

Gifted Education in Kaoshuing City: Development and Issues

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Abstract

Through literature reviews, individual visits and other means, this article aims to discuss the key developments in the gifted education scene in Kaohsiung City in recent years, including the establishment of the Special Education Division by the Education Bureau in Year 2004, the Kaohsiung City Gifted Education Resource Center and Kaohsiung Creativity Learning Center in 2005, and the sponsorship of the International Creativity Education Exposition in March 2008. It also provides the following suggestions:

1. To increase the professional manpower in Education Bureau;
2. To build up a movement for manpower training;
3. To strengthen assessment tools and their use;
4. To provide a channel for the development of local art groups (which could prevent mixing up the practice of regular gifted classes);
5. To overcome issues facing students shortening their study years;
6. To maintain curriculum flexibility;
7. To continue the development of the 'creativity curriculum' through workshops;
8. To adjust the definition of 'gifted education teacher' and strengthen training for them;
9. To strive for more budget for gifted education;
10. To unify social resources and establish a support system;
11. To simplify and substantiate assessment work;
12. To trace the practice of counseling;
13. To trace the 'substantiality' of counseling;
14. To make learning and advanced study channels flow smoothly;

15. To improve remuneration to increase educators' enthusiasm;
16. To develop exchange programmes with other cities counties and countries;
17. To combine research with practice;
18. To set up a movement team to resolve problems and improve the system continuously.

The above suggestions are for the reference of practitioners of gifted education.

Key Words: Kaohsiung City 、 Gifted Education

I. History

A major aim of gifted education is to develop the potential of gifted children so that they can become high-achieving adults who dedicate themselves to the betterment of society and others. Besides raising our personal and professional standing, international academic interaction and visits enhance our motivation to innovate in field of gifted education in Taiwan. The influence of the various visions for gifted education in other countries, the publication of regulations for gifted students and the announcement of the report on the development of gifted education in Kaohsiung City have motivated the administration collaborator to pursue their research on the development of gifted education Kaohsiung city's gifted education.

1. Evaluating Kaohsiung within an International Perspective

The history of gifted education in Taiwan can be divided into four stages: the beginning period (before 1973), the testing period (1973-1983), the developing period (1984-1994) and stable period (1995-present) (WU, Wu-Dien, 2005). In most of western Europe and America, the emphasis in gifted education has been on the 'return' of gifted students to the mainstream, leading to mixed-ability classes, This is different from the 'centralization' and 'separation' which have been applied to gifted education in Taiwan. Furthermore, the selection of gifted students in China and Taiwan depends on intelligence testing scores, which is different from the emphasis on teacher

recommendation in Europe and America. (WU, Wu-Dien, 2006)

At present, apart from gifted education classes in high schools and some arts classes, general ability students and gifted students in junior high schools and primary schools are placed in different classes and gifted education teaching is carried out through extra lessons. On how to manage separate placement efficiently, a professional in gifted education, Mr TSAI, Dien-Mo (1999) wrote: 1. To enlarge the range of reinforced classes. 2. To avoid obvious remarks. 3. To make points of students' interest and character. 4. To compress classes in order to save time for other activities. 5. To enrich training for high-achieving behavior 6. To establish enriched classes 7. To unify resources in society which support classes.

The policy and development of gifted education in Kaoshuing city was led by professor TSAI, Dien-Mo (CHUANG, Chin-Yuan, 2001) and influenced deeply by the theory of Renzulli (The Enrichment Triad Model, General Exploratory Activities, Group Investigation of Real Problems, and Individual and Small Group Investigation of Problems)

2. Changes in regulations for gifted students

Through the changes in the regulations for gifted students, we are able to observe the development of gifted education in Taiwan. Articles No. 4, 28, 29 of the Special Education Law (Education Administration, 2008) show that the definition of giftedness has been enlarged to include students with excellent potential and outstanding performance in six domains: general intelligence, academic character, art, creative ability, leadership skills and other specialties. There are also laws for high-achieving students who are able to enter school at a younger age and shorten their study years. Community and teaching resources are combined for gifted students who are disadvantaged socially, financially and culturally. Regulation No 5 and 7 of the Special Education Law mentioned flexibility in the application of teaching equipment, teaching methods,

and age for special education, while Article No. 13 mentioned that schools at various levels should autonomously find students with special character. The individual tutoring of gifted students was emphasized in Regulation No 14 and 15 of the Special Education Administration rules. Regulation No 20 provides for gifted students with physical and mental problems or who are from the lower levels of society, giving certain flexibilities in terms of testing tools, procedure, placement and teaching methods. According to the laws of the central government, every city and county government shall establish suitable regulations for special education, based on their actual requirement, to promote gifted education. (2006(a))

From 2005 to 2006, Kaohsiung City has made great progress in establishing regulations for gifted education as well as in establishing the policy for intelligence education. Examples include the ‘Kaohsiung City Creative Education White Paper’ (announced on March 16, 2005), ‘Establishing Points for the Kaohsiung City Gifted Education Resource Center’ (edited on January 19, 2006), ‘Kaohsiung Gifted Education Development Report’ (announced in June, 2006), ‘Establishing Points for the Kaohsiung City Creative Learning Center’ (edited on December 18, 2006), and ‘Administration Points for Kaohsiung City Gifted Students shortening of study periods in high schools or lower (edited on October 26, 2006). All these became the important foundation for gifted education in Kaohsiung City.

3. The announcement of the development report

Each project in gifted education has been regularly administered since the Special Education Department was established by the Kaohsiung Education Bureau in 2004. During the period 2004 to 2005, a working team of specialists, scholars and administrators was invited to draw up the Kaohsiung City Gifted Education Report (2006(a), which aimed to promote gifted education to realize the potential of students in order to raise more intelligent people for the society and country. The work schedule from 2007 to 2010 includes the following: promoting the concept of gifted education, securing budget allocation, developing assessment tools, providing multiple assessment

services, developing classes, enhancing tutoring, upgrading of the professional skills of teachers of the gifted, the construction of a support system with social resources, and the clarification of assessment benchmarks. The work has provided powerful support for the development of gifted education in Kaohsiung City.

4. The goal of practicing administrators

The most important goal in the promotion of gifted education is to gain the understanding of society for gifted learners, as well as the provision of updated and better services (Robinson, A, & Moom, S.M., 2003). The researcher of this paper was a teacher with 9 years of teaching experience in special education, and has been a leader in gifted education in Kaohsiung City for four years, working on organizing gifted education and related activities. This research was motivated by the demands of the role of an advocate - a person who needs to find both the problems and solutions administration and research.

For this research, some information was collected from Feb. to May, 2008, including the development reports, assessment reports, annual statistical reports, domestic regulations, and memos and interview records, in addition to five interviews with advocates of gifted education with more than two years of working experience in the field (The interviews consisted of semi-structured and open-style discussion). This was followed by the sorting of the information on the development and problems of Kaohsiung City Gifted Education into A1 to A5 through further categorization and generalization. In addition, this research paper is written based on the actual working experience of the researcher himself, who has the insight of understanding and analyzing the information. To sort the information, a 3rd party was invited to be an assistant. In analyzing the problems and suggesting solutions to the problems of gifted education in Kaoshuing City, I look forward to raising the overall quality of education.

II. The Development of High-Achievement Education of Kaohsiung City

This paper examines the development of gifted education in Kaohsiung City from six perspectives: the change in administration, the placement and assessment of students, lesson plans for gifted classes, the organization and operation of resources, the evaluation of the system of assessment and other development matters.

1. History of the Organization

(1) History

In order to develop and prepare talented students for the 'new age', "The National Gifted Education Meeting" was held in Kaohsiung in 1996. The meeting set the direction for the development of high-achievement education in this country, through a discussion of issues, exchange of views and finally reaching a common agreement. Following the meeting, "The Working Points of High-Achievement Resource Project for Junior High Schools in Kaohsiung City" was produced by the Kaohsiung Education Bureau in November, 1997; "The Working Points of Gifted Resource Class of General Ability to Primary of Kaohsiung City" was made next year. Thus, the placement of high-achievement classes with general ability students in junior high and primary schools of Kaohsiung has been replaced by separation since 1998 (Education Bureau of Kaohsiung City Government, 2006b).

For administration, the Kaohsiung City Special Education Consulting Commission was established in July 2003. It has the responsibility of reviewing the annual work plan for special education, directing the development to special education, guaranteeing the right of learning to students under special education and providing channels for complaints. The Commission of Assessment and Entry Tutoring for Special Education Students of Kaohsiung City was established in the same year, and added gifted education to the assessment (entry) placement group and assessment tutoring group in

the updated edition of 2004. The Special Education Promoting Commission was established in various schools for the actual administration and promotion of gifted education (Education Bureau of Kaohsiung City Government, 2006b).

In order to keep up with modern management trends, to achieve self-growth and excellence, and to upgrade the overall service quality, the Education Bureau of Kaohsiung City established the Special Education Department (the 7th dept.) in January 2004. Prior to that, the administration of special education was in the 1st dept. (High School and Professional Education), the 2nd dept. (Junior High School Education) and the 3rd dept. (Primary Education) in January, 2004. The 7th dept. will be concentrating on the administration and setting up of an Education Group (the 1st group) for students with physical and psychological problems, which includes overseeing a special education resource center located in Ai-Kao Primary School, an Education Group (the 2nd group) for gifted education, which includes overseeing the Kaohsiung City high-achievement education resource center located in Kaohsiung Junior High School (established 2005), the Kaohsiung Creative Learning Center in Yang Ming Primary School (established 2005) and the Kaohsiung City Creative Learning Center, a Digital Media Center located in Ling Chio Primary School in 2007 (A4).

(2) Functions of the Organization

The team for gifted education in the Special Education Department of Kaohsiung City Education Bureau has one manager and one chief for its entire operation. Currently, there are 3 teachers in support positions. They take charge of gifted education in pre-school, primary schools, junior high schools, senior high and professional high schools, and as well as assist in promotion work. There is one chief and 3 professional back-up teachers in both the high-achievement center and creative learning center, who assist in organizational and promotional work. On the operations of the promotion center, the researcher has sorted the following points according to Points of

Establishment of the Kaohsiung City Gifted Education Center (2006c), Points of Establishment of the Kaohsiung City Creative Learning Center (2006d) and other related information.

(2)-1. Kaohsiung City High Achievement Education Resource Center

a. Sourcing Services --establishing and providing resources for high achievement education, including the following:

(a) Collecting, sorting and establishing information on gifted education.

(b) Providing and applying the sources of gifted education.

b. Study Promotion –advertising and promoting gifted education.

(a) Working on promoting activities related to gifted education.

(b) Advertising and promoting knowledge related to gifted education.

(c) Exchange of experience on gifted education, teachers’ research and other research studies.

c. Research and Development --development of lessons and teaching materials, assessment tools and tutoring in gifted education.

(a) Innovation and application of gifted education resources.

(b) Organization and research on lessons and teaching materials related to gifted education.

(c) Organization and research on tutoring projects related to gifted education.

(2)-2. Duties of Kaohsiung City Creative Learning Center

a. The working outline from the Kaohsiung City Creative Education White Paper is as follows:

(a) To innovate and edit plans related to creative education.

(b) To organize and preview projects related to creative education.

(c) To assist every school in administering creative education.

b. To provide plenty of creative resources:

- (a) Managing and maintaining the main page of the Kaohsiung City Creative Education Website.
- (b) Collecting model projects on creative education and establishing a platform to share the knowledge of creative education.
- (c) Demonstrating creative works and new information from the creative industries.

c. To promote and advise on the concept and content of creative education:

- (a) To establish a system that provides the requirements of creative education.
- (b) To promote creative education.

d. To promote and organize the results of creative education of Kaohsiung City:

- (a) To hold sharing events to study and exchange experiences in creative education in seed schools.
- (b) To plan and promote festivals and events showcasing the results of all schools in Kaohsiung that administer creative education.

e. To create more borderless opportunities all over the world and enhance the exchange services of international non-profit organizations.

2. Student Assessment Placement

Currently, gifted education in Kaohsiung City comes in 4 forms:

(1) Early Enrolment

(2) The general intelligence gifted resource project

(3) Shorten study duration for gifted education students. At primary school, the focus is on

general intelligence, the gifted resource project and artistic talent. For senior high and vocational high school, the focus is on serving students talented in the arts, The artistic classes are centralized, while others are undertaken separately.

(1) Methods of Assessment

From the Development Report of Kaohsiung City Gifted Education (Bureau of Education of Kaohsiung City, 2006b) and information from interviewees, the assessment method for each type of provision is listed below:

a. Early Enrolment:

A child aged under 6 years (median age for kindergarten) living in Kaohsiung City could have early enrolment after a recommendation has been made. The assessment consists of a general character test and a group writing test, followed by an assessment counseling meeting held by the Bureau of Education. A child who clears all the above could enrol into primary school early.

b. General intelligence gifted resource project:

(a) Primary Stage: Year 2 students in all schools in Kaohsiung City are assessed from March to May. There is separate school enrolment, and separate school acceptance. An initial test assesses students' academic achievement performance, and a review test is a general character test.

(b) Junior High School Stage: General students in each school are assessed from September each year to January in the following year. The assessment is divided into three stages, made up of observation and recommendation, an initial general character test and an individual intelligence review test.

c. Academic Character Gifted Resource Project:

Currently, there is only one class in a junior high school undergoing assessment from September each year to January the following year. The assessment is divided into three stages, made up of

observation and recommendation, an initial general character test and an individual intelligence review test.

d. Artistic Talent:

There are three stages of assessment, including a paper review, a character test and an academic subject test, followed by application and acceptance by individual schools.

e. Shortening the study duration for gifted students:

This has been defined as shortening the study duration for gifted education students below senior high school levels in Kaohsiung City (Bureau of Education of Kaohsiung City Government, 2006g). A student should have a test score with a standard difference of ± 2 , or over 97 out of 100, before he/she qualifies to apply. Provisions include 'exempt curriculum', 'speeding individual subject', 'jumping subject' and 'speeding whole subjects', in order to earlier select curriculum higher than senior high school year 1 in a total of 7 categories.

(a) Primary School Stage:

After completing a general character test, an academic achievement test is undertaken (e.g. Language, Math, Sociology, Natural Sciences).

(b) Junior High School Stage:

The decision is made by individual schools, based on observations, intelligence testing, achievement tests and character tests. A school meeting will review the teacher observation records, parent observation records, subject achievement records, special performance records and the evaluation of adaptable behavior. Clearance by the school will be followed by a counseling session by the Bureau of Education.

(2) Number of Student Placement

According to the annual reports of The General Report and Annual Statistics Report of Kaohsiung City Special Education from year 2004 to 2007 (Education Bureau, Kaohsiung City Government, 2004, 2005, 2006f, 2007a), there were 156 classes of gifted students in total in Kaohsiung City in 2004 (5196 students), 156 classes of gifted students in 2005 (5114 students), 167 classes of gifted students in 2006 (5589 students) and 185 classes of gifted students in 2007 (6388 students).

(3) Changes from Practical Application

There has been a wide range of changes in the assessment of gifted students. According to A4 in the interview, since December 2006, although only 1 school eventually raised an application, an important breakthrough' in the assessment of gifted students in junior high schools was made by Education Bureau in 2007, which provided a channel to allow junior high schools to raise an application to transform their general gifted education project into an academic high achievement resource project. A definition of the assessment tools and the procedures for their use are stated in regulation No 7 in the points for application. Thus, the assessment of gifted students in 2007 was different from previous years, with more manpower involved to support the changes in assessment style. For example, a hundred assessors have to be gathered in a short period of time to carry out the intelligence tests and paper reviews. This was a challenge to the administration team. A common examination was held in May 2006, which drew over 20,000 graduates of primary schools from five counties and cities in the middle area of Taiwan, since it was viewed that the method of common examination has been twisted terribly. (WU, Wu Dien, 2006) The worries regarding the hesitation to normal placement and the problems associated with gifted education in the country have been presented by various parties. The Education Bureau then revised the Standard of Assessment for Students with Physical/Mental Problems and High Achievement Student and its related regulations in September of the same year. Aside from raising the assessment standards for various gifted students and bringing up the resulting score of average assessment from 95% to 97%, an additional regulation was added to clarify the assessment procedures and tools for testing gifted students at mandated

stages. For the schools that have not yet changed the method of management for high-achievement students with separate placement (except those in artistic classes), the local government of counties and cities would act accordingly.

Since 2006, the Education Bureau has been closely supervising the high-achievement education of junior high schools, year by year. There has been a wide range of changes, including short period promotion, the re-edition to assessment introduction and further changes to the assessment tools and procedures. These have forced the first line promotion of administrators, students and teachers of Kaohsiung City gifted education, resulting in rising costs, and doubts from parents, leading to continual waves of discussion (A4).

2. Planning for Gifted Education

It requires research from various professionals to plan lessons for gifted students. Currently, most lessons in high achievement classes are based on general lessons, with additional enhancements and activities according to the individual requirements of students, for example, to have lessons with deeper and wider content, stimulating lessons, independent research lessons etc. Some lessons have been researched and promoted through workshops planned by teachers, for example, on innovations in independent lessons and stimulating lessons (A1).

Currently, the regulations on gifted education in Kaohsiung City include the Working Points of the Gifted Resource Project of Junior and Primary Schools of Kaohsiung City (Education Bureau, Kaohsiung City Government, 2006i). Regulation No 8 states that the “teaching plan shall be applied with the ‘additive’ or ‘separated’ method. (1) ‘Additive’ method –to use lesson hours with blank hours, elective lessons, group activities, after-class tutoring, morning study (not more than 3 times for each student); each student has 2 to 6 lessons per week. (2) ‘Separated’ method – to use lesson hours saved by individual skipping centralized lessons. . However, this needs to be approved by the special education commission; the separated hours shall not be limited and the standard of separated

method shall be established by each school. (3) The total hours of the project (class) shall not be less than 32 lesson-hours for junior high school and 20 lesson-hours for primary schools. Regulation No 9 points out that “Students’ particular demands shall be considered by every school, especially on coordinating with school resource, focusing on creative thinking, problem solving and all kinds of high-level abilities and training to personality when organizing lesson plans. Regulation No 10 points out that “The directions of the lessons include group teaching, team work learning, individual tutoring, independent research, subject seminars, outdoor teaching, observations and study camps”. Regulations No 11 points out that “Teaching assessment shall be applied by individual style and multiple assessing method”. Regulation No 12 points out that “Every school shall take student tutoring seriously ...”.

In addition, a gifted class of art talent proceeds with at least six professional lessons, including major and minor specialist and simulation lessons. The additive lessons of group practice and individual tutoring are added to the musician class; furthermore, on-stage performance ability is given emphasis, exhibitions of the results will be held regularly to give opportunities to present the learning results of students (A2).

In recent years, more than a hundred students have passed the assessment for acceleration at primary level. This shows that the effort put in by school teachers and parents in tutoring students has been growing steadily (A4). We focus on students who apply to skip grades or lessons. We provide them a learning-and-tutoring plan which is set by parents and school teachers (A3).

On the issue of how to normalize, multiple-directed and suitable to characters??. the point is to enhance organization on lessons; the issue of how to get away from the traditional raising system requires more teachers and administrators to devote themselves to the promotion and application to create the actual value and path for gifted education.

3. Resource Integration and Application

The resource integration and application of gifted education plays an important role on the promotion of gifted education. Hence, the discussion will be divided into three parts: teacher preparation, budget application and social resources.

(1) Teacher Training

According to the annual reports of The General Report and Annual Statistics Report of Kaohsiung City Special Education from year 2004 to 2007 (Education Bureau, Kaohsiung City Government, 2004, 2005, 2006f, 2007a), there were 267 teachers for high achievement education at various stages of Kaohsiung City in 2004, with 83.2% for primary schools, 11.32% for junior high schools, and 8.34% for senior and professional high schools; there were 260 teachers for high achievement education at various stages of Kaohsiung City in 2005, with 99.2% for primary schools, 16.2% for junior high schools, and 2.8% for senior and professional high schools; there were 321 teachers for high achievement education at various stages of Kaohsiung City in 2007, with 61% for primary schools, 5% for junior high schools, and 2% for senior and professional high schools. During the period of 2006 to 2007, number of junior high schools increased from 47 to 62; the number of teachers has increased from 74 to 136, leading to a shortage of qualified teachers for high achievement education. The highest percentage of qualified gifted education teachers are for primary schools, the lowest percentage for senior and professional high schools; the majority of high achievement classes in senior and professional high schools are art talent classes but the preparation of qualified teachers for music, art and dance is ignored. The transfer rate of teachers of gifted classes is also higher. Overall, there are more questions regarding specialized teachers in junior high schools than primary schools because it requires more preparation to specialize in gifted education. The problem of adjusting teacher preparation in universities is an issue of concern for Kaoshiung City.

In order to reinforce the training of the teachers in gifted education systematically, apart from seminars and workshops in Kaohsiung City through resource center, the government also worked

with Dept. of Special Education of the National Kaohsiung Normal University for a course with 3 semester-hours of gifted education in 2007, with 40 teachers trained in gifted education. In addition, a high achievement education course with 3 semester-hours has been planned for teachers of the art talent classes of junior and senior high schools (A1).

(2) Budget Applications

According to the General Report and Annual Statistics Report of Kaohsiung City Special Education from 2004 to 2005 (Education Bureau, Kaohsiung City Government, 2004, 2005), the budget for special education made up 5.23% of the education budget in 2004, of which 4.32% went to the special education for students with physical or mental problems, and 0.91% went to gifted education; the budget for special education made up 6.91% of the education budget in 2005, of which 6.03% went to the special education for students with physical or psychological problems and 0.88% went to high achievement special education. To calculate the special education budget more tightly, the presentation of statistics in the annual reports of The Overlook and Statistics of Kaohsiung City Special Education from 2006 to 2007 (Education Bureau, Kaohsiung City Government, 2006f, 2007) has been changed. The cost of budget applications and unit cost of each student will be calculated by individual analysis with respect to various classes (A4). Overall, the percentage of the budget for special education for students with physical or mental problems is still much higher than that for gifted education. In the research, all of the interviewees explained that the budget application for gifted education has been ignored for a long time. In order to have a smooth implementation of gifted education in Kaohsiung City, expand the budget for schools that has been administering gifted education. A budget of three million from the Education Bureau in 2007 will be applied to fully support gifted education and related activities, aside from holding events for students with physical or psychological problems (A1). Apart from that, creative education will be continually promoted in 2008. 10 million (regular budget) and 5 million (equipment budget) will be used for 86 projects, for the promotion of the five actions outlined in

the white paper to promoting creative education to schools at various levels, and to raise the problem-solving ability and growing creative abilities of students as a whole.

(3) Social Resources

The social resources of schools in Kaohsiung City are plentiful e.g. parent groups, associations, domestic temples, enterprises, and stores around the neighborhood. They are able to provide enriched study activities and funding to promote gifted education (A4). Gifted education is different from the special education of students with physical or mental problems, which has been supported by 2 to 3 groups for each category. However, the close cooperation with the Kaohsiung City High Achievement Education Development Association has been proceeding continuously (A1).

(4) Assessment Operation System

The assessment of gifted education in Kaohsiung was added into the special education assessment during the past 3 years due to its importance to society; it was special education for students with physical and psychological problems (A1) before that. Since the establishment of the Kaohsiung City Gifted Education Resource Center, the assessment of gifted education was taken care of by the center that takes the responsibility to assist and plan the work (A2).

From The Administration Plan of Assessment of Special Education of National Education of 2007 (Education Bureau, Kaohsiung City Government, 2007b), the assessment methods that have been applied are “doing at school” (the schools doing the assessment should fill up the list by themselves, which should be delivered to the units that are responsible within 2 weeks from the date of assessment, in order for it to be transferred to the Assessment Commissioner for written evaluation.) and to Education Bureau for double audition (to be assessed by professional scholars and related member who are hired by Education Bureau). The assessment commissioners include 1-3 persons of professional scholars, 1 person of representative of relevant social groups (parent), 1-3 persons of

representatives of senior teachers, and 2 person of relevant staff of Education Bureau, in total, there are 4-9 persons. The assessment procedures include summary report (10-15minutes), written information review (50 minutes), examining of equipments of special education class (30 minutes), interview with parents and teachers of students who had taken special education tutoring from regular classes (to be held separately at the same period of time, about 30 minutes), meeting of assessment group (20 minutes), general seminar (30 minutes) and opinion exchange between commissioners (10 minutes). The content of assessment includes administrative cooperation, assessment and placement, human sources, lessons and teaching, teaching resource, student tutoring, interaction between parents and teachers, there are 8 subjects in total.

Through the assessment system of gifted education, schools that are doing good jobs can be found, and the observation and study events can be held that will provide a platform for exchanging experiences from every schools, Also those schools who did not do so well shall be added to the list of next year's follow up chart for further observation with continual guidance and improvement. For many schools, assessment work can be busy and stressful; therefore, how to adjust the assessment work to make it more manageable becomes the issue that deserves to be paid more attention to for further promotion of high achievement education (A2).

5. Other significant developments

(1) To set up 2 developing centers for overall propagation

Recently Bureau of Education has paid special attention to Kaohsiung City gifted education whose future will benefit from the establishing of gifted education resource center、creativity learning center, increasing teacher manpower, investing expenditure, overall propagation under core movement of administrators' full support (A1).

(2) Gifted Education Assessment Tool and Mental Assessment Professional Training

In recent years, Bureau of Education has tried to unify 5 counties and cities within southern part in Taiwan, and entrusted colleges and universities with work of gifted education assessment

theme and regular model installation to elevate assessment function. However, in order to keep long-term development of gifted education work stable, tool research and mental assessment professional training were carried out, we still require to continue these practices(A2)

(3) Multiple Display Activity Planning of Parents, Teachers and Students

Activities planned by parents, teachers and students that are special features of gifted education development in Kaohsiung City in recent years are the creative sporting brain competition, student independent research contest, robot race, outcome display of art talent class, mini play writing and great director films competition and playing bridge through students' multiple display which could exercise creative thinking besides stimulating potentiality and cultivating ability of resolving problems (A4).

(4) To devise Year 2008 International Creativity Education Expo

Bureau of Education sponsored Year 2008 International Creativity Education Expo in March 2008 inviting creative masters of 9 countries to hold 10 seminars of international creativity exchange. In addition, there were 200 booths to display creativity together lasting for 5 days from industries of each county and city, colleges and universities, senior and vocational high schools, junior high schools and primary schools. Approx 100,000 interested people visit this Expo. The Center had achieved affirmation from international friends and the public . This is a great step to establish connections between Koahsiung City and the international market (A5).

(5) To establish no boundary exchange platform

Currently, there are two developing centers to take development through website exchange platform, and also invite professionals to share proceeding of model school idea propagation. Additionally, opportunities are provided for administrators to attend international exchange every year to learn each country's best practices which can gradually be adopted by Kaohsiung City (A4).

III. Kaohsiung City Gifted Education Problem and Strategy

1. Administration Organization

(1) Problem

a. Gifted Education Manpower is unstable in Bureau of Education

Currently, except for one chief, two section chiefs, 2 staff in special education division in Kaohsiung City Bureau of Education, the other 5 workers are school teachers helping to perform the duties. Among them, there are 3 teachers performing gifted education duties for students from pre-school, junior & senior high school and vocational senior high school, one of them also assists in other physical & psychologically disabled work(A1). During the period of research visits, most interviewees (A1, A2, A3) .expressed that they were unable to work stably and longer hours because they have heavy workload from Bureau of Education, high pressure and problem of teacher transfer, such as teachers having no administrative experience or professional background of gifted education which would make development of gifted education difficult.

b. Insufficient Professional Skill from Administration Personnel

Due to busy business in special education, frequent movement of administration personnel of gifted education at school and developing center makes it difficult to extend development of gifted education,

(2) Strategy

a. To increase professional manpower in Bureau of Education

There are close relationships between stable growth of gifted education operations and developer's professionalism and enthusiasm. Facing insufficient manpower to undertake these duties in Bureau of Education, it is suggested to recruit more professionals, or get assistant professional teachers from developing center in order to resolve high workload and problems

of inadequate manpower (A1) which could build an excellent working environment for gifted educators for core planning, and motivate enthusiastic developers to support gifted education operations in the long term.

b. To establish movement of team manpower training

Experience inherited is an important continuing motivator in an organization. When manpower changes frequently in special education administration, it is required to start from scratch, setting up team with basic training . (A5).

2. Assessment Placement

(1) Problem

a. Uneasy maintenance of testing tool life

Bureau of Education invests expenditure in testing tools of gifted education in recent years focusing on tool research and purchase (A2). Each year when completing gifted student assessment, the Bureau needs to renew testing theme, or perform different tests in the following year to avoid repeated testing contents or themes leaking out (A3). Although obeying testing ethics is always emphasized every time during seminar for mental assessment personnel, it is still unable to prevent children from leaking the questions they have memorised. . In fact, it is really not easy to set up a confidential system for maintaining testing tool (A4).

b. Side-effect of Gifted Student Numbers Decreasing

Since increasing gifted student level up to 97 from 100 scores, numbers of gifted students have been quickly decreased especially from suburb area schools. (A1) The side-effects of declining gifted student numbers include the negative impression from community, doubting voices from parents to schools, teachers' worries, and students' self-recognition etc., Some school administration personnel are anxious and afraid to be held

responsible for the problems that school classes could be decreased (A4).

Besides, since Art Talent Class was established in 2004, many schools which are founded by music associations are unable to follow the rules after Junior High School Division of Ministry of Education cancelled the association founding scheme, and parents expressed their strong protest by striving for gifted education class in order to keep this student association practice. Under the initial and reviewed assessment made by professionals who were appointed by Bureau of Education, these classes have been set up (A1). Students should meet high standard assessment to enter into this kind of class, therefore student numbers were decreased which made it difficult for the music association to operate. Besides, without expenditure and auxiliary operation of teacher assignment, how to continue to operate is a big test for school and Bureau of Education (A4).

3. Problem of application for shortening study duration and student transfer level

To skip grade level and shorten the length of study (such as student of primary school Year 6 jumping to junior high school Year 1) cause students and parents two difficulties, Besides overcoming curriculum arrangement, assessment subject between primary and junior high schools are different which will give students difficulty in class section, curriculum arrangement and transportation. It should introduce consultation and support teacher in understanding student within a short time during period of level transfer. And therefore, under many restrictions, a lot of parents decide to give up student arrangement (A3).

(2) Strategy

a. To strengthen establishment and operation of assessment tool

To maintain confidentiality of testing tool, except training of assessment personnel in

mind, establishment and operation of strengthening assessment tool is the main job (A5). It requires to increase themes, establish regular model and strict assessment processing and raise administrative developer's professional skill (A3). Additionally, it should plan and unify the time of undertaking assessment to prevent items from leaking out (A1). If it requires flexible assessment time, function of teacher recommendation system should be strengthened (A4).

b. To provide development of local feature in art association as class channel in order to avoid mixing up regular gifted education practicing scheme

As there is no structure for primary and junior high school to develop combined classes ('teams') the schools setting up this kind of team at an earlier stage have faced these classes being scattered and students going back to their original classes. Many schools and parents suffered pressure from many directions and applied for building up art talent class one after another in order to increase team practicing opportunities (A1). Currently, schools setting up art talent class after 2004 in Kaohsiung City face this problem, and in order not to mix up attendance of regular gifted education class, it is suggested to provide class channel to build art association (team) (A1). Social Education Division of Ministry of Education since the succeeding year of 2007 has actively looked into the possibility of setting up non-art talent class in each county and city and expect to have a system and rules for operating in future (A2).

c. To establish level transfer support for shortening study duration across education stage

In Year 2008, Primary School Assessment Meeting has decided on individual case that if primary school student applying for jumping level to junior high school does not pass single one of three subjects, in order to avoid problems of transportation, curriculum arrangement and level transfer, the original school could collect this student's internal test and results of quality/character observation of this subject and lodge them to Special

Education School Development Committee for discussion. After passing, further assessment should be sent to assessing meeting of Bureau of Education. If these two procedures are all successfully completed and there is flexible space for providing student level transfer, then allow student to skip whole subjects into learning level to prevent student's distress of giving up his application (A3). For student crossing study level, school should arrange curriculum in priority and provide counseling support (A4). To provide support for shortening study duration across education level transfer is an important theme for future dissemination.

3. Curriculum Planning

(1) Problem

a. Advanced Study Principle causes the curriculum to change its quality

Advanced study principle has influenced the junior high school gifted education from the beginning. Parents and teachers often think that gifted education class means acceleration. Even though efforts have been made in recent years to correct this misconception, the administration department still has to control the processing of gifted education curriculum to prevent its nature and quality being changed (A1).

b. To extend multiple curriculum

The most difficult problem for the gifted education teachers is how to make their teaching multiple, active, fruitful and let student absorb it completely (A3). Teachers should have ability of preparing research teaching materials, because gifted child learns very quickly and needs teacher to have enough teaching curriculum to extend multiple curriculum so that students will not feel bored and that time has been wasted (A4).

(2) Strategy

a. To maintain flexibility of gifted education curriculum

It is an expert skill to balance gifted education facing advanced study principle (A5). Besides, it is also important to maintain flexible planning of gifted education curriculum, such as student of Year 1 junior high school and Year 2 may develop and study the curriculum actively, and independently, and for student of Year 3 could match school with professional in the subject to deepen, widen their sufficiency, and also strengthen advanced study concept to these gifted students which will make them learn in a happy and safe environment (A4).

b. To continue creative curriculum development in workshop

The curriculum development needs a group of enthusiastic professional teachers to work together (A4). The research of gifted education curriculum during the recent three years in Kaohsiung City has appointed expert scholar to direct teachers developing curriculum through workshop organized by teachers and the outcome is very fruitful. In future, workshop should still continue to work and provide research of creative teaching materials (A5).

4. Resource Alliance

(1) Problem

a. Training of qualified gifted education teacher

In accordance with recent annual statistical report of Ministry of Education, apparently, percentage of qualified teacher for gifted education is lower than teacher for physically and psychologically disabled . During the most recent years, increasing training has been better done, but qualified percentage has not been seen to increase (A4). The authority should adjust definition of qualified teacher and provide possible directions by ruling and defining the qualified gifted education teacher and whether it meets practising

operation of each kind of gifted education class (A4).

b. Insufficient Expenditure for Gifted Education

Insufficient expenditure and no appreciation of gifted education have been the purposes of achievement for gifted education partners (A2). Recently, Ministry of Education has specially valued gifted education which could be found from listing gifted education in county and city special education assessment since Year 2007. However, suggestions have been provided through continuous rules and assessment system, there is still no support from expenditure and resource.

c. To connect with social resource

The social resource applied to gifted education is less than the physical and psychological education, such as: enterprise, association and community could be connected to work together in further step (A5). After visiting overseas countries and learning their experience, it is found that the cooperation between Kaohsiung City gifted education and enterprise is lacking and, will be future working direction (A4).

(2) Strategy

a. Adjust definition of qualified gifted education teacher and increase training

To open channel and definition for qualified gifted education teacher is a breakthrough for education administration department when designing rules (A4). Available channel to make professional and multiple teachers as qualified gifted teacher is our effort, and to increase professional training of current gifted education teacher is the further way to elevate qualified percentage and teaching quality of gifted education teacher (A1).

b. To Strive for wider budget of gifted education expenditure

Lack of gifted education expenditure makes the developers in practice unable to

implement their idea (A4). Only when expenditure is listed on the regular track, then gifted education will be able to grow up stably ((A). Our government should refer to overseas experience and invest more funds for future training for excellent workers and leaders (A2).

The administration personnel should step forward to strive for bigger expenditure (A5). There has been breakthrough of establishing development center from gifted education organization in Kaohsiung City, but without support of more fund, it is difficult to accomplish our idea only having support of business expenditure from development center and school internal basic gifted education business propagation (A4). It has been found from one project of seven activities of Gifted Education White Paper (2008b): Enlarge resource and teaching support –it could show the importance of gifted education development by elevating gifted education expenditure ratio.

c. To unify social resource and build support system

To build up social resource is extraordinarily important under condition with lack of gifted education resource. It needs to extend friendly hands to cooperate with enterprise, non-business operation organization for breakthrough of traditional thinking and get a greater step (A1). The developing center may make efforts on development and alliance of social resource, such as to set up a library of professional manpower, to learn across territory, to sponsor ability performance activity through cooperation, to fully unify social resource and build up support system (A4).

5. Assessment Function System

(1) Problem

a. Participation of developer in practice

Gifted education assessment in Kaohsiung City since 2007 has been entrusted to Gifted Education Resource Center to undertake. Due to heavy workload within Bureau of

Education as well as insufficient negotiation during initial establishment of developing center and Bureau of Education, it is impossible to improve practical operation without participation of developer in practice from Bureau of Education(A3).

b. Pressure of Assessment

It is a long-term invisible pressure to school personnel who work on assessment. Even though Bureau of Education has declared that schools need not to get too nervous, school personnel undertaking assessment work still suffer from double pressure (A3). How to improve school assessment once every two years which brings pressure to school and Bureau of Education should consider changing operation method and assessment content (A1).

c. Trace and counseling of gifted students at school

To trace and counsel gifted student is a short part of the work at the moment, and there is still space for making effort in manpower resource, system establishment and teacher training (A4). In addition, it needs to build up long-term support system to trace assessment function system at school, not only take assessment as a target list (A4).

(2) Strategy

a. Assessment Work combined with participation of Bureau of Education and developer with senior teaching practice

It takes time and energy in assessing work, but only combining with participation of Bureau of Education and developer with senior teaching practice could resolve the problem efficiently and provide advice to schools (A2) It is suggested to undertake assessment planning and negotiation in advance and, the developer in practice should participate in assessment work. Firstly, it needs to proceed with manpower distribution planning and make close connection (A3).

b. To simplify and substantiate assessment work

The assessment contents may emphasize different subject with main point evaluation (A1). It is better to simplify assessment work to avoid too much paper work and could combine with website e-system (A5). Besides, it is proper to build model exchange between county and city schools, set up counseling support system and direct school how to build up data system in ordinary days little by little (A4). Change of assessment method will be future consideration, such as: To take group assessment discussion and individual visit to school (A1).

c. Trace of substantiating counseling function system

It requires to build long-term planning to trace students' counseling and school assessment and, starting from manpower training, system establishment, special project study, work-frame support, not only put into an assessment target (A4).

6. Others

(1) Problem

a. Problem of advanced study transfer level

Because of insufficient channel, gifted student from junior high to senior high, senior high to university's transfer level, university preparation system and school multiple selection of student etc. are sometimes unable to develop their talent even though they were very brilliant in childhood. How to establish an integrated learning channel is worthy for administration department to discuss and review (A1).

b. Lack of resource support for Teacher and Developer

“Suffering” from gifted student's quick learning and high understanding, the gifted education teachers need to take more time to prepare teaching materials, but they do not receive any support. On the contrary, they face increasing pressure at work (A3). There is

high turnover of gifted education teacher and special education administration personnel. Lack of resource is a bottleneck of long-term development of gifted education, and this is also an area for administration department to improve (A4).

c. Model Exchange Insufficiency between county, city and international countries

When assessing every county and city each year, Bureau of Education has been always busy with assessing effect, and has not made a good model exchange. It is a great pity (A4). Even more, it is also very important for representative visiting overseas countries to share their experience and thinking after returning to avoid mistakes (A5).

d. Shortage of Administration Practical Research

In this creative new era, all works are seeking quickest speed, such as performance of gifted work often look for good efficiency and instructions are given from the top to the low level, and therefore nobody cares about the effect and problem which cause shortage of administration practice research (A4)

(2) Strategy

a. Flowing learning channel

The establishment of advanced study system for gifted students include: To design class depending on distribution of gifted education clas; To highly value assessment of score increase for multiple gifted students; Tracing and counseling of student level transfer; To establish regional learning project and Breakthrough of university preparation programs etc. (A1)

b. Extending educators' enthusiasm

It is necessary to extend educators' enthusiasm, for example, recruitment of excellent gifted education teachers; increase of hourly pay to gifted education teachers; decrease of curriculum section; establishment of display stage for gifted education teachers; installation of

exchange platform (mail box, face to face talking). Attempts should be made to find every channel to listen to the educators, and increase their enthusiasm (A5).

c. To develop model exchange between county, city and international countries

Gifted education developers have been busy and made effort on their job, and often forget to take a look at developing features from other county, city or international countries, such as: visiting other county or city to share model, international visit arrangement and encouragement to attend international meetings etc. Under development of model exchange, the gifted education developers shall widen their vision and could be connected with the whole world (A4).

d. To combine substantial research with practical work

Good research needs people to listen and propagate (A5). There is still space for Kaohsiung gifted education no matter what in development of administration organization, curriculum planning, teachers' professionalism, assessment practice, resource alliance and assessment performing etc. (A4). Through both substantial research and practice , it could enable gifted education developers to raise gifted education quality (A1).

e. To establish a team for continuous study function system

It is necessary to establish a team to resolve problems facing gifted education. For example: set up a function system including public meetings, professional counseling, design of flexible planning, team mutual encouragement etc. that will improve permanent development, provide continuous team education, and research growth power so as to make a successful learning team (A5).

IV Prospect of Kaohsiung City Gifted Education

There is an excellent creative team in Kaohsiung City to completely get involved in

development of gifted education and make it quicker and more stable. The expectations of

Kaohsiung City gifted education are: 1. To be internationalized and increase resource
2. To reorganize across alliance. 3. Excellent quality assessment and proper arrangement. 4.
Flexible curriculum and strong teacher qualification. 5. To learn happily and fully show ability.
6. To simplify assessment and supervise efficiently. 7. Precise research and continuous
development.

1. To be internationalized and increase resource

- (1) To get wider expenditure budget of gifted education.
- (2) To strengthen model exchange channel between county, city and international countries.
- (3) To extend educators' enthusiasm.

2. To re-organize across alliance

- (1) To increase professional manpower in Bureau of Education.
- (2) To establish manpower training of motive team.
- (3) To set up support system across combining social resource.

3. Excellent quality assessment and adaptability arrangement

- (1) To strengthen establishment and operation of assessment tool.
- (2) To shorten study duration and establish support of allowing students to grade-skip.
- (3) To improve counseling function system to track students

4. Flexible curriculum and strong teacher qualification

- (1) To maintain flexibility of gifted education curriculum.
- (2) To adjust definition of qualified gifted education teacher and increase training.
- (3) To continue creative curriculum development in workshop.

5. To learn happily and fully show ability

- (1) To develop display stage for students and teachers.
- (2) To multiply learning and advanced study channels.
- (3) To provide channels for showing local and founding art groups.

6. To simplify assessment and supervise efficiently

- (1) To simplify assessment work and substantiate e-system.
- (2) Participation and assessment from developer and senior officer in teaching from Bureau of Education.

7. Precise Research and continuous development

- (1) To combine substantial research and practice .
- (2) To set up a team for resolving problems and improving permanent research function system.

V. Conclusions Through literature, individual visit to practical developers of Education Bureau and development center, this article provides a description of efforts undertaken by Kaohsiung City to advance gifted education, , and highlights related problems and recommendations to resolve these problems.. It is expected that Kaohsiung City Gifted Education could be adaptable, creative and continuously developed. The coming announcement of gifted education white paper (2008b) from Ministry of Education will encourage the first line gifted education workers to persist in their work, just like “little grass meeting sunshine with great hope” and to accomplish their goal of “Work together to create a country with adaptable, excellent and creative talents”.

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