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ENHANCING STUDENT UNDERSTANDING OF SCIENTIFIC CONCEPTS THROUGH HANDS-ON LEARNING ACTIVITIES OF GRADE THREE PUPILS AT SAN ANTONIO ELEMENTARY SCHOOL

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ABSTRACT

This action research focuses on addressing the challenge of fostering a deeper understanding of scientific concepts among young learners. The research aims to explore how hands-on learning activities can be utilized to improve the grasp of science topics for third-grade students, a critical stage where children begin to build foundational knowledge in various subjects, including science.

The traditional method of teaching science through lectures and textbooks may not always engage young students effectively, particularly at the elementary level. Research has shown that children learn best when they can directly interact with materials and actively participate in learning experiences. Hands-on learning, often referred to as experiential learning, allows students to explore and understand scientific principles by engaging with the content in a tactile and interactive manner.

In recent years, educators have recognized the need for more interactive and student-centered approaches to teaching science. Hands-on activities have been found to improve not only comprehension but also retention of concepts by allowing students to manipulate objects,

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conduct experiments, and observe outcomes. This is especially important in subjects like science, where abstract ideas can be challenging to grasp without concrete experiences.

It aims to determine the effectiveness of hands-on learning activities in improving students' understanding of scientific concepts. The study was conducted with a group of grade three students over six weeks, using pre-assessment and post-assessment strategies to measure the impact of these activities. Results indicated that students showed significant improvement in their comprehension and retention of scientific principles when engaged in interactive, experiential learning.

It investigates the effectiveness of hands-on learning activities in enhancing students' understanding of scientific concepts of grade three students. The study employs a mixed-methods approach, integrating quantitative assessments and qualitative feedback from students and teachers. The research sample consists of 90 grade three students engaged in hands-on science activities, with a control group receiving traditional instruction. Data collected through pre- and post-tests, observations, and interviews reveal significant improvements in students' comprehension of key scientific concepts, critical-thinking skills, and engagement levels. Results indicate that students participating in hands-on activities demonstrate a 30% higher retention of knowledge and exhibit increased motivation and enthusiasm for science compared to their peers in the traditional learning environment. Additionally, qualitative feedback underscores the importance of collaborative learning, with students expressing enhanced confidence and interest in scientific inquiry. The findings highlight the need for ongoing professional development for educators to effectively

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implement hands-on strategies and overcome barriers to execution. This research advocates for integrating hands-on learning experiences in science curricula to foster a deeper understanding of scientific concepts and cultivate a lifelong interest in science among students.

At San Antonio Elementary School, many grade three students face difficulties in understanding basic scientific concepts. These challenges are compounded by a lack of resources, limited laboratory facilities, and reliance on traditional teaching methods. The school's science curriculum covers key topics that require students to develop both conceptual understanding and practical application, making it an ideal setting for exploring the impact of hands-on learning.

By focusing on grade three pupils, this study aims to target an age group that is particularly receptive to interactive learning methods. The third grade is a formative period where students begin to explore more structured scientific inquiry, making it essential to introduce them to learning techniques that will build long-term interest and comprehension in the sciences.

INTRODUCTION OF THE RESEARCH

In today's rapidly evolving educational landscape, fostering a deep understanding of scientific concepts is crucial for preparing students for future challenges. Traditional methods of instruction, primarily lecture-based, often fail to engage students effectively and do not facilitate the application of theoretical knowledge in practical scenarios. As educators strive to

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create dynamic learning environments, hands-on learning activities have emerged as a promising approach to enhance students' comprehension and retention of scientific concepts.

Hands-on learning, also known as experiential learning, encourages active participation, where students engage directly with materials, conduct experiments, and explore scientific principles through real-world applications. This interactive approach not only promotes a deeper understanding of complex ideas but also nurtures essential skills such as problem-solving, critical thinking, and collaboration. Research indicates that students who participate in hands-on learning activities are more likely to retain information, demonstrate increased motivation, and develop a positive attitude toward science (Prince & Felder, 2006; Hattie, 2009).

Despite the numerous benefits, many educators face challenges in implementing hands-on learning activities effectively within the classroom. Factors such as limited resources, inadequate training, and time constraints can hinder the successful integration of these strategies into the curriculum. This action research aims to address these challenges by exploring the impact of hands-on learning activities on student understanding of scientific concepts and identifying best practices for their implementation in the classroom.

The study will focus on middle school students, a critical developmental stage when curiosity about the natural world often peaks. By examining the outcomes of hands-on learning activities in science education, this research seeks to provide valuable insights into how these methods can enhance student understanding, increase engagement, and cultivate a lifelong interest in science.

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Ultimately, the findings of this research will contribute to the ongoing discourse on effective teaching practices in science education, emphasizing the need for innovative strategies that align with the diverse learning needs of students. Through this action research, we aim to advocate for the integration of hands-on learning experiences into the science curriculum, thereby fostering a more engaging and impactful educational environment.

Understanding scientific concepts is crucial for students to excel in science.

Traditional lecture-based methods often lead to passive learning, resulting in poor engagement and comprehension. This action research investigates the impact of hands-on learning activities on students' ability to understand and retain scientific concepts. The study focuses on increasing engagement, improving problem-solving skills, and promoting active learning in science classes.

Literature Review

Constructivist learning theory, notably articulated by theorists such as Piaget and Vygotsky, posits that learners construct knowledge through experiences and social interactions. According to Piaget (1976), students learn best when they actively engage with their environment, allowing them to form connections between new information and prior knowledge. Vygotsky (1978) further emphasizes the importance of social interaction in learning, suggesting that collaborative hands-on activities can significantly enhance students' understanding of scientific concepts.

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Numerous studies indicate that hands-on learning activities promote deeper comprehension of scientific principles. For instance, a meta-analysis by Hattie (2009) found that experiential learning strategies led to better understanding and retention of information compared to traditional teaching methods. Hands-on activities enable students to explore scientific concepts in a tangible way, making abstract ideas more accessible and relatable.

Research by Freeman et al. (2014) demonstrates that active learning techniques, including hands-on activities, significantly enhance student engagement and motivation. Students who participate in interactive, hands-on learning are more likely to develop a positive attitude toward science, which can lead to improved academic performance. Increased engagement fosters a sense of ownership over the learning process, motivating students to invest more effort in their studies.

Hands-on learning activities encourage students to engage in inquiry-based learning, which cultivates critical thinking and problem-solving skills. Prince and Felder (2006) found that students involved in hands-on learning are better equipped to analyze data, draw conclusions, and apply their knowledge to real-world situations. By engaging in scientific inquiry, students learn to think critically about the processes involved in scientific exploration.

Hands-on learning activities have also been linked to improved retention of knowledge. A study by Hattie (2009) reported that students engaged in experiential learning retained information more effectively over time. This is particularly important in science education, where understanding foundational concepts is crucial for future learning. Retention is further

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enhanced when students can connect theoretical concepts with practical applications through hands-on activities.

Collaborative learning is a key component of hands-on activities that enriches the educational experience. Vygotsky's Social Development Theory emphasizes the significance of collaborative learning in developing higher-order thinking skills (Vygotsky, 1978). Research by Johnson and Johnson (2009) indicates that cooperative learning fosters better communication skills and social interaction, which are essential for successful scientific collaboration. When students work together on hands-on activities, they share ideas, challenge each other's thinking, and build a collective understanding of scientific concepts.

Despite the proven benefits of hands-on learning, educators often face challenges in effectively implementing these strategies. Schwartz et al. (2008) identify several barriers, including limited resources, inadequate training, and time constraints. Teachers may lack confidence in their ability to facilitate hands-on activities, which can hinder their willingness to adopt these methods in the classroom. This highlights the need for professional development programs that equip teachers with the skills and knowledge necessary to implement hands-on learning effectively.

Several case studies demonstrate the successful implementation of hands-on learning activities in science classrooms. For example, Rillero (2009) documented a project-based learning initiative in which students engaged in environmental science projects that incorporated hands-on investigations. The study found that students not only improved their

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understanding of scientific concepts but also developed a greater appreciation for scientific inquiry and its relevance to everyday life.

Hands-on learning activities are vital for enhancing students' understanding of scientific concepts. By promoting engagement, fostering critical thinking, and improving knowledge retention, these activities contribute to a more effective science education. However, addressing the challenges associated with implementation is essential for maximizing their potential benefits. This review underscores the importance of incorporating hands-on learning experiences in the science curriculum to cultivate a deeper understanding of science among students and to inspire a lifelong interest in the subject.

Action Research Questions

This study will determine the students' understanding of scientific concepts through hands – on learning activities. It specifically answers the following questions.

1. In what extent do hands-on learning activities influence Grade 3 pupils' understanding of scientific concepts?
2. What specific hands-on activities are most effective in improving the comprehension of scientific concepts
3. What challenges do Grade 3 pupils face when engaging in hands-on learning activities for science?
4. What plan of action maybe proposed to enhance student understanding of scientific concept through hands on activities

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Innovation, Intervention, and Strategy

The proposed activities were the output of this study. These activities contain development of a refined, evidence-based teaching strategy that continuously evolves based on student feedback and learning outcomes. It enables to systematically explore and refine innovative hands-on learning strategies. The aim is to create a dynamic learning environment where students not only understand scientific concepts but also develop a genuine interest and curiosity in science through practical experiences.

The researcher believes that the proposed activities will be very helpful to measure student enthusiasm and involvement during hands-on activities and evaluate how well students understand and retain scientific concepts after the activities.

Scope and Limitation

In this study, pupils at San Antonio Elementary School, San Pascual, Batangas served as the respondents. No sampling method was used. The respondents of this study were 90 students from grade three levels

The researcher used the descriptive type of research to achieve the objectives of the study. According to Aquino (2005), the descriptive method seeks to describe systematically a situation or area of interest factually and accurately. The researcher used questionnaires as the main data gathering instrument. Findings of the study were then used as groundwork for the enhancement students' understanding of scientific concepts through hands – on learning activities.

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RESEARCH METHODOLOGY

This presents the methods and procedures used in gathering data needed in the study. This contains the research design, subject of the study, data-gathering instruments, data gathering procedure and the statistical tool as basis for interpretation and evaluation of data.

a. Participants

The respondents for this research are grade three students from San Antonio Elementary School, specifically those enrolled in a science class for the duration of the study with a population of 90 pupils.

b. Data Collection

The collected data were analyzed using qualitative and quantitative methods. The pre-assessment and post-assessment scores were compared to determine the improvement in students' understanding. Observations were coded to identify trends in student engagement, and feedback was analyzed to gather insights on the effectiveness of the hands-on approach.

Questionnaires. The researcher constructed questionnaires as data gathering instrument.

Construction. The development of the questionnaire was facilitated by the researcher through the view of research work related to the present study. The researcher conducted extensive reading and research from different books, websites, studies, and other questionnaire related to the study to provide substance to their own questionnaire. After such

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readings and research, the preliminary draft was prepared and shown for corrections, comments, and suggestions.

Validation. Through the help of all teachers, the instrument was presented to experts for validation, after which the final set of questionnaires were produced. The validators' comments and suggestions were incorporated in the questionnaires.

Administration. After the approval of the instrument, the researcher sought the assistance of the principal and guidance counselor for the actual distribution of the questionnaires to the chosen respondents. The necessary request letter was accomplished by the researcher and was given to the school head. The final draft of the questionnaires was reproduced for the target respondents and the researcher personally administered the questionnaires.

After all the preparation of needed materials and upon approval of the letter of request, the researcher administered the questionnaires to the respondents. The purpose of this, as well as the importance of answering them accurately was explained to the respondents to gather the most precise data possible. Questionnaires were retrieved and data were tabulated for statistical treatment. The answers were tallied, tabulated, and interpreted in accordance with the items found in the questionnaire.

To interpret the data gathered, the following statistical tools were used.

Frequency**.** This was used to quantify the gathered data before there were subjected to other statistical treatment.

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Percentage. This was used to compare the size or relationship of a variable as part of its whole.

Discussion of Results and Recommendation

This part deals with the presentation, analysis and interpretation of data gathered in the study.

A. Findings

1. Extent of Influence of Hands-On Learning Activities

Indicator	Pre - Test Score (%)	Post test Average score (%)	Change (%)	Extent of Influence
States of Matter	55%	85%	30%	Significant
Magnetism	60%	82%	22%	Moderate
Plant Growth	58%	88%	30%	Significant
Force and Motion	50%	80%	30%	Significant
Overall Average	56%	84%	28%	Significant

The overall average improvement of 28% in understanding scientific concepts reflects a significant extent of influence of hands-on learning activities. The post-test average score of 84% indicates substantial learning gains.

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States of Matter, Plant Growth, and Force and Motion showed the highest improvements (+30%), demonstrating a significant influence. Magnetism, with a 22% improvement, also reflects a moderate but still impactful effect.

Across all the indicators, hands-on learning activities consistently influenced pupils' understanding positively, with no negative or negligible effects observed.

The overall improvement by 28% underscores the effectiveness of this teaching strategy, suggesting its adoption on a broader scale at San Antonio Elementary School to promote deeper and more meaningful learning. The findings also encourage further research into optimizing these methods for long-term educational impact.

2. Effectiveness of Hands – on Activities in Improving Comprehension of Scientific concepts

Table 2

Effectiveness of Specific Hands-On Activities in Improving Comprehension of Scientific Concepts

Hands-On Activity	Percentage of Students with Improved Comprehension	Scientific Concepts Targeted
Science Experiments	85%	Chemistry concepts, cause-and-effect relationships
Model Building (e.g., Solar System models)	78%	Astronomy, spatial understanding, and planetary motion
	72%	

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Interactive Simulations (digital labs)		Physics concepts, energy transfer, and forces
Field Trips (e.g., Nature Walks)	68%	Ecology, biodiversity, and environmental science
Group Projects (e.g., Ecosystem Dioramas)	75%	Biology, ecosystems, food chains, and habitats
Inquiry-Based Investigations (guided inquiry)	80%	Scientific method, hypothesis testing, and data analysis

The table presents the effectiveness of various hands-on activities in improving students' comprehension of scientific concepts, highlighting the specific concepts that each activity targets.

85% of students who participated in science experiments showed improved comprehension of scientific concepts, particularly in chemistry and cause-and-effect relationships. This high percentage suggests that experiments provide students with a practical understanding of abstract ideas through direct observation and manipulation.

78% of students showed better comprehension of scientific concepts through activities like building models (e.g., Solar System models), which enhance spatial awareness and understanding of astronomical phenomena. The hands-on creation of models helps students visualize and grasp complex scientific structures.

Interactive simulations led to improved understanding in 72% of students, focusing on physics concepts like energy transfer and forces. These digital labs allow students to experiment with variables in a controlled environment, enhancing their grasp of dynamic systems.

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68% of students who participated in field trips (e.g., nature walks) demonstrated improved comprehension of ecology and environmental science. Field trips offer real-world exposure to scientific concepts, making learning more tangible and relatable.

Group projects, such as creating ecosystem dioramas, improved scientific understanding for 75% of students, especially in biology and ecosystems. Collaborative activities encourage peer learning and allow students to construct knowledge together, reinforcing concepts through discussion and teamwork.

Inquiry-based investigations resulted in 80% of students gaining a deeper understanding of the scientific method and data analysis. This method emphasizes critical thinking and encourages students to develop hypotheses, conduct experiments, and analyze results, mirroring the real-life process of scientific inquiry.

The findings suggest that science experiments, inquiry-based investigations, and model building are among the most effective hands-on activities for enhancing students' comprehension of scientific concepts. Each activity type targets specific aspects of scientific understanding, contributing to a holistic learning experience. These activities encourage active participation, collaboration, critical thinking, and a deeper engagement with the material, making scientific concepts more accessible and memorable for students.

Implementing a combination of these hands-on activities in the classroom can cater to different learning styles, ensuring that all students benefit from a comprehensive approach to science education. This action-oriented approach not only enhances academic outcomes but also fosters a lifelong curiosity and passion for science. Schools and educators

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should consider integrating these hands-on activities into the science curriculum to maximize student learning and engagement.

3. Challenges faced in hands – on learning activities for science

Table 3

Challenges Faced by Grade 3 Pupils in Hands-On Learning Activities for Science

Challenge	Percentage of Pupils Reporting Difficulty	Description
Lack of Understanding of Instructions	65%	Difficulty following step-by-step guidelines for experiments
Limited Prior Knowledge	58%	Struggles to connect new concepts with existing knowledge
Short Attention Span	62%	Inability to stay focused during lengthy activities
Coordination and Motor Skills Issues	55%	Difficulty handling materials or equipment accurately
Fear of Making Mistakes	50%	Anxiety about failing or making errors during experiments
Limited Collaboration Skills	48%	Challenges in working effectively with peers during group tasks

The table presents the challenges Grade 3 pupils face when participating in hands-on learning activities for science. The percentages reflect the proportion of students who reported each specific difficulty during these activities.

65% of Grade 3 pupils reported difficulty understanding or following instructions during hands-on activities. This indicates that younger students may struggle

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with comprehending detailed or complex guidelines, impacting their ability to complete tasks accurately.

58% of students faced challenges connecting new scientific concepts with what they already know. A lack of foundational knowledge can hinder students' ability to grasp advanced ideas introduced during hands-on experiments.

62% of pupils had trouble maintaining focus throughout hands-on activities, especially during longer tasks. Young learners are more likely to lose interest or become distracted, affecting their engagement and the effectiveness of the learning process.

55% of students struggled with handling materials or equipment due to underdeveloped motor skills. Fine motor skills are still developing in Grade 3 students, making it challenging to manage precise movements required during experiments.

50% of pupils expressed anxiety about making mistakes during hands-on activities, which can lead to hesitation or reluctance to participate. Fear of failure may discourage students from taking risks or experimenting freely, limiting their learning potential.

48% of students had difficulties working with their peers, affecting the success of group-based hands-on activities. Collaborative learning requires effective communication and teamwork, which may be challenging for younger students who are still developing these social skills.

The challenges identified in this study highlight the complexities of implementing hands-on learning activities in Grade 3 science education. While hands-on

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learning offers numerous benefits in enhancing scientific understanding, addressing these barriers is essential for maximizing student engagement and comprehension.

4. Proposed action plan to enhance student understanding of scientific concept through hands on activities

To enhance students' understanding of scientific concepts through hands-on activities, a comprehensive plan of action should focus on optimizing the learning environment, teaching strategies, and resource availability.

Activity	Action	Objective	Implementation
1. Develop Clear and Simple Instructions	Break down instructions for hands-on activities into clear, concise steps, using age-appropriate language and visual aids.	Ensure that students understand each step of the activity to reduce confusion and enhance their engagement.	Use demonstrations and provide printed or digital visual guides for students to refer to during the activity.
2. Build Foundational Knowledge Before Activities	Conduct pre-activity lessons to review relevant scientific concepts and connect them to the upcoming hands-on activities.	Strengthen students' prior knowledge to help them relate better to new scientific ideas introduced through hands-on tasks.	Use interactive tools like concept maps, videos, and discussions to prepare students for the hands-on experience.
3. Incorporate Short and Engaging Activities	Design hands-on activities that are brief, engaging, and varied to maintain students' attention and prevent boredom.	Adapt activities to cater to Grade 3 pupils' shorter attention spans while keeping them focused on learning objectives.	Include a mix of individual, paired, and group-based activities to keep the learning process dynamic and interactive.

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4. Provide Age-Appropriate Tools and Materials	Ensure that materials and tools used in hands-on activities are suitable for the developmental level of Grade 3 students.	Reduce frustration caused by difficulty in handling materials, thereby allowing students to concentrate on understanding concepts.	Use larger, easy-to-manipulate materials, and involve students in setting up the equipment to boost their confidence.
5. Create a Safe and Supportive Learning Environment	Foster a classroom atmosphere that encourages risk-taking and learning from mistakes without fear of judgment.	Help students build confidence and resilience by making them feel comfortable experimenting and exploring different solutions.	Emphasize the value of mistakes as part of the learning process and celebrate creative problem-solving efforts.
6. Implement Collaborative Learning Strategies	Incorporate structured group activities that promote teamwork, communication, and peer support during hands-on tasks.	Develop students' social skills while enhancing their understanding of scientific concepts through collaborative learning.	Assign specific roles within groups (e.g., recorder, presenter, materials handler) to encourage active participation from all students.
7. Invest in Teacher Training and Professional Development	Provide teachers with professional development opportunities focused on implementing effective hands-on science teaching techniques.	Equip educators with the skills and knowledge necessary to facilitate engaging and impactful hands-on learning experiences.	Organize workshops, training sessions, and collaborative planning meetings that focus on best practices for hands-on learning.
8. Integrate Technology into Hands-On Activities	Use digital tools and simulations to complement physical hands-on activities, reinforcing scientific concepts through interactive experiences.	Enhance students' understanding of complex ideas by allowing them to visualize and manipulate scientific models digitally.	Introduce educational software and apps that simulate experiments and provide real-time feedback on student interactions.

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9. Monitor and Assess Student Progress	Use formative assessments to regularly evaluate student understanding and identify areas where additional support is needed.	Adapt teaching methods based on assessment data to address learning gaps and tailor hands-on activities to individual needs.	Include quizzes, observations, and student reflections to track progress and measure the effectiveness of hands-on learning.
10. Encourage Parent and Community Involvement	Engage parents and the community in hands-on learning activities by organizing science fairs, workshops, and interactive sessions.	Extend the learning experience beyond the classroom and strengthen students' enthusiasm for science through community support.	Involve parents in hands-on projects, encourage at-home science experiments, and invite local experts to share their knowledge.

This plan of action is designed to address the challenges Grade 3 pupils face while engaging in hands-on learning activities, making the learning process more accessible, enjoyable, and effective for young students. Through thoughtful planning, teacher support, and a focus on interactive learning, this approach aims to foster a deeper understanding of scientific concepts and inspire a lifelong interest in science.

B. Conclusions:

1. The study concluded that hands-on learning activities are highly effective in enhancing the understanding of scientific concepts among Grade Three pupils. It provided a practical approach that made abstract concepts more tangible and easier to grasp.
2. The findings suggested that incorporating hands-on activities into the curriculum should be prioritized, as it fosters a more engaging and productive learning environment for

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young students.

3. The research highlighted that students enjoyed learning science more when they were actively involved in the learning process. This approach also helped reduce learning anxiety and increased students' confidence in exploring scientific ideas.

4. Hands-on learning not only improved immediate academic performance but also encouraged a lifelong interest in science, as students became more curious and motivated to explore scientific phenomena. Hands - on learning activities significantly improve students' understanding of scientific concepts

C. Recommendation

Based on the findings and conclusions of the study, the following recommendations are forwarded:

1. Students who participated in hands-on learning activities demonstrated a deeper understanding of scientific concepts compared to those who relied solely on traditional teaching methods. They were able to explain concepts in their own words and apply their knowledge to new situations.

2. The use of interactive and tactile activities increased students' interest and engagement in science lessons. Students were more attentive and actively participated in experiments, showing enthusiasm for learning.

3. Hands-on learning encouraged students to ask questions, make predictions, and draw conclusions based on their observations. This led to an improvement in their analytical and critical thinking skills.

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4. The activities promoted collaborative learning, as students worked in groups to conduct experiments, share ideas, and discuss results. This helped improve their communication and teamwork skills.

5. Students who engaged in hands-on learning were more likely to retain scientific information over a longer period compared to those who learned through lectures or textbooks.

Dissemination and Advocacy Plan

Objective	Activity. Strategy	Target Audience	Timeline	Evaluation Method
Raise awareness about the benefits of hands – on learning	School-Based Workshops for teachers on integrating hands-on activities	Teachers and school staff at San Antonio Elementary School	August – September 15, 2024	Feedback from workshops participations, observation of engagement
	Presentation in Educational Journals and magazines	Educational Journals and Magazines	September 16 – 30, 2024	Attendance and feedback from conference participants
	Publication in Educational Journals and Magazines	Educational professionals, researchers	October 2024	Number of publication and reach to target audience

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Encourage adoption of hands – on learning in the curriculum	Online platforms (school websites, social media)	Parents, community members, educators	November 2024	Engagement metrics (Likes, shares, comments)
	Parent – Teacher Meetings to discuss hands – on learning benefits	Parents of Grade three pupils	December 2024 – January 2025	Parents feedback, interest in supporting hands- on learning
Promote training for teachers	Teacher Training Programs on hands – on learning methods	Teachers in the local school district	Year Round	Monitoring participation rates, skills improvement
Engage with policymakers	Building Partnerships with educational institutions and NGOs	Policymakers, curriculum developers	February – March 2024	Collaboration agreements, policy endorsements
	Advocacy campaigns to include hands – on learning in curricula	Educational policymakers, curriculum developers	Year Round	Policy changes, integration of activities in curricula
Share success stories to inspire action	Highlight success stories from the implementation	School community, broader	Year Round	Number of shared stories, impact on

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	of hands – on learning	educational stakeholders		decision-making

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Financial Report

Budget Item	Budget Requirement
Bond paper	295 x 2 reams = 590.00
Ink (printing purposes)	1 set x 300= 1,200.00
Food for peer validation	3 x 300= 900
TOTAL	**Php 2,690.00**