

Feasibility Study on Launching Special Science for Elementary School Program at H.N. Cahilgot Central Elementary School

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PROJECT SUMMARY

The Special Science for Elementary School (SSES) Program Implementation at H.N. Cahilgot Central Elementary School (HNCCES) aims to revolutionize Science and Mathematics education for Grades 4, 5, and 6 learners by offering an advanced curriculum that nurtures critical thinking, innovation, and problem-solving skills. Designed for students in the Fast Learner (FL) sections, this program equips them for the STEM track in Secondary education, positioning the school as a trailblazer in producing future-ready students. HNCCES is a well-established and thriving institution located in Barangay Calumpang, General Santos City. As the second-largest elementary school in the Division of General Santos City, serving 4,119 learners, the school boasts a long-standing tradition of academic excellence. Its accolades include high rankings in the Division Search for School Needs Data System (SNDS), participation in the Young Scientists Enrichment Program (YSEP), and recognition for student achievements in academics, sports, and co-curricular activities. These accomplishments, coupled with the school's ongoing infrastructure improvements and resource optimizations, highlight its capacity to spearhead transformative educational programs like the SSES. The implementation of the SSES program is anchored in DepEd Order No. 57, s. 2011, which mandates the enhancement of Science and Mathematics education in public elementary schools. By introducing a specialized curriculum, the program addresses critical gaps in STEM education and bridges the pathway between elementary and high school STEM tracks. This initiative is especially important in the context of the increasing demand for quality STEM education in the division and at the school level. Through the SSES program, HNCCES aims to produce a new generation of scientifically-inclined and academically-competent students who are ready to excel in advanced Science and Mathematics education and STEM-related careers. The program's success rests on several key presumptions outlined in the feasibility study. First, it anticipates continued enthusiasm and interest from potential beneficiaries, as evidenced by 85% of surveyed students indicating a strong willingness to participate and 90% of parents showing their full support. It is expected that the school will sustain its reputation for excellence and its ability to attract motivated and talented learners. Second, the program presumes the availability of essential resources, such as laboratory facilities, modern instructional materials, and teacher training. While existing limitations are acknowledged, these can be addressed through phased improvements, capacity-building initiatives, and collaborations with organizations like YSEP. Third, the program assumes that teachers will receive on-going training and professional development to effectively deliver the specialized curriculum. Fourth, it depends on robust engagement from the community and stakeholders, ensuring steady collaboration and support from parents, local authorities, government agencies, non-government organizations, and business sector. Other considerations include the smooth transition of SSES graduates to the STEM program of General Santos City National High School (GSCNHS). This is cognizant to the commitment of the HNCCES to align its programs with the national education objectives. Also, it aims to develop learners who have the ability to adapt to unforeseen challenges such as natural disasters or public health crises. Furthermore, it is anticipated that students will stay motivated and actively engaged in the program, with parents and the community reinforcing the importance of STEM education. Lastly, the program assumes that funding from various channels—such as the Maintenance and Other Operating Expenses (MOOE), DepEd grants, and partnerships with private organizations—will remain sufficient and sustainable.

In summary, the SSES program at HNCCES is a groundbreaking initiative designed to contribute in the institutionalization of STEM education in the division, specifically at the school level. By utilizing its strong

institutional foundation, forging strategic partnerships, and maintaining a commitment to educational excellence, the school is well-equipped to meet the rising demand for specialized STEM learning. This initiative not only strengthens the school's reputation as a hub of academic distinction but also aligns with national objectives for scientific research, innovation, workforce development, and economic progress. With meticulous planning and on-going support, the SSES program is set to empower students to excel in a rapidly evolving, technology-driven world.

THE PROBLEM AND ITS SETTING

Introduction/Rationale

This feasibility study focuses on implementing a SSES program at HNCCES to address its critical gaps in elementary STEM education. The Philippine education system continues to face significant challenges, including the poor performance of Filipino students in international assessments like the 2022 Programme for International Student Assessment (PISA). In this assessment, the Philippines scored a mean of 355 in Mathematics, 347 in Reading, and 356 in science, showing slight improvements in Reading and Mathematics compared to 2018 but a minor decline in science. These scores remain at low proficiency levels, with Mathematics at Level 1b and Reading and Science at Level 1a, reflecting significant deficiencies in STEM competencies among learners. These issues are attributed to limited access to specialized STEM programs, resource constraints in public schools, and gaps in early STEM education (World Bank, 2021; Republic of the Philippines, 2018; STEM Leadership Alliance, 2024). Despite government efforts, the development of SSES programs remains insufficient, particularly in regions outside Metro Manila (David, 2019). Within the Division of General Santos City, several schools offer SSES programs, but in Barangay Calumpang—one of the most populous areas with high concentrations of school-age children—there is only one out of three schools that offers SSES program. This implies that there is an ardent need to have another elementary school offering this program. The nearest mega-large elementary schools to GSCNHS, the division's largest and top-performing secondary school with a STEM track, are H.N. Cahilso Central Elementary School (HNCCES) and Romana C. Acharon Elementary School (RCACES). Of these two institutions, only RCACES has offered the SSES program for the past eight years. This disparity creates a bottleneck for students in Calumpang who aspire to excel in STEM disciplines, as RCACES cannot accommodate the increasing demand for advanced Science education. HNCCES is uniquely positioned to address this gap. As a central school in Barangay Calumpang and one of the major feeder schools to GSCNHS, it has the potential to provide a robust foundation for learners transitioning to high school STEM tracks. The school currently offers Fast Learner (FL) sections from Grades 1 to 6, which are composed of students who consistently exhibit strong academic performance and readiness for more advanced educational challenges. Targeting these FL students as enrollees of the proposed SSES program is a strategic choice, as they possess the knowledge, attitudes, skills, and habits necessary for specialized STEM education. Becker and Park (2021) postulate that early exposure to STEM-focused curricula enhances learners' academic outcomes and increases their likelihood of pursuing STEM careers. Similarly, Reeve and Tseng (2011) highlight that such interventions bolster motivation and long-term academic aspirations. More recent studies support the idea that early, high-quality STEM education is essential for improving academic outcomes, particularly for students with high learning potential (Mendoza et al., 2020).

The lack of a dedicated SSES program at HNCCES will have a ramification to the sustainability of the STEM program offered by GSCNHS, which relies on a steady stream of well-prepared elementary graduates for its STEM track. This is brought about by the insufficient number of feeder schools with robust Science elementary education. This situation further necessitates the implementation of an SSES program at HNCCES to ensure alignment and continuity between elementary and secondary STEM education. In 2020, Santos and Salazar emphasize the need to provide seamless elementary and secondary Science Education made possible by the strong partnership of an elementary school with its secondary school counterpart. Furthermore, the introduction of the SSES program would significantly contribute to addressing the growing demand for quality STEM graduates in the division. The socio-economic realities in Barangay Calumpang also highlight the urgency of this initiative. Many families in the area cannot afford private schooling options that offer specialized STEM programs, leaving public schools as their only choice. Unfortunately, public schools without dedicated STEM programs struggle to meet the growing demand for quality Science and Mathematics education. Aquino and

Reyes (2021) note that the unequal distribution of STEM programs exacerbates educational disparities, particularly in underserved communities in the Philippines. Camacho and Santos (2020) similarly argue that the lack of access to specialized programs perpetuates cycles of inequality and limits students' opportunities. In this context, the SSES program at HNCES will be instrumental in reducing these disparities and offering deserving students a chance to compete on equal footing with their peers in other private schools. By implementing the SSES program at HNCES, the school will not only fill a critical gap at the Calumpang area but also contribute to the development of a stronger pipeline of STEM-ready learners for GSCNHS and other Science high schools. This initiative will empower FL students with advanced skills, promoting a generation of innovators, critical thinkers, and problem-solvers who can thrive in an increasingly competitive global landscape (National Research Council, 2011). Moreover, it will position HNCES as one of the fundamental institutions in the division, capable of meeting the growing demand for quality STEM education and addressing the aspirations of learners and families at Barangay Calumpang.

Legal Bases

The establishment of the SSES program is anchored on several legal and policy frameworks designed to improve STEM education in the Philippines. DepEd Order No. 57, s. 2011, serves as the primary mandate for the program, emphasizing the need to develop Science and Mathematics competencies among elementary learners through enriched curricula, hands-on activities, and upgraded facilities. This policy aligns with Republic Act No. 10533, otherwise known as the Enhanced Basic Education Act of 2013, which supports the implementation of specialized programs under the K-12 curriculum to prepare Filipino learners for global competitiveness. Further reinforcing the program's relevance is the Philippine Development Plan 2023–2028, which underscores the critical role of science, technology, and innovation in driving economic growth. The plan highlights the importance of STEM education at all levels as a means to address the country's developmental challenges. Additionally, DepEd Memorandum 2023-014 outlines updated guidelines for Special Curricular Programs, prioritizing equitable access to quality education and the expansion of STEM-focused initiatives in underserved areas. These legal and policy bases provide a strong foundation for the proposed SSES program at HNCES.

Significance of the Study

The proposed implementation of the SSES program at HNCES holds significant value for a broad spectrum of stakeholders, including teachers, parents, researchers, the community, and other educational partners. It promises transformative benefits that will enhance education quality, community engagement, and future opportunities for learners. Its relevance can be emphasized as follows:

The school. For HNCES, the SSES program represents an opportunity to solidify its status as a leader in academic excellence and innovation. As the second-largest elementary school in the Division of General Santos City, the school has consistently demonstrated its ability to nurture learners' potential and achieve exceptional results in various fields, including academics, sports, and journalism. By offering a specialized curriculum, the school not only meets the growing demand for STEM education but also attracts more learners and strengthens its reputation as a center of excellence. This initiative will also enhance the school's infrastructure, teaching capabilities, and community partnerships, ensuring its sustainability and long-term success. Ultimately, the SSES program reaffirms the school's commitment to providing high-quality education that prepares learners for the challenges and opportunities of the 21st century.

The School Leader. For the school leader, the study provides a unique opportunity to champion a groundbreaking program that could redefine the school's academic and institutional identity. The implementation of the SSES program not only highlights the leader's commitment to quality education but also serves as a testament to their vision for innovation and inclusivity. The leader plays a critical role in aligning resources, training teachers, and engaging the community to ensure the program's success. By navigating these challenges, the school leader demonstrates their capability to manage complex projects and advocate for policy changes that benefit the school and its stakeholders. The program also allows the leader to leave a lasting legacy, positioning the school as a trailblazer in STEM education. This leadership role reinforces the school's reputation as a center of excellence and enhances the leader's standing within the educational community.

The Teachers. The study significantly enriches teachers' professional development by equipping them with the tools and methodologies needed to deliver a specialized science and mathematics curriculum. Teachers are introduced to modern pedagogical strategies that integrate technology, inquiry-based learning, and collaborative projects. These approaches not only enhance their teaching effectiveness but also reignite their passion for education. The program offers teachers opportunities for training and workshops, helping them stay current with global trends in STEM education. Additionally, participating in the program fosters a sense of pride and accomplishment as they witness their students excel and achieve their full potential. Teachers also benefit from a collaborative environment, where they can share best practices and learn from peers. By being part of this transformative initiative, teachers strengthen their role as mentors and contributors to the nation's development.

The Learners. The study is instrumental in providing learners with a robust foundation in science and mathematics, key areas essential for success in today's technology-driven world. Through the SSES program, learners are exposed to a curriculum that prioritizes critical thinking, innovation, and practical problem-solving. These skills not only improve their academic performance but also prepare them for real-world challenges. Furthermore, learners will benefit from advanced learning resources, hands-on experiments, and interactive teaching methods designed to make lessons engaging and relevant to their everyday lives. This initiative fosters a culture of curiosity and lifelong learning, encouraging learners to explore new ideas and develop a passion for STEM fields. By participating in this program, learners are given the tools they need to excel in higher education and future careers, ultimately contributing to society's advancement.

The Parents. This study provides immense benefits to parents by ensuring their children have access to a world-class education that prioritizes Science and Mathematics. Parents can be confident that their children are receiving the skills and knowledge necessary to thrive in an increasingly competitive global economy. The program also fosters a stronger partnership between parents and the school, encouraging active involvement in their children's educational journey. Furthermore, the program's focus on preparing students for STEM-focused high schools and careers aligns with many parents' aspirations for their children's future success. By supporting the program, parents contribute to building a community that values education and innovation.

The Community and Other Stakeholders. The study is beneficial to the community and stakeholders as it fosters collaboration in advancing STEM education, promoting societal and economic progress. By implementing the SSES program, the community gains a generation of learners equipped to tackle challenges in technology, environment, and innovation, enhancing the area's reputation as a center for academic excellence. Stakeholders, including local government units, private organizations, and policymakers, find in the program a strategic investment in human capital, as their support ensures sustainability and creates a skilled future workforce. This initiative strengthens public-private partnerships and demonstrates the collective power of collaboration in transforming education. Together, the community and stakeholders create a robust foundation for inclusive growth, empowering learners and solidifying a pathway toward regional development and global competitiveness.

The Neighboring High School and Science High Schools. The study holds immense value for STEM-focused high schools by addressing the growing need for well-prepared and highly motivated learners. The SSES program ensures that students transitioning from HNCCES to STEM high schools have already mastered foundational concepts in Science and Mathematics. This readiness allows high schools to build upon a solid base, enabling deeper learning and specialization. High schools benefit from having learners who are already accustomed to the rigors of STEM education, reducing the need for remedial instruction and enhancing overall academic performance. Furthermore, the collaboration between elementary and high schools strengthens the education pipeline, fostering partnerships that benefit both institutions. By creating a steady flow of STEM-ready learners, the program supports high schools in achieving their academic goals and contributing to the nation's STEM advancement.

The Researchers. The study offers researchers a wealth of data and insights into the implementation and outcomes of a specialized Science and Mathematics curriculum at the elementary level. Researchers can use this as a case study to explore the effectiveness of STEM-focused programs in public schools and their impact on learners' academic performance and career trajectories. This initiative also provides a platform for examining

best practices in curriculum design, teacher training, and community engagement. The findings can inform future educational reforms, contributing to a growing body of research aimed at improving Science and Mathematics education. Additionally, the study opens avenues for collaboration with other researchers, policymakers, and educational institutions, fostering a multidisciplinary approach to addressing the challenges of STEM education.

Project Objectives

The following are the objectives of this feasibility study:

On Market Study: Educational Needs and Market Analysis

Assess the number of students in Grades 3-5 who may be interested in enrolling in the proposed SSES program. Identify the specific educational needs related to science subjects among the target group. Conduct surveys or focus group discussions (FGDs) with students, parents, and teachers to gauge the level of interest in the program and willingness to enroll.

On Technical Study: Strategic Planning and Sustainability

Assess the adequacy of available resources, including qualified teachers, classrooms, science laboratory equipment, and instructional materials required for the program. Evaluate whether the current class schedules can accommodate the SSES program, and how to integrate it into the existing timetable. Develop a long-term plan for maintaining the program, including strategies for securing necessary resources and community or institutional support.

On the Management Study: Risk Assessment and Mitigation Strategies

Identify potential risks related to the program's implementation, such as low enrollment, challenges in acquiring resources, lack of teacher training, and budget constraints. Develop strategies to address these risks, such as diversifying funding sources, promoting the program to students and parents, and ensuring teachers are adequately trained in specialized science education.

On the Financial Study: Financial Projections and Cost-Benefit Analysis

Establish a detailed budget for the program, including equipment (science lab materials, technology), training, and operational expenses. Identify potential funding sources such as DepEd grants, local government support, school funding, or partnerships with NGOs and local businesses or universities. Assess the potential benefits of the program, such as improved student engagement and performance in science, against the costs of establishing and maintaining it.

On the Socio-Economic Study: Ethical and Socio-Cultural Considerations in Educational Projects

- Identify any ethical issues associated with implementing a SSES program, such as equitable access to the program for all students, fairness in selection, and addressing any biases in Science content.
- Evaluate how the SSES program might impact the local community, including its relevance to local needs and values, and any potential challenges related to integrating new scientific content into the community's existing educational framework.

On the Decision to Implement the Proposed SSES Program

- Based on the findings from the studies, decide whether to move forward with the implementation of the SSES program. Consider the feasibility, sustainability, and overall support for the program.

METHODOLOGY

Data Gathering Procedure

This study assessed the feasibility of implementing a SSES program at HNCCES for the school year 2024-2025. At the first year of its implementation, the program will focus on the Fast Learners in Grades 4, 5, and 6, whose learners demonstrated readiness for advanced Science education. A mixed-methods research design, as described by Creswell and Creswell (2020), was employed to combine qualitative and quantitative approaches for a comprehensive analysis of existing conditions and stakeholder perspectives. Purposive sampling was used to select key participants—six teachers, 72 parents, and the school head—based on their relevance to the research objectives. For the learners, Slovin's formula with a 5% margin of error was applied to select 163 participants, ensuring statistical representativeness. Data collection included surveys to capture broad trends, interviews for in-depth insights, and Focus Group Discussions (FGDs) to facilitate interactive exploration of readiness, resources, and challenges. This combination allowed for a nuanced understanding of the study context. Surveys were administered to both learners and parents. Learners' surveys focused on gauging their interest and preparedness for the program, while parents provided perspectives on their children's academic needs and their support for the initiative. Teachers and the school head were interviewed to gain qualitative insights into institutional preparedness and potential barriers. FGDs, involving selected learners, teachers, and parents, explored barriers, resources, and strategies for successful program implementation. Ethical considerations, including obtaining informed consent and ensuring confidentiality, were followed in line with the guidelines of Creswell and Poth (2020).

Locale of the Study

The study was conducted at H.N. Cahilsot Central Elementary School (HNCCES), located at Barangay Calumpang, General Santos City. The school caters to a diverse student body, with a total enrollment of 4,119 for the academic year 2024–2025. Of these, 272 are enrolled in the Fast Learner (FL) sections across Grades 3 to 5. The school has 81 classrooms and follows a combination of morning and afternoon shifts for Grades 4 and 5, while Grade 6 operates with regular classes. HNCCES employs 110 teachers, with six specifically assigned to the Fast Learner sections. The presence of these sections, designed for academically capable students, positions the school as an ideal setting for the feasibility study, particularly for piloting a SSES program that seeks to enrich STEM education through a specialized curriculum.

Respondents and Informants

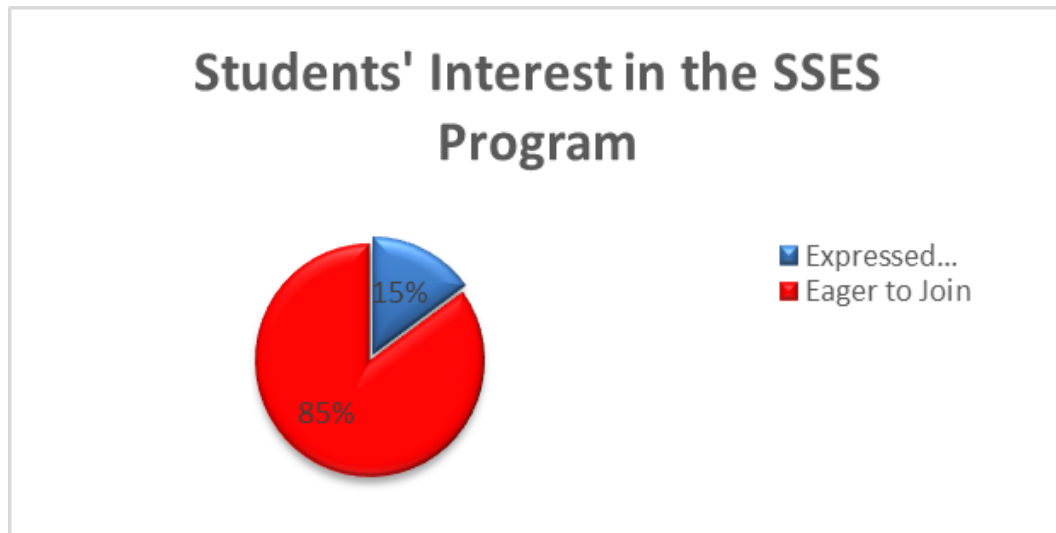
The respondents of this study consisted of key stakeholders who were instrumental in assessing the feasibility of the SSES program. A total of 163 learners from the Fast Learner sections of Grades 3 to 5 were selected using the Slovin formula with a 5% margin of error, ensuring a representative sample from a population of 272 learners. These students, being the primary beneficiaries, provided crucial insights through surveys focused on their interest and readiness for advanced Science education. In addition, 72 parents, representing 25% of the total parent population in the Fast Learner sections, participated in surveys to share their perceptions of the program, their children's academic needs, and their level of support for its implementation. Six teachers assigned to the Fast Learner sections were interviewed to provide qualitative data on the learners' educational requirements, the availability of resources, and the feasibility of integrating the program into the existing curriculum. The school head was also a key informant, offering perspectives on institutional readiness, available resources, and potential challenges. A Focus Group Discussion (FGD) further enriched the data collection process by involving eight learners, eight teachers, and eight parents, all purposively selected to ensure diversity of viewpoints. The FGD allowed for a more detailed exploration of the program's feasibility, including strategies for successful implementation and addressing potential barriers. This comprehensive approach, supported by Etikan and Babatope (2021), ensured the inclusion of relevant and varied perspectives in evaluating the program's viability.

PRESENTATION OF RESULTS AND DISCUSSION

Market Study: Educational Needs and Market Analysis

The study revealed a strong interest among students in Grades 3 to 5 for a SSES program.

Figure 1. Percentage of Students Interested to join the SSES Program



The chart visually illustrated that the majority of the surveyed students—139 out of 163 learners (85%)—were eager to participate in the SSES program. The following transcription presents feedback from students gathered during the focus group discussions. These students expressed their enthusiasm for the proposed SSES program, particularly its hands-on and interactive learning opportunities.

"Oo, kay gusto ko makakat-on ug experiments ug mga activities." (S3)

"Nindot ni nga chance kay murag maka-prepare mi para sa high school nga STE."(S2)

However, smaller portion, representing 24 learners (15%), reflected concerns about the program's difficulty especially on balancing extracurricular commitments with academic demands. Another critical aspect of the study was identifying the specific educational needs of the target group to ensure the program's relevance and effectiveness. Teachers unanimously identified hands-on learning opportunities and laboratory facilities as their most urgent needs, with all 8 teachers highlighting these priorities. They emphasized that access to practical tools and experiments would make Science lessons more engaging and meaningful for students. Additionally, 5 out of 8 teachers indicated the need for updated instructional materials, aiming to reduce reliance on textbook-centered teaching. Four teachers also stressed the importance of professional development, particularly through training programs that focus on innovative science teaching methods and specialized pedagogies. On the other hand, learners shared slightly different priorities. Out of 163 respondents, 114 learners identified laboratory facilities as their top need, reflecting their desire for a more interactive and hands-on approach to learning science concepts. A total of 98 learners expressed the need for updated instructional materials, such as tools and experiment kits, to enhance their understanding of lessons. Lastly, 82 learners emphasized the importance of hands-on activities, which they felt would help them grasp complex topics more effectively.

The table below summarizes the priorities as identified by both teachers and learners:

Table 1. Educational Needs Identified by Teachers and Learners

Priority Need	Teachers (out of 8)	Learners (out of 163)
Hands-on Learning Opportunities	8	82
Laboratory Facilities	8	114
Updated Instructional Materials	5	98
Professional Development	4	-

The following transcriptions provide feedback from teachers about the educational needs necessary for the successful implementation of the SSES program. These responses emphasize the importance of hands-on learning, updated materials, and teacher training. "Nakita namo nga ang kulang kay laboratory diri sa eskwelahan. Kung naa ni, mas ma-engage ang mga bata ug ma-practical ilang pagtuon."(KII-T4)"Kailangan pud namo ug training kay specialized baya ang science subjects, unya Kinahan Glan sab mahibawan namo ang new methods of teaching."(KII-T1) Parental support for the program had also been a key focus of the study. Parents highlighted their aspirations for their children to excel academically, particularly in STEM fields, which they viewed as essential for future career success.

Table 2. Parental Support for SSES Program

Parental Support Level	Number of Parents
Strongly Support	50
Moderately Support	15
With Reservations	7

The table illustrates the levels of parental support for the SSES program based on survey responses from 72 parents. A significant majority of parents, 50 out of 72, expressed strong support for the program, reflecting their belief in its potential to enhance their children's learning experiences. Additionally, 15 parents moderately supported the program, indicating cautious optimism, possibly due to uncertainties or concerns about the program's implementation. On the other hand, 7 parents expressed reservations, primarily citing financial or resource-related constraints as their main concerns. The following transcriptions reflect the feedback from parents who were part of the FGD. They expressed strong support for the program and also voiced concerns about ensuring that all students, regardless of financial status, could participate.

"Suportado kaayo mi ani kay maayong oportunidad ni para sa among mga anak. unsaon nalang kung wala ni nga programa diri?" (P6)

"Ganahan mi nga mahatagan ug equal chances tanan, bisan pa sa mga dili kaayo makabudget."(P3)

"Kung ma-prepare sila sa high school STE, mauna gyud na akong priority para sa ilang kaugmaon."(P4)

Many parents expressed confidence that the program would provide their children with a competitive edge in pursuing STE-focused high school tracks and, eventually, careers in science and technology. During the FGD with parents, some of them raised concerns about equitable access, particularly for families with limited financial resources, and suggested that scholarships or subsidies be made available to ensure inclusivity. The findings indicated that there was strong interest and support among stakeholders for the SSES program. Students demonstrated enthusiasm for hands-on and interactive learning, parents showed significant backing with suggestions for equitable access, and teachers identified critical resource and training needs. These results highlighted the feasibility of the program, provided that the identified challenges were addressed through strategic planning and resource allocation.

Technical Study: Strategic Planning and Sustainability

The study found that the current resources at HNCES were insufficient to fully support the implementation of the SSES program. A survey of the educational needs identified laboratory facilities, updated instructional materials, and teacher training as critical areas requiring improvement.

These findings were echoed in Key Informant Interviews (KIIs) with teachers.

"Our school lacks the essential tools for laboratory experiments. We try to teach science concepts theoretically, but hands-on learning is critical, and we cannot provide that adequately."(KII-T5)

"We need updated instructional materials, such as science kits or visual aids, to effectively deliver the lessons. Right now, we rely on outdated materials, which limit students' engagement." (KII-T1)

"Training is crucial. Many of us are willing to teach specialized subjects, but without proper training, it will be difficult to meet the program's standards." (KII-T3)

Evaluation of Class Schedules

The school's current class schedules were evaluated to determine their capacity to accommodate the SSES program. The school head confirmed that schedules could be adjusted to integrate the program without disrupting the existing curriculum. She stated:

"We can reorganize schedules to ensure the program fits seamlessly. Flexibility in scheduling and support from the faculty will enable us to accommodate the SSES classes."

While teachers shared similar sentiments, they emphasized the importance of balancing time for regular and specialized classes. For instance:

"Adjusting the schedule is feasible, but it will require careful planning to avoid overloading both the students and teachers." (KII-T2)

These insights highlighted a collaborative willingness among the school leadership and faculty to make necessary adjustments, ensuring the program could be implemented effectively within the existing timetable.

Strategic Planning for Sustainability

The study proposed several strategic planning approaches to address resource gaps and ensure the program's sustainability:

1. Resource Mapping: A comprehensive inventory of current resources was recommended to identify gaps. The school head emphasized:

"While we face resource limitations, a proper mapping exercise will help us determine what can be repurposed or upgraded."

2. Capacity Building: Teachers underscored the need for professional development. As noted by **T1 (Grade 4)**

"We need targeted training to align our teaching methods with the specialized curriculum. Collaborating with universities or NGOs could make this possible."

3. Infrastructure Development: Teachers highlighted the importance of upgrading classrooms into functional science spaces. **Teacher 3 (Grade 6)** suggested phased development:

"Even a small laboratory to start with would significantly improve the way we teach Science."

4. Community and Institutional Partnerships: The school head, despite the institution's lack of an official title due to legalities, expressed readiness to collaborate with other schools and organizations. She explained:

"We can work with schools like Romana C. Acharon Central Elementary School to share best practices and resources. Partnering with NGOs or local government units could also address critical needs."

5. Innovative Scheduling: Teachers suggested strategies such as rotating schedules or extending sessions on certain days to SSES classes effectively.

6. Funding Strategies: The school head emphasized securing support through DepEd grants and local partnerships:

"Proposals focusing on the long-term benefits to learners and the community can enhance our chances of securing funding like SEF and donations from our stakeholders."

7. Community Involvement: Engaging parents and the community through science fairs, workshops, and volunteer programs were proposed to foster ownership and sustained interest in the program.

Learning from International STEM Programs

When we look at global examples, Singapore and Finland stand out as models for effective STEM education. Both countries have implemented programs that focus on hands-on learning, critical thinking, and problem-solving. In Singapore, the primary school curriculum emphasizes integrating technology and practical applications, preparing students to handle real-world challenges and a culture of innovation (Tayag, 2019). Meanwhile, Finland places a high value on teacher training, ensuring that educators are well-prepared and given the flexibility to tailor lessons to their students' needs (Reeve & Tseng, 2011). These approaches offer valuable lessons for the proposed SSES program at HNCCES. One key takeaway is the importance of investing in teacher training. Like Finland, equipping teachers with specialized skills will help them confidently deliver a Science-focused curriculum. Another critical aspect is maximizing the use of existing resources, as Singapore has demonstrated with its efficient management of laboratory and technology facilities (National Research Council, 2011). By adopting similar strategies, the SSES program can address its challenges and align with global standards, offering students the opportunity to engage in advanced, inquiry-based learning. This study highlights both the challenges and opportunities in implementing the SSES program at HNCCES. While resource gaps such as the lack of laboratory facilities, updated materials, and teacher training were evident, the willingness of the school leadership, teachers, and community to collaborate offers a strong foundation for success. By addressing these needs through strategic planning, resource mapping, and professional development, the school can build the capacity required for the program.

Management Study: Risk Assessment and Mitigation Strategies

The feasibility study identified several key risks that could challenge the successful implementation of the SSES program at HNCCES. These risks included low enrollment, difficulties in acquiring resources, inadequate teacher training, and budget constraints. However, targeted mitigation strategies and the school's existing partnerships demonstrated potential for overcoming these barriers. One major concern was the possibility of low enrollment due to hesitations from both students and parents. Some parents expressed doubts about the program's difficulty level, fearing it might place undue academic pressure on their children. Financial constraints were also raised, with some parents worrying about the costs of additional learning materials. During the Focus Group Discussion (FGD), a parent remarked:

"Ganahan ko sa programa, pero naglibog ko kung makaya ba namo ang dugang nga gasto para sa mga kinahanglanon."

This highlighted the importance of proactive communication and awareness campaigns to demonstrate the program's long-term benefits and reassure parents about its accessibility. The second challenge involved resource acquisition, as the school currently lacks sufficient laboratory facilities, instructional materials, and technological tools necessary for a SSES program. Teachers acknowledged these gaps during Key Informant Interviews (KII). Teacher 1 (Grade 4) stated:

"We don't have enough equipment to support hands-on learning, which is a critical component of advanced Science lessons."

Despite these gaps, the school's ongoing partnership with the Young Scientists Enrichment Program (YSEP) was identified as a significant advantage. Now in its third year, YSEP provides science-related activities and additional resources, which have already contributed to improving Science education at the school. Another critical risk was insufficient teacher training. Teachers expressed enthusiasm for the program but emphasized the need for capacity building to deliver the specialized curriculum effectively. Teacher 3 (Grade 6) shared:

"We need workshops and training sessions tailored to advanced science education. Without proper preparation,

it will be difficult to meet the program's standards."

Budget constraints were also a recurring issue, particularly for upgrading facilities, procuring instructional materials, and funding teacher training. The school head highlighted this concern:

"Our reliance on government funding limits our capacity to acquire the resources we need. Exploring external partnerships, such as our ongoing collaboration with YSEP, is crucial to make this program a reality."

Mitigation Strategies

To address these risks, the study proposed several strategies:

Promoting the Program:

Promotional activities, such as school orientations, Science fairs, YSEP involvement and YES-O Encampment, were recommended to increase enrollment by showcasing the program's value. The school head suggested leveraging events to highlight the program's alignment with future educational and career opportunities in STEM.

Strengthening Partnerships:

Building on the success of its three-year partnership with YSEP, the school can further collaborate with science-focused organizations to secure additional resources and training opportunities.

Capacity Building:

Professional development workshops focusing on innovative teaching strategies for science education were proposed. Collaborations with STEM-focused institutions and support from YSEP were identified as key opportunities to provide teachers with the necessary knowledge and tools.

Resource Optimization:

The school could maximize existing resources by conducting a comprehensive inventory of materials and facilities. Incremental upgrades to classrooms to create functional science areas and further support from YSEP in enhancing laboratory spaces were also recommended.

Diversifying Funding Sources:

Collaboration with local government units (LGUs), private companies, and NGOs was identified as a key strategy for securing financial and material support. Teachers suggested applying for DepEd grants and seeking sponsorships from local businesses to reduce the financial burden on parents and the school. While the identified risks posed significant challenges, the study concluded that these barriers were not insurmountable. The school's existing partnership with YSEP demonstrates its capacity to collaborate effectively and secure external support for science-related initiatives. Combined with targeted strategies, such as diversifying funding sources, enhancing teacher training, and optimizing resources, the school is well-positioned to implement the SSES program successfully.

Financial Study: Financial Projections and Cost-Benefit Analysis

The financial study analyzed the feasibility of implementing the SSES program at HNCES by assessing the required budget, identifying potential funding sources, and conducting a cost-benefit analysis. As a central public school, the institution benefits from a substantial Maintenance and Other Operating Expenses (MOOE) allocation based on its student, teacher, and classroom population.

Detailed Budget for the Program

The financial requirements of the program were broken down into key areas, with emphasis placed on optimizing

the use of existing resources and funding opportunities. The projected budget is presented in Table 1.

Table 3. Proposed Budget Allocation Matrix for Establishment and Costs of the SSES Program at HNCES

Cost Category	Initial Establishment Cost	Estimated Cost	Funding Source
Laboratory Equipment/Materials	Science Experiment tools and materials	1,000,000	School MOOE/Donation from Stakeholders
Teacher Training Workshops	Training of existing staff	300,000	School MOOE/Donation from Stakeholders
Operational Costs (Maintenance)	Maintenance Expenses	200,000	School MOOE/Donation from Stakeholders

Staffing costs were not included in the budget, as existing teachers assigned to Fast Learner sections are expected to deliver the program. Instead, the focus was placed on teacher training to prepare educators for the specialized science curriculum. Laboratory equipment and instructional materials were identified as the most critical investment, accounting for half of the projected budget. Operational expenses for maintenance complete the cost requirements.

Funding Sources

The school’s financial position is strengthened by its MOOE allocation, which can be utilized for operational and instructional expenses related to the SSES program. Additional funding opportunities were identified through Department of Education (DepEd) grants specifically for specialized programs like SSES. Local government units (LGUs) were also recognized as potential contributors, with allocations from the Special Education Fund (SEF) recommended to support infrastructure and resource needs. Furthermore, the school’s existing partnership with YSEP, now in its third year, provides an avenue for continued support. Its contributions to science education, including resources and expertise, can be expanded to assist in the program’s implementation. Collaborations with private organizations and universities were also identified as potential sources for equipment sponsorships and additional training opportunities.

Cost-Benefit Analysis

The cost-benefit analysis revealed that the SSES program would deliver substantial long-term benefits that outweigh its initial costs. The program is expected to significantly enhance student engagement and performance in science, as evidenced by survey data indicating that 85% of learners were enthusiastic about participating in hands-on science activities. This enthusiasm is anticipated to translate into improved critical thinking and problem-solving skills, which are essential for success in STEM-focused high school tracks. Teachers also identified the professional development workshops as critical to improving their instructional competence, which would directly benefit student outcomes. The community impact of the program was highlighted during the Focus Group Discussion (FGD), where a parent stated:

"Kini nga programa makahatag og mas taas nga oportunidad alang sa among mga anak ug maghatag nila og advantage sa STE track sa high school."

The school head emphasized the strategic importance of the program, stating:

"Through the use of our MOOE and partnerships like YSEP, we can address the gaps in resources and sustain the program over time. Collaboration will be critical in ensuring its success."

The financial study concluded that the SSES program is feasible within the current financial framework of the school. By leveraging the MOOE allocation and seeking additional funding from DepEd, LGUs, and private

sector partnerships, the program's financial requirements can be met.

Socio-Economic Study: Ethical and Socio-Cultural Considerations in Educational Projects

The SSES program has the potential to bring significant positive changes to the community, but it also presents challenges in aligning with local socio-cultural values. The program addresses a critical gap in STEM education in Barangay Calumpang by providing advanced learning opportunities to students. This aligns with the community's aspirations for educational progress and economic development. Parents in the FGD expressed strong support for the program, noting its long-term benefits:

"Kini nga programa makatabang kaayo aron mapalambo ang among mga anak ug mag-andam kanila para sa mas taas nga oportunidad sa kinabuhi."(P1)

Integrating the specialized science curriculum into the existing educational framework poses challenges, particularly in balancing new content with current teaching practices. Teachers noted that adapting their teaching methods to accommodate the SSES curriculum would require training and resources. Teacher 1 (Grade 4) remarked:

"Adapting to a specialized curriculum will be challenging, especially if we are not provided with adequate resources and training."

While the program is widely supported, some community members raised concerns about its perceived exclusivity. Ensuring that the program is seen as a complement to, rather than a replacement for, existing educational opportunities is critical to gaining broader acceptance.

Ethical and Socio-Cultural Strategies

To address these issues, the study proposed the following strategies:

Expand access and coverage:

Consider supplementary programs or extracurricular activities to involve non-Fast Learner students in science education initiatives. For example, weekend science workshops or community science fairs can provide additional learning opportunities.

Transparent selection criteria:

Develop clear, merit-based selection criteria for the SSES program and communicate them effectively to all stakeholders. This ensures transparency and builds trust in the selection process.

Contextualization through localization and indigenization:

Incorporate local examples and cultural references into science lessons to make the content more relatable and meaningful to students.

Community engagement:

Engage parents and community members in the program's development and implementation through regular consultations, orientations, and feedback sessions. This will promote a sense of ownership and support for the program.

Teacher support to teach better:

Provide professional development opportunities for teachers to equip them with the skills needed to deliver the specialized curriculum while maintaining inclusivity and cultural sensitivity. The socio-economic study concluded that the SSES program has the potential to bring significant benefits to the community by addressing

gaps in STEM education and nurturing educational equity. However, ethical considerations such as equitable access, fairness in selection, and content relevance must be carefully addressed to ensure the program's success.

On the Decision to Implement the Proposed Special Science Program

Based on the findings of the feasibility study, it is highly recommended to move forward with the implementation of the SSES program at HNCES. The program has demonstrated strong feasibility in terms of both technical requirements and financial sustainability. The overwhelming support from students, parents, and teachers highlights the demand and readiness for such a program, making it a crucial educational advancement for the school. Financial projections show that, while the program requires an initial investment, funding can be effectively sourced through the school's MOOE allocation, DepEd grants, and external partnerships. The school's existing resources, including its partnership with YSEP, will provide essential support for the implementation and sustainability of the program. Furthermore, the program addresses key socio-economic needs by providing an opportunity for students to develop essential skills in STEM fields. The program's focus on equipping students with advanced science knowledge aligns with the community's aspirations for educational growth and better opportunities for the next generation. Addressing concerns about equitable access and ensuring fairness in the selection process will be key to its success, with supplementary programs proposed to engage all students. In conclusion, the SSES program aligns with the educational objectives of the school and its community. With proper planning, strategic partnerships, and a commitment to addressing challenges, the program will not only enhance the quality of education but also contribute to the division's development, ensuring that students are well-prepared for future academic and career opportunities in science and technology.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

This feasibility study aimed to evaluate the potential implementation of the Special Science for Elementary School (SSES) program at H.N. Cahilgot Central Elementary School. Based on the quantitative and qualitative data gathered, the following conclusions were drawn:

On the Market Study: Educational Needs and Market Analysis

Based on the gathered data, the study revealed substantial interest in the proposed SSES program, with 85% of surveyed students from the Fast Learner (FL) sections expressing a desire to enroll. Parents also demonstrated strong support, highlighting the program's alignment with their aspirations for their children's academic and career development in STEM fields. The findings confirm a clear demand for the program, positioning it as a timely and relevant initiative.

On the Technical Study: Strategic Planning and Sustainability

Based on the gathered data, while resource gaps, such as the lack of laboratory facilities, instructional materials, and teacher training, were identified, these challenges can be addressed through strategic interventions. The school leadership expressed willingness to reorganize schedules and develop phased infrastructure upgrades to support the program's implementation.

On the Management Study: Risk Assessment and Mitigation Strategies

Based on the gathered data, the study identified several risks, including low enrollment, resource insufficiency, and inadequate teacher preparation. However, the school's partnerships, particularly with the Young Scientists Enrichment Program (YSEP), demonstrate its capacity to mitigate these challenges. Proactive strategies, such as targeted promotions and professional development, were identified as key to ensuring program sustainability.

On the Financial Study: Financial Projections and Cost-Benefit Analysis

Based on the gathered data, financial analysis confirmed the program's feasibility, with funding sources available

through the school’s Maintenance and Other Operating Expenses (MOOE), DepEd grants, and external partnerships. While initial investments in laboratory equipment and teacher training are required, these costs are justified by the program’s long-term benefits in improving academic outcomes and community development.

Socio-Economic Study: Ethical and Socio-Cultural Considerations in Educational Projects

Based on the gathered data, the study emphasized the program’s potential to address socio-economic inequities by providing accessible and high-quality STEM education. Ethical considerations, such as inclusivity and fairness in selection, were addressed through recommended strategies to engage and involve the broader community. In summary, the findings indicate that the proposed SSES program is a feasible, sustainable, and impactful initiative that aligns with the school’s objectives and community aspirations. Its implementation promises to advance STEM education and the development of future-ready learners.

Recommendation

In light of the conclusions, the following recommendations are made: To Implement the SSES program and respond to the manifested need for STEM education specialization. Surveys and focus group discussions will be undertaken to find out if the program continues to support the changing needs of the student population and community. Design promotional strategies for underrepresented groups in terms of students who hail from economically depressed families so they may be reached out for their participation as well in this program. To enhance strategic planning and sustainability, provide resources for developing laboratory facilities, updated instructional materials, and targeted teacher training programs. Seek partnerships with educational institutions and organizations to share resources and expertise. In addition, prepare a phased plan for infrastructure improvements starting with essential laboratory spaces and science tools to support effective learning. To develop a comprehensive risk management plan focused on enrollment challenges, resource gaps, and operational constraints that will mitigate risks and operational challenges. Strengthen collaborations with existing partners, such as YSEP, to secure additional funding and resources. Engage stakeholders through regular consultations to promote transparency and collective commitment to the program's success. To prepare a detailed financial plan, indicating funding sources, including DepEd grants, SEF allocations, and local business sponsorships, to ensure financial sustainability. Optimize the use of the school's MOOE for operational and instructional expenses. Regularly monitor financial performance to minimize risks and maintain the long-term viability of the program. To make it fair and socio-cultural relevant, develop transparent merit-based selection criteria to include everybody. Make the STEM curriculum contain culturally relevant examples and activities that foster engagement among students and strengthening the connection of the program with the community. Foster the strong involvement of the community through science fairs, workshops, and regular feedback sessions to keep active participation and program support. The researchers propose this Phased Action Plan to guide the effective implementation of the program. Each phase is carefully designed with specific timelines and activities to ensure thorough preparation, smooth execution, and continuous improvement.

Phase	Timeline	Key Activities
Preparation	6 months prior to launch	<ul style="list-style-type: none"> - Conduct needs assessment. - Secure funding and partnerships. - Finalize the Class schedule.
Capacity Building	3 months prior to launch	<ul style="list-style-type: none"> - Train teachers in STEM pedagogy. - Upgrade laboratory facilities and procure materials.
Pilot Implementation	1st Academic Year	<ul style="list-style-type: none"> - Launch the program for Grade 4 students. - Monitor and evaluate initial implementation.
Initial Gains Evaluation	At the end of 1st Academic Year	<ul style="list-style-type: none"> - Check progress of the initial phase of the program

Expansion	2nd Academic Year	<ul style="list-style-type: none"> - Extend the program to Grades 5 and 6. - Incorporate feedback from the pilot phase.
Full Integration	3rd Academic Year	<ul style="list-style-type: none"> - Fully integrate the program across target grade levels. - Establish a system for continuous improvement.

In conclusion, the SSES program at HNCES is a viable and beneficial initiative that addresses critical gaps in STEM education. Its implementation, guided by the outlined recommendations, will not only enhance academic performance but also contribute significantly to regional educational and economic development. Proper planning, stakeholder collaboration, and adherence to ethical considerations will ensure the program’s success and sustainability.

APPROVAL SHEET

This feasibility study entitled “**Feasibility Study On Launching Special Science for Elementary School Program At H.N. Cahilot Central Elementary School**”, in partial fulfilment of the requirements for the subject EDUC 310 Educational Project Feasibility Design has been examined and is hereby recommended for acceptance and approval for oral examination.

PANEL OF EXAMINERS

Chairman

Member

Member

Member

Member

ACCEPTED and **APPROVED** in partial fulfilment for the requirements for the subject EDUC 310 Educational Project Feasibility Design

ACKNOWLEDGMENT

This feasibility study would not have been possible without the support and contributions of many individuals and organizations. First and foremost, we would like to extend our deepest gratitude to our professor, John Michael P. Castino, PhD, MPA, LPT, for guiding us in this study. His insight, constructive suggestions, and encouragement have been helpful in making our work refined and in the achievement of our goals. His commitment to inspiring academic excellence has inspired us in pursuit of the highest possible standards and for which we are also greatly appreciative of the knowledge and mentoring he has accorded to us. To the faculty and staff, parents, and learners of H.N. Cahilot Central Elementary School, headed by their School Principal Ma. Arlyn P. Albo roto Principal III, their willingness to share insights, experiences, and feedback during the

data collection process was crucial in shaping the findings and ensuring the success of this study. Their cooperation and openness not only enriched the depth of our analysis but also demonstrated their commitment to supporting initiatives that aim to bring positive change to the educational landscape. To our families and loved ones, for unwavering support, encouragement, and understanding during our journey. And last but not least, to Almighty God, for divine guidance, wisdom, and strength that has been the source of inspiration for us to go through this work, give us clarity, patience, and perseverance in order to overcome challenges and be victorious.

DEDICATION

This feasibility study is dedicated to our families; unwavering support and encouragement, sacrifices, that have been our pillars in strength throughout this endeavor. Your love and belief in our abilities have inspired us even to persevere in light of challenges. To Dr. John Michael P. Castino, PhD, MPA, LPT, his guiding words, expertise, and useful critique have given significance to this study. Not only have his insights, teachings, and ideas strengthened our understanding and perspective in this undertaking, but also enriched the fruits of this work. This work is, therefore, dedicated to the colleagues and peers whose close collaboration, shared insights, and thoughtful discussions have assisted in refining the outcomes from this project. Your efforts and dedication epitomize the power of collective effort toward achieving commonly set goals. Finally, this work is dedicated to the learners, educators, and community members who aspire to make meaningful changes in education. May this study be a testament that through careful planning, research, and commitment, transformative ideas can become realities.

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APPENDIX A

Letter of Permission to the School Principal

Republic of the Philippines

MINDANAO STATE UNIVERSITY

Fatima, General Santos City

November 15, 2024

MA. ARLYN P. ALBOROTO

Principal III

H.N. Cahilsot Central Elementary School

Dear Ma'am;

Greetings!

Following our proposal to conduct a feasibility study on implementing a Special Science for Elementary School (SSES) program at H.N. Cahilsot Central Elementary School, we are seeking your permission to conduct a Focus Group Discussion (FGD) as part of this study. The FGD will include key stakeholders—parents, students, teachers, and school administrators—to gather valuable insights regarding their interest in and readiness for the SSES program. This interactive discussion will help us assess both the demand for this program and the support we might need for successful implementation. We will ensure that the FGD is conducted at a convenient time to minimize any disruption to regular school activities.

Thank you very much for considering this request. We look forward to your approval so we can continue to move forward in evaluating this promising program for our school.

Respectfully yours,

KATHLEEN KATE D. CANTERO

PHD-EM Student

BREMEM M. COTONER

PHD-EM Student

Mindanao State University-Graduate Studies

Approved by:

MA. ARLYN P. ALBOROTO

Principal III

Republic of the Philippines

MINDANAO STATE UNIVERSITY

Fatima, General Santos City



November 14, 2024

MA. ARLYN P. ALBOROTO

Principal III

H.N. Cahilsot Central Elementary School

Dear Ma'am Arlyn,

Magandang Gensan!

We are third-year students in the PhD in Educational Management (PhD-EM) program, currently enrolled in the course EDUC 310: Project Feasibility Design under the guidance of Dr. John Michael P. Castino. As part of our final requirements, we are tasked with conducting a feasibility study that we will present to a recipient school. Our study is intended to explore avenues for enhancing educational programs, infrastructure, and overall student experience, which aligns with our course objectives. We would be honored to collaborate with your school as the primary recipient of our feasibility study. Our team is prepared to coordinate closely with your administrative and teaching staff to understand your school's current objectives, challenges, and future goals. After our research and analysis, we will formally present the study findings to your school, offering a set of actionable recommendations tailored to your needs. We hope that this endeavor will provide your institution with valuable insights and contribute to your educational objectives while also allowing us to fulfill our academic requirements meaningfully. Thank you very much for considering this opportunity to collaborate. We look forward to your positive response and are eager to support the ongoing excellence at H.N. Cahilsot Central Elementary School.

Respectfully yours,

KATHLEEN KATE D. CANTERO

PHD-EM Student

BREMEM M. COTONER

PHD-EM Student

Mindanao State University-Graduate Studies

Approved by:

MA. ARLYN P. ALBOROTO

Principal III

APPENDIX B

Survey Questionnaire

Republic of the Philippines

MINDANAO STATE UNIVERSITY

Fatima, General Santos City

SURVEY QUESTIONNAIRE FOR THE FEASIBILITY STUDY ON IMPLEMENTING A SSES PROGRAM

Name: (Optional) _____



Dear Respondent,

This study aims to assess the feasibility of implementing a SSES program for the Grades 4, 5, and 6 at H.N. Cahilsot Central Elementary School. The feedback gathered from you will help identify the resources, challenges, and readiness of the school to implement this program. By filling out this survey, you consent to participate in this study. Your responses will be kept confidential, and your identity will not be disclosed. You may withdraw from the study at any time without any consequences.

Instructions:

Read each question carefully and provide your response.

For multiple-choice questions, mark your answer(s) by placing a checkmark (✓) or an "X" in the box [].

For open-ended questions, write your answer in the space provided.

Section 1: Demographic Information**Age:**

Below 25

25-35

36-45

Above 45

Gender:

Male

Female

Prefer not to say

Position:

Teacher

Parent

Other (Please specify): _____

Educational Background:

High School Graduate

College Graduate

Postgraduate

Other (Please specify): _____

Affiliation with H.N. Cahilsot CES:

Current Teacher

Parent of a Student

Alumni

Other (Please specify): _____

Section 2: Awareness and Perceptions

Are you aware of any existing SSES Programs in elementary schools?

Yes

No

Do you think a SSES Program will benefit academically advanced students at H.N. Cahilsot CES?

Strongly Agree

Agree

Neutral

Disagree

Strongly Disagree

In your opinion, which specific skills should a SSES Program focus on? (Select all that apply)

Critical Thinking

Problem-Solving

Technological Proficiency

Innovation and Creativity

Other (Please specify): _____

How important is it to introduce a SSES Program for improving the school's academic standing?

Very Important

Important

Neutral

Not Important

Section 3: Needs Assessment

Do you believe the school currently has adequate resources to support a SSES Program?

Yes

No

Not Sure

What additional resources or support do you think are necessary for the program's success? (Select all that apply)

- Laboratory Equipment
- Training for Teachers
- Access to Technology (e.g., Computers, Internet)
- Update learning materials
- Additional Funding
- Other (Please specify): _____

Are you willing to support additional contributions (e.g., fees, fundraising) for the program?

- Yes
- No
- Not Sure

Section 4: Benefits and Challenges

What benefits do you foresee if a Special Science Program is implemented? (Select all that apply)

- Improved Student Learning Outcomes
- Enhanced Reputation of the School
- Better Preparation for STEM Careers
- Increased Enrollment
- Other (Please specify): _____

What challenges do you think might arise from implementing this program? (Select all that apply)

- Lack of Funding
- Resistance to Change
- Insufficient Teacher Training
- Inadequate Facilities
- Other (Please specify): _____

Section 5: Recommendations and Suggestions

Would you enroll your child (or recommend enrollment) in the Special Science Program if it is offered?

- Yes
- No
- Not Sure

What specific topics or areas should be included in the Special Science curriculum?

What other programs or initiatives do you think would benefit H.N. Cahilsot CES?

Do you have any additional comments or suggestions about implementing a Special Science Program?

Thank you for participating in this survey! Your input is crucial to the success of this study.

Republic of the Philippines

MINDANAO STATE UNIVERSITY

Fatima, General Santos City



SURVEY QUESTIONNAIRE FOR THE FEASIBILITY STUDY ON IMPLEMENTING A SSES PROGRAM

Name:(Optional) _____

Dear Respondent,

This study aims to assess the feasibility of implementing a SSES program for the Grades 4, 5, and 6 at H.N. Cahilsot Central Elementary School. The feedback gathered from you will help identify the resources, challenges, and readiness of the school to implement this program. By filling out this survey, you consent to participate in this study. Your responses will be kept confidential, and your identity will not be disclosed. You may withdraw from the study at any time without any consequences.

Section 1: Demographic Information

Grade Level:

Grade 3

Grade 4

Grade 5

Gender:

Male

Female

Prefer not to say

Age:

8

9

10

11

Other (Please specify): _____

Section 2: Interest in Science

Do you enjoy learning science at school?

Yes, very much

Yes, sometimes

No, not really

No, not at all

What topics in science interest you the most? (Select all that apply)

Animals and Plants

Earth and Space

Technology and Inventions

Experiments and Problem-Solving

Other (Please specify): _____

How often do you participate in science-related activities (e.g., experiments, science fairs)?

Very Often

Sometimes

Rarely

Never

Section 3: Awareness and Perceptions

Have you heard about special programs for science in other schools?

Yes

No

Would you like to join a program that focuses on learning more about science and doing experiments?

Yes

No

Not Sure

Why would you like to join (or not join) a SSES Program?

What do you think makes science exciting or difficult to learn?

Section 4: Needs and Expectations

What would you like to learn in a SSES Program? (Select all that apply)

How to conduct experiments

How to solve real-world problems

How to use technology for learning

How to think like a scientist

Other (Please specify): _____

What activities would make science learning more fun for you? (Select all that apply)

Doing experiments in a lab

Using computers and technology

Visiting science museums or nature parks

Competing in science contests

Other (Please specify): _____

Section 5: Feedback and Suggestions

Do you think a Special Science Program will help you prepare for your future goals?

Yes, very much

Yes, somewhat

No, not really

No, not at all

What other programs or activities would you like your school to offer?

Do you have any suggestions for making science lessons more enjoyable?

Thank you for sharing your thoughts! Your responses will help us make better learning opportunities for you and your classmates.

APPENDIX C

Semi-Detailed Interview Guide

Introduction

- **Greeting:** "Good day, and thank you for taking the time to participate in this interview. My name is [Your Name], and I am conducting a feasibility study on the implementation of the Special Science for Elementary School (SSES) program at H.N. Cahilsot Central Elementary School. The purpose of this interview is to gather your insights on the school's readiness, capacity, and support for the program."
 - **Confidentiality Statement:** "Please be assured that your responses will remain confidential and will be used solely for the purpose of this study. You may decline to answer any question or withdraw at any time."
 - **Consent Confirmation:** "Do you consent to participate in this interview?"
-
-

Teacher Focus Group Discussion (FGD) Guide

Directions:

In this focus group discussion, we will explore your thoughts and experiences as teachers of the Fast Learner sections regarding the potential implementation of a Special Science program. Please feel free to share your honest opinions. The session will be recorded for analysis, and all responses will remain confidential.

Explanation of the Study:

The goal of this discussion is to gather in-depth insights into the feasibility of implementing a Special Science program in the Fast Learner sections. Your feedback is crucial in determining the needs, resources, and challenges associated with the program's potential implementation.

Ethical Consent:

By participating in this focus group discussion, you consent to take part in the study. Your comments will be anonymized, and the discussion will be recorded for research purposes only. You may withdraw from the discussion at any time without any consequences.

1. Program Benefits

- How do you think a Special Science program would benefit the students in the Fast Learner sections?
-
-

2. Resources and Support

- What resources do you think are necessary for the success of this program?
-
-

3. Implementation Challenges

- What potential challenges or barriers do you foresee in implementing the Special Science program at H.N. Cahilsot Central Elementary School?
-
-

4. Teacher Preparation

- What kind of training or professional development would be helpful for you in teaching this program?
-
-
-

Parent Focus Group Discussion (FGD) Guide

Directions:

In this focus group discussion, we will explore your thoughts on the potential implementation of a Special Science program at the school. Your feedback is important to help us understand how the program may benefit your child and what challenges may arise.

Explanation of the Study:

This discussion is part of a study assessing the feasibility of a Special Science program for Fast Learner students. Your responses will provide valuable information on the program's potential impact from the perspective of parents.

Ethical Consent:

By participating in this focus group discussion, you consent to take part in the study. Your responses will remain anonymous, and the discussion will be recorded for analysis. You can withdraw from the discussion at any time without consequences.

1. Program Perception

- What are your thoughts on the implementation of a Special Science program for your child's grade level?
-
-

2. Parental Support

- How do you think you could support your child in this program?
-
-

3. Barriers to Implementation

- What challenges or barriers do you think might prevent the implementation of this program?
-
-

Learners Focus Group Discussion (FGD) Guide

Part 1: General Perceptions of Science Education

1. Do you enjoy learning science at school? Why or why not?
2. What topics in science interest you the most? (e.g., experiments, animals, space, technology)
3. Are there science-related activities or lessons you wish you could do more of in class?

Part 2: Awareness and Expectations for the SSES Program

1. Have you heard about special science programs in other schools? If yes, what do you think about them?
2. If a Special Science program were introduced here, would you be interested in joining? Why or why not?
3. What do you expect to learn or do in a Special Science program?

Part 3: Learning Preferences and Needs

1. What kind of activities make science learning fun for you? (e.g., hands-on experiments, using technology, group projects)
2. Do you feel you have enough resources in school (e.g., science materials, labs) to learn science effectively? Why or why not?
3. How do you think having more experiments and science tools would help you understand lessons better?

Part 4: Challenges and Suggestions

1. What challenges do you think students might face in a Special Science program? (e.g., balancing time, difficulty of lessons)
2. How can teachers and the school help make science lessons more engaging and easier to understand?
3. What suggestions do you have to make a Special Science program successful for students like you?

APPENDIX D

DepEd Order



Republic of the Philippines
Department of Education
DepEd Complex, Meralco Avenue, Pasig City



DepEd ORDER
No. 57, s. 2011

JUL 20 2011

POLICY GUIDELINES IN THE IMPLEMENTATION OF THE SPECIAL SCIENCE ELEMENTARY SCHOOLS (SSES) PROJECT

To : Undersecretaries
Assistant Secretaries
Bureau Directors
Directors of Services, Centers, and Heads of Units
Regional Directors
Schools Division/City Superintendents
Heads, Public Elementary Schools
All Others Concerned

1. Section 17, Article II of the Philippine Constitution mandates the State to give priority to Education, Science and Technology to foster patriotism and nationalism, accelerate social programs and promote total human development. Section 10, Article XIV further states that Science and Technology are essential for nationalism, development, invention, innovation and their utilization. Providing opportunities for the development of scientific attitudes, technological skills and higher order thinking skills among learners of Basic Education in an environment supportive of their nurturance is the primary responsibility of the Department of Education (DepEd).

2. As a supporting and strengthening initiative to the above mandates, this Department through the Bureau of Elementary Education (BEE) launched and implemented the Special Science Elementary Schools (SSES) Project in 2007 to fifty-seven (57) public elementary schools. This Project has expanded to forty-three (43) more schools in 2009. It is a research and development project designed to develop Filipino children who are equipped with scientific and technological knowledge, skills and attitudes; creative and have positive values; and lifelong learning skills to become productive partners in the development of the community and society.

3. The Project aims to:

- a. provide a learning environment to the gifted and talented through special Mathematics and Science curricula which recognize multiple intelligences geared towards the development of God-loving, globally competitive, nationalistic, creative, ecologically aware, scientifically and technologically-oriented and skilled individuals who are empowered through lifelong learning skills;
- b. provide the gifted and talented learners with avenues, opportunities and exposures for developing necessary skills and aptitudes;
- c. capacitate school heads and teachers in implementing and managing SSES schools; and
- d. develop SSES program models for both the regular schools and SPED centers.

"EFA 2015: Karapatan ng Lahat, Pananagutan ng Lahat!"

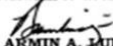


4. For School Year (SY) 2011-2012, the Project shall be expanded to one hundred (100) more public elementary schools which consist of SPED Centers with programs for the gifted and talented, and regular schools. Enclosure No. 2 contains the List of Schools. Each of the schools identified, the divisions and regions involved in the project shall be provided with funds subsidy to support the activities pursuant to the implementation of the Project. A DepEd Order to this effect shall be issued.

5. For effective implementation of the Project, the identified schools, divisions and regions should adhere to the implementing guidelines set forth in Enclosure No. 1.

6. For more information, please direct all inquiries to **Ms. Fe M. Villalino**, Chief, Staff Development Division (SDD-BEE) at telephone no.: (02) 687-2948 or to **Ms. Miria R. Olores**, Chief, Special Education Division (SPED-BEE) at telephone no.: (02) 631-99-93 or send a message at e-mail address: bee_sdd@yahoo.com.

7. Immediate and widest dissemination of this Memorandum is desired.


BR. ARMIN A. LUISTRO FSC
Secretary

Encls.: As stated

Reference:
DepEd Order: No. 51, s. 2010

To be indicated in the Perpetual Index
under the following subjects:

ELEMENTARY EDUCATION
OFFICIALS
POLICY
PROJECTS
PUPILS
SCHOOLS
SCIENCE EDUCATION

APPENDIX E

Photocuring the Conduct of Interviews

