Review on special education in USA higher schools

(overview essay)

Shangwei Li

Abstract: Special education in higher schools is the main method to train the special education teachers. The paper is to introduce the developmental status, features and dilemma of special education in USA higher schools. Investigation shows that there are at least 237 colleges and universities with special education degree programs, where focuses on higher educational level, various major options, applied degree plans, strict requirements, networking and richly social support, etc. and is facing up to balance between "quality" and "quantity", "fairness" and "efficiency", and "specialty" and "career". It will have important meanings in promoting the reform and development of special education in other countries to review special education in USA higher schools.

Key words: special education; degree programs; teacher education for the students with special needs; higher schools; USA

1 Preface

C. S. Berry created the first school to special education teacher in Michigan in 1914. Since that, it is about one hundred years for teacher education for the students with special needs in USA, which has formed complete system and accumulated some experiences.

At present, some researchers introduced the status and problems of early childhood special education in universities (Gallagher & Weiner, 1986, pp. 58–61); preparation of the effective initial deaf education teacher (Johnson, 2013), the rural teachers to serve young children with disabilities in Utah State University and University of Utah (Rule & Rowland, 1999), teacher for inclusive classrooms (Jordan, Schwartz & McGhie-Richmond, 2009), methods of pre-service and in-service training (Jiang &

Luo, 2011), modes of teacher education for the students with special needs (Lalvani, 2013; Brownell, Sindelar, Kiely & Danielson, 2010) and professional development of special education teacher (Li, 2013); compared the features, curricular system and mode of pre-service training for the special teachers in USA with PRC (Liu, 2010), and systems and requirements of qualification certificate of special teachers in USA with PRC (Gu, 2005; Deng, 2002). However, there are fewer literatures about special education degree programs in USA higher schools, this paper attempts to review its status and features in order to provide some experiences for special education in higher schools in other countries.

2 Status of special education in USA higher schools

In order to know the status of special education in USA higher schools, the author mainly investigates special education in 181 best universities with Faculty of Education, 201 best comprehensive universities and 178 best arts and sciences colleges in 2014¹. Investigation shows us that there are at least 237 colleges and universities with special education degree programs and the following is about their overview, focus fields, training purposes, curricular system, training methods and evaluation system.

2.1 Overview

Investigation shows that there are 237 universities and colleges with special education, including 200 bachelor degrees, 214 master degrees (36 without bachelor degrees), 129 doctorate degrees (1 without bachelor and master degree) and 54 educational specialists; there are more colleges and universities in Middle Atlantic, Upper Mississippi (Great Lakes) and Pacific than Rocky Mountain state, New England and South-west (see table 1).

Retrieved from http://www.zinch.cn/top/university/367584/2014/367595; http://liuxue.xdf.cn/ningbo/wzy/zx/596624.shtml; http://usa.bailitop.com/ranking/20130111/20053.html

Table 1. Number and distribution of special education major in USA higher schools

Districts	Higher schools	Bachelor	Master	Doctorate	Specialist
New England	14	11	12(3)	5	2
Middle Atlantic	62	51	50(11)	26	9
South East	21	19	20(2)	16	5
South	21	19	20(2)	12	9
Mid-west	22	19	22(3)	12	6
Upper Mississippi (Great Lakes)	38	37	33(1)	20	9
Rocky Mountain state	13	13	13	12	1
Pacific	29	15	28(13)	16(1)	12
South-west	17	16	16(1)	10	1
Total	237	200	214(36)	129(1)	54

2.2 Focus fields

Investigation shows us that special education majors involve in more than 20 fields in 237 American universities. Among of them, besides "Special education", there are high frequencies in "Early childhood special education", "Elementary special education", "Mild /Moderate/Severe Disabilities", "Learning Disabilities", "Gifted Education", "Emotional and Behavioral Disorders" and "Autism Spectrum Disorders", etc. (see table 2). In some degree, graduate education focuses on "Special Education Leadership", "Early Intervention" and "Multicultural Special Education".

Table 2. Focus fields and frequencies of special education major in USA universities

Educational level Fields	Bachelor	Master	Doctor	Specialists	Total
(1) Special Education	85	105	83	27	300
(2) Early Childhood Special Education	69	70	15	5	159
(3) Elementary special Education	42	20	1	0	63
(4) Mild /Moderate/Severe Disabilities	24	34	8	4	70
(5) Learning Disabilities	10	25	10	1	46
(6) Gifted Education	7	26	7	4	44
(7) Emotional and Behavioral Disorders	7	26	6	1	40
(8) Autism Spectrum Disorders	5	34	11	0	40
(9) Deaf Ed or Hearing Impairment	12	16	8	1	37
(10) Early Intervention	9	12	4	3	28
(11) Communication Disorders	12	7	4	0	23
(12) Secondary Special Education	10	11	2	0	23
(13) Language Pathology	8	10	1	3	22
(14) Intellectual and Mental Disabilities	5	10	5	0	20
(15) Special Education Leadership	0	9	7	4	20
(16) Visual Impairment and Blind Education	6	10	1	1	18
(17) Inclusive Special Education	5	6	1	0	12
(18) Cognitive and Attention Deficit Disorders	2	5	3	0	10
(19) Special Education Assessment or Diagnosis	0	6	2	0	8
(20) Multicultural Special Education	0	3	3	2	8
(21) High or Low Incidence Disabilities	1	4	2	0	7
(22) Special Education Technology	0	6	1	0	7
(23) Special Education Psychology	1	1	3	1	6

2.3 Training purposes

Purposes of special education usually involved in degree, curricular, student teaching and teacher education and are included in professional training programs or instruction manuals in USA universities. For example, student learning goals for bachelor of special education at The University of North Carolina in Greensboro includes demonstrating understanding of current federal and North Carolina law and policy related to special education and related services; explaining the basic educational and clinical concepts relative to definition, characteristics, identification, and diagnosis of students with mild to moderate disabilities; creating or revising program models for effective special education service delivery; using exemplary diagnostic, instructional, and therapeutic approaches for effectively and positively meeting the academic and social/emotional needs of students with mild to moderate disabilities; evaluating the effectiveness of students' special education programs. Master degree of special education at University of Missouri-Kansas City is to enhance the educated knowledge and skills in working with children and adolescents with exceptional learning needs and prepares them to teach students, to serve as advocates for children and their families, and to work collaboratively with colleagues. Doctoral program in special education at the University of Connecticut comprises a multifaceted experience to help students develop the knowledge, research, and leadership skills necessary to fulfill their professional goals. The primary goal of Randolph College's Teacher Education Program is to foster the development of highly qualified teachers and leaders for educational improvement.

2.4 Curricular system

About the curricular systems of special education in USA universities, there are mainly "vertical" and "horizontal" modes, the former directly introduces the curricula according to academic year, and the latter does that according to different classification standards. It is true that curricula are usually divided into different types in different USA higher schools.

Curricula for the bachelor in USA higher schools are mainly divided into two types such as "Required Special Education Courses" and "Required Additional Courses" in Nebraska Wesleyan University; three types such as "Professional Studies Core Courses", "Teacher Education Courses" and "Specialty Area Licensure Coursework in Special Education" in Salem College; five types such as "General Education Coursework", "Content Area Coursework", "Knowledge of the Learner and Learning Environment", "Methodology and Teaching" and "Additional Hours" in Louisiana Tech University; and six types such as "General Education Core Requirements", "General Education Marker Requirements", "Major Requirements",

"Teacher Licensure Requirements", "Second Academic Concentration Requirement" and "Electives" in The University of North Carolina at Greensboro.

Curricula for master in USA higher schools are mainly divided into two types such as "Core Courses" and "Directed Courses" in The University of Montana; three types such as "Core Curriculum", "Concentration Area" (Required course and Electives) and "Reflective Practice" in Eastern Mennonite University; and four types such as "a department core", "specialization core", "special education electives", and "two courses outside of the department" in The University of Texas at Austin; etc...

Curricula for doctor in USA higher schools are mainly divided into two types such as "Required Courses" and "Research Methodology" in University of Florida; four types such as "Required Reading coursework", "Coursework in Research", "Electives", "Other Requirements" in University of Virginia; six types "Doctoral Seminars", "Research and Practice", "Research", "Specialty", "Specialty and Licensure" and "Dissertation" in University of Northern Colorado; and seven types such as "Specialization Core", "Content Core", "Research Core", "Professional Core", "Interdisciplinary Core", "Dissertation" and "Professional Activities Beyond Coursework" in The University of Texas at Austin; etc...

Curricula for specialist in USA higher schools are mainly divided into two types such as "Teach Well Core" and "Additional Courses" in University of Florida; and three types such as "Reading Core Example Courses", "Electives", and "Thesis Course" in University of Virginia; etc..

2.5 Training Methods

With non-directional training mode for special education teacher in USA higher schools, the students will choose the major according to their interests at the end of sophomore year and special education students have more solid professional thinking (Liu, 2010, pp. 44). At the same time, higher schools usually make full use of quality resources from campus, Professional Development Schools (PDS) and community, and train high-quality special education teacher by means of group discussions, classroom debate, self-study out of school, field experiences and online learning, etc.. For example, Master of Arts in Learning Disabilities or Emotional/Behavioral Disorders in Furman College is designed to add endorsement in a specific area of special education for certified teachers, and field experiences and a final practice enable the students to apply their knowledge and skills in a real-world setting; students enrolled the bachelor and master program of special education at Edgewood College will have the opportunity to work in the Cutting Edge, which gives students in our graduate special education program the opportunity to teach individuals with special needs in collaboration with their college professors; and some courses may be

available as on-line, web-based courses about the Autism Collaborative Endorsement (ACE) Program for master of special education and may be appealing for graduate students in remote locations who want to further their knowledge in the area of Autism in Central Michigan University.

2.6 Evaluation system

Professional college evaluation system is attached to USA higher schools and special education evaluation is mainly included in requirements for admissions application, courses, internships, degree and teacher qualifications, etc.. For example, to be admitted directly into a teacher education program for Bachelor of Science in Education in Special Education in Kent State University, new freshmen have a 2.75 high school GPA and 16 units of college preparatory curriculum or a 21 ACT or 980 SAT score; graduation requires minimum 123-131 credit hours (depending on concentration), minimum 2.750 cumulative and a 3.000 major GPA; the candidates seeking Ohio licensure are required to pass specific assessments in order to apply for licensure and students in the Deaf Education and ASL/English Interpreting concentrations must also pass the Sign Language Proficiency Interview (SLPI) at the intermediate level for graduation. Evaluation of Master for learning disabilities teacher consultant endorsement (LDT-C) in Monmouth University includes Admission (Letters of recommendation, Essay, 2.75 GPA), Admission to Practicum (3.0 GPA, Lesson plans, Unit plans, Teacher Work Sample, Technology assessment, Course assessments, Case Studies), Program Completion (Comprehensive exams, Capstone assessment projects, Professional Binder, Supervised Internships, Professional Development Plans, Case Studies) and Post-Graduate Assessment (Exit Survey, Employer Survey, Candidate Survey). Doctoral students in New Mexico State University need doctoral qualifying examination for application admission, learning professional practice core and research core courses, sending research project/evaluation project/ continuing education project/ curriculum development project, and annual review/ scholarly development review/ comprehensive examination, and providing 20–30 minute overview about dissertation. Evaluation for student teaching in University of Wisconsin-Madison includes professionalism, communication, assessment, special education evaluation and individualized planning, instructional planning, instructional presentations and classroom management.

3 Features of special education in USA higher schools

Looking through the development status of special education major in USA universities, the author believes it has the following characteristics.

Higher level

"High-level" means special education in USA higher schools has developed faster and formed complete and higher-levels system. On one hand, it has developed very fast. There were 40 colleges and universities with special education to train the teacher for the children with mental impairments in 1957; however, there are more than 230 colleges and universities now. On the other hand, it has formed complete and higher-levels system. At present, many USA universities including some without normal education have set up a special education degree programs, and formed multiple levels of degree systems with associate bachelor, bachelor, master, doctor and specialist; at the same time, there are more and more colleges and universities with bachelor and graduate education that has developed very quickly. Among 237 colleges and universities, there are more master degrees than bachelors and percentage of master is 89.9%, doctor 54.4% and education specialist 22.8%.

Various options

"Various options" means non-directional pattern of teacher training with wide professional fields, rich curriculum resources, and diverse career options in USA higher schools. On one hand, there are the wider fields and diverse career options. For example, bachelor and master in Kent State University focus "Deaf Education", "ASL/English Interpreting", "Mild/Moderate Language Arts and Reading", "Mild/Moderate Social Studies and Reading", "Mild/Moderate Mathematics and Reading" and "Moderate/Intensive Educational Needs"; and may work in public and private educational institutions, individual and social assistance agencies or residential facilities, or in homebound or hospital environments. On the one hand, there are richer curricular resources. Special education in USA higher schools has diverse general courses, innovative and practical educational courses, novel professional curriculum, and rich practice (Liu, 2010, pp. 46–51), which facilitate the students to choose, learn and grow independently.

Applied degree plan

"Applied degree plan" means there are clear purposes, richer courses and varied methods of special education programs in USA universities which focus on learning and career guidance. On one hand, many colleges and universities have developed a special education professional training programs with specific educational goals, professional fields, admission requirements, curricular system, graduation

requirements, and career options. For example, master program in University of Houston shows us "Is this program for me", "What will I learn" and "What can I do with my degree". On the other hand, many colleges and universities with a very detailed degree programs and teacher education instruction manuals tell the students "What to do", "How to do" and "What to do in the future". For example, "Handbook for Doctoral Students in the Special Education and Communication Disorders Department" in New Mexico State University includes "Overview", "The doctoral application and admission process", "Program requirements" (courses requirements, doctoral projects, the scholarships, evaluation), and "Dissertation", etc.; "Teacher Education Handbook" in St. Lawrence University shows us "Routes to Initial and Professional Teaching Certification", "New York State Standards for Teaching Education", "The Professional Semester" and "Evaluation Process for Student Teachers", etc.

Strict requirements

"Strict requirements" refers to the fact that USA colleges and universities have not only national and local professional standards for special education teacher, but also put forward practical implementation of the program according to practice. On one hand, the US government attaches great importance to improvement of special education teachers' professional standards. The Council For Special Children (CEC) enacted "What Every Special Educator Must Know: The International Standards for the Preparation and Certification of Special Education Teachers" (first ed.) in 1995, published "What Every Special Educator Must Know: Ethics, Standards, and Guidelines" (sixth ed.) in 2009 (Du & Liu, 2014), and "Special Education Professional Ethical Principles" in 2010 and "CEC Special Educator Preparation Standards" in 2012 (Wang & Feng, 2014). On the other hand, USA colleges and universities carefully implement special education teachers' professional standards by means of training programs, teacher education or degree manuals. For example, "M. S. Ed Learning Disabilities Teacher Consultant Endorsement: LDT-C" in Monmouth University tells us "CEC Special Education Professional Standards" and beginning special educators should master the "CEC Common Core Knowledge and Skills" and the appropriate "CEC Specialty Area(s) Knowledge and Skills"; and "Teacher Training Guidebook" in Massachusetts College of Liberal Arts introduces six professional standards for Massachusetts's Teacher and four professional requirements of early special education.

Internetworking

"Internetworking" means that USA colleges and universities introduce special education and enhance the effectiveness of special education teacher training by means of Internet. On one hand, the colleges and universities have attached great importance

to constructing and updating of network resources. Learners and researchers can easily search richly professional network resources and get professional information of special education by means of "Teacher Education Handbook", "Student Teaching Manual", "Degree Handbook", which has played a great role in introducing and propagandizing their special education majors. On the other hand, the colleges and universities have attached great importance to the network instruction. Learners can learn professional knowledge and skills of special education and apply for the appropriate degree through online courses, online learning, distance education, etc.. For example, there is online learning for bachelor and master of special education (autism) in Kent State University; online learning for specialist of early childhood special education in University of Colorado Denver; and online learning for master, doctoral and specialist of special education in Alabama University; etc.

Richly social support

"Richly social support" means there is strong social support for special education degree programs in USA universities. The US government has improved special education teacher management system and provides a powerful system and financial support for special education degree programs in higher schools. At present, USA has set up more complete special education teacher standards, teacher certification system, the initial teacher education system, pre-service teacher training mechanisms, etc. (Li, 2012); at the same time, the government has increased funding step by step, and invested \$ 12.7 billion for special education to improve education and early intervention of children with disabilities and adolescents with 0-21 years, and accounting for 18.2 percent of the education budget in 2013 (Ou & Wang, 2013). The colleges and universities have actively set up the support system of higher education. For example, "Higher Education Support Center" has been set up in Syracuse University in order to develop high-quality inclusive teacher preparation program, participate and support the professional development of experimental schools, and promote the communication between the state Department of Education and higher education institutions²; nine public universities have established cooperation relationship with local educational institutions about professional development in Florida (Jiang & Luo, 2011); and there are the other relative programs such as "Innovative Special Education Preparation "(ISEP), "The Santa Cruz New Teacher Project" (SCNTP) and "Beginning Teacher Induction Programs of Milwaukee" (IPPSET) (Chen, 2005); etc.

² Retrieved from http://www2.ed.gov/about/overview/budget/budget13/summary/appendis1.pdf.

4 Dilemmas of special education in USA higher schools

In no doubt, special education degree programs in USA higher schools have entered into the developed countries in the world. However, special education teachers still lack of enough pre-service preparation and have a serious loss in USA, and special education degree programs in USA higher schools are still facing up to the dilemmas of balancing between "quality" and "quantity", "fairness" and "efficiency", "specialty" and "career".

Quality and quantity

"Quality" and "quantity" are the important evaluation standards for special education in higher schools. The former pursues in developing professional connotation and characteristics, and enhancing the professional and overall quality of the educated; and the latter focused on the change in scale of higher schools and, the number of the educated. Currently, the value orientations and goals of the USA policies on special education are no longer just concerned about "quantity" of special education teachers and training systems of special education teachers, rather than "quality" of special education teachers (Li, 2012); special education in colleges and universities have paid great attention to not only increasing "quantity", but also improving "quality". However, in the face of "Zero Reject" of special education and the practical needs of inclusive special education, "How to deal with the dilemma between 'quality' and 'quantity'?" or "How to train both the 'high-quality' and 'enough-quantity' of inclusive education teacher?" (Lalvani, 2013) is one of difficulties or challenges that special education in higher schools needs to cope with.

Fairness and efficiency

"Fairness" and "efficiency" are another important evaluation standards of special education in higher schools. The former refers to the "scope" of the educated for special education degree programs, and highlights "all is equal"; and the latter refers to professional effectiveness and social influences, and pursues in "value should be added". Currently, "equal opportunity", "full participation", "Independent Living", "Self-sufficiency" are considered as the basic goal of special education and core indicators of its effectiveness in the USA (Turnbull, Tumbull & Wehmeyer, 2010, pp. 26); college and universities focus on humanistic concern and have established "Special Education Management Office" responsible for special education management and service objects (Cai, Wang, Zhu & Dan, 2010). However, with the increasing number of children with special needs and a serious shortage of special education teachers (Zan & Jiang, 2008), "How to coordinate the conflict between 'fairness' and 'efficiency'?" or "How to train special education teachers with theoretical knowledge and practical ability?" (Brownell, Sindelar, Kiely & Danielson, 2010), is

still one of the problems that special education in USA higher schools needs to cope with.

Specialty and career

"Specialty" and "career" are another important evaluation standards of special education in higher schools. The former emphasizes professional academic standards and norms and focuses on professionalism and academic value; and the latter emphasized professional social rules and identity, and focuses on the application and practical value. Currently, the USA has established more complete systems of special education and more perfect professional standards for special education teachers; and colleges and universities attach great importance to the implementation of professional standards for special education teachers. However, faced with practical problems such as "too strict regulations", "heavy workload", "shortage of adequate support" for special education and "serious loss", "shortage of quantity", "low quality" and "structural imbalance" of special education teachers (Yi & Xiong, 2013; Qi & Chen, 2013), "How to deal with relationship between 'professional standards' and 'career identity'?" or "how to train special education teacher with both "professionalism" and effective adaption to realistic environment?" is still one of the problems that special education in USA higher schools needs to solve.

5 Conclusion

In short, special education in USA colleges and universities has developed for more than 100 years, and not only entered into the leading ranks of the world, but also accumulated a lot of experience and formed its characteristics. Between the USA and the developing countries, including the PRC, there are great gaps in educational scale, educational levels, network resources and overall quality of special education, etc. Therefore, it is very imperative to learn from special education in USA higher schools.

References

- [1] Brownell, M. T., Sindelar, P. T., Kiely, M. T. & Danielson, L. C. (2010). Special education teacher quality and preparation: Exposing foundations, constructing a new model. *Council for Exceptional Children*, 76(3), 357–377.
- [2] Cai, Q. F., Wang, C. Y., Chu, Z. and Dan, H. J. (2010). Comparative study on the special physical education in China and USA Universities: A case study on Jianghan University in China and University of Missouri-Columbia in USA. *Journal of Capital Institute of Physical Eduction*, 22(4), 45–47.
- [3] Chen, Q. B. (2005). Beginning teacher induction programs for special education teachers in USA. *Chinese Journal of Special Education*, (10), 91–95.

- [4] Deng, Y. M. (2002). Comparative research on special education teacher training between PRC and US. *Journal of Quanzhou Normal College*, (1), 115–117.
- [5] Gallagher, J. J. & Weiner, B. B. (1986). *Alternative futures in special education*. Virginia: The Council for Exceptional Children.
- [6] Gu, D. Q. (2005). Comparative research on special education teacher certification system. *Comparative Education Review*, (9), 53–56.
- [7] Gu, D. Q. & Liu, Y. (2014). The evolution and characteristics of occupational standards of USA special education teachers. *Comparative Education Review*, (1), 31–36.
- [8] Gu, M. Y. & Liang, Z. Y. (2000). *International education encyclopedia: Special education*. Jilin: Jilin Education Press.
- [9] Jiang, Q. D. & Luo, S. (2011). On special teacher training from the perspective of the implementation of NCLB and IDEA in American states. *Studies in Foreign Education*, 39(4), 104–110.
- [10] Johnson, H. A. (2013). Initial and ongoing teacher preparation and support: Current problems and possible solutions. *American Annals of the Deaf*, 157 (5), 439–449.
- [11] Jordan, A., Schwartz, E. & McGhie-Richmond, D. (2009). Preparing teachers for inclusive class-rooms. *Teaching and Teacher Education*, 25, 535–542.
- [12] Lalvani, P. (2013). Privilege, compromise, or social justice: Teachers' conceptualizations of inclusive education. *Disability & Society*, 28(1), 14–27.
- [13] Li, L. (2012). Comparative research on policies of special education teacher between PRC and USA. *Chinese Journal of Special Education*, (10), 56–60.
- [14] Li, X.(2013). Literature review on the professional development of special education teachers at home and abroad. *Journal of Hubei Radio & Television University*, 33(11), 151/158.
- [15] Li, Z. L. (2010). Comparative research on pre-service training of special education teachers between *PRC and USA* [Unpublished master dissertation]. China: Suzhou University.
- [16] Ou, T. Y. & Wang, F. Y. (2013). Strategies and suggestion: Implications from the analysis of the input and use of special education funds in America A probe into reformation on special education policies of Obama Administration in 2013. *Journal of Chongqing University of Arts and Sciences (Social Sciences Edition)*, 32(1), 133–38.
- [17] Qi, K. M. & Chen, X. M. (2013). Qualification and implications of high quality special education teacher under IDEA 2004 and NCLB. *Education Research Monthly*, (5), 41–45.
- [18] Rule, S. & Rowland, C. (1999). Preparation of rural personnel to serve young children with disabilities and their families: A multi-university consortium. Retrieved from www.cpd.usu.edu.
- [19] Turnbull, H. R., Tumbull, A. & Wehmeyer, M. (2010). *Exceptional lives: Special education in today's schools (6th Ed.)*. Upper Saddle River, NJ: Merrill/Prentice Hall.
- [20] Wang, Y. & Feng, Y, J. (2014). Professional development standards and review on special education teacher in USA. *Teacher Education Research*, 26(3), 107–112.
- [21] Yi, N. Y. & Xiong, M. (2013). Review on research about supplementary of special education teachers in USA. *Chinese Journal of Special Education*, (1), 47–51, 91.
- [22] Zan, F. & Jiang, Q. D. (2008). Problems and its implications of USA special education teachers

(reviewed twice)

Shangwei Li Institute of Rural Preschool Education Research Yibin University Yibin PRC, 644007