Critical Reflection on Teacher Training Programs in Korean Gifted and Talented Education

Kore Üstün Yetenekliler Eğitiminin Öğretmen Yetiştirme Programlarının Kritik Yansımaları

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Abstract

This study reviewed the kinds of teacher education programs for the gifted in Korea and its development during the last 10 years and the improvements needed for the future. Central government and local education authorities implemented 261 in-service training courses in 2010. The Gifted and Talented Education Promotion Act and its Enforcement regulate the quality of these programs. From 2003 to 2013, universities and various educational institutions have developed a variety of teacher training programs including basic, advanced, overseas, leadership, specialized, and on-demand. Basic program occupied the most (61.3%), then advanced program (12.6%), and the program for administrators the least (8.8%). A total of 21,002 teachers have participated in, at least, one of the in-service training programs. Among them, 13,928 teachers have taken the basic program, 3,506 teachers joined advanced ones, and 1,208 administrators have taken more than one program. There is no formal undergraduate pre-service teacher education program, while most of the pre-service and inservice teacher education programs are offered at the graduate schools. For further development, more professional development opportunities for undergraduate students, more advanced in-service training courses, training programs in arts, athletics, and leadership; and online training; and a nation-wide professional standards system are needed to be developed.

Key Words: Teacher training, Korean gifted education, professional standards

Öz

Bu çalışmada Kore'deki üstün yetenekliler öğretmenliği yetiştirme programları ve son on yıldaki gelişimleri ile gelecekte ihtiyaç duyulacak gelişmeler gözden geçirilmiştir. Merkezi hükümet ve yerel eğitim otoriteleri 2010 yılında 261 hizmet-içi eğitim kursu düzenlemişlerdir. Bu tür programların kalitesi Üstün Zekâlı ve Yetenekliler Eğitiminin Teşvik Yasası ve İcrası ile düzenlenmiştir. 2003-2013 yılları arasında çeşitli üniversiteler ve eğitim kurumları temel, ileri düzey, yurtdışı, liderlik, uzmanlaşma ve talebe dönük çeşitli öğretmen yetiştirme programları geliştirmişlerdir. Bunların içerisinde en temel programlar ilk sırada yer alırken (%61.3), ardından ileri düzey programlar (%12.6) gelirken idarecilere yönelik programlar en son sırada yer almaktadır (%8.8). Toplamda 21,002 öğretmen bu tür hizmet-içi eğitim programlarından en az birine katılmıştır. 13,928 öğretmen temel eğitim programlarına, 3,506 öğretmen ileri düzey eğitim programlarına ve 1,208 idareci ise birden fazla eğitim programına katılmışlardır. Lisans düzeyinde örgün öğretmen yetiştirme programı olmamakla birlikte, öğretmen yetiştirme programları en çok lisansüstü eğitim programlarında sunulmaktadır. Daha fazla gelişim için lisans öğrencilerine daha fazla olanak, daha fazla ileri düzey hizmet-içi eğitim programı, sanat, spor ve liderlik alanlarında daha fazla program, uzaktan eğitim programları sunularak ulusal standartların geliştirilmesi gerekmektedir.

Anahtar Sözcükler: öğretmen eğitimi, Kore üstün yetenekliler eğitimi, profesyonel standartlar

A Breakthrough of Korean Gifted Education in 2000

From the beginning of the 21st century, advancement and excellence in Korean education brought empirical and scientific credibility to the field of gifted education even though it had a short history and many things needed to be improved. Experts in Korean gifted education have long recognized that the number of students, institutes, classes, and people's interests in gifted education has increased drastically within the last a couple of decades.

With the expansion of gifted education, there has been an increasing need to have well-prepared teachers in gifted education since 1960's. However, there have been no specific or formal pre-service and in-service training programs for gifted education, until special legislation, the Gifted and Talented Education Promotion Act (2000), was promulgated.

Choe (2011) suggested that teachers' professional development in gifted education was one of the core elements needed to have effective gifted education. In its early days, the National Research Center for the Gifted and Talented Education of the Korean Educational Developmental Institute (KEDI), has led the in-service training programs. Based on such early efforts to establish the teacher education system, the Office of Education at the local level (each province and metropolitan city), universities, and special institutes for gifted education have provided a variety of programs for teacher training in gifted and talented education thus far.

After the development of in-service teacher education programs, gifted and talented teacher education has been rapidly expanded and qualitatively developed. Teachers who have participated in in-service gifted education training programs have showed high satisfaction with the contents of programs and in fact, they have applied what they have acquired through the programs to their actual teachings. However, there have been some tasks and challenges to be resolved. Some of the tasks with high priorities include providing financial and administrative support, developing more sophisticated programs, and establishing professional standards (Choe, 2014).

In this context, this paper will discuss how the teacher education programs for the gifted and talented in Korea have been developed during the last 10 years and what kinds of improvements should be made for prospective gifted and talented teacher education programs.

Requirements for Gifted Education Teachers

According to the theoretical definition, a teacher in gifted education should be a guidance counselor that helps others understand gifted children intellectually, socio-emotionally, and culturally; and helps them to maximize their potential (Lee, 2008). As one of the main bodies of gifted education, a teacher should prepare gifted students keeping professional responsibility in mind, by providing the contents or learning resources in response to the students' demand, and by influencing many things in students' current and future life based on an understanding of students' characteristics. A teacher in gifted education is the person inter-

acting with students directly and providing learning content and an appropriate educational environment.

Gifted students in Korea can participate in one of three different types of gifted education provisions: independent gifted schools, gifted education centers of universities or under the Office of Education in each province and metropolitan city, and gifted classes within regular schools.

In 2000, a historical educational law, the Gifted and Talented Education Promotion Act, was legislated for Korean gifted education. Two years later, its enforcement has been applied to gifted and talented education. This Act regulated gifted education and stated that gifted education should be provided at the national and local levels. Also, this Act has been a catalyst for establishing and opening schools, classes, and education centers for gifted students in elementary and secondary schools. It may provide significant momentum for the establishment and operation of educational institutes for gifted students across the nation.

Along with sharp increase of gifted education since 2002, there has been a growing need of gifted education teacher training programs that enable teachers to learn on how to meet the educational needs of individual gifted students. However, due to the lack of well-prepared professional gifted teacher education programs at the university level or above at that time, gifted teacher education training programs were mainly limited to the in-service training for elementary and secondary school teachers.

The National Association for Gifted Children (NAGC) in U.S.A. made efforts to have standards and requirements for specialists, endorsements, and teaching certificates in gifted education (Johnsen, 2006, 2012). However, Korea does not have any specific standards or approval systems currently in place for the teaching certificate in gifted education. Korea still need teachers with a certain level of competence to take responsibilities for gifted education (Johnsen, 2012; Landrum, Callahan, & Shaklee, 2001; Vialle & Quigley, 2001, 2002a, 2002b; Vialle & Tischler, 2009).

A well-organized recruiting and educating systems by law and policy is necessary to maintain the high quality of teachers in gifted education. According to the Promotion Act and its Enforcement, which includes the regulation of the employee selection criteria and in-service training programs for gifted education institutes, a teacher or an instructor who is entitled to teach at a gifted education institute should complete a basic course (60 hours of in-service training) within one year of being dispatched or employed.

Regarding the certification of gifted education teachers, Act 12, Article 1 of the Act and its Enforcement (2002) prescribes that hiring gifted and talented teachers can be approved based on the "Elementary and Secondary Education Act", Act 21, which states that schools or institutes can hire gifted and talented education teachers and be approved by the presidential decree. In Act 25, teachers in gifted schools and classes are the ones certified for elementary

or secondary education institutes according to "Elementary and Secondary Education Act" and take the in-service training programs approved by the Minister of Education or the Superintendent of education.

Recently, after they revised "The Gifted and Talented Education Promotion Act" not only can the teacher with a teaching certification teach gifted and talented students but someone who has expertise with gifted and talented education can also work in gifted and talented education. This meant that gifted education institutes focused more on the teachers' professional forte or the knowledge or attitude related to educating the gifted and talented students rather than their basic personality and characteristics as a teacher (Lee, 2009).

Below are the requirements for the teacher and the instructor in gifted classes, schools, and institutes based on the Act 25. 1. These are the requirements for teachers of a gifted class or/at a gifted school according to the Act 12, Article 1 (Table 1). 2. Even though a person who does not meet the requirement in Act 21, Article 1, they can be a teacher or an part time instructor if he/she meets the requirement from the other Acts as follows: Doctoral or Master's degree with 5 years of work experience in gifted and talented education and other related fields; or Special abilities in the gifted and talented education field and approved by the school authority. 3. Gifted schools should hire the person who has a teacher certificate. 4. Teachers, according to the Act 2, can only work at gifted schools, and she/he cannot work at other institutes.

Table 1. Requirement for the Teachers in Gifted Class and/or School

Institutes	Position	Requirements for the position					
Specialized gifted schools	Principal	Secondary school principal certification In-service training approved by the Minister of Education or Superintendent of education					
	Vice Principal	Secondary school vice principal certification In-service training approved by the Minister of Education or Superintendent of education					
	Teachers	Secondary school teacher certification In-service training approved by the Minister of Education or Superintendent of education					
	Counselor	Secondary school counselor certification In-service training approved by the Minister of education or superintendent of education					
Gifted classes	Teachers	Elementary or secondary school teacher certification In-service training approved by the minister of education or superintendent of education					
	Counselor	Elementary or secondary school counsellor certification In-service training approved by the minister of education or superintendent of education					
	Librarian	Elementary or secondary librarian certification In-service training programs approved by the minister of education or superintendent of education					
	Part Time teacher or instructor	 Elementary or secondary teacher certification Master's degree or above College degree or above with gifted and talented education related area 					

Source: The Gifted and Talented Education Promotion Act (2000)

Since continuous in-service training is needed to maintain and improve teachers' qualifications and quality of gifted education, the Minister of Education or Superintendents approves applications of in-service training programs at the teachers' colleges or teacher education institutes. The instructor or the part time teacher in gifted schools or classes should take the in-service training within one year after he/she started teaching gifted students. Superintendents require the newly assigned gifted education teachers to complete a 60 hour or above in-service training on gifted education to assure teachers' quality based on "Elementary and Secondary Education Act", Act 2. Table 2 shows various types of in-service training for gifted education teachers provided by the Ministry or school districts.

Table 2. Requirements for in-service Training Program on Gifted Education

Program type	Hours	Course Contents	Provider		
Basic program	60h	Concept of giftedness and gifted education, assessment tools, and evaluation of gifted program.	Office of Education, University, Institute for Gifted Education		
Advanced program	120h	Domain-specific concept of giftedness and education, assessment tools, advanced contents of specific domain, various teaching-learning strategies, evaluation methods, and developing gifted education programs.	Office of Education, Institute for Gifted Education		
Specialized programs	90h	Policy of gifted education, developing curriculum for gifted education, and developing educational resources for gifted education students	Institute for Gifted Education		
Leadership program	30h	Gifted education policies, student selection, teacher education, and evaluation of gifted education program.	Office of Education, University, Institute for Gifted Education		

In sum, the qualifications of teachers and the requirements of in-service training are regulated at the national level by law. Above all, it is necessary that teachers are required to have a teaching certificate for either elementary or secondary school approved by Elementary and Secondary Education Act. However, the government allows flexibility to hire persons who have experience in related fields of gifted and talented education or a Master's degree or above in education or in specific domains to participate in gifted education.

There is no formal undergraduate pre-service teacher education program, whereas recently there are a growing number of pre-service and in-service teacher education programs that are offered at the graduate schools. The central government and local education authorities are actively implementing various in-service training courses. Even though the Korean government does not directly regulate the contents and operating processes of teacher training programs, through the Gifted and Talented Education Promotion Act and its Enforcement, it, in reality, maintains the minimum level of quality and universality among diversified teacher training programs across the nation.

Accomplishments of Teacher Training Programs in Korea Last 10 Years

Korean undergraduate programs do not offer pre-service gifted teacher education programs in colleges and universities. Instead the Ministry of Education required teachers' colleges or teacher education institutes to teach some gifted education content in teaching courses. From 2009, all students enrolling in a college of education or a teacher education institute should take 'Understanding Special Education' (two credit hours) which includes some gifted education content. Through this course, students may have an opportunity to understand basic concepts of gifted education.

On the other hand, in the case of graduate programs, Konkuk University started Master's degree program at the graduate school of education in 1998. After that, Soonchunhyang University started a joint degree program in 2002, and Incheon University created one in 2003. Currently, 32 graduate schools are offering programs for gifted education major or a jointed/collaborated program. Choe (2014) analyzed the contents and characteristics of the curriculum of 32 graduate programs. Each program offers similar core courses like 'General Understanding of Gifted Education', 'Understanding the Identification Process', 'Creativity', 'Development of Gifted Education and the Program of Gifted Education', 'Gifted Education Research or Seminar.' After completing basic and core courses, graduate students are required to conduct research studies in the school field.

There has been a dramatic increase in the number of gifted education institutes and teachers in gifted education after the revised Enforcement of the Gifted and Talented Education Promotion Act was released in April 2012. To meet the increased needs of gifted education, in the 3rd Comprehensive Development Plan for Gifted Education (2013-2017), the Korean government strongly stresses teacher education and in-service training. Teacher colleges and other teacher education institutes are going to invest in more gifted education courses, try to make new gifted education degree programs at the graduate level, and include at least two credit hours of gifted education in the pre-service training program and more in in-service one.

According to this plan, the Korean government is expecting 9,000 in-service trainees by 2017 through the differentiated in-service teacher training programs: prospective teachers, novice teachers, basic program, advanced program, specialized program, and the leadership programs for administrators.

The number of gifted students has been increased every year with 121,433 gifted students in 2013. The number of gifted students in 2013 is 6 times larger than the number of gifted students in 2003. The number of teachers taking in-service training programs also has increased continuously every year. In 2013, the number of teachers trained is approximately 37,966. Therefore, the ratio between teachers and students is about 1:4.

It will be more helpful, if Korea can resolve the challenges at the early stage of system development to provide gifted education teachers with the goal of having increased in-service training programs for the gifted students and education. Here is the comparison of the increasing numbers of each year (Table 3).

Table 3. Numbers of Gifted Students and the Teachers Who Completed the in Service-training

Year	2003	2005	2007	2009	2011	2013
Students	21,616	31,100	46,006	73,865	111,818	121,433
Teachers in service trained	2,368	2,763	2,698	3,035	4,645	6,630
Accumulated number of trained teachers	2,368	5,131	10,348	16,163	25,336	37,966

Source: The 3rd Comprehensive Development Plan for the Gifted Education (2013-2017)

Meanwhile, Korea has 261 in-service training courses (Table 4). Among them, basic program occupied 61.3% (160), advanced program 12.6% (33), and leadership program for administrators 8.8% (23). A total of 21,002 teachers have participated in, at least, one of the in-service training programs. Among them, 13,928 teachers have taken the basic program, 3,506 teachers joined advanced ones, and 1,208 administrators have taken more than one program.

Table 4. Kinds of In-Service Training Programs and the Number of Participants

Level	Basic	Advanced	Specialized	Administrators	On demand	Overseas	Others	Total
Number of participants	13,928	3,506	1,208	301	859	601	599	21,002
Courses (%)	160 (61.3)	33 (12.6)	23 (8.8)	10 (3.8)	2 (0.8)	12 (4.6)	21 (8.1)	261 (100%)

Source: Kim (2010). Korean gifted education: The current gifted education and establishing national standards. Seoul: KEDI

The teacher training programs in gifted education implemented over last 10 years have been recognized as having a positive impact on an increasing number of teachers, a diversified curriculum, and a high level of satisfaction with the programs. However, for the continuous and sustainable growth and development of gifted education, it is crucial to train qualified teachers of gifted education by providing various in-service training program opportunities.

Toward Improving Training Programs for Gifted Education in Korea: Recommendations for Sustainable Progress

For future development of teacher education programs in gifted and talented education, this paper has several suggestions as follows;

First, professional development system for gifted education should be strengthened at undergraduate level and above. In-service training programs for the certification of domainspecified teachers of gifted education should be developed within the context of the national teacher training system. In addition to expanding in-service training programs, there is a need for instituting an undergraduate teacher certification program in gifted education. Preservice teachers should be able to take a various undergraduate courses such as language art, math, science, and computer (information) science, and further complete domain-specific graduate courses in gifted education to enable them to serve in the gifted education field.

Second, there is a need of differentiated in-service training courses focused on the learning challenges of teachers who have already successfully completed the basic level and have strong motivation to strengthen their professional competencies. Teachers serving a certain amount of time in gifted education institutes after completing the basic level program should have the chance to engage in advanced training programs such as overseas training and short-term dispatch training etc. Additional training will allow basic level gifted education teachers to acquire more in-depth and enriched knowledge and skills needed to become a capable and skillful teacher in gifted education. Moreover, they will be able to act as a gifted education coordinator or practical expertise.

Third, the scope or range of gifted education should be expanded from existing math and science centered programs to other domains like arts, athletics, and even leadership. Until now, math and science centered teacher training programs have been the majority of inservice training program topics in gifted education. This is because, in the initial stage, gifted education in Korea was mainly focused on math and science education of elementary and secondary gifted students. In order to create a balance among in-service training programs, more efforts are needed to develop training programs in diverse domains including arts, languages, invention, computer science and interdisciplinary programs are needed.

Fourth, exposure to the basic gifted education course should be expanded to regular education teachers. Nurturing creativity of students is perceived as an essential task in Korean education. For this, teachers should be prepared to teach creative thinking and problem solving. In order to equip them with competences for nurturing creativity, the minimum of 30 hour classes in in-service training program for gifted education should be provided to most of teachers in regular schools.

Fifth, in addition to on-site teacher education, which is a common mode of training, efforts to develop appropriate online training course should be made to respond to the growing number of teachers who have an interest in gifted education and their diverse learning needs. For the future, it is clearly evident that online courses or video conference systems using the Web or Apps should be actively utilized. By taking advantage of fast-developing Information Technology (IT), teachers of gifted students would be able to acquire a basic understanding about gifted education. Furthermore, through vivid or dynamic interactions in online environments, teachers will be able to access much more specialized or enriched learning experiences in each domain of gifted education.

The last, for the sustainable progress of in-service training programs in gifted education, nation-wide standards of professions, curriculum and assessment in gifted education should be established and continuously disseminated. In the past, there was a similar attempt by the National Research Center for the Gifted and Talented Education at KEDI. However, it was not widely adopted as a common standard for teacher training and curriculum implementation. To this point, establishing a nation-wide common standard system is ideal for promoting the Korean gifted education as a whole. Reflecting on the educational investment to make advances of Korean gifted education last 10 years, clarifying national core standards will be one of the most important tasks to practice more appropriate gifted education.

Note: This work was supported by Kyungnam University Foundation Grant, 2012

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