

Analysis of Special Science Elementary School Project for Gifted Children in the Philippines

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Abstract

In response to the growing importance of science and gifted children in the Philippines, the Special Science Elementary School Project (SSES Project) was first implemented in 2007. This project is intended for gifted children in public elementary schools with a goal of producing scientifically literate students that will pursue study in special science high schools. Hence, the purpose of this presentation is to analyze the SSES Project. Specifically, it seeks to answer the following questions: (1) what is the process in identifying children for the project?; (2) what type of science curriculum is offered for the children?; and (3) what are the qualifications required to become an SSES teacher? A comparison between the SSES Project and regular schools are also explored in this presentation. The study used documents, articles, and department of education memo and orders as main sources of the analysis. The results of the analysis showed that SSES Project, although it is also a part of public school, was different from regular public school in terms of the following: selection process for students; qualifications of teachers and science curriculum. Children should pass stages of written, oral and psychological tests. For example, all incoming Grade 1 students, with permission from the parents, will be given written test (English, Math and Science), reading test and interview, 50 students who got the highest rank will move to the next level of screening process which is the psychological test. Students will be ranked based on the result of first phase (50%) and second phase (50%) and only those on the top 35 out of 50 were included in the project. Aside from the four subjects for Grades 1 and 2 in the regular curriculum, the project offered enhanced science curriculum in grades 1 and 2 which is formally stated in grade 3 in the regular curriculum. The enhanced science curriculum for this project is design to develop higher-order thinking skills through learner-oriented activities with an integration of ICT instruction. The subject is taught longer than the allotted time in regular curriculum: 60 minutes for grades 1 to 3 and 80 minutes for grades 4 and 6 to give more time and emphasis on science concept and process. Finally, both schools followed the qualification set by the law to become public school teacher, however, the project included additional qualifications in selecting teachers such as willingness to participate and support the project, performance, and specialization in science and/or relevant training in the subject. The implementation of the project may serve as a tool to strengthen the importance and awareness of providing appropriate science program for gifted children in elementary level. Further, the aim of producing scientifically literate gifted children that may pursue science related professions may be achieved through this project.

[Keywords:] *Special Science Elementary School Project (SSES Project), science, gifted young children, Philippines*

Introduction

Every child, regardless of his individuality and needs, has a right to education as stated in the 1987 Philippine Constitution. This statement is supported in the report presented by the Department of Education Secretary Jesli Lapus (2008) at Geneva, Switzerland where he stressed the participation of the country in the global movement on Education For All 2015 which states that by that year every Filipino child is expected to be functionally literate, including children with special needs. This goal can be achieved by providing appropriate and responsive education for all children and children with special needs, including those who are gifted.

Giftedness draws multiple meanings from different sources. In general, gifted children show exceptional abilities different from children of their age. They are extremely curious, ask questions, learn quickly, and think about the world differently (Smutny, 2004). Dr. Leticia Peñano-Ho, president of the Philippine Association for the Gifted (PAG) says, "(Giftedness is a) condition resulting from a responsive biological and social environment that is manifest during the early developmental period of life and describes significantly above performance and estimates of future performance. In totality, gifted children make up the 3% of the total population of this country. Unfortunately, based on the statistics of School Year 2004 – 2005, only 4.8% of children with special needs are provided with appropriate educational services, while the remaining 95.2% are not (Sped Division – DepED, 2005). This scenario calls for the need for creating special programs that offer suitable education for children with special needs all over the country, including for those who are gifted.

For many decades, educating gifted children has been recognized in the country. The importance of educating gifted children is supported by national laws and policies. For example, the constitution under Article XIV affirmed that the state should take appropriate steps to make education accessible for all, and that the state should provide incentives and scholarship grants to deserving children gifted in science. With this, Presidential Decree 603 (PD 603) promulgated in 1974 stressed the importance of providing opportunities and encouragement for gifted children to develop their special talents. In doing this, the decree under Article 74 stated that there shall be special classes in every province and if possible special school for children with special needs including gifted children. Most of these laws and provisions emphasized the importance of providing science education for gifted children.

Hence, in response to what is stated by the law and the growing importance of educating gifted children in the country, schools for the gifted were established. Special science schools were built in different provinces all over the country. One of the most popular public science high schools in the country is the Philippine Science High School (PSHS) which was established in 1970. This school is among the many science high schools that offer a special science curriculum for gifted children. Its main goal is to train students to become scientists in the future (Wong-Fernandez & Bustos-Orosa, 2007). Limited number of students is admitted in science high schools because they administered strict screening procedures.

The Philippine government, in its pursuit of providing an appropriate education for all gifted children, introduced a program under the Department of Education (DepED)–Special Education Division called Special Science Elementary School Project (SSES Project) in 2007. The goal of this project is to produce scientifically literate children starting from the elementary level. Graduates from these schools are expected to continue in science high schools all over the country. Although it is also part of the public school system, the project is different from other classes in the public schools. Hence, the purpose of this study is to analyze the Special Science Elementary School Project (SSES Project). The analysis focuses on the processes of selecting students, science curriculum, and qualifications of teachers for this project.

Elements of an Effective Program for the Gifted

Gifted children have unique and challenging needs (Gessner, 2007). The needs of gifted children can be addressed by a program that is tailored to their characteristics, which is often not provided in the regular classroom (Cox, Daniel, & Boston, 1995 as cited by Parke, 1991). The limited opportunities provided in the

regular classroom may result in gifted children becoming unchallenged and unmotivated (Winerbrenner, 2001).

Providing a responsive program for gifted children is not an easy task for educators. One of the challenging tasks for educators is how to develop an appropriate and responsive program for gifted children. The schools need to respond to their educational needs before their abilities diminish (Smutny, 2000). According to Criteria for Excellence: Gifted and Talented Program Guidelines, an effective program for gifted children should have the following elements (Maryland State Department of Education, 1983):

- *Identification of students* – an identification process is an important stage for a gifted program. Proper procedures in conducting the identification process should be done by the right authorities such as the supervisors, principal, assistant principal or other professional members. The results of this process help program developers and teachers to decide on the appropriateness of curriculum to be provided for gifted children.
- *Curriculum and Instruction* – gifted children have demanding characteristics and needs; therefore, curriculum and instruction for gifted children should be appropriate to their needs. The regular curriculum program should be differentiated to meet the demanding needs, learning styles and abilities of gifted children. Teachers can differentiate the content, process and product to be suitable for the students' needs. The differentiated curriculum should have both the elements that are different from and elements that are similar with regular curricula offered to children of the same chronological age. However, some aspects of the regular curriculum may be adopted, while others which may be unique to the gifted children will need to be added.
- *Professionally qualified teachers* – the process of selecting qualified teachers should be established and clearly articulated. The criteria for selecting qualified teachers should be based on the competencies and characteristics supported by research as being important to effective teaching of gifted children.
- *Professional development* – teachers of gifted children should be trained to become successful in the field. Professional development of teachers should include characteristics and identification of gifted children and implication for curriculum, instruction and assessment process.
- *Program Management* – the program should clearly state the role of the gifted program and the services at the system and school level to ensure the development and maintenance of program excellence. Schools should provide general direction of the program such as the mission and vision. Moreover, administrators who will support the implementation of the program should be clearly identified and properly supported as they are responsible for goal setting, students' coordination, staff development, fund allocation and communication with the parents.
- *Evaluation* – the evaluation process should be based on the data and information to help decision makers decide on the area of the program that needs improvements. Ongoing assessment is an important part of program planning and implementation. The evaluation should be conducted by professionals from the field. Furthermore, it should focus on whether the goals and objectives of the program have been achieved.

Philippine Elementary Science Education

Basic education in the Philippines is covered within six (6) years for elementary and four (4) years for secondary, or an aggregate of ten (10) years. The country has the shortest primary educational system in the whole world (Marina, 2000). The Bureau of Elementary and Secondary Education of the Department of Education is the in-charge of the primary education of the country. Under this bureau is the Special Education Division which is in-charge of the education for children with special needs.

At present, the Restructured Basic Education Curriculum (RBECE) 2002 is the mandated curriculum for primary education. The curriculum is composed of five (5) main subject areas. These areas are English, Mathematics, Science, Filipino, and MAKABAYAN. The design of the curriculum is content-topic-based and competency-based. As mandated by the law, Philippine schools use a bilingual system of instruction. Filipino is used in teaching Filipino and MAKABAYAN, while English is used in teaching English, Science and Mathematics.

As mentioned, one of the subjects included in the curriculum is Science. The goal of the subject as stated in the Restructured Basic Elementary Curriculum Handbook 2002 is “to help Filipino students develop functional understanding of science concepts and principles linked with real life situations, acquire science skills as well as scientific attitudes and values needed in solving everyday problems”. It prescribed a list of minimum competencies that children need to acquire after a certain grade or year level. However, teachers are given authority to modify and use teaching strategies based on the characteristics and needs of the students.

The teaching and learning of Science is formally starts in Grade 3. There is no separate Science subject for Grades 1 and 2; however, the use of simple Science content is integrated in the teaching of English and Social Studies. Forty minutes is allotted to Grade 3 while 60 minutes is allotted starting from Grade 4 to 6 to give more time and emphasis on the study of complex science concepts and processes that prepare students for high school Science.

Special Science Elementary Science Project (SSES Project)

The Philippines gives much importance in developing scientifically literate children due to its many benefits. Pawilen & Sumida (2005) opine that children who are well versed with different scientific skills can make important contributions to the development of the country. As mentioned, there are several public science high schools that offer specially-designed science curricula for students with exceptional abilities. However, there is none in elementary level until the first implementation of Special Science Elementary School Project began in 2007 in the public schools.

Lapus (2009) noted that among high school graduates only 44% of them pursue science or engineering-related courses in college. This situation shows that there is a need for providing a challenging curriculum in Science and Mathematics within basic education which students may consider as a career path in the future. This further plan for improvement is also an answer to what was stated by former President Gloria Macapagal-Arroyo on the importance of Science and Technology as a means “to put food on the table, to save lives and prevent calamities, to harness renewable and indigenous energy, to cure and prevent illnesses and to create more high-quality job opportunities”. Hence, the Special Science Elementary Project for elementary school gifted children was introduced. The goal of the project is to produce scientifically literate children starting from elementary level. This goal is supported by its mission and vision.

Vision – *The SSES envisions developing Filipino children who are equipped with scientific and technological knowledge, skills and attitudes, creative and have positive values, lifelong learning skills to become productive partners in the development of the community and society.*

Mission – *The SSES provides learning environment to science-inclined children through a special curriculum which recognizes multiple intelligences and is geared towards the development of God-loving, nationalistic, creative, ecological aware, scientifically and technologically oriented and skilled individuals who are empowered through lifelong learning skills.*

The pilot implementation of the SSES was participated in by 57 selected public schools in 16 regions of the country. The participating schools were selected based on the following criteria: above average

performance in the division, regional and national achievement tests; strong leadership of school head, commitment of teachers and supportive parents and community; and availability of facilities and equipment relevant to support science and technology. As of 2010, the number of public schools with SSES Project increased to 100 (*Department of Education Order No. 51 series of 2010*).

Table 1. Ratio of SSES Project per District

Region	Number of SSES Project	No. of district	Region	Number of SSES Project	No. of district
Region I	7 (5.0%)	140	Region VIII	7 (3.5%)	198
Region II	6 (4.2%)	140	Region IX	6 (5.3%)	113
Region III	7 (3.9%)	179	Region X	6	
Region IV – A	7 (3.6%)	194	Region XI	6 (6.2%)	96
Region IV – B	6 (5.1%)	105	Region XII	4 (2.9%)	136
Region V	7 (4.2%)	166	CARAGA Region	7 (10.6%)	66
Region VI	6 (2.8%)	214	Cordillera Administrative Region	6 (4.9%)	122
Region VII	5 (2.8%)	177	National Capital Region	7 (6.6%)	106

This curriculum was first implemented in grades 1 and 2. After the first implementation, the project expanded its scope in School Year 2008-2009 by adding Grades 3 and 4. In School Year 2009-2010, Grades 5 and 6 were added to complete the whole SSES curriculum. Table 1 shows the ratio of public schools with complete cycle of SSES Project per district in 16 regions. The table also indicates the percentage of SSES Project per district as of 2010.

The SSES Project is designed to develop grade school children with high aptitude in science and mathematics through an enriched science curriculum. Lapus (2009) opines that this project provides opportunities for gifted elementary children to develop understanding and skills needed to become productive problem-solvers in a scientific and technological world. Furthermore, it will serve as a feeder schools to Science and Technology-oriented high schools all over the country.

Methodology

The purpose of this study is to analyze the Special Science Elementary School Project for gifted children in the Philippines. Specifically, this seeks to answer the following questions:

- (1) What are the processes used for selecting students for SSES Project?;
- (2) What type of science curriculum is provided for the students?; and
- (3) What are the qualifications to become an SSES Project teacher?

This study used analysis of documents as main tool for gathering data. The researcher gathered available documents on the projects, articles about SSES Project through the official homepage, Department of Education Memorandum and Orders, the existing Philippine elementary science curriculum and the curriculum for SSES Project as the sole basis for analysis. The documents were analyzed to answer the abovementioned questions. Additionally, this paper focuses on the difference of the project with the regular schools in terms of admission process, science curriculum and teacher's qualifications, although they are both public schools.

Results of the Study

1. What is the process used for selecting students for SSES Project?

The Special Science Elementary School Project is intended to cater to children with exceptional abilities and skills far advanced than those of the regular children. Hence, children who have intentions of being included in the class should undergo rigid screening process. The Department of Education Central Office and Regional Offices administered the screening process for selecting children with exceptional abilities and talents. Selected children for the project should pass the following procedures. Figure 1 shows the process of selecting the children.

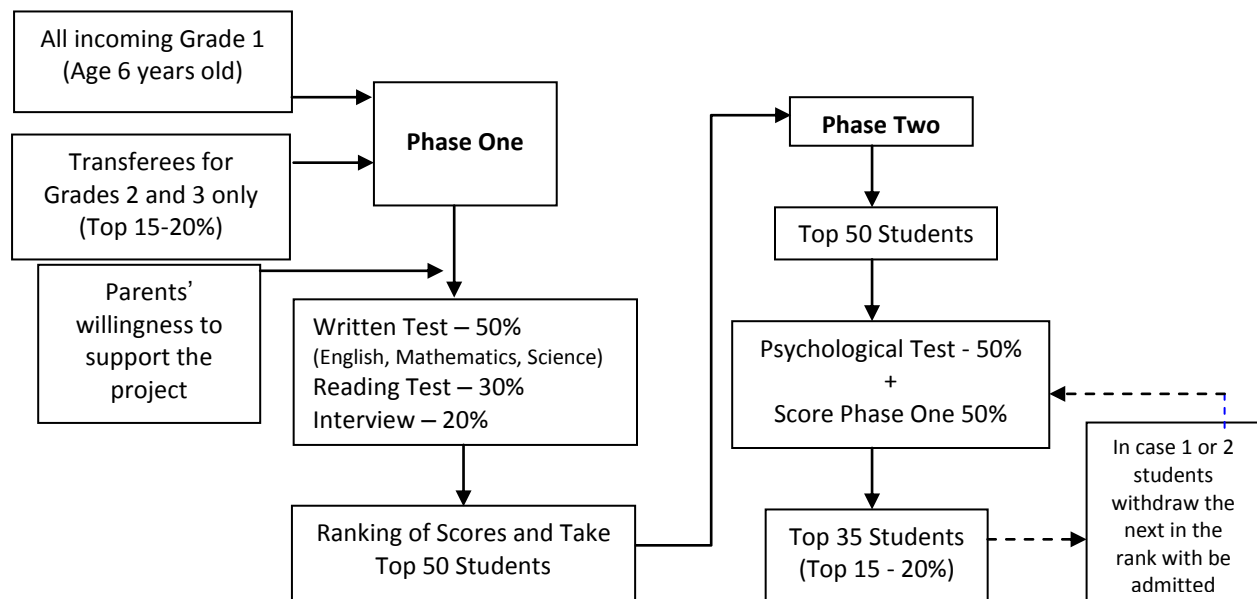


Figure 1. Diagram of Screening Process

Based on the figure above, all incoming Grade one children, ages 6 years old, are given a written test in English, Science and Mathematics; Student's Reading Ability test (SReA) and an interview as initial screening. This is administered by the Central or Regional Office of DepED. The scores of the children will be ranked and the top 50 who got the highest score among all incoming children will move to the next step of screening procedure.

In addition, parents are asked to sign a written agreement to show their willingness to support their children and the project. The SSES Project recognizes the importance of parents for the success of the project. In selecting children, the cooperation and support of parents is an important consideration. Teachers and children need support from parents in terms of the activities and projects of the SSES Project.

The top 50 children will be given a mental ability test or psychological test administered by the Regional Office. Afterward, all 50 children will be ranked based on the combination of 50% psychological test and 50% average of the first screening. The 35 (Top 15 – 20%) children who got the highest rank will be assigned to make up the Grade 1 of SSES class. In case anyone from the top 35 children did not enroll or withdraw from enrolling, the next in the rank will replace the vacant slot/s. This same process is applied to Grades two to six. This process in selecting new children is done yearly.

The project accepts transferees but only for Grades 2 and 3. Additionally, acceptance of transferees is allowed provided that the children belong to the top 15% - 20% of their previous class, and that there are available slots to accommodate the transferees. The same screening process is applied to children who wish to transfer to the project.

After a year the children will be evaluated based on their performance. In order for the children to continue being in the project, he/she should maintain the following requirements: (1) no grade lower than 80% in any subject in any grading period; (2) must have a final rating of 85% in English, Mathematics and Science subjects; and (3) continuously exhibits character traits defined in the standards for SSES children.

However, a child who does not meet the standards set by the project, despite of the remediation by the teachers with the assistance of the parents, shall be advised to move to the regular program in the succeeding school year. Or in any case, parents may voluntarily pull-out their child any time within the School Year.

2. What type of science curriculum is provided for the students?

The Special Science Elementary School Project (SSES Project) is designed to develop children with higher aptitude for Science and Mathematics. This project offers an enriched science curriculum anchored on the national curriculum which starts from Grade 1. The design of the SSES curriculum is Higher-Order Thinking Skills (HOTS)-based in nature with focus on learner-oriented activities. It provides children with the opportunity to develop lifelong learning skills. Furthermore, the SSES curriculum utilizes varied teaching approaches/strategies to address the multiple intelligences, learning styles and needs of the students.

The science curriculum for the project is divided into three areas: Life Sciences, Physical Sciences, and Earth and Solar System. Each area is composed of several themes with different competencies that children need to acquire after a year. For Grades 1 and 2, the curriculum offered are benchmarked in the higher grade level particularly in Grade 3 which is composed of the same themes.

In addition, the curriculum for this project is provided with ICT-enhanced instructions. It is taught with integration of technology such as the use of computer in teaching and learning science. In order to support the curriculum, the selected school should have a “state of the art” technology that includes a standard size classroom of 7 meters by 9 meters with at least two computers, a television set, cassette player/recorder, LCD projector, OHP, VHS/VCD/DVD for every classroom. Moreover, the school should have a science laboratory, a computer laboratory with multimedia and internet facilities, a speech laboratory, a music room, and a gym with functional sports facilities. To support the continuous improvement of the project facilities, Department of Education will provide financial assistance to the participating schools as stated in DepED Order No. 73 series of 2008.

With regards to the time, longer time is allotted in teaching and learning of the subjects under the SSES Project to give more emphasis on the study of Science concepts and processes. For Grades 1 to 3, children study Science for 60 minutes. Eighty minutes, however, are allotted time for Science in Grades 4 to 6. Teachers use English as medium of instruction in teaching the subjects. This is in response to Executive Order No. 210 series of 2003 which is about the policy of strengthening the use of English language as a medium of instruction in the Philippine educational system.

3. What are the qualifications to become an SSES Project teacher?

Teachers play important roles in the teaching and learning process. The success of the children in gaining meaningful and relevant learning experiences lies on the kind of teachers they have in the classroom. Gifted children need teachers that also possess exceptional abilities. Therefore, aside from the minimum qualifications stated by the law to become classroom teachers, SSES Project includes additional qualifications in order to be eligible as teachers for the project. Teachers for SSES Project should: (1) be willing to participate in the project; (2) have teaching experience for at least 3 years onward and not about to retire

within the next 5 years; (3) possess good moral character and positive work ethics; (4) have specialization in Science and/or relevant training in the subject; (5) have very satisfactory performance rating; and (6) be willing to undergo and attend professional development programs/studies (see SSES Project Handbook).

Likewise, teachers with ICT orientation or are willing to undergo training in ICT; with experience in conducting research; and have initiated innovations in teaching Science and/or Math are given much priority in being taken in as an SSES teacher. These criteria are added to ensure the capacity and passion of teachers to handle the children and to participate in the undertaking. These characteristics of teachers can contribute to the success of the project.

Once teachers have been selected to teach, professional trainings are provided for them in compliance with DepED Order No.73, s. 2008. The trainings focus on enhancement of teachers' and school heads' capability. Furthermore, University of the Philippines – National Institute for Science and Math Education (UP-NISMED) conducted trainings for some SSES teachers. The training given to the teachers will help them to become more competent teachers of SSES students.

Children in SSES Project are gifted (UP-NISMED, 2009). They need teachers that can address and cope with their demanding needs. Hence, the additional qualifications included in selecting teachers for SSES Project can help in addressing the needs and developing scientific skills of gifted children in SSES Project.

Findings

The study presented the analysis made on SSES Project for gifted children in the Philippines. It showed that there are points of differences between the regular school and the SSES Project. These differences are discussed as follows:

On Students' Admission

It is said that all children have the right to education. Hence, children can easily be admitted in regular public elementary schools as long as they have their copies of their birth certificates and the consent forms duly signed by their parents. This is not so under the SSES project. In the SSES project, children should undergo rigid screening procedure. High requirements and greater capabilities are expected of the SSES students. Under the SSES, children should pass written, reading, interview and psychological tests before they can be accepted in the class. Students who passed the rigid screening procedure should maintain an average grade expected of all SSES learners. Otherwise, they will be pulled out of the project. In contrast, students in the regular public school are only expected to achieve minimum level of performance. Table 2 shows the difference between the regular public elementary school and the SSES Project in terms of selection of children, the grade that a child should maintain, and the number of children per classroom.

Table 2. Comparison of two schools based on selection process, minimum grade requirement and number of children per classroom

Area	Regular Public Elementary School	Special Science Elementary School Project
Selection Process	No Rigid Screening Process	Has Rigid Screening Process
Minimum Grade Requirement (Science)	70%	85%
Number of children	Minimum of 35	Maximum of 35 (Top 15 -20%)

In the table above, the number of students per classroom is also included to show the difference between the number of students for regular classroom and for SSES Project. Under the Philippine laws, it is stated that no children should be refused access to education. Hence, in the regular public elementary school set-up, regardless of the number of students in a classroom, administrators do not have the right to reject or

refuse children who want to go to school. However, it is different in the SSES Project because the number of students is limited to a maximum of 35 per classroom. The project limits the number of students per class to make sure that all students are equally served and challenged.

On Science Curriculum

Regular public elementary school uses the mandated science curriculum as guide in providing the learning experiences of children. However, the SSES Project uses an enhanced science curriculum anchored on the regular curriculum which was designed to develop higher order thinking skills and to address the multiple intelligences of gifted young children. The curriculum for this subject is mandated by the central office of the Department of Education.

In regular public school set-up, Science as a separate subject formally starts only in Grade 3 as mandated by the Department of Education. There is no separate Science subject for Grades 1 and 2. In the SSES set-up, on the contrary, Science is formally taught in Grades 1 and 2 for teachers and administrators to know if teaching Science starting from the younger years can be a factor in improving the performance of children in the subject.

Table 3. Comparison of subjects offered in regular school and SSES Project (Grades 1 and 2)

Regular School	SSES Project
English	English
Filipino	Filipino
Mathematics	Mathematics
(No separate science subject)	Science
Makabayan	Makabayan

The class schedule for SSES is the same with the standard procedure in regular classes, except with the inclusion of Science in Grades 1 and 2. Table 3 compares the subjects for regular school and SSES Project (Grades 1 and 2). In the regular science curriculum, 40 minutes is allotted for Grade 3 children to study Science while additional 20 minutes are added in Grades 4 to 6. In contrast, longer time is allotted for Science in SSES Project rather than in regular science classes. Grades 1 to 3 students study Science for 60 minutes. Eighty minutes are allotted for the subject in Grades 4 to 6. Children in the SSES Project study Science longer than those in the regular schools with the purpose of giving children enough time to study and master science concepts and processes. Table 4 shows the allotted time for science in the regular and SSES Project respectively.

Table 4. Time Allotted for Science in the Regular School and for Special Science Elementary School Project

Subject (Science and Health)	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6
Regular School	*	*	40	60	60	60
SSES Project	60	60	60	80	80	80

* - No separate science subject.

There is no difference on the medium of instruction used for both the regular schools and SSES Project. Both classes use English as medium of instruction in teaching science as mandated in the Philippine curriculum.

On Teacher's Qualifications

Republic Act No. 4670 or also known as The *Magna Carta for Public School Teachers* gives the list of qualifications to become a public school teacher in the country. According to the Act, teachers in elementary should have earned a bachelor's degree in Elementary Education. Otherwise, those who are non-education graduates must have earned 18 units Certificate of Professional Education taken from any teacher-education institutions. Other requirements include passing the Licensure Examination for Teachers (LET) administered by the Professional Regulation Commission (PRC).

Teachers of SSES Project should possess the qualifications mandated by the law. However, there are additional qualifications that SSES teachers should have. These additional qualifications make SSES teachers different from the regular science teachers. Gifted children need teachers that have the exceptional characteristics that they possess. Hence, teachers should have additional characteristics that will enable them to teach the scientifically-inclined and gifted children.

Because of the characteristics of the children in the project, it is imperative that teachers should be provided with the needed trainings and workshops. Once teachers have been selected for the project, trainings are provided for them in compliance with the Department of Education Order No. 73, series of 2008. The trainings focus on the enhancement of teachers' and school heads' capability to handle SSES Project.

Trainings and workshops play important roles for science teachers of gifted children. Teaching gifted children is a challenging task for teachers. Science lessons for gifted children should focus on the development of skills such as problem-solving, creative and critical thinking and scientific thinking skills. Trainings and workshops can help them prepare and plan science lessons that help gifted children develop these skills.

The Future Plans of SSES Project

The pilot implementation of the project focused on identifying factors that a special science project for gifted children should have. The project already determined the qualities that science-inclined learners should possess; described the characteristics of a good SSES; and determined the factors that significantly contribute to the performance of the students in the project. For more than five years of existence, the project already organized a full grade cycle, produced more trained teachers and school heads that have the capability to pioneer and manage a project in their assigned schools, created provision for financial support for the implementation of the project and provision for the implementation of team teaching. At present, one of the future plans of SSES Project is to address the issues and concerns with regards to the organization of SSES classes, especially in the screening process due to the non-availability of the mental ability test. There is no standard mental ability test instrument for this project; only a teacher-made test is used to measure the mental ability of the incoming students. Due to this, it is more likely to say that the validity of the instrument is unreliable because different schools use different content and type of test instruments. Addressing these issues and concerns in the future can contribute to the improvement of the project.

Conclusion and Recommendations

The results of the analysis in this study showed that the Special Science Elementary School Project (SSES Project) has notable difference from the regular public elementary school in terms of screening procedure, science curriculum and teachers' qualifications. First, the project performs rigid screening procedure in selecting children for the project. This is to make sure that children possessed exceptional abilities, skills and behavior that can help them cope with the enhance science curriculum that the project will offer. Second, it offers enhanced science curriculum with ICT-integration. It focuses on developing higher-order thinking skills and multiple intelligences of gifted children. Finally, teaching gifted children is a challenging and difficult task; hence, the additional qualifications set for SSES teachers are needed. These

qualifications are needed to address the demanding needs of gifted children by planning and preparing challenging science activities for these children. Having these components, the SSES project is very promising in providing quality science education for gifted children starting from the elementary years. However, there are some aspects of the project that need to be addressed for further improvement such as the validity of mental-ability test used by each school with SSES Project, the strict monitoring of the implementation of enhanced science curriculum and the ability of teachers teaching in the SSES Project. Hence, based on the results of the analysis on the Special Science Elementary School Project (SSES Project) for the gifted children the researcher recommends the following: (1) evaluation on the effectiveness of the tools in identifying gifted children due to non-availability of mental-ability test; (2) evaluation of SSES science classes through actual classroom observations to identify what areas of instruction need improvement or what areas do teachers need to apply differentiated instruction in; (3) evaluation of teachers' abilities and skills in teaching gifted children; (4) analysis of materials used in teaching science such as textbooks and laboratory equipment; (5) attitude/perception of teachers, students and parents on the project; and (6) study on the emotional development of the gifted students in the project.

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