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A Proposed Model and Framework for Developing a Curriculum for the Gifted in the Philippines

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Abstract

The K to 12 Education provided an opportunity for the advancement of gifted education in the Philippines, especially in public schools. This paper identifies different existing programs for gifted education in the country and discusses the issues and challenges experienced by teachers and administrators in implementing the curriculum for the gifted in public schools. It presents a proposed curriculum development model that builds on a curriculum process followed by the Department of Education and based on accepted principles and theories of curriculum development. This paper also presents a proposed curriculum framework to guide teachers in designing curricula for gifted education. The proposed curriculum development model and curriculum framework could serve as a guide in the development of a curriculum for gifted students in all public schools across the country.

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1. Introduction

School Year 2017-2018 is an important period to remember in Philippine education. It marks the full implementation of the K to 12 Education Program, which was instituted in 2012 under Republic Act 10533 otherwise known as the Enhanced Basic Education Act of the Philippines. This major reform in the Philippine education system tested the tenacity of all educational institutions in the country. It provides immense opportunities for many administrative, curricular, and instructional reforms to be planned and implemented. It is also a period for the Department of Education (DepEd) to plan, design, and develop the first official curriculum for the gifted in the Philippines.

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In the past years, gifted education in the country is limited to selected special programs in science and mathematics, the Headstart Program, and a gifted program under Special Education in selected public schools. The Philippine Science High School System under the Department of Science and Technology (DOST) was established for gifted high school students in science and Mathematics. The government also established the Philippine High School for the Arts, which is under the National Commission of Culture, and Arts (NCCA) to develop gifted students in the field of music and arts. Gifted education is offered mostly by elite private schools in selected cities across the country. There are also limited professional organizations and advocates for gifted education in the Philippines.

Van Tassel-Baska (2004) observed, that in the global context, curriculum for the gifted has been a major issue over the past 25 years as attested to by proliferation of books and articles on the subject. Gifted education is still a growing field in developing countries like the Philippines. Undoubtedly, gifted education is quite expensive to implement; however, providing gifted education for the gifted and potentially gifted Filipino students is their right. The 1987 Constitution of the Republic of the Philippines states that every Filipino has the right to have access to quality education and training relevant to their needs.

This paper aims to help the DepEd develop a curriculum for the gifted and potentially gifted Filipino students. Specifically, it aims to identify existing programs and discuss some issues and challenges in gifted education in the country. It will also present a curriculum development model and curriculum framework that could be used to guide the development of curriculum for the gifted in Philippine schools. Currently, the Department of Education is completing the development of a curriculum for Filipino gifted students to be implemented in all public schools in the country. Thus, this study is useful and timely.

1.2. Conceptions of Giftedness

The concept of giftedness varies among different scholars. It also varies from different cultures. Davis, Rimm, and Siegle (2011) noted that there is no single definition of the word gifted that is universally accepted. Some scholars refer to it as having special talents and abilities while others think of it as a state of high intellect or genius.

Tannenbaum (2003) proposed a definition of giftedness in children to denote their potential for becoming critically acclaimed performers or exemplary producers of ideas in spheres of activity that enhance the moral, physical, emotional, social, intellectual or aesthetic life of humanity. For Gagne (1985), giftedness refers to domains of human abilities, talents, to domains of □human accomplishments. Giftedness also involves

excellence, rarity, productivity, demonstrability, and value attached to the skills/products of the individual (Sternberg & Zhang, 1995).

Howard Gardner (1983) presented his theory of Multiple Intelligences and identified nine intelligences that are present in every individual person: linguistic, logicomathematical, spatial, musical, bodily-kinesthetic, interpersonal, intrapersonal, naturalist, and existential intelligence. Many schools today considered this intelligence as areas of giftedness. Those who subscribe to this belief advocate that schools have a special role to play in the development and nurture of these gifts.

Reading the literature from a myriad of publications and studies conducted by experts on giftedness gives an insight that the concept of giftedness is always associated to the attributes of great intellectual and talented people having great accomplishments, developing great ideas and producing great works, inventions or performances. In some cases, giftedness is also associated with people having outstanding leadership abilities.

1.3. Characteristics of Gifted Students

The concept of giftedness is interdependent to the characteristics and attributes of gifted individuals. The definitions of giftedness provide a general conclusion that gifted individuals are people from various ages who give evidence of high intellectual ability, special artistic talents, and creativity in different areas. As to their intellectual ability, Davis, Rimm, and Siegle (2011) observed that gifted individuals are developmentally advanced in language and thought; thinking process are quick and logical, early advanced mathematical, musical, and artistic abilities; and high motivation with persistence. Upon examining several studies, Davis et.al (2011) also observed that gifted individuals are well adjusted in childhood, and reported to have had greater personal adjustments, emotional stability, self-esteem, professional success, and personal contentment.

Pufal-Struzik (1999) noted that gifted students are better adjusted than regular students and have better self-concepts and greater overall self-actualization. They possess a high level of independence, self-confidence, and internal control, sense of humor, and high moral thinking and empathy (Davis, Rimm, and Siegle, 2011). Renzuli and Reis (1997) also noted that gifted students have an instructional style preference, learning environment preference, thinking styles preference, and expression style preference. Watters and Diezmann (2003 observed that gifted students in lower primary level are likely to be faster, more intensely involved, and more abstract in their approach and solutions to problems.

Calvin Taylor (1988) observed that majority of gifted students possess special skills and talents: academic, productive thinking, communicating, forecasting, decision-

making, planning, implementing, human relations, and discerning opportunities. In the Philippines, Pawilen (2014), identified general attributes of Filipino gifted individuals and classified them into three: (1) high intellectual ability, (2) exceptional talents, and (3) outstanding leadership skills. Many intellectually gifted individuals also possess exceptional talents either in music or in arts. Talents are contributory to creativity and problem solving and that is essential for getting ideas into action (Davis, Rimm, and Siegle, 2011).

Some scholars like Cox, Daniel, and Boston (1985) preferred to use the term able learners than using the term gifted. Renzuli (1994) shared the same sentiment and prefers to use the phrase "gifted behaviors" which can be developed in certain students at certain times and in certain circumstances. Davis, Rimm, and Siegle (2011) explained that this argument is based on the premise that the title of "gifted" should not be bestowed on individuals as a result of the identification process. It is for this reason that many preferred to use the phrase "potentially gifted."

Taber (2007) encourages educators in gifted education to study carefully the characteristics, nature, and needs of gifted students. This is important in the development of a curriculum for the gifted. The nature of gifted students demands a curriculum characterized by a vast array of challenging activities that engage their cognitive skills. The learning environment, created by the curriculum, also plays a central role in the degree to which high-ability learners can become independent, innovative, imaginative thinkers (Amabile, 1996, Hennessy, 2004).

1.4. Curriculum Models for Gifted Education

There are several foreign curriculum models that can provide insights into what type of curriculum is needed and how to develop a curriculum appropriate for gifted individuals. Understanding these curriculum models will help the researcher in developing the proposed curriculum development model and curriculum framework for gifted education, which is the focus of this study.

A. School-wide Enrichment Model

The Schoolwide Enrichment Model (SEM) (Renzulli & Reis, 2009, 1997) is widely implemented as an enrichment program used with academically gifted and talented students and a magnet theme/enrichment approach for all schools interested in high-end learning and developing the strengths and talents of all students (Davis, Rimm, and Siegle, 2011). The major goal of the SEM is the application of gifted education pedagogy to the total improvement of the school.

The SEM provides enriched learning experiences and higher learning standards for all children through three goals; developing talents in all children,

providing a broad range of advanced-level enrichment experiences for all students, and providing advanced follow-up opportunities for young people based on their strengths and interests. The SEM focuses on enrichment for all students through high levels of engagement and the use of enjoyable and challenging learning experiences that are constructed around students' interests, learning styles, and preferred modes of expression.

B. Parallel Curriculum Model

The Parallel Curriculum Model evolved from a National Association for Gifted Children curriculum in 1998. A group of scholars (Tomlinson, Kaplan, Renzulli, Purcell, Leppien, & Burns) collaboratively developed this model. It is based on the premise that every learner is somewhere on a path toward expertise in a content area. It promotes a curriculum model for developing the abilities of all students and extending the abilities of students who perform at advanced levels. The Parallel Curriculum Model (PCM) offers four curriculum parallels that incorporate the element of ascending intellectual demand to help teachers determine current student performance levels and develop intellectual challenges to move learners along a continuum toward expertise. (Tomlinson, Kaplan, et.al, 2002).

The four curriculum parallels in this model are: (1) Core curriculum – focuses on the nature of knowledge that is embedded in the discipline. These are core concepts, skills and values that are unique for each discipline; (2) Curriculum of Connection – focuses on the integration or interconnectedness of knowledge across different disciplines; (3) Curriculum of Practice – involves application of knowledge to different real-life situations: and the methodology of a practitioner; and (4) Curriculum of Identity – fits the learner's values and goals and those that characterize practicing professionals.

The beauty of this model lies in its framework of helping the learners to experience the nature of the different disciplines rather than just accumulating information. It is designed to engage the learners with the core of knowledge development in each discipline.

C. Autonomous Learner Model

Betts (2004) pointed out that curricular offerings typically fall into three levels. Level 1 is a prescribed curriculum and instruction that focuses on state standards. Level 2 involves differentiation of curriculum base on individual differences. Level 3 features learner-differentiated options where students are self-directed and

teachers provide opportunities for the learners to be in charge of their learning. This model focuses on the third level.

The Autonomous Learner Model is divided into five major dimensions:

- 1. Orientation acquaints students, teachers, students, and administrators with the central concept in gifted education and the specifics of this model. At this level, gifted students work together in doing some self-understanding exercises that will help them familiarize each other. The students are expected to develop an Advanced Learning Plan as part of their orientation experience that includes information about their giftedness, various personal and academic needs, learning experiences they might need, and other things that will help them succeed in school.
- 2. *Individual development* focuses more clearly on developing skills, concepts, and attitudes that promote lifelong learning and self-directed learning.
- 3. *Enrichment Activities* two kinds of differentiation of curriculum are involved here: (1) differentiation of curriculum by the teacher, and (2) differentiation by the student. Students are exposed to various activities to develop their passion for learning.
- 4. *Seminars* it is designed to give each person in a small group the opportunity to research a topic and present in seminar format to other people or to the rest of the group.
- 5. *In-Depth Study* students pursue areas of interest in long-term individual or small-group studies. The students will decide what will be learned, the process of doing it, the product, how it will be presented, and how the entire learning process will be evaluated.

D. Integrated Curriculum Model

This model is a popular way of organizing or designing different kinds of curriculum. The Center for Gifted Education at the College of William and Mary developed its curriculum based on this model and has trained many teachers around the world in using their curriculum materials (Davis et.al. 2011). The model presented three dimensions based on the model of VanTassel Baska (1987) that guide in the development of the curriculum:

1. Advanced Content Dimension – meeting the needs of gifted students for acceleration by providing content earlier and faster than same-age

- peers would normally receive it. Content area experts and educators work collaboratively to develop the content, and they align key topics, concepts, and habits of mind within a domain to content area standards.
- 2. Process/Product Dimension incorporates direct instruction and embedded activities that promote higher-order thinking skills and create opportunities for independent pursuit in areas of student interest.
- 3. *Issues/Themes Dimension* learning experiences are organized around various issues and themes. In doing so, students are able to develop deeper ideas and philosophies that ultimately promote understanding of the structure of knowledge learned.

E. Kids Academia Model

Kids Academia is a program for young Japanese children aged 5-8 developed by Dr. Manabu Sumida in 2010. The program is designed to provide excellent science experiences for gifted children in Japan. The kids who participated in the program were highly selected using a checklist adapted from the Gifted Behavior Checklist in Science for Primary Children. Faustino, Hiwatig, and Sumida (2011) identified three major phases followed in the development of the curriculum for Kids Academia:

- 1. Group Meeting and Brainstorming Activities The teachers and teaching assistants held several meetings and brainstorming activities to decide on the themes that will be included in the program. A general orientation of the program is also done during this phase.
- 2. Selection of Contents for each Theme The teachers and teaching assistants carefully select the lessons and topics that are included in the theme. A rigorous study of the topic is done in this phase.
- 3. *Designing Lessons* The third phase includes careful preparation of lesson plans and other instructional materials needed for implementing each lesson.

In addition, the program adapted the *Wheel of Scientific Investigation and Reasoning* as a guide for developing skills of gifted children. This model was adopted from the Scientific Wheel Model of the Center for Gifted Education of the College of William and Mary, to develop scientific habits of mind for independent research investigations.

1.5. Gifted Education Curriculum Models in the Philippines

There are several government programs implemented by the Department of Education and few private schools for the gifted in the Philippines.

A. Philippine High School for the Arts Model

The Philippine High School for the Arts (PHSA) was established on June 11, 1977, as a government-run secondary school for artistically gifted and talented children and adolescents. It implements a special secondary education program committed to the conservation and promotion of the Filipino artistic and cultural traditions.

Aside from academic and artistic training, the PHSA provides its students with opportunities for cultural appreciation that will contribute to their development as artists for others. The experience of living away from home and integrating with peers in this special residential high school cultivates in the young artists an attitude of independence tempered by the spirit of cooperation as they create art together.

PHSA implements a general secondary program that is integrated with a special curriculum in the arts. It aims to develop cultural leaders in the preservation of the environment and dynamic evolution of the Philippine Arts and Culture (P.D. 1287, 1978). It is committed to the conservation and promotion of the Filipino artistic and cultural traditions and makes every effort to develop the potentials of its young arts scholars as future cultural leaders with a nationalistic orientation.

PHSA consults with the Cultural Center of the Philippines (CCP) for policy and program implementation pertaining to the arts. The institution offers five courses of specialization in the arts: Theater Arts, Creative Writing, Visual Arts, Dance, and Music. Highly trained teachers and artists are hired to handle these subjects. The school also offers elective courses that students can choose to complement the major courses of study in the arts. Electives are offered to the students on a semester basis.

B. Philippine Science High School System

Another government program for gifted students in the Philippines is the Philippine Science High School System. It is a service institute of the Department of Science and Technology (DOST) whose mandate is to offer on a free scholarship basis for a secondary course with special emphasis on subjects pertaining to the Sciences with the end view of preparing its students for a Science career. This is according to Section 2 of Republic Act 3661 that established the first Philippine Science High School campus in 1964.

The curriculum of the school is designed to develop students who are gifted in the field of Science, Technology, Engineering, and Mathematics (STEM). Advanced courses in STEM fields are offered as the core of the curriculum and highly specialized courses in STEM areas are offered as electives.

Since its inception, the PSHSS continues to pursue its vision to develop Filipino science scholars with a scientific mind and a passion for excellence. Under the competent faculty and administrators, PSHS students have proven to be a beacon of excellence, courage, and hope for the country. Numerous scholars have brought honor to the Philippines through their exemplary achievements in various international competitions and research circles. Upon graduation, the students are expected to pursue degrees in Science and Technology at various colleges and universities both here and abroad.

C. Central Visayan Institute Foundation

The Central Visayan Institute Foundation (CVIF) is the home and pioneer of one of the prominent school-based innovation in science and mathematics education in the country known as the Dynamic Learning Program (DLP). The DLP is a synthesis of classical and modern pedagogical theories adapted to foster the highest level of learning, creativity, and productivity. Essential features of the program include (1) Parallel Learning Groups (Modified Jigsaw Strategy); (2) Activity-based Multidomain Learning; (3) In-school Comprehensive Student Portfolio; and (4) Strategic Study and Rest Periods and Integrated Spiritual and Cultural Formation.

The school takes pride in its Research Center for Theoretical Physics (RCTP) that was established in 1992. The Center also organizes small international Workshops to foster the informal but intense exchange of ideas and perspectives on outstanding problems in physics and mathematics. The workshops feature pedagogical, review, and research-level lectures focusing on new concepts, methods, and techniques used to investigate current problems in quantum physics, biophysics, complex systems, and various nonlinear phenomena, among others.

D. The Learning Tree Child Growth Center

The school started as a preschool program in 1994. The school now offers an excellent program for elementary grades. Many of their graduates study high school at Philippine Science High School, Philippine High School for the Arts and big private secondary schools in Metro Manila. The school is famous for nurturing and developing the gifted potentials of young children in different subjects in a Christian atmosphere.

Noleal (2012) conducted a study on the curriculum offered in this school and reported positive results. The school is known for its Experiential-Integrative Approach to education. Activities are integrated into different subject matter areas so that the child learns to make real and meaningful connections between them. Noleal also observed the warmth and support of teachers who help the children develop their potentials. According to his study, the strength of the curriculum lies with the presence of excellent teachers and learner-centered environment.

E. Headway School of Giftedness

This school uses different forms of instruction and curricular approaches to develop and nurture the giftedness of their students. It provides a learning environment that is conducive for learning. The school also uses a differentiated and flexible program that responds to the unique learning abilities of their students. The school employs an interdisciplinary team approach composed of specialists in General Education, Early Childhood Education, Special Education, Counselling, Psychology, Developmental Paediatrics and mentors in areas of special interests.

F. BEREA Arts and Sciences High School

This school was established in 2005 as an attempt to integrate the philosophy of combining arts and sciences as the core curriculum to develop gifted students. It develops students' abilities in Math, Sciences, and Languages, at the same time, their abilities in the arts - visuals arts and music. The curriculum of the school followed the Department of Education prescribed curriculum but as soon as a BASHS student turns sophomore, he has a choice of what major to take.

There are two kinds of majors: Arts Major and Science Major. Arts majors are divided into Music major (Piano, voice, guitar, violin), Creative Writing major, and visual arts major. Music majors study music theory and classical repertoire and instruments. They have recitals and performances in different places to showcase their musical talents. Creative writing majors study literature, story and character analysis, and grammar. Visual arts majors study art techniques and a variety of traditional media. Science majors on the other hand study advance math and science subjects. The curriculum of the school also incorporated a Bible-study component at all levels, to strengthen the student's spiritual essence.

The Philippines is trying its best to provide gifted education programs for gifted students. In fact, in October 1999, then President Joseph Ejersito Estrada signed

Presidential Proclamation No. 199 declaring every fourth week of November as the national week for the gifted and talented. Accordingly, one of the aims of the Philippine government in terms of education is to provide every gifted and talented Filipino with opportunities, encouragement, greater attention, and assistance to fully develop his or her potentials. Watters and Diezmann (2003) cited *economic prosperity* and *equity* as the main reasons for governments to support the gifted. This is to recognize the future well being of the nation and society as an outcome of fostering productivity and creativity.

1.7. Purpose of the Study

The main purpose of this study is to present a curriculum framework and to create a curriculum development model for developing a curriculum for the gifted in Philippine public schools. The study also aims to identify existing programs for gifted education in Philippine public schools and the issues and challenges encountered by schools and teachers in implementing these existing gifted education programs.

1.8. The Significance of the Study

The study is useful for readers and scholars to have an idea of the current situation of gifted education in the Philippines. The curriculum framework and the curriculum development model are useful in the development of a gifted curriculum and can be adapted by teachers and education supervisors in developing similar curriculum for their schools and country. The proposed curriculum development model and curriculum framework for gifted education could be used to guide the curriculum developers of the Department of Education, as they develop the K-12 curriculum for the gifted. This study is also a contribution to the limited literature on gifted education in the Philippines.

2. Method

The research is qualitative. The data are from available DepEd documents and results of discussion among educators and other stakeholders. The final output of this study focuses on creating a model for curriculum development and a curriculum framework that could be used in the development of the K-12 Curriculum for the gifted in the Philippines. Specifically, it aims to answer the following questions:

- 1. What are the existing programs for the gifted in Philippine public schools?
- 2. What are the issues and challenges in gifted education public schools in the Philippine?

- 3. What curriculum development model can be used for developing a curriculum for the gifted schools in the Philippine?
- 4. What curriculum framework can be proposed for developing a curriculum for gifted in the Philippines?

2.1. Data Gathering Procedure

The important data are based on the researcher's observation and critical analysis on the result of the national consultation for the development of a roadmap for gifted education in the Philippines, participated by 50 administrators and teachers implementing gifted education programs in different regions in the country. Some of the data also derived from DepEd documents available for the public from their official website. The research involves three major phases:

Phase 1. Analysis of the result of the consultation with teachers and administrators – The result of consultation with several public school administrators, and teachers from the different regions in the country were analyzed to identify various issues, problems, and concern about gifted students and gifted programs in public schools.

Phase 2.Document analysis – Department Orders and Memoranda from DepEd were analyzed to study the guidelines for implementation of different programs for gifted education.

Phase 3.Development and Validation of a curriculum development model and a curriculum framework that can be used for developing the curriculum for the gifted – The model and the curriculum framework were presented to administrators and teachers of public schools for comments and suggestions.

2.2. Data Analysis

The data from the result of the consultation were analyzed using the narrative research strategy proposed by Clandinin and Connelly (2000). The data were analyzed, summarized, and organized into specific themes and categories based on the research questions of the study. The results were used to create a model for curriculum development and as an emerging curriculum framework for a proposed curriculum for the gifted. The curriculum development model and the curriculum framework were

presented to curriculum experts, administrators, and teachers of gifted programs for validation and comments. As a result of the validation, the curriculum development model and the curriculum framework were revised and improved. The final model and framework are presented in this study.

3. Results and Discussion

The results of the study were organized and presented qualitatively based on the four research questions of this study.

3.1. What are the existing programs for the gifted in Philippine public schools?

The result from the document analysis identified several programs that are implemented in selected public schools in the Philippines.

a. Special Program for the Arts and Sports

The Department of Education (DepEd) through the Bureau of Secondary Education is implementing a Special Program for the Arts and Sports in pursuance to DepEd Order No. 54 s. 2010. There are 17 selected schools in different regions offering this program. The curriculum includes additional arts and sports subjects and an increase of time allotment on these subjects in the secondary curriculum.

Liocario (2012) conducted an evaluation of one of the schools offering this program in Manila. He reported some positive results except that additional arts and sports facilities and special teachers are needed to implement successfully the program. Nevertheless, many students who are interested in arts and sports have benefited this government program.

b. Special Science Elementary School Project

The Department of Education (DepEd) through the Bureau of Elementary Education is implementing a Special Science Elementary School (SSES) Project in pursuance to DepEd Order No. 73 Series of 2008, and DepEd Order No. 51 s. 2010. This project started in June 2007 with 57 identified elementary schools that participated or were identified as Science Elementary schools in the country. Since its inception, the number has grown to more than 60 schools nationwide and this is now its sixth year of implementation. DepEd issued DepEd Order No. 57 Series of 2011 to provide guidelines for the implementation of the SSES Project

The SSES Project aims to develop Filipino Children equipped with scientific and technological knowledge, skills, and values. Its mission is to provide a learning environment to science inclined children through a special curriculum that recognizes the multiple intelligence of the learners. The SSES Program utilizes a science curriculum that promotes the development of lifelong learning skills and fosters the holistic development of learners. The subject of Science and Health is taught in Grade 1 with a longer time compared to other subjects. 70 minutes for Grade I-III and 80 minutes for Grade IV and VI. The curriculum also utilizes different instructional approaches that address the learning styles and needs of the learners like the use of investigatory projects.

c. Science High School

Science High Schools were established in the Philippines pursuant to DECS Order No. 69 Series of 1993, which was later, amended by Department of Education Order No. 89, s. 1993. The science high schools were built for above average ability students who have shown an aptitude in science and technology and mathematics. Admission to these schools is highly selective. These specific high schools take Science, Math, and English at a higher level. The schools also have an enriched curriculum, undertaking research that is not available in mainstream schools. The teachers in these schools were also carefully selected by the Department of Education to ensure quality teaching and learning. Science high schools are currently helping the Department of Education in preparing students in the STEM tract of the senior high school program.

d. Headstart Program for the Gifted and Talented

This program was offered to 4-5-year-old children who manifest superior intelligence beyond their chronological age in public schools. It was piloted in March 2006 with 44 organized classes. Based on DepED Order 99 s2009, the main goal of the program is to ensure that all gifted and talented preschoolers are given the necessary support to attain the highest standard of achievement that matches with their abilities, intelligence, and skills.

Specifically, the program aims to:

- Offer the services for the mastery of the basic skills and development/enhancement of the multiple intelligence at a pace and depth appropriate to the capabilities of the gifted and talented preschoolers;
- Provide an environment that encourages and challenges the gifted preschoolers in the development of creativity, originality, fluency, flexibility, and elaboration in their thought processes; and

- Provide opportunities for the gifted/talented preschoolers to explore and develop their unique abilities
- Currently, the Bureau of Learning Delivery is reviewing the Headstart Program in public schools.

e. Other Programs and Initiatives for Gifted Education

There are other programs and initiatives for gifted education done by teachers in several local schools in the country. A summary of some of the major programs is presented in Table 1.

Table 1. Other Programs for Gifted Education in the Public Schools

- 1. *Acceleration* intellectually gifted students were encouraged to be accelerated to higher grade levels or to have early college placement
- Enrichment Activities these are instructional activities, special projects, co-curricular
 and extracurricular activities, and strategies that are used to engage gifted students to
 meaning learning and sustain their interest in the different academic subjects and
 courses in school
- 3. Special Programs and Classes these are offered for gifted students on top of their regular academic loads. Examples of special classes offered are classes on different musical instruments, performing arts, visual arts, robotics, engineering science, and creative writing workshops among others.
- 4. Involvement in academic and co-curricular or extracurricular competitions gifted students are often encouraged to participate in several districts, division, regional, or national competitions like the National School Press Conference, Festival of Talents, Palarong Pambansa (National Sports Competition), and Math Olympiad among others.
- 5. Use of Interest Centers in the classrooms this is often used for kindergarten and early grade classes where students are led to work or study on his/her particular area of interest like science, language, music, or arts
- 6. *Special Projects* every gifted student can work on a particular project or conduct research that interests him/her. This is often done in science and social studies.
- 7. Clubs gifted students are encouraged to join clubs to nurture their talents and skills.
- 8. *Advanced classes* highly gifted students will attend advanced classes usually in college-level courses to develop their skills and knowledge of the subject.

The implementation of these programs is dependent on the capacity of the school in terms of the availability of facilities, teachers, and support from the Parents and Teachers Association (PTA). In some municipalities and cities, the local government provides funding and other instructional support to the schools that offer programs for the development of gifted students.

3.2. What are the issues and challenges in gifted education at public schools in the Phillipines?

Improving gifted education in the Philippines is a challenging act. There are several issues and challenges in gifted education in the country. These issues and challenges are clustered into five as shown in Table 2.

Table 2. Issues and Challenges in Gifted Education in the Public Schools

- There is a need to develop a national and official curriculum for the gifted
- There is a need for a "Filipino" model of curriculum for the gifted
- There is a need to develop instructional materials appropriate for the gifted
- There is a need to develop appropriate assessment tools to identify gifted students
- There is a need to train teachers who are implementing the gifted program
- There is a need to address the needs of potentially gifted students

There is a need to develop a national and official curriculum for the gifted. Over the years there do exist curriculum guidelines for gifted education in the country, however, there is no official curriculum guide for the gifted. The participants believe that a good national curriculum for the gifted should include all subjects in the K-12 and must consider the development of extracurricular activities, co-curricular activities, and support system.

There is a need for a "Filipino" model of curriculum for the gifted. This was highlighted during the consultation. The participants observed that almost all curriculum models for gifted in the country are pattered from foreign models of gifted education. The participants believe that while the foreign or adapted models are good, there is a need to develop a curriculum for the gifted that reflects the learning styles, thinking preferences, giftedness, and context of Filipino gifted.

There is a need to develop instructional materials appropriate for the gifted. The participants agreed that the DepEd should provide sufficient and appropriate instructional materials that can be used for implementing the curriculum for the gifted. Currently, gifted children are using the same textbooks and instructional materials with regular students. Some schools, however, are lucky to receive donations of instructional materials from their local governments and from alumni.

There is a need to develop appropriate assessment tools to identify gifted students. Developing an assessment tool for gifted students in public school is a great challenge for the DepEd. Currently, a private psychologist assesses gifted students. This makes it expensive for parents in public schools to have their children assessed. There is also a need to develop an assessment tool appropriate to measure the Filipino gifted behavioral and affective characteristics and there is also a need to assess the talents and other skills of the gifted. The participants also expressed optimism that an IQ test appropriate for Filipinos will be developed and made available to all public schools.

There is a need to train teachers who are implementing the gifted program. The participants pointed out that the training and preparation of teachers are crucial for the implementation of the curriculum for the gifted. The teachers should not only be trained on pedagogy but also on providing advanced content and psychosocial support for the gifted. During the consultative workshop, the participants mentioned that gifted classes are supervised by SPED Centers. This means that SPED teachers who received limited training and exposure on gifted education teach the gifted students in public schools.

Aside from these issues and challenges, gifted education in the Philippines still faces some broader challenges that need to be addressed. These other issues and challenges are presented in Table 3.

Table 3. Other Issues and Challenges in Gifted Education

- Quality there is a need to evaluate the gifted programs in the country to ensure its
 quality and its responsiveness to the needs of gifted students. Teacher education
 programs for teachers of gifted should be provided to prepare good teachers who can
 teach in gifted classes.
- Access there are only few schools offering programs for the gifted. Gifted programs should be made accessible to the public especially to the indigenous people and those who are poor but gifted or potentially gifted.
- Sustainability gifted programs need support from the government and from different people. Schools for the gifted need financial support and other forms of support to sustain their program.
- Autonomy there is a need for gifted schools to be given the autonomy to develop their curriculum and be independent of the rigid prescription of the government prescribed curriculum.

Many gifted children in the Philippines have to struggle with the rigid public educational system that has limited support for the education of gifted students. Providing good nutrition is also an important factor that can affect the development of Filipino gifted students. Support from the families and from the community is also vital in the nurture and development of the gifted.

There is also a challenge to develop a curriculum for gifted students from indigenous communities that integrate their local culture and indigenous knowledge. Except for the

National Capital Region, many regions have public schools catering to the needs of indigenous local communities. The participants during the national consultation mentioned that there are identified gifted students who are part of these indigenous communities. It is unfortunate that many of these gifted and potentially gifted students have no access to any special program for the gifted. The 1987 Philippine Constitution respects the rights of indigenous people to have an education that responds to their needs and conditions.

The participants express optimism that in spite of these issues and challenges, there is a bright future for gifted education to flourish in the country. However, there is a need to address these issues and problems and there is a need to respond to the challenges posed by the social, cultural, economic, and demographic changes in society.

3.3. What curriculum development model can be used for developing a curriculum for the gifted in Philippine schools?

A model for developing a curriculum for the gifted was developed and presented to curriculum writers for comments. The curriculum development model is presented in Figure 1.

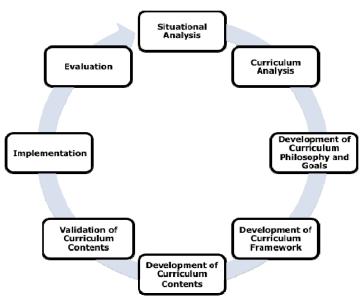


Figure 1. A Model for Developing Curriculum for Gifted Education

The curriculum development model follows cyclical curriculum development processes that are procedural and interconnected. The model includes eight processes that should be followed in the development of a curriculum for the gifted. Each curriculum development process is aligned with the process followed by DepEd in developing curriculum. The uniqueness of this model is the inclusion of four preliminary processes (1) situational analysis, (2) curriculum analysis, (3) development of curriculum philosophy and goals, and (4) development of a curriculum framework.

- 1. Situational Analysis The needs, learning styles, and characteristics of Filipino gifted students are identified and analyzed. The context and needs of the public schools are also analyzed in this phase. The experiences of the schools in implementing existing gifted programs are discussed in this phase. The results are helpful in planning the curriculum for the gifted.
- 2. Curriculum Analysis The K to 12 Curriculum contents should be analyzed to see how it could respond to the needs of gifted students. Benchmarking with other gifted programs abroad is also done in this phase. This process also ensures that the curriculum for the gifted that will be developed is aligned to the K to 12 Curriculum.
- 3. Development of Curriculum Philosophy and Goals. The results of step 1 and 2 are used to develop a Philosophy for gifted education and in identifying the goals of the gifted curriculum. This will serve as anchor and guide for the development of the content of the curriculum for the gifted.
- 4. Development of Curriculum Framework This will help identify key curriculum standards and competencies for any curriculum for the gifted that will be developed. It will also identify possible enrichment programs, special activities, and creative strategies that could be used to implement the curriculum.
- 5. Development of Curriculum Content This process will guide the curriculum development team in the development of the curriculum content. It is important in this process to ensure alignment of the curriculum for the gifted to the K to 12 Curriculum. The curriculum for the gifted must be expressed in terms of curriculum standards and competencies.
- Validation of Curriculum Contents

 This process involves validation of the
 curriculum framework by curriculum experts, administrators, content experts,
 and teachers.

- 7. *Implementation* This process involves an actual implementation of the curriculum in various schools.
- 8. *Evaluation* The last part of the process is an evaluation of the curriculum, which could be done after the first cycle of implementation of the curriculum.

The model was presented to the participants for comments. The participants evaluated positively the curriculum development model. The following are the summary of the comments given by the participants:

- The model reflects the traditional process followed by the DepEd for developing the curriculum to ensure participation from the field.
- The model considers the national curriculum policy and practice of the DepEd.
- The process follows a logical sequence that reflects significant processes of curriculum development
- The model includes a clear procedure in developing a curriculum that considers the processes followed by the Department of Education
- The mode is easy to follow and could be used in the regional, division, or local school curriculum development activities.

3.4. What curriculum framework can be proposed for the development of a curriculum for the gifted in the Philippines?

A curriculum framework defines the curriculum content to be learned and the ideal possible means on how the curriculum could be implemented. The data from the result of the consultative workshop shows that the participants cited important ideas that should be considered in the development of the curriculum framework for the gifted. Accordingly, a good curriculum framework for the gifted must:

- 1. Put emphasis on the development of Filipino gifted
- 2. Define the characteristics of gifted learners
- 3. Include the development of potentially gifted learners
- 4. Include development of habits of mind
- 5. Reflect the importance of interdisciplinary knowledge, aesthetics, creativity and critical thinking, and performance skills for the gifted.

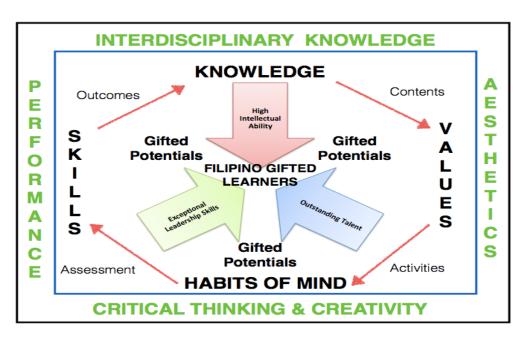


Figure 2. Proposed Curriculum Framework for Gifted Education in the Philippines

A proposed curriculum framework for a curriculum for the gifted was developed based on the given comments of the participants. Figure 2 shows the proposed curriculum framework for gifted education. The curriculum framework includes the broad content of the curriculum for the Filipino gifted and how it could be implemented in public schools. As shown in Figure 2, the core of the curriculum focuses on the development and nurture of Filipino gifted learners. The word *Filipino Gifted Learner* is highlighted in the proposed framework to emphasize that a good curriculum for the gifted in the Philippines must be culturally relevant and responsive to the Filipino learners. It must be aligned to higher educational goals of the country, which is an education that will focus on the holistic development of every Filipino student and to promote national unity and development.

The proposed framework classifies Filipino gifted as those with high intellectual ability, outstanding talents, and exceptional talents. A good curriculum for the gifted should also respond to the needs of a great number of Filipino learners who are potentially gifted. The curriculum aims to make gifted education programs accessible for every potentially gifted Filipino student who is enrolled in the public school.

The proposed curriculum framework shows that a good curriculum for the gifted should develop essential knowledge, values, and skills across the disciplines, and habits of minds that are necessary for the holistic development and nurture of gifted students. These will be expressed in terms of relevant learning outcomes, advanced contents,

learner-centered and mentally engaging activities, and holistic assessment tools that are relevant and responsive to the nature of Filipino gifted learners. Furthermore, the proposed curriculum framework for gifted education shows that knowledge should be interdisciplinary; values should develop aesthetic talents and aesthetic appreciation; skills should focus on the development of exceptional performance; and the habits of mind should continue to inspire and develop creativity and critical thinking that will inspire more innovative ideas and innovative behavior to be nurtured in every Filipino gifted learner.

4. Conclusion

Gifted education is essential. There are several programs implemented for the advancement of gifted education in the country. These programs are administered by private schools and public schools. The study focused on gifted education in public schools. In the public schools, existing gifted programs are concentrated on STEM while other schools use enrichment activities and instructional approaches in teaching the gifted. There are only few gifted programs for other disciplines like arts and music, and gifted programs are not accessible in many public schools.

In spite of these efforts, gifted education in the country faces some challenges and issues. Teachers and local schools need a curriculum framework to guide them in the development and implementation of gifted programs. They also need direction on how to develop a curriculum for gifted programs in their schools.

As a result, the study provided a curriculum development model that could be used in developing a gifted curriculum in school. This is an important contribution to this study. The Department of Education could use the curriculum development model in the national level, regional, Division, or in any local school that wishes to develop a curriculum for gifted. It is, however, necessary those who are involved in curriculum development should be experts in the different disciplines. The curriculum developers understand the structure of knowledge and they know how to organize this knowledge into meaningful standards and competencies that are mentally engaging for gifted learners. While pedagogical expertise is important, those involved in curriculum development should have experience teaching gifted students.

The proposed curriculum framework could be useful in setting the direction for the development of an appropriate curriculum for the gifted in the country. It highlights the importance of making the curriculum for the gifted truly Filipino in character while responding to global challenges and demands. The proposed curriculum framework is useful as the Department of Education is developing a curriculum for the gifted in the Philippines.

References

- Amabile, T.M. (1996). Creativity in context. Boulder, CO: Westview Press.
- Betts, G. T. (2004). Fostering autonomous learning through levels of differentiation. *Roeper Review*, 26, 190-191.
- Clandinin, D. J., & Connelly, F. M. (2000). Narrative inquiry: Experience and story in qualitative research. San Francisco: Jossey-Bass.
- Cox, J., Daniel, N., &Boston, B. (1985). "Educating able learners: Programs and promising practices."
 - Austin, TX: University of Texas Press
- Davis, G., Rimm, S., and Siegle, D. (2011). *Education of the gifted and talented*. 6th Ed. Upper Saddle River, NJ. Pearson.
- Department of Education Order No. 69, s. 1993. Science High Schools
- Department of Education Order No. 89, s. 1993. Addendum to DECS Order No. 69, s. 1993. Science High Schools.
- Department of Education Order No. 73, s. 2008. Guidelines on the Utilization of the Financial Assistance to the Special Science Elementary School Project
- Department of Education Order No. 51, s. 2010. Guidelines on Strengthening Science Education at the Elementary Level
- Department of Education Order No. 57, s. 2011. Policy Guidelines in the Implementation of the Special Science Elementary Schools (SSES) Project Faustino, J. Hiwatig, A., & Sumida, M. (2011). Kids Academia Science Program: Enriching exceptional needs and characteristics of gifted young children. *Bulletin of the Faculty of Education Ehime University*. 58. 125-135.
- Gagné, F. (1985). Giftedness and talent: Reexamining a reexamination of the definitions. *Gifted Child Quarterly*, 29(3), 103-112
- Gardner, H. (1983). Frames of mind: The theory of multiple intelligences. New York: Basic Books.
- Hennessy, B. A. (2004). Developing creativity in gifted children: The central importance of motivation and classroom climate. Storrs, CT: The National Research Center on the Gifted and Talented.
- Liocario, R. (2011). Implementation of the special program in the arts curriculum in a public secondary school. Unpublished masters thesis. College of Education, University of the Philippines, Diliman.
- Noleal, R. (2011). Evaluation of the experiential-integrative curriculum using Posner's model. Unpublished masters thesis. College of Education, University of the Philippines, Diliman.
- Pawilen, G. (2014). Developing curriculum standards for Filipino gifted students in science. Unpublished postdoctoral research submitted to the Faculty of Education, Ehime University, Japan.
- Presidential Decree No. 1287 (1978). Creating the Philippine High School for the Arts
- Renzulli J. S. (1994). Schools for Talent Development: A Practical Plan for Total School Improvement. Mansfield Center, CT: Creative Learning Press
- Renzulli, J. S., & Reis, S. M. (1997). The schoolwide enrichment model: A how to guide for educational excellence. Mansfield Center, CT: Creative Learning Press.
- Republic Act 10533. An act enhancing the Philippine basic education system by strengthening its curriculum and increasing the number of years for years for basic education, appropriating funds therefore and for other purposes.

- Republic Act No. 3661. An Act to Establish the Philippine Science High School
- Sternberg, R. J., & Zang, L. (1995). What do we mean by giftedness? A pentagonal implicit theory. *Gifted Child Quarterly*, 39(2), 88-94.
- Taber, K. (2007). Science education for gifted learners. London: Routledge.
- Tannenbaum, A. (2003). Nature and nurture of giftedness. In. Collangelo, N. & Davis, G. 3rd. Ed. *Handbook of gifted education*. Boston: Allyn and Bacon.
- Taylor, C. W. (1988). Various approaches to and definitions of creativity. In R. J. Sternberg (Ed.), The nature of creativity: Contemporary psychological perspectives (pp. 99–121). New York, NY: Cambridge University Press.
- Tomlinson, C. A., Kaplan, S. N., Renzulli, J. S., Purcell, J., Leppien, J., & Burns, D. (2002). The parallel curriculum: A design to develop high potential and challenge high-ability learners. Washington, DC: Corwin Press.
- VanTassel-Baska, J. (2004). Introduction to curriculum for gifted and talented students: A 25-year retrospective and prospective. In *Curriculum for gifted and talented students*. Thousand Oaks, CA.: Corwin Press
- Watters, James J and Diezmann, Carmel M (2003) The gifted student in science: Fulfilling potential. Australian Science Teachers Journal 49(3): 46-53.

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