Analyzing Project Math-SAYoN Implementation: A Documentary Review

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Abstract — This study examined the effectiveness of Project MATH-SAYoN, a school-initiated innovation aimed at improving numeracy skills among elementary learners at Bobon Elementary School during the School Year 2023–2024. Rooted in the alarming results of national assessments such as PISA and NAT, the intervention targeted foundational math competencies through structured drills, differentiated remediation, and stakeholder collaboration. The primary goal was to evaluate learners' academic performance before and after the project's implementation and to develop a technical assistance plan based on the outcomes. A documentary research design was employed, involving 92 learners from Grades 1 to 6. Data collection included learners' demographic profiles—sex, grade level, access to learning resources, and nutritional status—and their academic performance in Mathematics during the first and fourth quarters. Statistical tools such as point-biserial and ETA correlation, as well as paired sample t-tests, were used to determine relationships and significant differences in performance across grading periods. Findings revealed that while there were no significant correlations between learner profiles and academic performance, a statistically significant improvement in mean scores was observed from 83.73 in the first quarter to 86.51 in the fourth quarter. The percentage of students achieving "Outstanding" increased by 127.27%, while those in lower performance categories notably declined. These results highlight the effectiveness of Project MATH-SAYoN in fostering equitable and meaningful improvement in mathematical proficiency across diverse student groups. In conclusion, the program's alignment with educational theories such as Thorndike's Law of Exercise and Vygotsky's Sociocultural Theory proved instrumental in its success. A technical assistance plan was formulated to guide the replication of best practices and ensure sustained implementation in similar educational contexts.

Keywords — Numeracy development, Project MATH-SAYoN, academic performance, elementary education, technical assistance plan.

I. Introduction

In the 21st century, numeracy has emerged as an essential life skill that transcends the classroom, influencing decision-making, problem-solving, and critical thinking in everyday situations. As education systems worldwide strive to produce competent learners equipped for global challenges, mathematics remains at the core of academic development. The ability to understand and work with numbers is no longer limited to school success but is a prerequisite for active citizenship and meaningful participation in society. Recognizing this, educators and policymakers have consistently emphasized the need to enhance learners' numeracy skills from early childhood through formal education.

Globally, countries such as Singapore, Finland, and Japan have made significant strides in developing numeracy through evidence-based teaching practices and curriculum reforms. According to the 2019 Trends in International Mathematics and Science Study (TIMSS), students from these countries consistently perform above the international average due to strong foundational mathematics programs introduced as early as kindergarten. In contrast, developing countries continue to face challenges in numeracy instruction, often due to resource limitations, large class sizes, and the lack of innovative teaching strategies. The Philippines has grappled with alarming results in national and international assessments. The 2018 Programme for International Student Assessment (PISA) revealed that Filipino students ranked lowest in mathematical literacy among 79 participating countries. Similarly, the National Achievement Test (NAT) in 2019 showed that the majority of Grade 6 learners scored below the proficiency level in mathematics.

At the regional and local levels, these national trends are reflected in the persistent difficulties faced by students in mastering fundamental operations—addition, subtraction, multiplication, and division. Teachers across elementary schools in Southern Leyte have reported increasing numbers of learners categorized as "non-numerates," particularly in early grades, hindering their academic progress in subsequent levels. In response, various school-based innovations have been introduced to address these gaps. At Bobon Elementary School in Bobon B, San Juan, Southern Leyte, a significant effort has been launched through Project MATH-SAYoN (Strategies that Accelerate Young Learners in Numeracy Skills), an initiative officially approved under Division Special Order No. 043, s. 2024. This innovation was designed in line with the Department of Education's call for contextualized and localized interventions to address learning deficiencies in basic education.

Project MATH-SAYoN is a targeted intervention aimed at improving numeracy proficiency through daily practice and contextualized activities. These include multiplication and division drills during flag ceremonies for Grades 3 to 6, foundational arithmetic drills for Grades 1 and 2, and number recognition exercises for Kindergarten pupils. Furthermore, students are encouraged to solve math problems before entering their classrooms using a "numeracy box," while instructional murals strategically placed around the school reinforce familiarity with the four

fundamental operations. Weekly assessments track student progress and provide data to inform teaching adjustments.

Several studies have shown the effectiveness of school-initiated, practice-based programs in enhancing numeracy. An international study by Askew et al. (2015) in the UK demonstrated that repeated exposure to basic arithmetic through drills and engaging tasks significantly improved fluency and confidence among primary school students. Locally, a research project by Flores (2019) in Iloilo revealed that daily math drills incorporated into classroom routines led to a 30% increase in student numeracy performance within one school year. These findings, both global and local, reinforce the relevance of programs like Project MATH-SAYoN and inspire educators to explore sustainable, community-driven solutions to the persistent problem of math underachievement.

This study aims to assess the effectiveness of Project MATH-SAYoN in enhancing numeracy skills among young learners at Bobon Elementary School. Specifically, it investigates whether the program has led to a measurable decrease in the number of non-numerate learners and an increase in the percentage of highly numerate students. By documenting the experiences and perceptions of those directly involved—teachers, students, and parents—the research seeks to provide a comprehensive picture of how structured, localized interventions can bridge learning gaps and improve educational outcomes.

Literature Review

The conceptual frameworks and related literature and studies provide a strong foundation for the implementation and success of Project MATH-SAYoN.

Piaget's Cognitive Development Theory – Project MATH-SAYoN aligns with Piaget's theory by providing hands-on learning activities that correspond to the concrete operational stage, where children begin to understand logical operations like addition, subtraction, multiplication, and division.

Vygotsky's Sociocultural Theory – The program encourages social interaction through peer-assisted learning and teacher-student interactions during drills, which reflect the sociocultural approach to learning. The students learn best when they engage with others.

Bruner's Discovery Learning Theory – Project MATH-SAYoN incorporates discovery learning through interactive activities, such as number recognition games and problem-solving exercises, allowing students to "discover" mathematical concepts themselves.

Bandura's Social Learning Theory – The inclusion of peer tutoring and role-modeling by teachers in Project MATH-SAYoN supports Bandura's theory. Students learn by observing and imitating others, reinforcing their numeracy skills.

Gardner's Multiple Intelligences Theory – By offering various types of numeracy activities (e.g., visual aids like murals, interactive games), Project MATH-SAYoN caters to different intelligences such as linguistic, logical-mathematical, and spatial intelligences.

Bloom's Taxonomy – The daily drills in Project MATH-SAYoN are designed to guide students from basic recall (remembering facts) to higher-order thinking (applying and analyzing math problems), following Bloom's hierarchical structure.

Sweller's Cognitive Load Theory – By breaking down math problems into simpler parts and providing step-by-step drills, Project MATH-SAYoN minimizes cognitive overload, helping students process and retain information effectively.

Hattie's Visible Learning – Project MATH-SAYoN includes regular assessments and feedback, ensuring that progress is visible, as emphasized by Hattie's research on the importance of feedback in improving student performance.

Dweck's Growth Mindset Theory – The program fosters a growth mindset by encouraging students to view challenges in numeracy as opportunities for growth. Daily practice builds resilience, making students more confident in solving math problems.

Deci and Ryan's Self-Determination Theory – Project MATH-SAYoN increases students' motivation by offering activities that are both engaging (competence) and socially interactive (relatedness), which are essential for intrinsic motivation.

Kolb's Experiential Learning Theory – The program emphasizes active learning where students experience math tasks, reflect on their strategies, conceptualize solutions, and then apply them, mimicking Kolb's experiential cycle.

Ausubel's Meaningful Learning Theory – Project MATH-SAYoN helps students connect new math concepts with their existing knowledge through interactive activities, ensuring that the learning process is meaningful and not just rote memorization.

Gagne's Nine Events of Instruction – Each day's drill in Project MATH-SAYoN follows a structure similar to Gagne's nine events, such as attention-getting activities, presenting drills, and assessing student performance.

Thorndike's Connectionism Theory – The repeated math drills in Project MATH-SAYoN facilitate the creation of strong connections between stimuli (math problems) and responses (correct answers), reinforcing learned concepts.

Skinner's Operant Conditioning Theory – The reinforcement strategies used in Project MATH-SAYoN, such as positive feedback and rewards for completing tasks, align with Skinner's emphasis on reinforcing desirable behaviors.

Piaget and Inhelder's Theory of Logical Thinking – Project MATH-SAYoN's progression from simple addition and subtraction drills in early grades to more complex tasks in higher grades mirrors Piaget's stages of cognitive development.

Siegler's Overlapping Waves Theory – By using multiple strategies (e.g., visual aids, peer tutoring, games), Project MATH-SAYoN accommodates students' diverse approaches to problem-solving, reflecting Siegler's theory.

Tharp and Gallimore's Instructional Conversation Model – The focus group discussions and teacher-student interactions in Project MATH-SAYoN are based on Tharp and Gallimore's model of promoting dialogic learning where teachers guide students through conversations that build numeracy skills.

Lave and Wenger's Communities of Practice – The collaborative nature of the learning activities and peer tutoring in Project MATH-SAYoN supports Lave and Wenger's emphasis on learning within a community of practice, where students share knowledge and support each other.

Miller's Information Processing Theory – Project MATH-SAYoN helps students process mathematical information in manageable chunks, reinforcing memory through repeated practice and reflection to improve long-term retention.

Numeracy skills are essential for a child's cognitive and academic development. According to Kilpatrick, Swafford, and Findell (2001), early mastery of basic mathematical operations serves as a foundation for advanced problem-solving and logical reasoning. The Department of Education (DepEd, 2022) in the Philippines emphasizes the need for numeracy development, as it is a crucial component of lifelong learning and real-world application.

Studies by Butterworth (2019) highlight that weak numeracy skills at an early stage can negatively affect a student's confidence, academic achievement, and ability to pursue STEM-related careers. Additionally, Boaler (2016) argues that traditional rote memorization techniques in mathematics often fail to engage students meaningfully, suggesting the need for innovative approaches to numeracy instruction.

Several educational systems worldwide have implemented intervention programs to address numeracy challenges. According to Dowker (2020), structured intervention programs that incorporate daily practice, real-life applications, and interactive learning help struggling students improve their mathematical fluency.

A study by Clements and Sarama (2019) on early childhood mathematics education found that interactive numeracy strategies, such as games and collaborative activities, significantly enhance students' engagement and retention of math concepts. Similarly, Gersten et al. (2009) emphasize the effectiveness of targeted interventions, stating that regular assessment and reinforcement strategies are critical in improving numeracy outcomes.

In the Philippine context, the Numeracy Program under the DepEd Learning Recovery Plan (2022) highlights the importance of daily drills and structured learning activities to help students develop fluency in mathematical operations. This aligns with the principles of Project MATH-SAYoN, which integrates daily practice and visual reinforcement in elementary education.

II. Methodology

A documentary research design was employed, involving 92 learners from Grades 1 to 6. Data collection included learners' demographic profiles—sex, grade level, access to learning resources, and nutritional status—and their academic performance in Mathematics during the first and fourth quarters.

Research Design: A documentary research design was employed, involving 92 learners from Grades 1 to 6. Data collection included learners' demographic profiles—sex, grade level, access to learning resources, and nutritional status—and their academic performance in Mathematics during the first and fourth quarters. Statistical tools such as point-biserial and ETA correlation, as well as paired sample t-tests, were used to determine relationships and significant differences in performance across grading periods. while also Documentary research is a valuable method for evaluating Project MATH-SAYoN by analyzing existing documents such as school records, reports, and official communications. According to McCulloch (2020), documentary research involves examining documents to understand societal contexts and historical developments. In the case of Project MATH-SAYoN, documents like Division Special Order No. 043, s. 2024, which approved the project, provide essential background information. These documents help assess the program's implementation and outcomes, offering insights into its effectiveness in improving students' numeracy skills.

Sample of the Study: To assess the effectiveness of Project MATH-SAYoN, the researchers used a self-made questionnaire and documentary analysis. The questionnaire was administered to pioneering teachers, students, and parents to gather their insights and experiences regarding the program. It focused on perceptions of how the project improved students' numeracy skills, engagement, and confidence in math. Alongside this, documentary analysis was used to review relevant records such as pre- and post-assessment results, lesson plans, teacher logs, weekly test scores, and samples of student work. These documents provided evidence of student progress and how consistently the program was implemented. Together, the questionnaire and document analysis offered a well-rounded understanding of the impact of Project MATH-SAYoN.

Procedures: The study followed a clear and organized process. First, the researcher obtained approval from the school head and secured consent from participating teachers, students, and parents. A self-made questionnaire was developed and validated to gather data from these groups about their experiences with Project MATH-SAYoN. At the same time, documentary analysis was conducted by collecting and reviewing relevant documents such as lesson plans,

assessment results, activity logs, and student outputs. The data collection involved distributing questionnaires and conducting focus group discussions to gain deeper insights. After gathering all data, the researcher analyzed the responses and documents to identify common themes and patterns. Finally, the results were interpreted, conclusions were drawn, and recommendations were made to support the improvement and possible replication of Project MATH-SAYoN in other schools.

Measures: This study adopts the documentary research method, a qualitative approach that involves systematically reviewing and interpreting existing documents to gain a deeper understanding of a specific phenomenon. As noted by Bowen (2009), documentary analysis is especially useful in educational research as it allows for the exploration of institutional processes, program implementations, and policy impacts through written records and official materials. In relation to Project MATH-SAYoN, this method enables the researcher to conduct a comprehensive examination of pertinent documents such as Division Special Order No. 043, s. 2024, school memoranda, assessment results, progress monitoring forms, and activity logs. These sources provide valuable insights into how the program was introduced, carried out, and monitored, offering evidence of both its strengths and areas for development. The method is particularly appropriate for this study as it supports data collection without disrupting school routines, while also reflecting both the formal structure and day-to-day realities of the intervention.

Data Processing: In this study, documentary analysis was used as a primary method for data processing. Relevant documents—such as pre- and post-assessment results, lesson plans, activity logs, weekly test scores, student outputs, and monitoring forms—were systematically collected and examined. The researcher organized these documents by category and analyzed them based on recurring patterns, frequency of activities, and improvements in student performance. Data from these documents were compared and triangulated with responses from questionnaires and focus group discussions to ensure accuracy and consistency. Through this method, the researcher was able to interpret how Project MATH-SAYoN was implemented and how it influenced the numeracy skills of the learners over time.

Ethical Considerations: This study strictly adheres to ethical standards in conducting educational research. Permission was secured from the school head, and informed consent was obtained from all participants, including teachers, students, and parents. Participation was voluntary, and respondents were informed of their right to withdraw at any time without penalty. All data collected—whether through questionnaires, interviews, or documents—will be treated with confidentiality and used solely for academic purposes. Names and identifying details will be anonymized to protect the privacy of participants. The researcher ensures honesty, transparency, and respect throughout the entire research process.

Another thing to consider is free will to participate in answering the questionnaire and informed consent. Must ask permission from the District Supervisor, the Principal, and the adviser prior to give the instrument and the right to be inform the purpose of the study and their significant

contribution for the fulfillment of the study. Explain its process, to ensure efficiency and accuracy of the research. Therefore, it can be said that the researcher respected the decision and answer of the respondents whether they want to participate or not. The most important thing to consider is the adaption of privacy, confidentiality, and anonymity. It will guide the study in the accomplishment of its objectives. The confidentiality and privacy are focused more by the researcher. It is because these are the foremost and prior consideration.

III. Results and Discussion

The results and discussion section analyzes the relationship between teacher profiles, differentiated instruction (DI) implementation in Grade 4 English using the MATATAG curriculum, and student academic performance in Samar Division. The findings are presented in a logical sequence, prioritizing the most significant results.

Key Finding 1: Frequency and Percentage Distribution on the Sex of the Learners

The study on Project MATH-SAYoN is grounded in Gardner's Multiple Intelligences Theory and Vygotsky's Sociocultural Theory, emphasizing the importance of diverse learning styles and social interaction in education. The project aims to improve numeracy through varied, inclusive activities. The nearly balanced gender distribution (53.26% male) allows for a thorough evaluation of the program's effectiveness across genders. While gender differences in math achievement are not deeply explored, the representation enhances the study's methodological soundness and reduces bias. This aligns with DepEd's focus on inclusive, lifelong numeracy learning and strengthens the credibility of findings from the documentary research method used.

Key Finding 2: Frequency and Percentage Distribution on the Grade Level of the Learners

The grade-level distribution of learners in the study provides key insights into the developmental alignment and effectiveness of Project MATH-SAYoN. The program is designed to cater to different developmental stages, drawing on Piaget's Cognitive Development Theory and Bruner's Discovery Learning Theory. A notable 25% of participants are in Grade 6, a critical level where national data shows low math proficiency. This allows for focused evaluation of the program's impact at a pivotal educational stage. The balanced representation across lower (Grades 1–3) and upper (Grades 4–6) elementary levels supports analysis of differentiated strategies, such as foundational drills for younger students and more complex activities for older ones. Overall, the distribution enhances the study's capacity to assess the program's ability to improve numeracy across developmental stages and address persistent learning challenges in mathematics.

Key Finding 3: Frequency and Percentage Distribution on the Number of Learners Provided with Learning Resources

The universal provision of learning resources at Bobon Elementary School is a key strength in the implementation of Project MATH-SAYoN. Aligned with Vygotsky's Sociocultural Theory, this equitable access supports interactive and socially grounded numeracy learning. It also addresses major barriers in developing countries—such as limited resources and large class sizes—by ensuring all students can fully participate in the program's activities.

The resource distribution supports differentiated instruction based on Gardner's Multiple Intelligences Theory and aligns with Sweller's Cognitive Load Theory by aiding scaffolded learning. It also facilitates experiential learning as described by Kolb, enabling students to actively engage in math tasks and apply learned concepts. The proportional allocation of resources across grade levels ensures that every learner benefit, reinforcing the program's developmental and inclusive approach.

Cited studies further validate this strategy, showing that access to interactive tools and visual aids improves engagement and comprehension. Overall, the comprehensive resource provision is central to Project MATH-SAYoN's success, enabling consistent, inclusive, and effective numeracy development throughout the elementary grades.

Key Finding 4: Frequency and Percentage Distribution on the Nutritional Status of the Learners

The overwhelmingly healthy nutritional status of learners at Bobon Elementary School—97.83% with normal nutritional levels—provides a strong physiological foundation for the successful implementation of Project MATH-SAYoN. Although not directly addressed in the program's theoretical framework, this favorable health condition supports students' cognitive functioning, attention, and energy, which are essential for learning mathematics.

This context enhances the effectiveness of cognitive and active learning theories applied in the program, including Sweller's Cognitive Load Theory and Bruner's Discovery Learning Theory, by ensuring that learners are not hindered by physiological challenges. It also supports motivation and engagement as emphasized in Deci and Ryan's Self-Determination Theory.

The near absence of undernutrition or overnutrition eliminates a common barrier in educational settings, especially in developing countries, allowing the program to focus fully on pedagogical interventions. Overall, the strong nutritional profile complements the program's educational goals and contributes to creating an optimal learning environment for numeracy development.

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Key Finding 5: Academic Performance in Mathematics during the First Quarter

The first-quarter academic performance data from Bobon Elementary School reveal a generally positive but improvable baseline for evaluating Project MATH-SAYoN. Grade 4 achieved the highest mean score (85.75), while Grades 1 and 3 showed the lowest, suggesting a need for additional focus on early foundational skills. Most students (66.30%) fall within the "Satisfactory" to "Very Satisfactory" range, with only 11.96% reaching the "Outstanding" level, indicating room for growth in higher-order mathematical skills.

These results align with national concerns about low math proficiency and echo developmental challenges in early grades. The data support the relevance of Project MATH-SAYoN's theoretical foundations, including Thorndike's Law of Exercise (repeated practice), Vygotsky's Sociocultural Theory (social learning), and Piaget's Cognitive Development Theory (stage-appropriate learning). The relatively consistent standard deviations across grades suggest that the program's differentiated and scaffolded instructional strategies are well-matched to the learners' varied abilities.

In sum, the baseline data provide critical insight into existing strengths and gaps in numeracy skills, setting the stage for measuring the program's effectiveness in improving student performance throughout the year.

Key Finding 6: Academic Performance in Mathematics during the Fourth Quarter

The fourth-quarter academic performance data strongly support the effectiveness of Project MATH-SAYoN in improving mathematical achievement across grade levels. The overall mean score rose from 83.73 to 86.51, shifting the average from "Satisfactory" to "Very Satisfactory", while the percentage of students achieving "Outstanding" performance more than doubled (from 11.96% to 27.17%). No students scored below the passing threshold, and those in the lowest performance category decreased significantly.

Grade-level analysis revealed the highest mean in Grade 2 (88.09), with all grades performing within the "Very Satisfactory" range. The greatest gains occurred in Grades 2 and 3, aligning with developmental theories that emphasize early mastery of foundational math skills. Reduced variability in upper grades (especially Grade 6) suggests the program effectively supported diverse learners through its differentiated strategies.

These outcomes validate key theoretical frameworks underpinning the program:

Thorndike's Law of Exercise: Daily drills and repetition strengthened learning.

Vygotsky's Sociocultural Theory: Collaborative learning supported students' growth within their zones of proximal development.

Gardner's Multiple Intelligences Theory: Varied activities catered to different learning styles.

Bloom's Taxonomy: The program fostered higher-order mathematical thinking.

In conclusion, the fourth-quarter results provide compelling evidence that Project MATH-SAYoN effectively addressed numeracy challenges through structured, developmentally appropriate, and theory-driven instruction—particularly benefiting early to middle elementary learners.

Key Finding 7: Point-Biserial Correlation between the Sex and Learning Resources Provision of the Learners and their Academic Performance

The analysis shows no significant relationship between sex and mathematics performance, reinforcing the inclusive design of Project MATH-SAYoN, which draws on Gardner's Multiple Intelligences Theory and Vygotsky's Sociocultural Theory. The program's diverse, interactive instructional strategies appear to support equitable learning outcomes for both male and female students, maintaining consistent effectiveness across academic quarters.

Additionally, while the analysis found no correlation between learning resource provision and performance, this is due to universal access to resources—a constant variable with no statistical variation. This limitation, however, reflects a positive implementation outcome, ensuring that all learners had the tools needed to fully engage with the program. This aligns with Sweller's Cognitive Load Theory, which stresses the role of structured support in reducing cognitive strain and enhancing learning.

Overall, these findings underscore Project MATH-SAYoN's success in establishing a supportive, inclusive, and resource-equipped environment that facilitates numeracy development for all students, regardless of gender or socioeconomic differences.

Key Finding 8: ETA Correlation between the Grade Level and Nutritional Status of the Learners and their Academic Performance

The non-significant relationship between grade level and mathematics performance highlights the success of Project MATH-SAYoN's differentiated instructional approach, which effectively meets the developmental needs of learners across Grades 1 to 6. By offering grade-appropriate interventions—aligned with Piaget's Cognitive Development Theory, Bruner's Discovery Learning, and Siegler's Overlapping Waves Theory—the program ensures consistent outcomes across grade levels. The decreasing correlation from first to fourth quarter suggests that the program helped reduce initial performance gaps, further supporting its developmental appropriateness.

Similarly, the non-significant correlation between nutritional status and math performance reflects the predominantly healthy nutritional profile of students (97.83% with normal status),

which limits variation and therefore statistical detection of impact. Nevertheless, this favorable health context supports the cognitive demands of the program, consistent with Sweller's Cognitive Load Theory, by removing physiological barriers to learning.

Together, these findings affirm that Project MATH-SAYoN provides equitable and effective numeracy development, regardless of grade level or minor physiological differences. They validate the program's robust theoretical foundations and suggest that it can serve as a replicable model for enhancing math achievement across diverse elementary learner populations.

Key Finding 9: Inferential Statistical Analysis of Academic Performance Between First and Fourth Quarter

A paired-samples t-test revealed a highly significant improvement in students' mathematics performance following the implementation of Project MATH-SAYoN, with average scores rising from 83.73 to 86.51 ($p < 0.001$), reflecting a moderate effect size (Cohen's $d = 0.556$). All grade levels showed significant gains, with the most substantial improvements in Grades 1 to 3, where effect sizes ranged from moderate to large. A chi-square test confirmed a statistically significant shift in performance levels, including a 127% increase in "Outstanding" ratings and the complete elimination of failing scores.

These outcomes support the program's theoretical foundations, including Thorndike's Law of Exercise, Vygotsky's Sociocultural Theory, and Dweck's Growth Mindset Theory, by demonstrating the effectiveness of daily practice, social learning, and mindset development. The findings also align with existing research highlighting the benefits of structured, interactive, and early numeracy interventions. Overall, the results establish Project MATH-SAYoN as an effective, evidence-based model for improving mathematics achievement in elementary education.

IV. Conclusion

The balanced gender distribution, diverse grade level representation, universal provision of learning resources, and predominantly normal nutritional status created favorable conditions for Project MATH-SAYoN implementation. This demographic context provided a solid foundation for evaluating the program's effectiveness across diverse learner populations.

The first-quarter academic performance established a baseline that reflected generally satisfactory achievement with significant room for improvement. The predominance of students in the "Satisfactory" and "Very Satisfactory" ranges (66.30% combined) indicated positive initial performance levels but highlighted the need for interventions to advance students to higher achievement categories.

The strategic implementation of Project MATH-SAYoN, transitioning from a planning phase to active implementation with differentiated instructional approaches, effectively addressed

the numeracy needs of learners. The program's alignment with theoretical frameworks, particularly Thorndike's Law of Exercise and Vygotsky's Sociocultural Theory, provided a sound pedagogical foundation for enhancing students' mathematical skills.

The statistically significant improvement in academic performance from the first to fourth quarter provides robust evidence of Project MATH-SAYoN's effectiveness. The substantial upward shift in performance distribution, particularly the 127.27% increase in Outstanding ratings, demonstrates the program's success in enhancing mathematical proficiency across all grade levels, with particularly strong impacts in early elementary grades.

The non-significant correlations between learner profiles and academic performance suggest that Project MATH-SAYoN creates equitable learning opportunities regardless of demographic characteristics. The program's differentiated instructional approaches effectively address diverse learning needs and developmental stages, resulting in improved mathematics achievement across all student subgroups.

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