Preparing Special Educators Highly Qualified in Content: Alternative Route Certification for Unlicensed Teachers in Rural Georgia

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Abstract

The shortage of highly qualified special educators is most pronounced in rural schools serving populations characterized by poverty, low achievement, disability, and cultural diversity. The result is often untrained teachers serving students with the greatest education needs. This article describes efforts by a university in rural middle Georgia to address the training needs of uncertified teachers through a high quality alternative route certification (ARC) program leading to both special education and content certification. Key program components, including blended instruction, extensive field-based assessments with supervision, learning community supports, and content training, are described along with implementation challenges and training outcomes.

Keywords: alternative certification, special education, teacher education, content, program description

In 2006, Georgia College & State University (GCSU) initiated an expansion of an existing initial special education certification program at the graduate level to address the chronic shortage of highly qualified special education teachers in rural middle Georgia. The blended delivery program, which provided training in special education and two content areas, served seven rural counties and targeted recruitment of teachers hired on provisional certificates as well as culturally diverse applicants. This program served as a model for revisions to an existing off-site program resulting in a robust training program currently serving 20 counties across middle Georgia. This article describes the rationale for the program, critical components of program design, program outcomes, and lessons learned in responding to implementation challenges.

Shortage of Highly Qualified Teachers

Despite a slight decline across the last decade in the number of children with disabilities who require special education services nationally, the demand for qualified special education teachers continues to outreach supply (Boe & Cook, 2006; TA&D Network, 2012). In 2010, the number of students with disabilities, ages 3 to 21, served in the United States was 6,552,766. Of the teachers serving those students, 21,334 or approximately 6% did not meet certification and/or highly qualified requirements. In Georgia, where special education has been identified as a teacher shortage area for over two decades (U.S. Department of Education, Office of Postsecondary Education, 2012), the number of special education teachers who were not certified and/or highly qualified in 2010 reached approximately 8% (TA&D Network, 2012).

Further exacerbating the chronic personnel shortage are high attrition rates of special education teachers, particularly teachers just entering the field (McLeskey & Billingsley, 2008). The attrition rate is most acute among new hires or inexperienced teachers. On average, 40% to 50% of new teachers exit the field within the first 5 years of teaching (Boe, Cook, & Sunderland, 2008). Georgia's special education 5-year teacher attrition rates surpass the national average with 47% to 53% of new special education teachers leaving the profession (Afolabi & Stephens, 2010). This attrition rate can be, in part, attributed to ineffective preparation, considering that beginning teachers report difficulty in choosing effective instructional strategies, organizing and managing schedules and the learning environment, addressing behavioral issues, and completing legal requirements, such as paperwork and meetings (Billingsley, Griffin, Smith, Kamman, & Israel, 2009). The data would indicate that novice teachers are exiting teacher preparation programs inadequately prepared to educate children and manage classrooms.

The schools most struggling to retain and hire certified teachers are rural and urban schools serving children characterized by poverty, racial and linguistic diversity, low-achievement, and disability (Ingersoll, 2003; Keigher, 2010). The pattern continues where the least qualified teachers serve the most disadvantaged students with the greatest educational needs. This disadvantage is particularly pronounced in rural Georgia. While student populations in Georgia public schools are increasingly diverse, the middle Georgia area is characterized by even greater cultural and linguistic diversity, as well as socio-economic struggles. Some school systems in middle Georgia serve populations with up to 99% minority students

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and up to 87% of students receiving free and reduced price lunch (Governor's Office on Student Achievement [GOSA], 2012). Socioeconomically disadvantaged and minority students often are identified with disabilities more frequently than their economically advantaged peers (U.S. Department of Education, Office of Special Education and Rehabilitative Services [USDOE OSERS], 2012). The economic disparity and identification rates create further challenges to ensure teachers are prepared to provide the evidence-based instruction necessary for students to meet rigorous general education standards (Cartledge & Kourea, 2008).

Despite increasing efforts to provide quality access to general education and despite improved outcomes, only 56% of students with disabilities in the U.S. who exited from IDEA services in 2007 graduated with a regular high school diploma (USDOE OSERS, 2012). Other outcome measures, including K-12 academic measures and postsecondary measures, highlight the gap between students with disabilities and their peers without disabilities on issues ranging from reading and math achievement to income and criminal justice issues (The Nation's Report Card, 2014; Newman et al., 2011). These reduced outcomes for students with disabilities bring into question the quality of instruction students receive across their educational careers. Given that the most essential component influencing student achievement is a highly effective teacher (National Comprehensive Center for Teacher Quality, 2007), these reduced outcomes generate questions as to how well teachers are prepared to meet student learning and behavioral needs and to promote student success.

Research has demonstrated preparation of the most effective teachers includes multiple components: (a) content training, (b) pedagogy, and (c) intensive field experiences with supervision (Brownell, Ross, Colón, & McCallum, 2003). It is further indicated that one instrumental factor influencing teacher impact on student achievement is content area expertise (Goldhaber & Brewer, 2000; U.S. Department of Education, Office of Policy Planning and Innovation, 2002); however, the vast majority of special education teachers, particularly those at the secondary level, do not possess content proficiency and content area certification (Billingsley, Fall, & Williams, 2006). To meet NCLB and IDEA highly qualified teacher requirements, students often receive special education services through inclusive and consultative models. The general education teacher serves the role of content expert while the special education teacher provides a supportive role in planning and implementing instruction. Although inclusive settings offer benefits, the issue must be raised concerning how special education teacher content knowledge, or lack thereof, impacts contributions to curricular planning and instruction. More specifically, the field must consider if teachers without content expertise can move beyond basic accommodations to infusing content instruction with evidence-based practices. The current difficulties teachers experience with providing quality content instruction and evidence-based supports for students with disabilities are well documented. Research indicates general education teachers struggle differentiating and addressing the needs of diverse learners, particularly as content difficulty increases (Baker & Zigmond, 1995; Mastropieri et al., 2005). Further compounding this issue is that evidence-based practices are not widely utilized by special education teachers to support students with disabilities (McLeskey & Billingsley, 2008; Vaughn & Linan-Thompson, 2003). As the field moves forward, the challenge for special educators is not only knowledge of evidence-based practices, but possessing a working knowledge of the content so they can best support their general education partners in differentiating instruction through use of proven practices (Maccini & Gagnon, 2002, 2006; Mastropieri et al., 2005). One of the critical factors influencing this issue, the persisting research-to-practice gap, is teacher preparation.

Decades of research support key evidence-based practices (e.g., curriculum-based measurement) and indicate critical components necessary for effective teacher preparation; yet, special education teachers continue to enter the field poorly prepared to meet the challenges of real classrooms and to facilitate student success (McLeskey & Billingsley, 2008). Thus, teacher training programs face the mounting challenge to not only address teacher shortages but to increase teacher quality, both in content and in evidence-based pedagogy. This task is increasingly difficult as expectations for teachers' content knowledge intensifies and as expectations for teachers' skilled use of evidence-based practices within a response to intervention (RTI) model mounts (Brownell, Sindelar, Kiely, & Danielson, 2010).

Alternative Route Certification

Alternative route certification (ARC) programs have proliferated in the last two decades as a means of fast tracking the certification process and moving teachers into classrooms to address the teacher shortage. Variations in length, structure, and delivery exist across alternative route certification programs (Rosenberg & Sindelar, 2005). Generally, programs are designed to support non-traditional teacher candidates, persons who have not completed traditional undergraduate training in education and are seeking entrance into the teaching field or have already accepted employment without regular certification. Given that training is often on-the-job, indicators of effective ARC programs are those that include rigorous learning requirements and ongoing supervision with in-depth feedback (Rosenberg & Sindelar, 2005). ARC is most effective when knowledge and skills gained in training courses or seminars require field-based application with evaluation of implementation. Unfortunately, quality of training provided in some ARCs is questionable (Brownell et al., 2010). ARC programs often expedite training, limiting or omitting coverage of content, pedagogy, child development, and laws (Darling-Hammond & Sykes, 2003). Resulting outcomes of ARC with limited preparation are unusually high attrition rates as teachers lack skills to be successful in the classroom and are more likely to leave education (Rosenberg & Sindelar, 2005).

One particular advantage of ARC is program design supportive of non-traditional candidates, which consequently increases recruitment rates of culturally and linguistically diverse persons, males, and career changers (Rosenberg, Boyer, Sindelar, & Misra, 2007). Recruits to ARC generally reflect the diversity of their local communities. Teachers who are culturally and racially representative of their students may better understand expectations and social/behavioral dynamics,

communicate providing more personal access to students and families, and relate content and deliver instruction in culturally relevant and responsive ways (Tyler, Yzquierdo, Lopez-Reyna, & Flippin, 2004). This is a particular advantage of ARC in Georgia where the teaching force (i.e., 73% white [GOSA, 2012]) does not closely mirror the diversity of the student population (i.e., 55% non-white [GOSA, 2012]). Access can have an immense impact on a student's receptivity to education (Dee, 2004). Thus, ARC programs provide Georgia, and especially rural middle Georgia, one opportunity for training teachers to reach the diverse student population.

Online and Blended Learning

ARC programs are utilizing online learning as an approach to increase recruitment and to reach a broader service area, which is particularly useful in rural areas where there may be limited access to institutions of higher education (Bargerhuff, Dunne, & Renick, 2007; Rosenberg et al., 2007). While research regarding student learning outcomes and student satisfaction of online learning as compared to a face-to-face approach yields mixed results, more recent studies reflecting current technologies indicate equivalent learning outcomes for online learning and face-to-face instruction but lower satisfaction for online learning (Jaggars & Bailey, 2010). For example, in comparing online and face-to-face in an introductory elementary education course, Mentzer, Cryan, and Teclehaimanot (2007) found that learning outcomes were equivalent, but grades were lower for online instruction due to missed assignments and satisfaction was lower for online delivery. In multiple courses across a post-baccalaureate secondary education degree, Peterson and Bond (2004) found equivalent outcomes on quantitative measures of skill development, but, in interviews, students indicated online learning offered reduced opportunity for learning through modeling and for interpersonal skill development. Despite relative drawbacks of online learning, it offers benefits not available through face-to-face programs. Online learning meets the needs of non-traditional students who require flexible learning schedules due to vocational and family responsibilities. Further, online learning provides educational access to persons from a broader geographic area, particularly those in rural areas where distance and travel may be a factor.

While online learning opens doors for underserved geographic areas, the training may not always be adequate for successful education outcomes. Research indicates that without appropriate supports online learning may impede the progress for college students from underserved groups, including students of low income and those with gaps in academic preparation (Jaggars & Bailey, 2010). Engagement in a learning community can be a factor of critical importance for ensuring college student retention and success. One means of balancing the need for flexible programming with the support needs of underserved groups is through utilization of a blended learning approach (i.e., combination of face-to-face and online instruction). Specifically, blended or hybrid course delivery allows for the convenience of online instruction while providing face-to-face opportunities to build instructor and peer learning community supports for at risk college students (Engstrom, Santo, & Yost, 2008). Such supports increase program retention, particularly for at-risk ARC trainees.

Project Purpose

Due to persistent special education teacher shortage in the rural middle Georgia area, there has been a strong demand for ARC programs to fill difficult to staff positions. In Georgia, certification rules allowed non-certified individuals to maintain employment through the issuance of 3-year non-renewable provisional certificates with the agreement that they enroll in a state-approved program to complete certification requirements during the 3-year period. GCSU designed an ARC program to address the needs specific to the special education teacher shortage in rural middle Georgia: (a) teachers highly qualified in special education and content, (b) effective training to support success and long-term retention of teachers, (c) teachers for underserved areas, and (d) teachers of diversity. The resulting master's level initial certification program (i.e., M.A.T.) in special education general curriculum (i.e., non-categorical, inclusion) focused on preparing teachers skilled in evidence-based pedagogy as well as content. To best support the needs of these teachers for quality training and access from a distance, GCSU used a combination of face-to-face instruction and online learning environments along with integrated field-based assessments and supervision in training. Personnel preparation funding from the U.S. Department of Education, Office of Special Education Programs (OSEP) supported the resulting program that is described in this article.

Program Components

Recruitment and Delivery

Recruitment for initial enrollment targeted persons hired on non-renewable provisional certificates, representative of the area's diversity, and committed to long-term service in special education in the local rural area. Recruitment also targeted persons "rooted" in local communities to minimize attrition as these persons were more likely to remain in and pursue long-term employment in rural communities (Brownell, Bishop, & Sindelar, 2005). A partnership with the Oconee Regional Education Service Agency, the state agency supporting school systems in the area that communicated with administrators as well as with people interested in career changes to education, was highly useful in recruitment. Of equal import in recruitment was direct contact with area administrators to determine hiring needs and to offer the program as a training option for non-certified hires. Initial enrollment for the program was 15 trainees, 14 of whom were employed as special education teachers on non-renewable provisional certification, 1 of whom was employed as a para-professional, and 6 of whom were of diverse racial backgrounds (e.g., African-American, multi-racial).

The program was based on the main campus, as it provided the most central location for the trainees and offered a variety of supports for trainees (e.g., library and computer access). Courses were implemented through a blended model (i.e., face-to-face meetings and online instruction), which effectively reduced trainee drive requirements by half. Blended delivery was viewed as an optimal approach as it offered ample contact with trainees for the purposes of

Table 1.

Basic M.A.T. Degree Requirements

Coursework and Field Experiences	
EDEX 6111	Exceptional Child in the Regular Classroom
EDEX 6117	Behavior Management
EDEX 6120	Nature of Interrelated
EDEX 6118	Educational Evaluation
EDEX 6115	Language Development
EDFS 6231	Research for School Improvement
EDEX 6121	Curriculum & Methods of Interrelated I
EDRD 5211	Literacy for Special Education*
EDEX 6122	Curriculum and Methods of Interrelated II
EDEX 6114	Collaboration with Families
EDEX 6960	Internship I, II, III, IV, V, VI

Note. *Course exempted for trainees who completed system required reading foundations training.

building learning community and the flexibility of online study. Through face-to-face contact, peer relationships were established that served as ongoing supports across the program. Direct contact with instructors during face-to-face meetings supported retention and student responsiveness more so than in an online environment. Trainees who failed to complete online work and became non-responsive to faculty initiations were reconnected and brought back on track during face-to-face meetings. While blended learning offered convenience, face-to-face meetings were critical for monitoring and supporting trainee success.

Conceptual Framework

In designing the program framework, factors contributing to effective teacher preparation, including teacher quality and retention, were considered. Program design targeted integration of the following features: (a) a vision for program outcomes that guides program development and revision, (b) alignment of curriculum and field experiences to support spiraling development of knowledge and skills and to promote critical thinking and problem-solving, (c) inclusion of content and content specific pedagogy, and (d) development of a learning community to foster engagement, learning, and support (Brownell et al., 2003). The guiding vision for the blended program was to train teachers in content and evidence-based pedagogy who would be skilled in providing tiered interventions necessary to support student success in the general curriculum.

Establishment of a learning community was viewed as central to academic as well as retention goals of the program. To accomplish this, the program applied a knowledge-of-practice model wherein trainees were engaged in generating knowledge as part of learning communities supported by experienced personnel (Cochran-Smith & Lytle, 1999; McLeskey & Waldron, 2004). The learning community was established through use of a cohort-based mentor-led approach wherein students entered the program and completed coursework together under the guidance of a faculty mentor. Course work and field experiences were interconnected through comprehensive field-based assessments in each course across the program. These assessments required trainees to process course content through the sequence of knowledge acquisition, problem-solving application, reflection, feedback, and practice revision (Klingner, Ahwee, Pilonieta, & Menendez, 2003). The learning community fostered the natural development of peer support networks, a critical support for teachers in rural schools where access to mentors and role models is often limited. Peer support proved essential, as some trainees were the sole special education teachers in schools or the sole special education teachers serving a specific grade level or population. Relationships evolved from the learning community model that encouraged trainee support not only for program completion but also for problem-solving issues—instructional, behavioral, and administrative—in the work setting.

Course and Field Work

The 63-hr program was designed for completion in seven semesters. The course of study included 27 hr of courses and 18 hr of internships (i.e., six 3-hr internships across the

Table 2.

Content Training Course Sequences

	Reading
EDRD 6000	Theory and Process of Literacy Learning
EDRD 6151	Literature in School Programs
EDRD 6661	Reading Diagnosis and Remediation
	Mathematics
MAED 6010	Mathematical Investigations of Numeracy and Operations
MAED 6030	Data Analysis and Probability for Teachers
MAED 6040	Geometry for Teachers
	Science
BIOL 1107/1107L	Principles of Biology I and Lab
BIOL 3400	Organismal Physiology
BIOL 4010	Integrated Life Science
	Language Arts
ENGL 5115	History of the English Language
ENGL 5445	Literary Women
ENGL 5665	American Literature from 1920 to the Present

program) to address special education training requirements as well as 18 additional hr of content concentration. Please see Table 1 for a list of the basic degree requirements. All trainees completed two areas of content concentration; one was reading, and the other was trainee choice. Each content area required a sequence of three courses. Advisement in content course selection ensured trainees acquired content needed for their assigned teaching positions. Since the content courses were beyond the basic M.A.T. degree requirements, trainees were allowed to select from undergraduate or graduate content courses, as appropriate, based upon prior coursework and knowledge. Content sequences chosen by trainees included a math concentration that integrated both content and pedagogy, a general science sequence targeting secondary content, and a language arts sequence with various course options for targeting knowledge of literature, grammar, and writing. Table 2 provides the required reading content sequence as well as examples of content sequences developed for mathematics, language arts, and science.

Program coursework and program competencies were aligned with the Council for Exceptional Children (CEC) initial preparation standards (CEC, 2001; 2012) and the Georgia Professional Standards Commission (GaPSC) special education general curriculum educator preparation rules and standards (Georgia Professional Standards Commission, 2005) to ensure coverage of critical knowledge and skills specific to special education teachers working with students on general education curriculum. The program was further mapped to the Interstate Teacher Assessment and Support Consortium (InTASC) standards to address the critical connection between content training and curriculum and instruction, which is foundational for promoting inquiry, critical thinking, and problem solving (Council of Chief State School Officers, 1992; 2011).

Curriculum was designed and sequenced to accomplish key needs of training. Curriculum was designed to spiral and build knowledge and skills each semester, wherein key concepts and practices were continually reintroduced and connected to new information and contexts (Brownell et al., 2003). A component of the curriculum was embedding training and scheduling key courses within the initial semester that ensured trainees had "survival knowledge and skills" to be successful in completing job responsibilities (e.g., classroom and behavior management, standards-based lesson planning). Not only did this scheduling model support job success and retention, but also it limited the need for retraining or "unlearning" poor habits that can occur when on-the-job training is not matched with effective preparation and supervision. Program competencies in the form of applied field projects were embedded each semester to ensure trainee

Table 3.

Content Certifications Secured by Trainees

Content Certification Area	Grade Level	# of Trainees Certified
Reading	(P-12)	11
Mathematics	Middle Grades (4-8)	3
Science	Middle Grades (4-8)	1
	Biology (6-12)	1
Language Arts	Middle Grades (4-8)	2
	English (6-12)	3
Social Studies	Middle Grades (4-8)	1
Early Childhood*	(P-5)	8
Special Ed. Content*‡	(K-8)	6

Note. Trainees completed more than one certification test for each content area if content spanned across early, middle, and/or high school grade levels so number of certifications listed exceeds the number of trainees' content areas.
*Multi-content test including reading, mathematics, science, language arts, and social sciences.
‡Content certification supports service as teacher of record for students with disabilities only.

knowledge of standards as well as the application within classrooms. Successful completion of applied projects was required as these assessments served as decision points for trainee continuation in the program.

Given that trainees were in the challenging situation of teaching without prior training, internships were embedded in each semester to provide extensive supervision and support as they taught in classrooms. The applied projects in each course documented trainee acquisition of key knowledge and the implementation in internships allowed supervisors to evaluate integration of skills in the trainee's classroom practice. An additional summer internship provided trainees experience with students of other ages and disabilities to ensure their competency across the grade levels required by state special education teacher preparation rules. Arrangements were made for trainees to complete internship requirements as volunteer interns in their system summer school program. This option supported trainees in expanding working relationships within their school systems while reducing trainee travel demands.

Additional Support

Unique to the program was the opportunity for professional development beyond coursework. Habits of life-long learning and trainee connection to state and national resources were encouraged and promoted. Opportunities included membership in special education professional organizations and attendance at conferences and workshops. Trainees reported conferences addressing content and content pedagogy were most useful as they immediately transferred the information to teaching practice.

Further, personnel preparation funding supported trainees in completing certification exams in special education as well as content training areas. Trainees were encouraged to secure multiple certifications, if applicable, as this would support trainee flexibility in servicing rural systems.

Outcomes

Certification

As a result of program training, 14 of the 15 enrollees completed the program. All 14 completers met state certification for special education general curriculum (i.e., non-categorical inclusion services), and all secured a minimum of one general education content certification. Thirteen of the 14 completers secured two or more content certifications related to their chosen content training. Some trainees secured a single certification that combined their chosen content trainings. For example, trainees completing math and reading training may have pursued early childhood education certification, which is a multi-subject test. Others sought certifications focused on each training area. For example, a trainee completing science and reading training may have chosen to complete certification exams for high school science and for reading P-12. The majority of secured certifications were in general education that would, in conjunction with the special education general curriculum certification, allow these trainees to serve as the teachers of record for both general education and special education students. Six trainees chose to complete the special education content exam that met highly qualified requirements for teaching students with disabilities across multiple subjects in grades K through 8. All six of these

trainees also completed one or more general education content tests. See Table 3 for additional detail on the content and grade levels for content certifications secured.

Program Revision

To support ongoing service to the broader rural middle Georgia area, the university's existing off-site M.A.T. special education program was revised. Revision included adoption of the adjusted program course sequence and early emphasis on "survival skills," an internship in each semester to provide intensive supervision and mentoring, internship-coursework integration through use of the program's field-based assessments, and a blended approach for all coursework. The revisions were fundamental to the program's recent receipt of national CEC accreditation. The shift to a blended program reduced accessibility issues and facilitated service to a much broader area. As a result, 19 to 22 teachers enroll each year, the majority of whom are teaching on non-renewable provisional certificates. While content training is not currently a requirement, trainees have multiple options for securing content training as additional coursework or as add-on endorsements. Ongoing revisions supported through a subsequent personnel preparation grant are targeting the development of a reading course sequence as a program requirement for all trainees.

Lessons Learned and Ongoing Challenges

Communication and Connection with Schools

Communication with systems throughout training is critical to program and trainee success. First, university supervisors must conduct in-depth observations to understand each trainee's teaching situation and the school's practice in order to provide guidance and facilitate the trainee's transfer of course content into classroom practice. Next, establishing open communication with the school administration is necessary to ensure open discussion about training needs and support for university guidance in developing the teacher's practice. Collaborative relationships support not only trainee development, but encourage program recruitment as well. School administrators recognize the practical focus of the program in building knowledge and skills for teaching, as well as view these trainees as potential long-term employees in rural systems.

Incentives for Content Training and High Quality Training Programs

While this program demonstrated content preparation for special educators, such extensive content requirements create programmatic challenges, including enrollment maintenance and competitiveness with less rigorous and less lengthy programs (McLeskey & Billingsley, 2008; McLeskey & Ross, 2004). OSEP personnel preparation funds provide critical support for maintaining high quality programs and options that are otherwise not fiscally feasible for teachers or training institutions (Brownell et al., 2003). Financial support continues to be a major need and an impediment for many potential teachers, particularly special educators completing additional content training and exams to address highly qualified teaching requirements. There exists a need for a comprehensive plan from the federal government to manage shortages of highly qualified special education teachers, including provision of support for high-quality alternative training programs that target special education and content preparation (Darling-Hammond & Sykes 2003; McLeskey & Billingsley, 2008).

Changes are needed at the state level as well. In the National Council on Teacher Quality review of state policies for identifying effective teachers, Georgia received a D^+ (National Council on Teacher Quality, 2008). While the state is pursuing value-added models to evaluate in-field teacher effectiveness, a change at the preparation level is needed if teachers are to be equipped to meet the content expectations of the Common Core Standards and to provide supports and interventions consistent with efficient use of RTI. More stringent requirements, such as increased expectations for training programs and for content certification along with incentives for content training, would begin to address the state's need.

Dual Certification: Advantages and Disadvantages

As the trainees in our program exited dually certified in special education as well as general education, an interesting dilemma arose. Multiple teachers, particularly those with secondary certifications, were heavily recruited by administrators to transfer into general education positions in inclusion classrooms. While some researchers have indicated that attrition of special educators to general education has a negative impact on students with disabilities due to loss of our most qualified teachers (McLeskey & Billingsley, 2008), this initial loss must be viewed in light of the potential systemic benefits that may occur through these position changes. General education teachers with special education expertise can utilize dual expertise to effectively collaborate with special education teachers and can provide instructional and classroom management techniques that support students with disabilities served in inclusive environments.

Conclusion

Although questions regarding the quality of preparation and highly qualified status of ARC completers continue, the model program outlined herein illustrates that ARC programs can be designed to address concerns and effectively prepare teachers. The key to success while remaining competitive in the ARC marketplace is balance. Trainee need for ease in access, support, and shorter program length must be balanced with the program need to provide quality standards-based coursework and field support, ensure trainee demonstration of knowledge and skills, and maintain enrollment for program sustainability (Rosenberg et al., 2007). As ARC programs continue to develop, emphasis must be placed on improving training so that special education teachers have content training as well as content-related pedagogy to ensure all students can access general education curriculum and meet learning standards. Preparation of such dually trained teachers provides increased quality of education services and offers school systems increased flexibility in how highly qualified teacher requirements are met for students

with disabilities. With the advancing use of multi-tiered interventions and supports in school systems, training that promotes teacher capacity to effectively contribute in inclusive general education settings as well as to provide intensive interventions to meet individual student needs is needed (Brownell et al., 2010). It is imperative that ARC programs consider these demands for expertise in content and evidence-based practices to ensure viable high quality training.

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