

# The Enlightenment of the Concept and Practice of Gifted Education in USA to the Development of Gifted Education in China: Perspective of School Education

TAN Shaofeng\*, WEI Jihua

Guangxi College for Preschool Education, Nanning, Guangxi, 530022, China

\*Corresponding Author

**ABSTRACT.** Under the background of the increasing demand for high-ability talents, Gifted Education is the effective complement to school education as a concept of quality education. China needs the help of Gifted Education to realize the goal of building a strong country in human resources. School education is the most important part of the education system of China, its educational reform must be combined with the local reality to provide Gifted Education for Chinese students effectively. The schools and educators need to adhere to the ideas of “Gifted Development” and “Multi-oriented Gifted Education”, so as to draw on the experience of the reform and development of Gifted Education in the USA, to promote the organic integration of national policies, funds, social environment, curriculum system and the building of teachers, and attach importance to the interaction between students and environment, as well as the exertion of students’ subjective initiative, finally to provide rich and different education for all students in the whole school.

**KEYWORDS:** Gifted education, School education, Multi-orientation, Differentiation, Enlightenment

## 1. Introduction

Under the background of globalization and the rapid development of modern science and technology, the competition among Countries in the world is becoming more intense and high-end. Gifted and Talented Education (the words used in this paper are all from Webster's New Collegiate Dictionary) as a Model of Quality Education and a viable strategy for the Policy of “Strengthening China with Talents” is being taken seriously, adopted and developed all over the world. Since the establishment of the “Gifted Youth Class” in the late 1970s in China (this paper refers to Mainland China, the same later), however, the Gifted Education has been restricted by the special historical period of Universal Education as well as the idea of Education Equity, and has not been promoted to the level of national policy now.

It is also often used as a special part of the basic education in practice, formally or informally, just for the most intelligent and talented of the students (Shi, 2008). The research and practice of Gifted Education in China is still relatively weak, and there is still a lot of distance between China and more developed Countries.

In order to speed up the construction of a powerful country with human resources in response to international competition, the Gifted Education in China is changing from Elite Education to Popular Education at an accelerated pace. So that the practical theoretical guidance and experience are especially needed to help China achieve the strategic goal of building an innovative country and cultivating top-notch innovative talents at present (The Outline of China's National Medium-and Long-term Education Reform and Development Plan 2010-2020). To strengthen Gifted Education in current and future school education will not only better identify and nurture creative and leadership talents, but also provide students from poor families and culturally specific areas with the education that is more responsive to their development needs, in particular, making up for the inadequacy of their family resources to further promote equity in education. From a macro perspective, there are the continuous questioning and reflection on the direction of educational development, as well as the urgent need for various types of high-level talents due to social development and economic transformation, especially the gradual advancement of educational policy support and its pilot reforms. Because these three interrelated factors at least, the development of Gifted Education in China is facing unprecedented opportunities (Zheng, 2013). And from the perspective of education, however, there is still a big gap between the current and future development of China's high-end, innovative talent, and the supply capacity of the education system. In the process of continuing the education reform and development, therefore, China need to keep an open and absorbing attitude, draw lessons from the developed countries of Gifted Education, such as the USA, which is a realistic strategy for quality and efficiency.

As the most outstanding and mature country of Gifted Education in the world today, the USA has been developing its specialization for nearly 100-year. Many relevant theories and models of Gifted Education, most of them were first proposed by USA's scholars and then studied and tested in depth, are widely accepted and accepted all over the world. Such as Howard Gardner's "Theory of Multiple Intelligences" that influenced the global education community, and Renzulli & Reis's "School-wide Enriched Teaching Model", which is regarded as the best practice models of Gifted Education. Meanwhile, many states in the USA have already established the status of Gifted Education through legislation, matching the corresponding policy and fund. These experiences and practices of reform and development are all very worthy of reference.

## **2. Background: Gifted Education and the Gifted Education from the USA**

Based on the above, researchers can find a lot of valuable experience in the development of USA's Gifted Education, but it is not possible to copy specific practices directly in the different historical processes and cultural backgrounds. The

key to the development of Gifted Education in China, as well as the purpose of this study is to explore the commonness and connotation of USA experience in the process of the formation and penetration of Gifted Education. Thereby--

This paper focuses on the process of educational practice, drawing lessons from the USA, especially the disputes, challenges, innovations and breakthroughs in the process of its practice. It is not only in accordance with China's public education to promote private education, and the school-based national conditions, but also to focus on the twists and turns in practice, which is conducive to uncover the surface of things to grasp the internal development of the situation and re-cognitive.

Thus, the "Gifted Education" here is based on the Developmentalism, and as a school-based education effective complement to the whole concept. The aim is to provide as many gifted students as possible with a multi-oriented education tailored to their potential or talent development needs at least in one field. This paper will also review the development practice, dispute and present situation of the USA from the angle of whole concept, in order to seek the enlightenment suitable for Chinese education reform and development, avoid the impact of cultural differences between China and USA. The "Gifted Education" of USA introduced here refers specifically to the gifted education program in high school based on its "Talent Development Paradigm". It is consistent with the above statement, which emphasizes the diversity, development and creativity of talents and aims to provide more talents reserve for the future in this respect. This is not the "Gifted Child Paradigm" with the implication of Elite Education or the "Individual Education Paradigm" to meet individual needs. Moreover, most gifted high schools in the USA (as opposed to all public and private high schools) have gifted programs within their existing curriculum (school-based), this fact is also consistent with the writing perspective of this paper.

In addition, the term "Supernormal Children" was often used by early Chinese scholars, however, some scholars used the word "Gifted" or even "Child Prodigy" based on children's quality basis and result-oriented at the same time, but the corresponding English words are "Giftedness". The term "Gifted" is a translation of "Giftedness" by scholars in Taiwan, referring to the individuals who are gifted and talented. These terms could be used synonymously in the sense of whole concept, and most Gifted Education researchers are ambiguous and confusing in their use (Davis & Rimm & Siegle, 2011). In order to avoid misunderstanding caused by different references and also to better reflect the integrity of its meaning, here uses the term "Gifted" uniformly.

### **3. Development in Controversy: A review of Gifted Education practice of USA and its development**

#### ***3.1 Controversy over the form of education***

The essence of Gifted Education in USA lies in the separate teaching system for gifted and talented children or students and non-gifted students at present. It takes

two forms: first, the direct placement of gifted students in special gifted classes or schools for differential treatment; and second, the placement of gifted students in regular classes and schools together with ordinary students, but they are pulled out to carry out special gifted education programs for a period of time. In High School, the first form is called a special gifted high school, and the second is a gifted high school program in general, or a gifted high school program outside of school.

The opponents and critics think that this essence is to achieve the difference between gifted students and ordinary students education, but in fact aggravated the social inequality. The rationale focuses on the differences in the economic and social status of students, emphasizing that disadvantaged students have a low participation rate in such Gifted Education, which prevents them from accessing better and higher levels of education. The argument in favor is that gifted and talented students can maintain high academic standards only if they are constantly motivated in challenging education. Based on the decentralized education system in the USA, education services and quality vary from State to State, and even from school districts. Gifted high schools want to be able to provide equal quality educational opportunities between different districts, the Diversity is just the embodiment of educational equity. From the perspective of student development, in addition, it is further emphasized that gifted students are treated in an unfriendly manner by teachers and other students in ordinary classes or schools, with no good atmosphere for their development.

### ***3.2 Controversy over educational standards***

In the identification and selection of students for gifted education in high schools, the criteria are mainly “high academic motivation”, “high academic achievement” and “high intellectual performance”, which are based on standardized test scores such as SAT/ACT and ordinary academic performance. It shows that the characteristics of taking the gifted students as the main object of education. Although academic achievement is valued, it is not the sole purpose of school education. Rather, it is the active promotion of diversity, differentiation and lifelong development of gifted students, especially characterized by their contribution to society, the country and the world at large. For example, at Governor’s High School for Science and Math in South Carolina, its subjects include a variety of humanities, including history, politics, economics, and Chinese. According to the survey, the proportion of “Lifelong Development” and “serving society” in the goal dimension of private elite high school education in the USA reached 250% and 140% respectively. Meanwhile, the federal government is actively promoting STEM education through policy and financial support in order to enhance international competitiveness and safeguard the national interest, and currently attaches great importance to the education of gifted students in STEM fields.

The practice of gifted high schools focusing on academically gifted students is an adaptation to the macro education policy, but some States still take gifted students as students' intelligence or academic ability unilaterally, in addition, the policy

guidance of STEM subject education leads to the phenomenon of “intellectual gifted students” or “academic gifted students” in educational practice. The traditional “Elite Education” represented by Terman and Hollingworth is still the mainstream of Gifted Education in the USA, but it is also facing new challenges today(Dai, 2013) .

### ***3.3 Controversy over educational effectiveness***

It mainly focuses on the question of the reliability and validity of the existing research. It is generally believed that gifted high schools are inherently superior to ordinary high schools, and it is impossible to distinguish the influence of Gifted Education or students' own quality. This leads to further criticism of the ratio of Input to Output in Gifted Education, but no one has studied the benefits of Gifted Education (Subotnik & Rickoff, 2010). Sternberg (2002) also points out that the effectiveness of Gifted Education programs has not been demonstrated and evaluated by researchers, and that many Models of Gifted Education have not been scientifically validated.

### ***3.4 Current Situation and Trend***

Because of the examination of “Elite Education”, any approach that might touch “Fairness & Justice” in USA values would be controversial, so Gifted Education will still be questioned nowadays, the existence of its three “Paradigms” is a positive response to Educational Equity to a certain extent. Although the rationality of Gifted Education practice has been questioning, most scholars still hold the attitude of approval. The dominance of supportive forces is also an important reason why Gifted Education in the USA has continued to grow. For example, the survey of the States of Gifted Education in USA by NAGC (National Association for Gifted Children) shows that, there are 31 States have strengthened their performance measures for Gifted students; 25 States indicate that federal policies can encourage researchers to develop best educational practices and implement them in local school districts; 19 States indicate that they have increased parental involvement in children's learning or schooling; and 22 States have published the funding of Gifted Education.

It has to be said that the development of Gifted Education, as well as its disputes and challenges, essentially originates from the different cultural traditions, educational thoughts, political positions and value orientations existing in the USA, educational excellence itself is the basic value pursuit of the USA's education, which is in line with the cultural tradition of Elitism and Individualism. Gifted Education continues to develop in such an inclusive and adversarial environment that takes into account both fairness and excellence. It makes the idea of Gifted Education more and more clearly, and finally goes on the road of long-term and healthy development.

## **4. Enlightenment to the construction and development of gifted education in**

## **Chinese schools**

The development of education must be guided by ideas. It can be seen from the above that the promotion of an educational concept reflects the influence of social environment, cultural tradition and the vicissitude of the era on education. But the guiding function of educational idea is helpful to the standardization, guidance and reflection of practice. This can know that establishing the correct educational idea is the premise of realizing the benign development of education. For the development of Chinese school gifted education, it is the first of all necessary to carry on the comprehensive and correct cognition to its idea from all levels.

### ***4.1 Establish a comprehensive understanding of student-oriented and difference development***

Gifted Education is neither an educational theory nor a goal of school education, but an educational philosophy, which is a link of quality education, that is a supplement to school education. It is a dynamic, step by step, and long-term development process. Developmental psychologists now mostly no longer regard “Gifted” as a static property of the brain, but rather as the result of a combination of external and internal factors in the right place at the right time.

From Multi-gifted to Multi-talented, no longer pay attention to the identification of natural potential, but to emphasize the interaction between students and the environment, as well as students' subjective initiative. If someone is a gifted person, not only does it sound elitist, but it reduces the main function of education to discovering the potential of the student, and then realizing it immediately. This is a fundamentally flawed view today. Competence is a stable individual difference, but creativity and execution are acquired and should be a goal of education (Renzulli, 2012).

The focus is to provide a rich and differentiated education to all students on a school-wide basis: (a) what needs to be paid more attention to is the quality of teaching and the way students learn. Schools should identify and nurture gifted students in a systematic and targeted manner and provide them with appropriate educational opportunities to enable them to achieve their full potential in a flexible teaching approach and environment. That is, (b) from the perspective of Gifted Education, the task of school education is to identify not only gifted students, but also those who exhibit untapped potential in specific areas such as Academia, Arts, and Leadership. The task is not always to select students, but to provide them with better educational opportunities at a particular stage of development. (c) the aim is to bring out the best in students and help them learn what matters, not another form of categorical queuing, and also not to widen the gap between equity and meritocracy. Rather, it is a “meritocratic education equity” that “everyone has a chance”, measured by how many students in at least one field who need special education benefit from it. That is, if a student responds very positively to a regular educational activity, this means that he or she needs to be provided with higher, richer supplementary educational activities, to enable each student to further develop his or

her potential in their interests.

Schools should implement ways and means to identify, select and cultivate talents with multiple orientations, including comprehensive standardized test and performance evaluation, and take multiple approaches to complement each other. It is also necessary to provide students with educational objectives within their capabilities in order to enhance their motivation to learn. This means giving students the ability to develop self-expression, the freedom to decide what characteristics they should have, and the freedom to decide who they want to be (Israel Scheffler, 2005).

#### ***4.2 Establishing various supports to promote the practice development of Gifted Education***

Under the guidance of the above-mentioned cognition, to ensure the effective implementation of Gifted Education needs support and cooperation from many sides. The following four areas of support are particularly important:

#### ***4.3 To serve the interests of China and provide all-round support for social development***

The application of the idea needs the whole policy design and mechanism guarantee, that is, the formulation of the overall policies, the investment of funds, the development of scientific research, as well as the understanding and support of various forces inside and outside the school, work together to promote a sustained, long-lasting effect. Even in the USA, where democracy and freedom are most prized, its reform and construction of education should still serve the overall development of the country. From the Gifted Education Report of 1950, the Malander Report of 1972 to the National Report of Excellence of 1993, and the TALENT Act of 2013, most States today also legally regulate the identification of gifted students and provide them with educational services appropriate to their development. These not only guide the development of Gifted Education at the macro level, but also create a supportive policy and funding environment. Hence, Gifted Education is the national talent competitiveness weapon. As an effective complement to China's future education, it should become the main position for realizing the strategic goal of building an innovative country and cultivating top-notch innovative talents. All kinds of schools in China should join the tide of reform and development, realize the combination and integration of theory, policy and practice, and continuously expand and tamp the development path of Gifted Education in China.

#### ***4.4 To obtain the support of national Gifted Education standards and school implementation standards***

The “standards” mentioned here should cover everything from national to local, from preschool education to university education, as well as the national standards

for specialized programs and services, for gifted education teacher preparation, knowledge and skills for all teachers, and advanced standards in teacher preparation. Not only do they help to improve teaching and deepen student learning, but they also ensure that many gifted schools and educators can continue their professional growth, prepare them for the reformers or leadership in Gifted Education.

#### ***4.5 To build the rich and diversified curriculum and curriculum system support***

It should be particularly emphasized that the construction and development of gifted education in schools needs to be supported by curriculum. Schools have a certain degree of autonomy and resources in this area, so they should take actions immediately to integrate exploration, reform and innovation with the educational reality of the school and its area, promoting the development of Gifted Education in a positive and responsible manner. Two points are made here: (a) how to cultivate gifted students is a major problem faced by the researchers of educational theory and educational practitioners when the corresponding supportive educational policies are coming out one after another. The problem of curriculum construction is the most direct and concrete problem faced by the practitioners in the process of educational exploration. The work to be accomplished is under the constraints of various practical conditions, development of a highly feasible practical programme for development goals (Dai, 2013) with an assessment system for curriculum revision. (b) how to apply it in practice, VanTasel-Baska (2000,2003) had put forward a six-point guideline for the curriculum, emphasizing that the curriculum should be both “accelerated” and “enriched” to provide diversified opportunities for all kinds of gifted students. In order to achieve maximum effect, curriculum should be well designed and implemented, must be phased, rich, systematic and operational. This is the final decision of an educational concept can be effective ground of the key.

#### ***4.6 To build the professional team of high-quality teachers***

Gifted Education places higher demands on teachers. Ensuring that highly able learners are recognized and subsequently served through systematic programming is of the highest priority. All teachers must be able to recognize a high-ability student who needs more depth and complexity in instruction or may need a referral for further assessment and services. Teachers in specialized programs for gifted learners or those who coordinate gifted and talented programs and services should be familiar with the theory, research, curriculum strategies, and educational practices necessary to develop and sustain high quality classroom-based opportunities for advanced student learning. Therefore, the requirements for gifted teachers include: professional, erudite, knowledge of students, love students, have personality, have the pursuit, dare to question, can create, etc.. Gifted teachers should develop in harmony with gifted students, grow together and, generally speaking, become “Facilitators of the Learning Process” (Betts & Knapp, 1981) through positive interaction. Meanwhile, the government should guide and assist schools to construct



the growth path, support model and evaluation system for teachers' dynamic development, and finally build high-quality professional teachers.

## 5. Conclusion

Under the background of social development and transformation, Gifted Education in China has been paid more attention by the society and schools, and has gained a favorable opportunity for rapid and healthy development. School education, as the core field of educational reform and practice, needs to adapt to the development process of students' differentiation and diversification, and present the vigor and values of the new era to the maximum. Many countries in the world at the same time, are actively carrying out Gifted Education, and the practice and exploration of the USA has long maintained its educational advantage in the world. If Gifted Education is able to meet the diverse needs of all types of students indeed and help them grow and become self-fulfilling, schools should shape specific and effective educational programs for their future potential, to better adapt to the development of the country and the progress of the Times.

## Acknowledgments

Funding: The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This project was funded by the Youth Program of the 2018 school level vocational education teaching reform of the Guangxi College for Preschool Education. NO. GXYZJG2018Q25.

## References

- [1] Allport, G. W (1937). *Patterns and growth in personality*, New York: Holt, Rinehart & Winston.
- [2] Atkinson et al (2007). Addressing the STEM challenge by expanding specialty math and science high schools, *NCSSMST Journal*, vol.12, no.2, pp.12-13.
- [3] Barab, S. A., Plucker, J. A (2002). Smart people or smart context? Cognition, ability, and talent development in an age of situated approaches to knowing and learning. *Educational Psychologist*, no.37, pp.165-182.
- [4] Berliner, D. C., Biddle, R. J (1995). *The manufactured crisis: Myths, fraud and the attack on America's public schools*. Reading, MA: Addison-Wesley Publishing.
- [5] Bloom, B. S. (1985). *Developing talent in young people*. New York: Ballantine Books. Bronfenbrenner, U., & Ceci, S. J. (1994). Nature-nurture reconceptualized in developmental perspective: A bio-ecological model. *Psychological Review*, no.101, pp.568-586.
- [6] Carroll, J. B (1993). *Human cognitive abilities: A survey of factor-analytic studies*. Cambridge: Cambridge University Press.
- [7] Carroll, J, B (1997). Psychometrics, intelligence, and public perception. *Intelligence*, no.24, pp.25-52.

- [8] Dai, D. Y. (in press). Giftedness in the making: A response to Ziegler and Phillipson (2012). *High Ability Studies*.
- [9] Dai, D. Y (2010). *The nature and nurture of giftedness: A new framework for understanding gifted education*. New York: Teachers College Press.
- [10] [10] Dai, D. Y (2011). Hopeless anarchy or saving pluralism? Reflections on our field in response to Ambrose, Van Tassel-Baska, Coleman, and Cross. *Journal for the Education of the Gifted*, no.34, pp.705-730.
- [11] [11] Dai, D. Y., & Renzulli, J. S (2008). Snowflakes, living systems, and the mystery of giftedness. *Gifted Child Quarterly*, no.52, pp.114-130.
- [12] [12] Feldhusen, J. F (1986). A conception of giftedness, In R. J. Sternberg (Ed.), *Conceptions of giftedness* (pp. 127-127). New York: Cambridge University Press.
- [13] Feldman, D. H (1988). *Creativity: Dreams, insights and transformations*. In R. J. Sternberg (Ed.), *The nature of creativity*. New York: Cambridge University Press, pp. 271-297
- [14] FU Y. P (2018). *Policy and practice of Gifted Education in American high schools*. Beijing. Science Press.
- [15] Gardner, H (1983). *Frames of mind: The theory of multiple intelligences*. New York: Basic Books.
- [16] Gardner, H (1993). *Multiple intelligences: The theory in practice*. New York: Basic Books.
- [17] Gardner, H (2006). *Multiple intelligences: New horizons in theory and practice*. New York. Basic Books.
- [18] Getzels, J. W., & Jackson, P. W (1962). *Creativity and intelligence: Explorations with the gifted child*. New York: Wiley.
- [19] Goleman, D (1995). *Emotional intelligence: Why it can matter more than IQ*. New York: Bantam Books.
- [20] Guilford, J. P (1950). Creativity. *American Psychologist* 5, pp.444-454.
- [21] Guilford, J. P (1967). *Nature of human intelligence*. New York: McGraw-Hill. Jacob K. Javits gifted and talented students education act of 2001[EB/OL]. <http://www2.ed.gov/policy/elsec/leg/esea02/pg72.html>, 2015-11-03.
- [22] Jones, B M (2009). Profiles of state-supported residential math and science schools, *Journal of Advanced Academies*, Spring, vol.20, no.3, pp.12-13.
- [23] Kelley, H. H (1973). The process of causal attribution. *American psychologist*, vol.28, no.2, pp.107-128.
- [24] National Association for Gifted Children. 2008-2009 State of the nation in gifted education. [EB/OL]. [http //www.nagc.org/index.aspx? id=1051](http://www.nagc.org/index.aspx?id=1051). [2010-08-12].
- [25] Shaughnessy M F (2002). A reflective conversation with Robert J. Sternberg about giftedness, gifted education, and intelligence [J]. *Gifted Education International*, no.16, pp.201-207.