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The gifted brain is the country's most precious resource and core power of social progress. It is also of great importance top priority in the pursuit of excellence and innovation. Gifted education is of a crucial role to the development of the country because of: 1. the need of human resource development (High quality human resource comes from high quality education), 2. the need of individual development (The basic idea of special education lies in the development based on the aptitude of each individual and the chance for students with special needs to explore their potentials) 3. the need for educational reform (Gifted education emphasizes creative, critical, and practical thinking, which can improve the quality of education and holistic reformation is expected under all pervasion). It is, therefore, a major mission of all educational professionals.

Experiment of gifted education started in Taiwan in 1973, and became legitimized in 1984 with the promulgation of the Special Education Act. However, the development of gifted education in Taiwan at the turn of the new century has aroused great attention when a lot of gifted classes were formed without adequate evaluation on its content and quality. The "Conference of National Gifted Education Development" was therefore held in July, 2006 to enhance quality of gifted education by discussing present situation and issues.

Six developmental dimensions were discussed at the "Conference of National Gifted Education Development": assessment and placement, instruction and curriculum design, teacher education and supporting system, counseling and follow-ups, disadvantaged gifted education, and evaluation and supervision. This White Book is compiled based on the conclusions reached in the Conference to serve as the reference of local educational authorities in promoting gifted education.

This White Book was drafted by professionals specializing in gifted education, administrative representatives, and practiced teachers, compounded suggestions from zonal Public Hearing and Public Forums. Structurally, seven issues on gifted

education were modulated and addressed based on six developmental dimensions discussed in the Conference; they are administration & resource, identification & placement, curriculum & project design, teacher training, counseling & follow-ups, disadvantaged gifted education, and evaluation & supervision. On these seven issues, the present status of gifted education in Taiwan was fully examined in order to draw up main strategies and projects to enhance the quality and effectiveness of gifted education.





The following are our ideals of gifted education:

Providing appropriate and adaptive educational opportunities: The Constitution of
the Republic of China (Taiwan) states that "the people shall have the right and the
duty of receiving general education." Besides emphasizing the equal right for
every citizen to receive education, this Article ensures appropriate and adaptive
educational opportunities to every citizen.

Whether students have the opportunity to develop their potential depends on their access to adaptive education. In general educational environment, gifted students are often a special group of unsatisfied clients who, instead of "knowing too little", know too much and learn too fast. The ideal of equal education is to provide developmentally appropriate learning environment for each and every student; therefore, the first ideal of this *White Book* is to give every gifted student adaptable educational opportunity to explore their potential.

- 2. Building up differentiated learning environment for every student: High quality educational environment should present differential settings to look after different students' abilities, interests, and aptitude. At present many gifted students attend regular classes besides their talented subjects and it is necessary to deliver differentiated instruction and curriculum. Meanwhile, there is still difference among the gifted students although they are all called "gifted students."
  - Individualized teaching is the fundamental perspective of special education and it would not be realizable if a differentiated learning environment is not available. The second ideal of this *White Book*, therefore, is to build up differentiated educational environment.
- 3. Offering abundant opportunities for cultivating multiple intelligences: Giftedness and talents can occur in various areas and one may distinguish himself in any trade. Every individual has own talent spectrum and should be treasured. At present gifted education in every country has incorporated the concept of multiple

intelligences. The Special Education Act has covered six categories of target students. Gifted education development is no longer limited to academically talented students.

The third ideal of this White Book addresses the necessity of exploring more individuals' potentials and providing more opportunities for different groups of students, and most importantly, the cooperation among society and students' parents to build up friendly environment for developing special talents.

4. Guiding students to become responsible and altruistic beings: The purpose of education is to help individuals become "whole persons." Gifted students are expected to lead the progress of the society by helping others to create a harmonious and joyful atmosphere in the society. Gifted education addresses equal importance on the cognitive and affective domains. The affective development of the gifted students should be emphasized so they can develop as highly ethic, responsible, altruistic and caring citizens.

Therefore, the fourth ideal we behold is to cultivate gifted students as wise, caring human beings and they can learn how to devote their abilities, to help the weak, to appreciate others' achievements and to tolerate others' differences.

# MAIN ISSUES AND STRATEGIES

The development of gifted education in Taiwan has accomplished significant achievements. For examples, gifted students have the opportunities to learn with peers of similar abilities; modes of gifted education are established as a result of continuous experiment of administrators and teachers. Of the most remarkable, these achievement are due to factors of: 1. full support to gifted education by government authorities, 2. committees of educational experts administering open and fair identification and assessment of the gifted, 3. Special Education Centers at Normal Universities or Education Colleges, entrusted by Ministry of Education, to assist gifted education on primary and secondary school levels, and 4. experiments and research projects sponsored by government institutes like the National Science Council.

However, there are some difficulties that we have to overcome, such as inadequate concept of the general public on gifted education, lack of professional knowledge among administrators and teachers, hindrance on multiple assessment and placement plans, and inadequate design of differentiated curriculum. In view of this, the seven developmental dimensions, namely: administration & resources, identification & placement, curriculum & project design, teacher training, counseling & follow-ups, disadvantaged gifted education, and evaluation & supervision, will be addressed in the following discussion.

#### **ISSUE 1**: ADMINSTRATION & RESOURCES

The issue of "administration & resources" contains topics of administrative organization and operation, regulation and budget, community and Internet resources, parents' involvement, and supporting system. They are discussed under the present status, difficulties, and strategies.

#### **PRESENT STATUS:**

#### 1. Administrative Organization and Operation

Regarding the administrative organization of special education in Taiwan, there are the Division of Special Education (hereafter referred to as the Special Education Unit) and the Special Education Advisory Council under the Ministry of Education in charge of special education affairs, including gifted education. On the local level, there is "Division of Special Education" in the education bureau of every city/county government, and also the "Committee for the Identification and Placement of Gifted/Disabled Students" (hereafter referred to as the GIP) and "Special Education Advisory Board." In each school, there is the "Special Education Promotion Committee" and/or "Special Education Unit."

#### 2. Regulations and Budget

As for the regulations, the most important basis of gifted education is the "Special Education Act," enacted in 1984 and amended in 1997, 2001, 2004, and 2006. Related regulations include "The Enforcement Rules to the Act of Special Education (enacted in 1987 and amended in 1998, 1999, 2002, and 2003), "Regulation for Curriculum and Teaching Materials, and Methods of Special Education" (enacted in 1986 and amended in 1998, 1999), "Standard of Special Education Facility and Personnel" (amended and enacted in 1999, and re-amended in 2003, 2004, 2005, and 2006), "Regulations Government the Early Admission and Academic Acceleration for Excellent Student" (amended and enacted in 1999 and amended again in 2004), "Evaluation Criterion for Disabled and Gifted Student" (enacted in 2002 and amended in 2006), "The Perquisite Admission Regulation for the Student Excellent in

International Mathematical Olympiad and International Science Fair" (issue in 2004 and amended in 2005, 2006, 2008), and so on. As for the gifted education in visual and performing arts, primary regulations include "Art Education Act" (enacted in 1997 and amended in 2000), "The Enforcement Rules to the Act of Art Education" (enacted in 1998 and amended in 1999), and "Criterion for the Establishment of Art Talented Class in Junior and Elementary School" (enacted in 1999 and amended in 2002, 2007, and 2008).

As for the budget, according to Article 30-1 at the Special Education Act, "All levels of government shall exercise leniency in planning annual special education budget. The annual special education budget of the central government shall account for no less than 3% of the sum allotted to education. The annual special education budget of the local governments shall account for no less than 5% of the sum allotted to education. Local governments shall put the top priority on disabled education in planning the annual education budget...." Table 1 shows that the annual special education budget of the Ministry of Education in 2005 to 2007 account for 4.30% of the total budget of education; among which, gifted education budget accounts for nearly 5% of the sum allotted to special education.

Table 1: Annual Special Education Budget of the Ministry of Education in 2005-2007

Ye ar	Special Education Budget		Disabled Education Budget		Gifted Education Budget	
	Sum (Unit: 1,000NTs)	% in total education	Sum (Unit: 1,000NTs)	% in special education	Sum (Unit: 1,000NTs)	% in special education
05	6,356,776	4.31%	6,049,363	95.16%	307,413	4.84%
06	6,380,424	4.21%	6,069,051	95.12%	311,315	4.88%
07	6,627,977	4.30%	6,293,960	94.96%	334,017	5.04%

\* Note: The total budget of gifted education include the personnel and administration expenditures in Public Senior High Schools

#### 3. Community and Internet Resources

Gifted education is promoted through activities at schools, competitions and exhibitions held by community organizations and with Internet resources.

Take community resource for example. Social and education institutions such as library, culture center, planetarium, art gallery, and museum always attract gifted students to visit after class. In addition, equipment and human resources at universities or research institutions offer necessary guidance and assistance for the gifted in studies. Competitions or exhibitions also provide opportunities for the gifted to learn and to challenge. These include the Mathematics and Science Olympiad Competition, the Nurturing Program for the Gifted in Basic Science at Senior High School, Science Fairs at high/primary schools, and National High School Intelligent Ironman Creativity Contest held by Ministry of Education, Taipei city high school science research funds supported by Taipei City Government, science fairs at secondary and primary schools held by every city/county government agency, and Taiwan International Science Fair held by National Taiwan Science Education Center.

Owing to the rapid development of the Internet, cyber resources become more abundant and attractive for the gifted. Popular special education websites include National Special Education Information Network, A-Bao's Sky, and a host of websites of numerous academic or private sponsorship. But most of these websites stress disabled education. It is desirable to have more websites in the future specifically designed for gifted education.

#### 4. Parents' Involvement

There are a few Gifted Education Development Associations organized by parents of gifted students to assist in conducting enrichment activities for the gifted children and parent education for the gifted. Some members of these Associations serve as members on the city/county "Special Education Advisory Board" to promote the gifted education. At schools, parents' associations have the function of supporting the development of gifted education, which is especially important when considering the limitation of budget and resources from the government.

#### 5. Supporting System

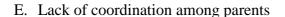
Generally speaking, supporting system of gifted education refers to academic institutions, like Normal Universities or Teachers Colleges, Special Education Centers, or (Gifted Education) Resource Centers at city/county governments.

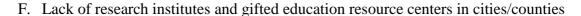
These institutions provide gifted education teacher with in-service training so as to enhance teachers' professional knowledge and teaching quality.

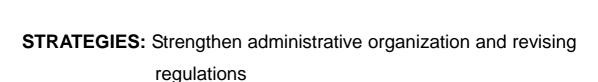
Special Education Resource Centers at city/county governments, also offer several supporting services for gifted education, such as services of administration, gifted student identification, assessment, curriculum, teaching material, consultation, and counseling.

#### **DIFFICULTIES:**

- A. Insufficient manpower bearing the heavy workload
- B. Lack of clear regulations and policies
- C. Insufficient funding and inadequate teaching environment
- D. Inadequate distribution of community and network resources







- A. Amend the Special Education Act and other related regulations to promote gifted education.
- B. Enhance professional knowledge and implementation strategy of administrators involved.
- C. Increase the proportion of gifted education budget in total education budget to



- improve the facilities of gifted education.
- D. Organize the participation of experts, professionals, teachers and parents in special education administration to assist in the development of gifted education.
- E. Encourage the setting up of parents' group/association to enhance parents' knowledge of gifted education.
- F. Set up the National Special (Gifted) Education Research Development Center and encourage local government agencies to establish Gifted Education Resource Centers in order to promote gifted education.





#### **ISSUE 2**: IDENTIFICATION & PLACEMENT

The issue of "identification & placement" contains topics of criteria and instruments of identification, evaluation procedure, professional assessment, fairness of identification, multiple adaptive placement, resource allocation and continuity for each educational stage. They are discussed under the present status, difficulties, and strategies.

#### **PRESENT STATUS:**

#### 1. Identification

The amended Special Education Act of 1997 expands the categories of gifted/talented education from the original three categories of "general intelligence," "scholastic aptitude," and "special talents" to six categories: "general intelligence aptitude," "specific academic aptitude," "visual and performing arts," "creative and productive thinking," "leadership ability," and "other aptitudes." The major considerations for this amendment are to enlarge the scope of gifted education to

include multiple intelligences, to lower the threshold of gifted children identification to 1.5 standard deviations (SD) above the mean, instead of 2 SD, and to depend more on the observation and professional judgment of experts than on objective tests.

The policy of "mixed-ability grouping" was officially imposed when the National Education Act was amended in 2004. But some local governments managed to continue ability grouping by increasing the number of self-contained gifted classes, identifying students with one single test. This has caused great confusion on the spirit of gifted education. In 2006, the identification criterion of gifted students was amended by Ministry of Education. Students with giftedness should conform to the following requirement: whose aptitude test scores are corrected from 1.5 standard deviations above the mean to 2 standard deviations above the mean, and recommendation documents from teachers are required.

Most local governments now have the measure of early entrance for pre-school gifted students. Some others are experimenting with acceleration programs for the gifted students. But identification of students with extraordinary creativity, leadership, and other special talents is not ready yet.

#### 2. Placement

Though there are multiple and flexible placement measures of gifted children, there are doubts and worries about the implementation of ability grouping under the disguise of gifted education, which violates the ideal of mixed-grouping and the true spirit of gifted education. In 2006, the Ministry of Education ruled that concentrated gifted classes are limited only to students with talents in visual and performing arts. Distributed gifted classes are required for students from other categories of giftedness. Now, most new gifted classes are those of talents in visual and performing arts.

In addition to the concentrated and distributed gifted classes, the local education authorities are supposed to provide numerous flexible, multiple activities to promote full development of gifted education, such as school-based gifted education programs, area project, seminars on holidays, winter/summer camps, competitions, mentor models, independent studies, and so on.

#### **DIFFICULTIES:**

- A. Insufficient understanding of gifted education
- B. Lack of multi-dimensional multi-phased assessment plans
- C. Insufficient professional manpower and instruments of assessment
- D. Lack of number of programs to realize multiple adaptive placement
- E. Inadequate distribution of resources and lack of coordination among different levels of education
- F. Lack of coordination of measures to accelerate the study
- G. Lack of systematic measures for the identification and placement of students gifted with high creativity, leadership, and other special talents

#### **STRATEGIES:** High-quality identification appropriate and placement

- A. Advocate the ideal and spirit of gifted education through media.
- B. Draw up codes of multi-dimensional and multi-step identification of gifted/talented students.
- C. Organize training programs for professional personnel in charge of the identification.
- D. Develop a series of assessment instruments and standards of gifted children in order to enhance the reliability and validity of assessment.
- E. Arrange multiple placement paths and improve the continuity of gifted education between levels of education.
- F. Draw up "principles of acceleration and grade-skipping" to meet the developmental needs of the students.
- G. Prepare realistic measures for the identification and placement of students with extraordinary creativity, leadership, and other talents.

#### **ISSUE 3**: CURRICULUM & PROJECT DESIGN

The issue of "curriculum & project design" contains differentiation curriculum, school-based curriculum, flexible educational environment, and curriculum continuity. They are discussed under the present status, difficulties, and strategies.

#### **PRESENT STATUS:**

#### 1. Curriculum and Project Design

Curriculum and course design require the participation of teachers, parents, and even students. At the present, the teacher of gifted classes plays the major role in the design of curriculum and projects. Usually the teacher starts from curriculum of the grade, general course field, and his/her own specialty, also taking into consideration the content of related courses, teaching strategies, and students' performance. The teacher of gifted classes also exercises his/her creativity and incorporate community resources to expand the rich learning experiment of the gifted.

#### 2. Curriculum and Project Operation

Generally speaking, the present curriculum and project design for the gifted is mainly based on regular course design with additional attention on distinctive, unique, and rich programs and activities. The design is specifically based on the grade and class; with extra classes added to the regular course program. Besides, differentiated curriculum of gifted education is operated with courses of independent studies and acceleration programs.

In recent year, curriculum and project design for the gifted is getting more and more diversified. Similarly, gifted programs at schools now cover more categories of gifted education, like intelligence aptitude and talents in visual and performing arts. But gifted courses and programs for talents in creativity, leadership, and other special talents are still insufficient and remains a challenge in the future.

#### **DIFFICULTIES:**

A. Lack of coordination among courses and projects

- B. Inadequate design of differentiated curriculum
- C. Over-emphasis on lecturing in class
- D. Inadequate classroom design for special ed. classes
- E. Lack of gifted program for students with extraordinary creativity, leadership, and other talents
- F. Creativity and affective education largely ignored
- G. Lack of adequate teaching materials
- H. Inadequate course design for preschool gifted education and curriculum continuity built through preschool, primary, secondary to college levels

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# STRATEGIES: Appropriate differentiated curriculum and flexible integrated projects

- A. Establish differentiated curriculum and adaptive educational environment for gifted education.
- B. Assist and assess the school-based gifted education program to provide differentiated curriculum and educational environment for gifted students.



- C. Create a digital learning platform for gifted education to facilitate exchanges of teaching materials, resources, and other support of gifted education.
- D. Encourage the preschool gifted education enrichment program to discover and develop young children's potentials.

#### **ISSUE 4**: TEACHER TRAINING

The issue of "teacher training" contains topics of teacher training, internship and accreditation, and professional development. They are discussed under the present status, difficulties, and strategies.

#### **PRESENT STATUS:**

#### 1. Pre-service Teacher Training

In early days, teachers of gifted education mainly are trained from among general teachers, who obtain credits on special education by attending in-service seminars. After the amendment of Teacher Education Act in 1999, most teachers of gifted education receive pre-service training and qualifications from teacher educational institutions at universities or colleges; some general teachers get certified as special education teachers by taking course offered by gifted education programs in universities and get their teaching certificate in gifted education. The credits required for certification of gifted education teachers are 40 credits now, instead of the original 16 credits. The requirement includes 10 credits for general educational subjects, 10 credits for special education subjects, and 20 credits for gifted education subjects.

According to Teacher Education Act amended on 28 December 2005, "The term of study for students taking pre-service teacher education courses shall in principle be four years, including the student's studies in his or her major department, plus an additional half-year of practicum." After that, the prospective teacher is supposed to pass the certification test before qualified to obtain a teaching position. The Annual Statistical Report for Special Education in 2007 shows that the average rate of certified gifted education teachers is only 18%, with 42% in elementary schools and 6% in secondary schools.

In three teacher certification tests held between 2005-2007, only 26 persons registered for the test of certification for gifted education in 2007, among whom 14 successfully passed the test. The number is far from enough for the demand of gifted education teachers. There are now graduates with the major in gifted education, which will gradually help solve the problem of lack of well-trained gifted education teachers.

#### 2. Internship and Accreditation

Recruitment of gifted education teachers varies among different cities/counties or schools. In junior high and elementary schools, recruitment is usually planned by local education authorities. The actual recruiting process is usually jointly administered by schools with vacancies for teachers. In senior high schools, the planning and administration of recruitment is done by individual schools. Recently, due to the serious excessive supply of qualified teachers and a decreasing number of school-age children, teacher recruitment has virtually stopped in many cities/counties. Even when there are openings for gifted education teachers, the primary concern is usually on the applicants' expertise in the subject course, not that on special education.

In order to meet the practical need of teaching in gifted education, schools may employ contractual teachers with special skills. The criteria of appointment and accreditation of these contractual advisors, however, remains to be clearly formulated.

#### 3. Teachers' Professional Development

There are three types of gifted education teachers' professional development programs: 1. seminars organized by the educational authorities, Special Education Centers at universities, and schools, 2. in-service Master Program of Teaching organized by teacher training universities and/or colleges, 3. general graduate programs at universities or colleges. For most of the programs, the trainees have to bear the expenses themselves.

#### **DIFFICULTIES:**

- A. The gap between teacher training and teaching demands
- B. Low percentage of teachers with gifted education certificates
- C. Inadequate professional growth opportunities for teachers

### **STRATEGIES:** Multidisciplinary teacher training and various teacher appointments

- A. Regulate the criteria and provide multidisciplinary training for teachers of gifted education.
- B. Build up the professional standard for gifted education teachers to ensure the connection of professional teacher training with demands at schools.

- C. Encourage teachers' professional development and form gifted education teachers' communities.
- D. Design gifted education empowerment program for general educational administrators to increase their professional knowledge in gifted education



#### **ISSUE 5**: COUNSELING AND FOLLOW-UPS

The issue of "counseling and follow-ups" contains topics of educational counseling and follow-up research. They are discussed under the present status, difficulties, and strategies.

#### PRESENT STATUS:

#### 1. Counseling

With their better intelligence and potentials, the outstanding performance of the gifted students often draws teacher and parents' attention to their cognitive development instead of their psychological and affective needs. Many gifted students have unique mal-adjustment problems, as a result of perfectionism, unbalanced physical and psychological development, and anxiety due to stereotyped expectations.

Nowadays, it is usually the homeroom teachers and subject course teachers that give consultation and counseling to the gifted students. Some schools offer courses of affective education and career development as well. The design varies between levels of schools and between different schools. As to those gifted students with adjustment problems, it is the school counselor and/or homeroom teacher that they are supposed to turn to for help.

#### 2. Follow-up research

Follow-up research on the development of the gifted can help to understand the needs of the gifted students and prevent problems. At the present, most schools proceed with consultation and follow-up study on enrolled gifted students. After they graduate, however, the connection is severed, with only the record of the subsequent schools they are admitted to. Most follow-up studies on gifted students are by special education professionals in backtracking cross-sectional researches. In this connection, follow-up study and consultation in Taiwan required more concerns and efforts.

#### **DIFFICULTIES:**

- A. Inadequate affective education and counseling
- B. Inadequate follow-up research and continued counseling

#### **STRATEGIES:** Adaptive consultation and diversified development

- A. Provide more courses of affective counseling and career consultation for the gifted to nurture their career and potential development.
- B. Design social service programs for the gifted to learn to benefit the society, take care of the weak, and contribute to the society.
- C. Establish and maintain an effective follow-up database for the gifted to achieve systematic guidance to the gifted students.





#### **ISSUE 6**: DISADVANTAGED GIFTED EDUCATION

The issue of "disadvantaged gifted education" contains topics of development and categories of disadvantaged gifted education, offer of identification, placement, and counseling services, and supporting system. They are discussed under the present status, difficulties, and strategies.

#### **PRESENT STATUS:**

#### 1. Development of Disadvantaged Gifted Education

The National Gifted Education Conference in 1995 addressed the issue of, "gifted education for selected groups," evoking the importance of disadvantaged gifted education. In the Article 29 of The Act of Special Education enacted in 1997 and Article 20 of The Enforcement Rules to the Act of Special Education, guideline principles for gifted students with mental handicap(s) and disadvantaged social-economic background were regulated: emphasizing differentiated education and consultation, developing education programs with the maximum flexibility and least restriction on the number of participants, and offering necessary support based on the students' physical and mental conditions, and so on.

Afterwards, the Ministry of Education announced a series of policies and strategies for disadvantaged gifted education. In the assessment criteria for special education administration in local educational authorities, the identification and assessment, resources, and service for gifted students with disabilities and/or social-economic disadvantages are all taken into account.

#### 2. Categories of Disadvantaged Gifted Education

The disadvantaged gifted education serves for gifted students with disabilities and/or social-economic disadvantages.

Disabled gifted students refer to students possessing at least one talent defined in six categories of giftedness and simultaneously one or more physical and/or mental handicap(s). These disabled gifted students are roughly divided into two groups, the "sensually/physically disabled gifted" like visually impaired people with giftedness,

hearing impaired people with giftedness, physically impaired people with giftedness, the physically weak gifted, and the "cognitively disabled gifted," such as gifted students with intelligence disabilities, high functional autism, the gifted students with Asperger's syndrome, the gifted students with learning disorders, the gifted students with emotional disorders, and the gifted students with Attention-Deficit/Hyperactivity Disorder (ADHD), and so on. The data in the first semester of 2007 academic year shows that there are 97 disabled gifted students. 24 percentage of them are hearing impaired, 22 percentage of them are physically disabled, while 13 percentage of them suffer autism.

Gifted student with social-economic disadvantages refers to those who possess giftedness but live in remote or aboriginal areas, from poor families, or foreign students lacking certain cultural stimulation, or students with parents possessing different mother tongues, and so on. The data in the first semester of the 2007 academic year show that there are 129 aboriginal gifted students in junior high and primary school. Their categories of giftedness are visual and performing art (68%), academic aptitude (24%), and general intelligence (8%). 48 disadvantaged gifted students in junior high and primary schools have foreign parents; most of these students are talented in visual and performing arts (67%), some are talented in academic aptitude (23%), and a few of them are talented in general intelligence (10%).

#### **DIFFICULTIES:**

- A. Inadequate understanding of gifted students in disadvantaged groups
- B. Lack of instruments for assessment
- C. Insufficient administrative support and inadequate professional educational service for disadvantaged groups

STRATEGIES: Advocacy of disadvantaged gifted education and services for students' potential development



- A. Advocate for the concept of disadvantaged gifted education to give better education services for disadvantaged gifted students.
- B. Design adjusted and multiple identification tools and placement procedures for the disadvantaged gifted to discover their potentials.
- C. Enrich gifted education supporting system, establish suitable consultation services, and increase teachers' professional knowledge in teaching and counseling for the disadvantaged gifted to obtain more adjusted resources.

#### **ISSUE 7**: EVALUATION AND SUPERVISION

The issue of "evaluation and supervision" contains topics of evaluation methods, evaluation index, evaluation results and application. They are discussed under the present status, difficulties, and strategies.

#### **PRESENT STATUS:**

#### 1. School Visits and Assessment

Assessment of gifted education in Taiwan has been conducted for almost 40 years. As early as in 1963, the Ministry of Education invited Professor Gia of NTNU to conduct school visits to assess the effectiveness of Excellent Children Experimental Classes at Taipei Fu Shing Elementary School and Taipei Yangmingshan Elementary School. Afterwards, more assessment was done on several experiment projects, including "education program for gifted and talented student" and "educational research experiment on gifted students from junior high and primary school."

Subsequent assessment projects include the 1986 assessment of gifted classes in dance and art in junior high and primary schools with a follow-up project in 1989; the 1990 assessment of the music gifted classes in junior high and primary schools; the 1993 assessment of mathematic and science gifted classes in senior high schools; in the 1995 assessment of gifted classes in music in primary and secondary schools; and the 1998 assessment of gifted classes in visual and performing arts, including gifted class in music, art, and dance.

Perhaps as a tactic to resist the implementation of the mixed-grouping policy in 2004, the number of concentrated gifted classes increased by 101 at different cities/counties to form ability grouping classes. With the concern that the spirit of gifted education may be distorted, the Ministry of Education invited gifted education professionals to pay school visits for assessment.

#### 2. Supervision

Article 21 of "The Enforcement Rules to the Act of Special Education" in 1997 indicates that "Assessment of all phases of special education shall be conducted by the local educational authorities at least once every other year....The educational authorities in the central government shall visit local educational agencies to assess the outcome of special education at least once every other year." In recent year, local educational authorities are very active in assessing the effectiveness of gifted education; some local educational agencies include the evaluation of gifted education as one important index of school assessment.

In view of debate and doubts raising from drastic increasing of gifted classes in 2005, the first meeting of the 5<sup>th</sup> Special Education Advisory Council of Ministry of Education concluded that the effectiveness of gifted education practices in the local education authorities shall be included in the assessment index of special education.

### **DIFFICULTIES:**

- A. Lack of clear gifted education policies and assessment indexes
- B. Lack of a self-evaluation mechanism
- C. Evaluation are easily ignored when embedded in general school evaluation

#### STRATEGIES: Institutionalized effective assessment and supervision

- A. Establish and implement institutionalized assessment and effective supervision to better the development of gifted education.
- B. Regulate assessment indexes for different categories of gifted education.
- C. Encourage self-assessment among schools and include a sanction system in the assessment.







### **ACTION PLANS**

These strategies mentioned in the seven dimensions can lead to the following seven action plans.

#### **ACTION PLAN 1:**

#### MAGIFYING RESOURCES AND TEACHING SUPPORT SYSTEM

- A. Amend acts and regulations of gifted education
- B. Allocate more budget for gifted education
- C. Regulate the criteria for gifted education teacher qualification and facilities
- D. Plan and set up the National Special (Gifted) Education Research Development Center
- E. Encourage the local educational authorities to establish their own Gifted **Education Resource Center**
- F. Design empowerment program for parents of gifted students
- G. Establish longitudinal database so as to further provide the follow-up consultation

#### **ACTION PLAN 2:**

#### **GIFTED PROMOTION** OF EDUCATION IDEALS WITH ADVANCED MEDIA AND TECHNOLOGY

- A. Advertise fundamental concepts of gifted education with on media and Internet
- B. Conduct gifted education seminars for parents and teachers to exchange experiences
- C. Produce audiovisual programs for gifted education case exchanges

#### **ACTION PLAN 3:**

### HIGH-QUALITY MULTI-DIMENSIONAL IDENTIFICATION AND ADAPTIVE PLACEMENT

- A. Regulate "Essentials on the Identification of Gifted Students"
- B. Plan placement plans to meet individual needs

- C. Formulate and implement acceleration programs for gifted students
- D. Develop measures of identifying and serving students with extraordinary creativity, leadership, or other special talents

#### **ACTION PLAN 4:**

#### DIFFERENTIATED CURRICULA AND HOLISTIC COUNSELING

- A. Establish and evaluate the action plans of school-based gifted education service
- B. Establish and popularize the e-learning platform on gifted education
- C. Design pre-school gifted education enrichment programs
- D. Design social service programs for the gifted
- E. Establish and popularize the effective follow-up system for the gifted



### **ACTION PLAN 5:**

### DIVERSIFIED TEACHER TRAINING AND PROFESSIONAL **DEVELOPMENT**

- A. Develop the criteria of training for teachers of gifted education
- B. Design and provide multidisciplinary training for teachers of gifted education
- C. Design gifted education empowerment programs for general educational administrators to increase their professional knowledge in gifted education

#### **ACTION PLAN 6:**

### DISCOVERY OF DISADVANTAGED GIFTED STUDENTS AND TEACHING WITH PROPER ADJUSTMENT

- A. Design adjusted and multiple identification tools and placement procedures for the disadvantaged gifted students
- B. Improve teachers' professional competency, especially those teachers of disadvantaged gifted students
- C. Provide full support to and carry out the consultation programs for disadvantaged gifted communities



### **ACTION PLAN 7:**

## PROFESSIONAL ASSESSMENT AND EFFECTIVE **SUPERVISION**

- A. Develop assessment indexes for different categories of gifted education
- B. Establish longitude effective and institutionalized assessment and supervision mechanisms
- C. Encourage all levels of schools to self-evaluate and set up the recess system as a sanction mechanism.

These seven action plans can be implemented in terms of its relative degrees of urgency as short-term plans, intermediate plans, and long-term plans. The most urgent plans that require immediate actions are:

- A. Encourage the local educational authorities to establish their own Gifted **Education Resource Center**
- B. Have Special Education Programs at Normal Universities or Educational Colleges conduct gifted education teacher training workshops in order to increase the percentage of certified teachers
- C. Increase the percentage of gifted education budget
- D. Increase the subsidy to local education authorities to improve the facilities of gifted classes

Detailed items of short-term, intermediate, and long-term projects are listed in the Appendix, in the hope of upgrading the quality of gifted education within six years.



# **FUTURE PERSPECTIVES:** A Flexible, Finest, Fertile Land

The ideals of gifted education of this country are: "providing appropriate and adaptive educational opportunities," "building up differentiated learning environment for every student," "offering abundant opportunities for cultivating multiple intelligence" and "guiding students to become responsible and altruistic beings." Gifted education, assuming adaptive education as its premise, purposes to reach the ultimate goal, holistic development, aims to bring competency, cognition, and consultation into focus, with the hope to make every child one real "gifted person" of high morality, high responsibility, and altruism. In practice, there are strategies and action plans proposed on seven dimensions: "administration & resources," "identification & placement," "curriculum & project design," "teacher training," "counseling & follow-ups," "disadvantaged gifted education," and "evaluation & supervision." We hope to encourage the gifted to discover and develop their potentials, have multiple values, and enhance the quality and effectiveness of gifted education.

When every child is educated as a citizen with wisdom and love, we can predict that in the near future, Taiwan will be a land of excellence, prosperity, and innovation.

### **Attached Table: Action Projects for Seven Issues**

Administration & Resources	Short-term Projects 2008-2009  Regulation of the criteria for teacher qualification and facilities	Intermediate Projects 2010-2011  Establishment of National Special (Gifted) Education Research Development Center  Legislation of related regulations of Special	Exercises and assessment of the effectiveness of Research Development Center
Identification & Placement	Advertisement on fundamental concepts of gifted education  Discover and consultation for students with other special talents	Case sharing and discussion	Parents' empowerment business
Curriculum & Project Design	Attempt to provide school-based gifted education service	Assessment of the outcome of school-based gifted education practice  Establishment of digital e-learning platform	Enrichment of pre-school gifted education programs  Popularization of digital learning platform
Teacher Training	Regulation of the criteria of professional standard	Teacher training programs	Gifted education empowerment program for general educational administrators
Counseling & Follow-ups		Establishment of follow-up counseling systems	Exercise and popularization of follow-up counseling system  Exercise social service programs for the gifted
Disadvantaged Gifted Education	Procedure and mode of identification and placement	Discovery, development, and consultation	programs for the gifted
Evaluation & Supervision			Assessment of the outcome of gifted education practices

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