvement of various programs that align with the intent of the Department of Education's Quality Education, as advocated by their creation of DepEd Order No. 013, s. 2023 or the National Learning Recovery Program (NLRP) to heal learning losses while rebuilding foundational skills in literacy and numeracy. This initiative supports the MATATAG Agenda on making education accessible, relevant, and responsive to the needs of Filipino learners. In line with such efforts, this study aims to look at the implementation, effectiveness, challenges, and future directions of literacy and numeracy programs in the Veruela District as part of insight on how such programs contribute to learner development and academic success.

Research indicates that literacy and numeracy programs should be structured and evidence-based. According to Petscher et al., reading programs based on the science of reading greatly improve learners' comprehension and fluency [1]. Geary also stated that numeracy interventions designed well enhance students' arithmetic skills and problem-solving abilities [2]. As can be seen despite these benefits the Philippines ranked towards the bottom end in

the PISA results, 2022 for literacy and numeracy results, and an urgent need there is for some sustained and focused interventions.

The results from the Philippine Informal Reading Inventory for the School Year 2024–2025 indicate that over 53.53% of students in Grades 4-6 within Veruela District, Veruela, Agusan del Sur, are experiencing difficulties as readers, while a mere 9.16% have achieved independent reading proficiency. Furthermore, there are significant concerns regarding numeracy skills. At Bacay Elementary School, the average Mean Percentage Score (MPS) in Mathematics for Grades 1-6, based on the last two quarterly assessments, was 76.00%, which is below the 80% proficiency benchmark established for grade-level expectations. These findings point to substantial challenges in problem-solving, computation, and logical reasoning abilities among students. Such alarming statistics underscore the necessity for a thorough evaluation of existing programs to effectively address the deficiencies in literacy and numeracy.

This study examined the level of implementation, effectiveness, challenges, and future directions of literacy and numeracy programs in the Veruela District. It uses a multi-perspective approach—analyzing the programs from the views of teachers, learners, and administrators—to identify areas of strength, hidden challenges, and areas for improvement. This research will critically examine the instructional strategies and resource allocation so that evidence-based recommendations can be provided to promote proficiency and lead to more effective interventions. The end result, therefore, is the support of holistic academic development, which equips all learners with the fundamental skills for lifelong success.

2. METHODOLOGY

2.1 Research Design

This study employed a quantitative descriptive-correlational research design to examine the extent of implementation of literacy and numeracy initiatives in the Veruela District for School Year 2024–2025. The descriptive aspect aimed to outline the existing literacy and numeracy programs and identify implementation trends and challenges. The correlational component sought to determine the relationships between respondents' demographic profiles and their perceptions of program effectiveness.

2.2 Research Participants

The respondents of this study included all 28 school administrators from the Veruela District who, therefore, are expected to give information regarding the implementation of literacy and numeracy programs. The researchers shall randomly select a sample of 181 elementary teachers from 28 public elementary schools in the district to participate in the study.

To ensure diversity and representation, a total of 69 pupils served as respondents, selected through cluster sampling. Schools were grouped into three clusters: central schools, monograde schools, and multigrade schools. From the clusters, random schools were selected, and the learners of those schools will form the respondents of the study. In this way, learners from various educational settings are adequately represented in the study.

2.3 Research Instruments

The research utilized two distinct survey questionnaires designed for teachers, school administrators, and learners in the Veruela District. These instruments were developed to quantitatively collect data on their understanding of and experiences with the literacy and numeracy program in the district.

The first questionnaire focused on the perceptions of elementary school teachers and administrators regarding the implementation, effectiveness, and challenges of the program. Responses were rated using a 5-point Likert scale, providing measurable data aligned with the study's objectives. On the other hand, the second questionnaire targeted learners, assessing their participation in the program, the availability of resources, and their perceived improvement in literacy and numeracy skills. Learners were also asked to rate their level of satisfaction with the program.

To ensure reliability, Cronbach's alpha was computed for each variable, resulting in values ranging from 0.701 to 0.725 for the extent of implementation domains—indicating acceptable internal consistency.

2.4 Data Gathering Procedure and Analysis

The data-gathering procedure followed a structured approach. The researcher first obtained approval from relevant authorities, including the Dean of the Graduate School Office, the Schools Division Superintendent, and school principals. Once permission was granted, the researcher personally administered the survey to ensure respondents understood the instructions.

Quantitative data were collected using a validated questionnaire, and the responses were tallied, tabulated, and analyzed using statistical tools such as frequency count, percentage, mean, standard deviation, and Pearson correlation. Ethical standards, including confidentiality and voluntary participation, were strictly adhered to throughout the process. This structured approach ensured the reliability and validity of the data collected, providing a solid foundation for analyzing the effectiveness of the digitalized quality management system.

2.5 Ethical Consideration

The study followed strict ethical guidelines to protect participants' rights and ensure data confidentiality. Informed consent was obtained both in writing and verbally, and participants were assured of their right to withdraw at any time. Confidentiality and anonymity were maintained by securing personal data and ensuring that identifying information was not linked to any responses. The principle of beneficence was upheld by ensuring that the study contributed to educational improvements while minimizing risks to participants. Justice and fair treatment were observed by ensuring equitable selection criteria and avoiding the exploitation of vulnerable groups. The researcher-maintained transparency and honesty by clearly communicating the study's objectives and faithfully reporting findings. Additionally, cultural sensitivity was consistently demonstrated throughout the research process, ensuring respect for participants' diverse backgrounds and values.

3. RESULTS AND DISCUSSION

3.1 Demographic Profile of the Respondents

The demographic profile of teachers and administrators in the Veruela District, as presented in Table 1, reveals a predominantly young to mid-career workforce. A significant proportion of respondents are aged between 31 to 40 years, followed closely by those in the 21 to 30 and 41 to 50 age brackets. This age distribution suggests a dynamic and potentially adaptable teaching force, capable of integrating new pedagogical approaches and technologies into their practice. Such adaptability is crucial in the ever-evolving educational landscape, especially in the wake of challenges posed by the COVID-19 pandemic (OECD) [3].

Gender-wise, the teaching and administrative staff is predominantly female, aligning with global trends in the education sector, particularly at the elementary level (UNESCO) [4]. While female dominance in the teaching profession is common, it's essential to ensure that gender dynamics do not inadvertently influence pedagogical approaches or student engagement strategies.

In terms of educational attainment, a substantial majority of the educators hold graduate-level qualifications, with many possessing a Master's Degree or having completed significant postgraduate coursework. Higher educational qualifications among teachers have been linked to improved student outcomes, as they often correlate with enhanced content knowledge and pedagogical skills (Darling-Hammond et al.) [5]. Furthermore, the varied years of service among the staff, ranging from newcomers to seasoned educators, provide a rich tapestry of experience and fresh perspectives, fostering a collaborative environment conducive to mentorship and continuous professional development.

Turning to the learners, the majority fall within the 12 to 14-year-old age group, corresponding to upper elementary levels. This age range is critical for foundational learning in literacy and numeracy, setting the stage for future academic success. The gender distribution among students mirrors that of the teaching staff, with a higher proportion of females. While this may reflect broader societal trends, it's imperative to ensure that educational strategies are inclusive and cater to the needs of all genders.

Socioeconomic factors play a significant role in the learners' educational experiences. A considerable number of students come from families engaged in farming, indicating a predominantly agrarian community. Research has consistently shown that students from lower socioeconomic backgrounds often face challenges that can impede academic achievement, including limited access to educational resources and support systems (Eriksson et al.) [6]. Additionally, household sizes tend to be moderate to large, which can impact the availability of quiet study spaces and individualized attention at home.

Housing conditions further reflect the community's socioeconomic status. While a significant portion of students reside in concrete houses, a notable number live in wooden structures or makeshift shelters. Stable and secure housing is a critical determinant of academic success, as it influences students' ability to focus and engage in learning activities (Cunningham & MacDonald) [7].

On a positive note, the vast majority of learners have access to the internet, a vital resource for modern education. However, it's essential to recognize that mere access does not equate to effective utilization. The digital divide encompasses not just connectivity but also digital literacy and the ability to leverage technology for learning

(OECD). Ensuring that students are equipped with the necessary skills to navigate digital platforms is crucial, especially in the context of blended or remote learning environments.

In summary, the demographic data underscores the strengths and challenges within the Veruela District's educational landscape. While the teaching workforce is well-qualified and diverse in experience, and most students have internet access, socioeconomic disparities and housing conditions present hurdles that need to be addressed. Tailored interventions, community engagement, and resource allocation are essential to bridge these gaps and promote equitable educational outcomes for all learners.

Table -1: Demographic Profile of the Respondents

Teachers and Administrators			
Profile	Age Bracket	Frequency	Percentage
Age	21-30 years old	60	29%
	31-40 years old	66	32%
	41-50 years old	53	25%
	51 years old and above	30	14%
Sex	Category	Frequency	Percentage
	Male	62	30%
	Female	147	70%
Educational Background	Level	Frequency	Percentage
	Bachelor's Degree	62	30%
	Master's Degree (CAR/with units)	147	70%
Years in Service	No. of Years	Frequency	Percentage
	0-5 Years	44	21%
	6-10 Years	39	19%
	11-15 Years	46	22%
	16-20 Years	30	14%
	21 Years and Above	50	24%
Learners			
Profile	Age Bracket	Frequency	Percentage
Age	9-11 years old	26	38%
	12-14 years old	43	62%
Sex	Category	Frequency	Percentage
	Male	24	35%
	Female	44	64%
	Other	1	1%
Source of Income	Source	Frequency	Percentage
	Farming	44	64%
	Small Business	17	25%
	Government Job	14	20%
	Private Job	5	7%
	Remittances	6	9%
	Others	2	3%
Family Members	No. of Family Members	Frequency	Percentage
	1-3 People	4	21%
	4-5 People	37	19%
	6-7 People	19	22%
	8 People- Above	9	14%
House Type	Category	Frequency	Percentage

	Concrete	30	43%
	Wooden	22	32%
	Makeshift	1	1%
	Others	16	23%
Internet Connectivity	Option	Frequency	Percentage
	Yes	64	93%
	No	5	7%
Support to Education	Option	Frequency	Percentage
	Always	59	86%
	Sometimes	10	14%

3.2 Extent of Implementation of Literacy and Numeracy Initiatives

The assessment of the extent of implementation of literacy and numeracy initiatives in the Veruela District reveals a generally positive outcome across the four key dimensions—availability of materials and resources, teacher preparedness and training, learners' participation and engagement, and administrative support and monitoring. Both teachers and learners rated all dimensions as "Largely Implemented," which suggests that there is a strong alignment between the initiatives and their practical application in the classroom setting. The scores highlight that the literacy and numeracy programs are effectively reaching their intended goals, but there may still be room for improvement in some areas. The table below summarizes the mean scores from both teachers and learners.

Table -2: Extent of Implementation of Literacy and Numeracy Initiatives

Indicator	Teachers' Mean	Learners' Mean	Interpretation
Availability of Materials	3.60	3.36	Largely Implemented
Teacher Preparedness and Training	3.91	4.07	Largely Implemented
Learners' Participation & Engagement	4.04	4.12	Largely Implemented
Administrative Support & Monitoring	3.72	3.85	Largely Implemented
Overall Mean	3.82	3.85	Largely Implemented

The evaluation of literacy and numeracy initiatives in Veruela District encompassed four key dimensions: availability of materials and resources, teacher preparedness and training, learners' participation and engagement, and administrative support and monitoring. Both educators and learners rated these dimensions as "Largely Implemented," indicating a strong alignment between the initiatives and their practical application in the educational setting.

To begin with, the availability of materials and resources was assessed. Teachers assigned a mean score of 3.60, while learners provided a slightly lower mean of 3.36. This suggests that, although educators perceive resources to be generally sufficient, students may encounter occasional limitations in access. Such disparities are not uncommon; for instance, a 2025 report highlighted that over 80% of 10-year-olds in South Africa could not read for meaning, emphasizing the critical need for adequate learning materials in early education (The Guardian) [8].

Moving on to teacher preparedness and training, learners rated this aspect at 4.07, slightly higher than the teachers' self-assessment of 3.91. This indicates that students recognize and appreciate the competence and supportiveness of their educators. Recent studies have underscored the importance of addressing teacher anxieties, particularly in subjects like mathematics, to enhance instructional quality and student outcomes. For example, a 2023 AP News article discussed initiatives aimed at helping teachers overcome math anxiety, which can negatively affect students' math foundations and future performance (AP News) [9].

Furthermore, learners' participation and engagement received the highest ratings among the assessed dimensions, with teachers assigning a mean score of 4.04 and learners slightly higher at 4.12. This high level of engagement is significant, as it is closely linked to improved academic achievement. Research by Fredricks, Blumenfeld, and Paris has consistently demonstrated that student engagement is a critical factor in educational success, encompassing behavioral, emotional, and cognitive dimensions [10].

In terms of administrative support and monitoring, teachers rated this domain at 3.72, while learners provided a slightly higher mean of 3.85. This indicates a solid level of backing from school leadership. The slightly higher rating from learners may reflect their perception of visible administrative involvement in educational activities. Effective leadership is crucial for sustaining educational reforms. An opinion piece in the Beaumont Enterprise

highlighted the transformative impact of leadership development in schools, emphasizing that well-supported leaders can drive substantial school improvements [11].

Overall, the mean scores of 3.82 from teachers and 3.85 from learners suggest a consistent and strong implementation of literacy and numeracy programs across the district. The close alignment between teacher and learner perceptions indicates a shared understanding and confidence in the educational strategies employed. However, the minor discrepancies in ratings point to areas for potential improvement, such as enhancing resource accessibility and increasing the visibility of administrative support.

3.3 Significant Relationship between the Respondents' Demographic Profile and the Extent of Implementation of the Literacy and Numeracy Initiatives

The data presented in Table 3 offers valuable insights into the relationship between the demographic profiles of teachers, administrators, and learners in the Veruela District and the extent of implementation of literacy and numeracy initiatives. Understanding these relationships is crucial for tailoring educational strategies that effectively address the needs of both educators and students.

Table -3: Significant Relationship between the Respondents' Demographic Profile and the Extent of Implementation of the Literacy and Numeracy Initiatives

Teachers and Administrators					
Variables Tested		Computed r	P-value	Decision	Conclusion
Availability of Materials	Age	0.072	0.300	Failed to reject null hypothesis	Not Significant
	Sex	0.129	0.062	Failed to reject null hypothesis	Not Significant
	Educational Attain.	0.029	0.674	Failed to reject null hypothesis	Not Significant
	Years in Service	0.057	0.415	Failed to reject null hypothesis	Not Significant
Teachers' Preparedness	Age	0.005	0.942	Failed to reject null hypothesis	Not Significant
	Sex	0.090	0.195	Failed to reject null hypothesis	Not Significant
	Educational Attain.	0.028	0.692	Failed to reject null hypothesis	Not Significant
	Years in Service	0.013	0.856	Failed to reject null hypothesis	Not Significant
Learners' Engagement and Participation	Age	0.014	0.836	Failed to reject null hypothesis	Not Significant
	Sex	0.180	0.009	Reject null hypothesis	Significant
	Educational Attain.	0.106	0.127	Failed to reject null hypothesis	Not Significant
	Years in Service	0.038	0.582	Failed to reject null hypothesis	Not Significant
Administrative Monitoring and Support	Age	0.031	0.661	Failed to reject null hypothesis	Not Significant
	Sex	0.126	0.070	Reject null hypothesis	Significant
	Educational Attain.	0.010	0.880	Failed to reject null hypothesis	Not Significant
	Years in Service	0.010	0.891	Failed to reject null hypothesis	Not Significant
Learners					
Availability of Materials	Age	0.379	0.001	Reject null hypothesis	Significant
	Sex	0.137	0.261	Failed to reject null hypothesis	Not Significant
	Family Member	0.187	0.123	Failed to reject null hypothesis	Not Significant
	House Type	0.106	0.385	Failed to reject null hypothesis	Not Significant
	Internet Access	0.004	0.977	Failed to reject null hypothesis	Not Significant
	Support to Educ.	0.137	0.261	Failed to reject null hypothesis	Not Significant
Teachers' Preparedness and Training	Age	0.004	0.973	Failed to reject null hypothesis	Not Significant
	Sex	0.270	0.025	Reject null hypothesis	Significant
	Family Member	0.042	0.732	Failed to reject null hypothesis	Not Significant
	House Type	0.061	0.620	Failed to reject null hypothesis	Not Significant
	Internet Access	0.104	0.393	Failed to reject null hypothesis	Not Significant
	Support to Educ.	0.008	0.945	Failed to reject null hypothesis	Not Significant
Learners' Engagement and Participation	Age	0.244	0.0244	Reject null hypothesis	Significant
	Sex	0.191	0.116	Failed to reject null hypothesis	Not Significant
	Family Member	0.142	0.244	Failed to reject null hypothesis	Not Significant

	House Type	0.047	0.700	Failed to reject null hypothesis	Not Significant
	Internet Access	0.058	0.638	Failed to reject null hypothesis	Not Significant
	Support to Educ.	0.225	0.063	Failed to reject null hypothesis	Not Significant
Administrative Monitoring and Support	Age	0.011	0.928	Failed to reject null hypothesis	Not Significant
	Sex	0.237	0.050	Failed to reject null hypothesis	Not Significant
	Family Member	0.061	0.620	Failed to reject null hypothesis	Not Significant
	House Type	0.032	0.792	Failed to reject null hypothesis	Not Significant
	Internet Access	0.118	0.332	Failed to reject null hypothesis	Not Significant
	Support to Educ.	0.074	0.548	Failed to reject null hypothesis	Not Significant

The data indicates that most demographic variables among teachers and administrators—such as age, educational attainment, and years in service—do not significantly correlate with the availability of materials, teachers' preparedness, or administrative monitoring and support. This suggests a uniform implementation of literacy and numeracy initiatives across various demographic groups within the educational staff.

However, a notable exception is observed in the area of learners' engagement and participation, where the variable 'sex' shows a significant correlation ($r = 0.180$, $p = 0.009$). This finding implies that the gender of teachers and administrators may influence student engagement levels. Supporting this, a study by Alnahdi and Schwab found that female teachers often exhibit more positive attitudes toward teaching and employ diverse instructional strategies, which can enhance student engagement and achievement in math and science [12]. Similarly, Hastedt et al. reported that students taught by female teachers performed better in mathematics and science across various education systems [13]. These findings suggest that gender dynamics within the teaching workforce can impact the effectiveness of literacy and numeracy program

Among learners, the data reveals that age significantly correlates with the availability of materials ($r = 0.379$, $p = 0.001$) and learners' engagement and participation ($r = 0.244$, $p = 0.0244$). This suggests that older students may have better access to educational materials and exhibit higher engagement levels. This aligns with the findings of Dagunduro and Onakoya, who emphasized the importance of age-appropriate instructional strategies to enhance literacy and numeracy outcomes [14].

Additionally, 'sex' shows a significant correlation with perceptions of teachers' preparedness ($r = 0.270$, $p = 0.025$), indicating that gender differences among students may influence their perceptions of teacher readiness. This is consistent with the study by Demalata et al., which found that female students often exhibit stronger interest and participation in science subjects, potentially affecting their perceptions of instructional quality [15]. Furthermore, the study by Martinez highlights how teachers' gender stereotypes can influence student evaluations and long-term outcomes, underscoring the need for gender-sensitive pedagogical approaches [16].

The analysis of Table 3 underscores the importance of considering demographic factors in the implementation of literacy and numeracy initiatives. While most demographic variables among teachers and administrators do not significantly impact program implementation, gender differences can influence student engagement and perceptions of instructional quality. Among learners, age and gender play significant roles in access to materials and engagement levels. These insights highlight the need for targeted interventions and gender-sensitive pedagogical strategies to ensure equitable educational outcomes.

3.4 Significant Difference in the Implementation of Literacy and Numeracy Initiatives as Perceived by Teachers and Administrators, and Learners

The data presented in Table 4 examines the perceived differences in the implementation of literacy and numeracy initiatives among teachers, administrators, and learners in the Veruela District. The analysis focuses on four key areas: Availability of Materials, Teachers' Preparedness and Training, Learners' Participation and Engagement, and Administrative Support and Monitoring.

Table -4: Significant Difference in the Implementation of Literacy and Numeracy Initiatives as Perceived by Teachers and Administrators, and Learners

Sources of Variation	Computed f	P-value	Decision	Conclusion
Availability of Materials	7.600	0.006	Reject null hypothesis	Significant
Teachers' Preparedness and Training	4.270	0.040	Reject null hypothesis	Significant
Learners' Participation and	0.730	0.393	Failed to reject null hypothesis	Not Significant

Engagement				
Administrative Support and Monitoring	2.730	0.099	Failed to reject null hypothesis	Not Significant

The computed F-value for the availability of materials is 7.600 with a p-value of 0.006, indicating a statistically significant difference in perceptions among the groups. This suggests that teachers, administrators, and learners have varying experiences regarding the accessibility and sufficiency of educational materials. Such disparities may stem from differences in resource allocation, distribution, or utilization across schools within the district. Emata emphasizes the importance of providing instructional materials and ensuring an enabling environment to support effective literacy and numeracy instruction. Similarly, a study in the Almeria District, Biliran Province, highlighted the limited availability of learning materials in kindergarten schools, underscoring the need for adequate resources to facilitate early literacy and numeracy development [17].

The F-value for teachers' preparedness and training is 4.270 with a p-value of 0.040, also indicating a significant difference in perceptions among the groups. This finding suggests that stakeholders perceive varying levels of teacher readiness and professional development opportunities. Emata notes that conducting professional development activities is crucial for enhancing teachers' pedagogical skills in literacy and numeracy [18]. The Department of Education's Early Language, Literacy, and Numeracy (ELLN) Program also emphasizes the need for a sustainable professional development system to improve teaching competencies in these areas [19].

With an F-value of 0.730 and a p-value of 0.393, the analysis reveals no significant difference in perceptions regarding learners' participation and engagement. This uniformity suggests a shared understanding among teachers, administrators, and learners about student involvement in literacy and numeracy activities. Such consistency may reflect standardized implementation practices or common challenges faced across the district.

The F-value for administrative support and monitoring is 2.730 with a p-value of 0.099, indicating no statistically significant difference in perceptions. However, the p-value is close to the conventional threshold of 0.05, suggesting a potential trend worth further investigation. Effective administrative support is vital for the successful implementation of educational programs. Emata highlights the role of supervisors in conducting monitoring and evaluation to ensure the fidelity of program implementation.

The analysis of Table 4 underscores significant perceptual differences among teachers, administrators, and learners concerning the availability of materials and teachers' preparedness and training in the implementation of literacy and numeracy initiatives. These disparities highlight areas that require targeted interventions to ensure equitable resource distribution and professional development opportunities. Conversely, the uniform perceptions regarding learners' participation and administrative support suggest areas of consistency that can be leveraged to strengthen program implementation. Addressing the identified gaps and building on existing strengths are essential steps toward enhancing the effectiveness of literacy and numeracy initiatives in the Veruela District.

4. CONCLUSIONS

The implementation of literacy and numeracy initiatives in the Veruela District is generally consistent across various demographic groups, including teachers, administrators, and learners. The data indicates that factors such as age, educational attainment, and years of service do not significantly influence the implementation of these programs, suggesting a uniform approach across different profiles. However, the study reveals notable disparities in perceptions based on gender and age. Specifically, gender differences significantly affect perceptions of learners' engagement and participation, as well as administrative monitoring and support. Additionally, age influences learners' perceptions of material availability and their engagement levels. Furthermore, significant differences exist among teachers, administrators, and learners regarding the availability of materials and teachers' preparedness and training, highlighting the need for improved communication and alignment among stakeholders.

In light of these findings, it is recommended that the Veruela District implement targeted interventions to address the identified disparities. Adopting gender-sensitive teaching strategies can help bridge perceptual gaps between male and female stakeholders, ensuring a more inclusive educational environment. Tailoring instructional materials and teaching methods to cater to different age groups can enhance learners' engagement and access to resources. Fostering open communication channels among teachers, administrators, and learners is essential to align perceptions and expectations, promoting cohesive implementation of literacy and numeracy initiatives. Continuous professional development for teachers should be prioritized to enhance their preparedness and adaptability to diverse classroom dynamics. Lastly, ensuring equitable distribution of educational materials and resources across all schools can address disparities in availability, thereby supporting the overall effectiveness of the programs. Implementing these recommendations will strengthen the literacy and numeracy initiatives in the Veruela District, contributing to improved educational outcomes for all stakeholders.

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