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Peishi Wang

Queens College, City University of New York, peishi.wang@qc.cuny.edu

Sara B. Woolf

Queens College, City University of New York, sara.woolf@qc.cuny.edu

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Trends and Issues in Bilingual Special Education Teacher Preparation: A Literature Review

Peishi Wang and Sara B. Woolf

Queens College, City University of New York

Teachers represent the largest school impact on student learning, yet the national professional teacher workforce has been described as inadequately prepared to meet the academic, linguistic, social, and other educational needs of the majority of the nation's public school student population. Moreover, youngsters from diverse linguistic, cultural, and ability backgrounds continue to be overrepresented in specialized school settings. These interrelated phenomena are influenced by multiple complex sociocultural and other factors (i.e., historical, economic, political). Among these are reported steady growth in the population and enrollment of students from non-English speaking, diverse cultural backgrounds in the nation's public schools, perennial low representation of teachers who are themselves members of diverse cultural backgrounds, and teachers who are competent in the languages spoken by the students assigned to their classrooms. These conditions represent significant challenges for all students, but especially those who, in addition to language or cultural differences, experience unique learning or social challenges as a function of disability conditions. Researchers have consistently emphasized the need for children who are English Language Learners and those who have disabilities to be taught by teachers who are knowledgeable about and competent in the critical bilingual and special education pedagogies identified by the professions. This study examined the current state of bilingual special education teacher preparation programs and their inclusion of components identified as critical to these teachers' professional competence. Findings suggest that the integrated model of bilingual and special education teacher preparation is the most frequently used model. Implications and future research directions were also presented.

Keywords: bilingual and special education, bilingual special education teacher preparation, synthesis of research

Education researchers and scholars as well as policy leaders have for many years argued that the nation's economic and social stability depends on a national teacher workforce that is competent to educate and prepare youngsters for their roles as empowered and active citizens (Darling-Hammond & Price, 2007; Fenstermacher & Richardson, 2005; Goe, 2007; Hess & Kelly, 2011). Recent concerns, including findings that US students' academic performance continues to fall below that of their international peers, have fueled education reform initiatives to improve the quality of public education and preserve opportunities for the nation's youth to successfully

compete in the complex global markets that characterize the 21st Century (Hess & Kelly, 2011; Hinchey, 2010).

Teacher Impacts

Accrued empirical evidence has firmly established that teachers' impacts represent the largest in school contribution to student outcomes (Gordon, Kane, & Staiger, 2006; Rivkin, Hanushek, & Kain, 2005). Further, findings have shown that youngsters taught by effective teachers demonstrated higher academic achievement than those taught by less effective teachers (Feng & Sass, 2010; Kane, Rockoff, & Staiger, 2006). Unfortunately, not all children have equal access to well-resourced schools and effective teachers (Blanton, Pugach, & Florian, 2011; McCardle, Mele-McCarthy, Cutting, Leos, & D'Emilio, 2005; Tyler, Yzquierdo, Lopéz-Reyna, & Flippin, 2004). This may reflect a number of phenomena, including persistent and chronically high personnel shortages in special education (McLeskey, Tyler, & Flippin, 2004) and bilingual education (Chavez, 1989). The most up to date published report indicated that there are fewer than 15 programs in the US that prepare teachers to work with bilingual students who have special needs (Gallegos & McCarthy, 2000; Paneque & Barbetta, 2006). Finally, Education reform initiatives may have inadvertently created disincentives for teachers of English Language Learners (ELLs) and students who require academic support (Baker et al., 2010; Hinchey, 2010; Holdheide, Goe, Croft, & Reschly, 2010; Partee, 2012). Specifically, teacher performance measures and related employment decisions (e.g., tenure) are increasingly informed by students' scores on standardized tests irrespective of reliability and validity challenges associated with these tests for ELLs and students with disabilities (Holdheide et al., 2010; Steele, Hamilton, & Stecher, 2010).

Longstanding national reports have documented that youngsters with disabilities, and those from low socioeconomic and/or diverse social, cultural, and linguistic backgrounds, experience lower academic achievement, higher drop-out rates, and worse post school employment rates than their White peers (Artiles & Klinger, 2006; Artiles, Kozleski, Trent, Osher, & Ortiz, 2010; Aud, Hussar, Johnson, Kena, & Roth, 2012; Blanton et al., 2011; Klinger et al., 2005; Rueda & Stillman, 2012; Trent, Kea, & Oh, 2008). Children for whom English is a second or even third language, and/or those who come from diverse cultural backgrounds, often experience learning, social, behavioral, and other challenges. These challenges may be exacerbated by cultural discontinuities at school (Kidd, Sanchez, & Thorp, 2008; Levinson, 2007; Rodríguez, 2009) such as mismatched communications, inadequate attention to culturally influenced learning styles, and instructional activities or strategies that fail to maximize children's varied home or community experiences and knowledge (Gay, 2010; Guiberson, 2009; Rueda & Stillman).

The complex conditions that undergird these patterns of disparate school supports and outcomes have been associated with a number of influences (Artiles et al., 2010; Kea & Trent, 2013; Klinger et al., 2005; Rueda & Stillman, 2012; Townsend, 2002). One such influence is the pervasive disproportionate placement of inexperienced, early career, and under or uncertified teachers in schools that support children from predominantly minority and/or low socioeconomic communities

(Blanton et al., 2011; Carlson, Lee, & Schroll, 2004; McLeskey et al.; 2004; Tyler et al., 2004). This is further mitigated by findings which have described the population of non-English speaking students as the fastest growing subgroup of students in the United States (McCardle et al., 2005; Snyder & Dillow, 2013). Compounding classroom teachers' challenges to meet the needs of increasingly diverse students is the fact that most teachers (83.5%) are White, monolingual females; moreover, there are very few teachers who are Hispanic (6.9%) and African American (6.7%; Ortiz, et al., 2011). Taken together, these conditions can be seen as contributing to findings that teachers report feeling ill prepared to meet the needs of students who require both bilingual and special education supports (Blanton et al., 2011; National Center for Education Studies, 2001; Paneque & Rodríguez, 2009; Rueda & Stillman, 2012).

Current State of Teacher Preparation

At present, the national teacher workforce is insufficiently trained, prepared, and competent in areas critical to the delivery of multicultural education (Brownell, Ross, Colón, & McCallum, 2005; Cochran-Smith & Dudley-Marling, 2012; Fullerton, Ruben, McBride, & Bert, 2011; Kea & Trent, 2013; Trent et al., 2008). In the absence of adequate training, support, and guidance, teachers are susceptible to unrecognized biases which may lead to inaccurate, superficial, or stereotypical beliefs and constructs about cultures that differ from their own (Pugach & Blanton, 2012; Rueda & Stillman, 2012; Sleeter, 2001; Villegas, 2012). These biased lenses further contribute to the cascading effects of other inequities, including longstanding disproportionate referrals of youngsters from diverse linguistic and cultural backgrounds to special education settings (Artiles et al., 2010; Klinger et al., 2005) and misconceptions about the relationships between first (home) and second (new) language development (Paneque & Rodríguez, 2009; Park & Lian, 2001; Rodríguez, 2009; Rodríguez & Carrasquillo, 1997). In contrast, teachers are better positioned to deliver effective instruction when their cultural backgrounds more closely match those of their students and when they and their students speak the same language (Chu & García, 2014; Paneque & Barbeta, 2006; Paneque & Rodríguez, 2009; Rodríguez, 2009). Similarly, when teachers are competent in special education pedagogies, students' academic gains are higher than those achieved in classrooms staffed by uncertified special educators (Feng & Sass, 2010; Goe, 2007).

Teachers must be prepared to utilize practices that are informed by prevailing scholarship and the professional standards that distinguish their respective specialty professions (Darling-Hammond & Price, 2007; Goe, 2007; Hinchey, 2010; Little, 2009; Partee, 2012; Pugach & Blanton, 2012). At the national level, teacher education and preparation programs are informed in part by the standards promulgated by professional accreditation entities. In years past, programs were informed by either the National Council for the Accreditation of Teacher Education (NCATE) or Teacher Educator Accreditation Council (TEAC). However, in 2010 these separate organizations consolidated to form a single entity, the Council for the Accreditation of Educator Preparation (CAEP; NCATE, 2010) to enhance "quality assurance, accountability and the overall performance of the profession" (Murray, F. B. as quoted in NCATE, 2010).

In addition to standards subsumed in national accreditation criteria, specialized disciplines, and their associated professional preparation programs, are bound by the standards developed by their respective professional organizations. The Council for Exceptional Children (CEC; CEC, 2009, 2013) provides professional standards and benchmarks for the field of special education. Similarly, TESOL International Association established professional standards for programs that train teachers of speakers of other languages (TESOL, 2010). However, there are no national professional standards in place to inform the specialized field of bilingual teacher education.

There is no doubt that existing special education teacher preparation and bilingual teacher preparation standards represent a rich and broad scope of professional knowledge, skills, practices, and dispositions. Despite this, teacher preparation scholars continue to grapple with ways to meaningfully bridge university emphasized theoretical constructs and the pedagogical needs of teachers who work in diverse school settings (Gutiérrez & Vossoughi, 2010). Wilson, Rozelle, and Mikeska (2011) characterized the current state of teacher education as “diffuse and uncoordinated” (p. 1), and in need of more explicit effort to articulate the central “...theories of teacher learning that drive decision making (and) the design of substantial learning opportunities for teachers” (p. 392).

Leading scholars focused on multicultural education have increasingly recommended specific strategies for teacher education to enhance the educational experiences and school outcomes of youngsters from culturally and linguistically diverse backgrounds. Many of these recommendations have direct application for the preparation of bilingual special educators (Kushner, 2008; Pugach & Blanton, 2012; Rodríguez, 2009; Wasburn-Moses, 2012). These include, among other priorities, the need for an expanded knowledge base from which to ensure that teachers are well prepared for diversity and able to transform multicultural theories into practice. They also require systematic approaches that de-emphasize traditional deficit perspectives and broaden to include other cultural markers such as disabilities, gender (Gay, 2010; Rodríguez, 2009; Rueda & Stillman, 2012).

Special education scholars have similarly encouraged the field to more meaningfully meet the education, training, and preparation needs of special educators and expand the empirical base used to inform these practices (Blanton et al., 2011; Brownell, Sindelar, Kiely, & Danielson, 2010; Kozleski, 2011; Spooner, Algozzine, Wood, & Hicks, 2010). Scholars in the field of bilingual special education continue to encourage scholarship to expand the field’s “thin” research base (Artiles & Klinger, 2006) and to engage in explicit research to inform the formal preparation of bilingual special education teachers (Cochran-Smith & Dudley-Marling, 2012; Rodríguez, 2009; Rueda & Stillman, 2012).

Each of these specialized disciplines share in their emphasis for more research to inform teacher education; however, research focused specifically on bilingual special education teachers is scarce (Rueda & Stillman, 2012). This takes on increased urgency in light of pressing demands for teachers to adequately support and educate students who are essentially twice marginalized due to the combined impacts of language,

disability, and cultural diversity (Figueroa, Fradd, & Correa, 1989; Paneque & Rodríguez, 2009; Rodríguez, 2009). That is, teachers must have multicultural and bilingual expertise and competencies (Gay, 2010; Rueda & Stillman, 2012; Townsend, 2002; Villegas, 2012).

Bilingual Special Education

The field of bilingual special education is a young discipline, having emerged in the early 1970s (Figueroa et al., 1989). The first bilingual special education teacher training programs were established through grants from the Office of Special Education and Rehabilitation Services of the U.S. Department of Education in 1979 (Baca & Amato, 1989). In the University of Colorado's Multilingual Special Education Program's (MUSEP) 1982 survey study that explored how 30 university training programs in the western United States prepared bilingual/multicultural special education teachers, programs were categorized according to one of three distinct training models:

1. Traditional special education teacher preparation coursework and training which included specific efforts to recruit minority and bilingual trainees. In this model, teacher trainees with bilingual skills were recruited but none received specific training to work with ELLs with disabilities.
2. Infused teacher preparation program models reflected efforts to embed bilingual special education components within existing special education coursework.
3. Integrated program models reflected efforts to develop new courses and field experiences specifically for bilingual special education. This model reflected thoughtfully planned efforts to converge elements of bilingual and special education rather than pushing in or interfacing separate elements of each discipline.

Salend and Fradd (1985) surveyed 50 states and the District of Columbia regarding their certification and training programs for bilingual special education. Their findings indicated that while sixteen university teacher preparation programs offered training for bilingual special educators, only the state of California had established a teacher certification program for bilingual special educators.

It has been 35 years since the establishment of the first bilingual special education teacher preparation programs. As a young discipline, it is important to identify and interrogate the past history and current trends and issues in bilingual special education teacher preparation programs. It is only with such effort that the field can continue to grow and best meet the needs of bilingual students with disabilities. The current literature review was guided by the following research questions:

1. How many traditional, infused, or integrated bilingual special education teacher preparation programs have been described in the professional literature since 1980?
2. What are the key components of these bilingual special education teacher preparation programs?

3. Do these programs described in professional literature offer similar or divergent coursework, practicum, professional development, or other formal and informal components?

Method

Selection of Studies

A review of the literature was conducted using the following procedures. First, an electronic search was performed for studies published between 1980 and 2014 using the Educational Resources Information Center (ERIC) and PsycINFO databases. Searches were carried out using a combination of the following descriptors: *bilingual special education, bilingual education and special education, teacher training, teacher preparation, ELLs, English as a Second Language, ELLs with special needs, pre-service teachers, teacher education, and teacher certification*. Second, a manual search was conducted with the following peer-reviewed journals: *Bilingual Research Journal, Exceptional Children, Journal of Special Education, Journal of Teacher Education, Multiple Voices for Ethnically Diverse Exceptional Learners, and Teacher Education and Special Education*. Third, an ancestral search of studies was conducted using the reference lists of each study located via ERIC and PsycINFO, in an effort to locate additional studies that were not captured by the initial database search. This combined initial search yielded a total of 76 records.

Criteria for selecting studies for review were as follows. First, the articles selected were peer-reviewed and empirical, i.e., they included quantitative descriptions of teacher preparation programs. Theoretical and/or opinion papers were not included. Second, studies needed to describe teacher preparation programs leading to credentials/certifications in both special education and bilingual education– and include full program descriptions. Articles that included only partial descriptions about teacher training program components (e.g., the description of a single course) were not included. Third, programs that prepared teachers to better serve culturally and linguistically diverse populations but did not describe an explicit credential/certification in ELLs and special education were not included. Using these methods and criteria, a total of 9 studies were identified for inclusion in this review.

Coding and Interrater Agreement

A modified version of the coding system established by Pugach and Blanton (2012) was used to code the studies included in this review. Each study was analyzed across the following categories: (1) publication source, (2) geographic location of described program, (3) funding source, (4) degree/licensure, (5) trainee characteristics, (6) program outcomes, (7) program description, and (8) field experience. Reliability coefficients were calculated for both article selection and coding. For article selection, a formula similar to that described by Artiles, Trent, and Kuan (1997) was applied. Specifically, the total number of studies identified by both authors was divided by the number of articles identified by either author. Interrater agreement for article selection was 100%. Kazdin's (1982) formula (i.e., agreements divided by agreements and disagreements multiplied by 100) was applied to determine interrater agreement for coding. Interrater agreement was 100%.

Results

Findings for program characteristics, presented in Table 1, are discussed below.

Table 1
Teacher Preparation Program Characteristics

Study	Publica- tion Source	Geo- graphic location	Funding Sources	Degree/ Licensure	Trainee Characteristics	Program Outcomes
Valero- Figueria, E. (1986)	<i>Teacher Education and Special Education</i>	George Mason University, Virginia	U.S. Depart- ment of Education, Office of Bilingual Education and Minority League Affairs	Master's degree in Bilingual Special Education	6 trainees in the Master's program, 1 in the doctoral program Languages spoken by trainees include Spanish, Viet- namese, Arabic	At time of publication, no graduate of program yet
Chavez, J. (1989)	<i>B.C. Journal of Special Education</i>	California State University at Fresno	U.S. Depart- ment of Education, Office of Bilingual Education and Minority League Affairs	Master's degree in Special Education & California Credential in Bilingual Special Education	40 Spanish speaking trainees	The goal was to train 40 Spanish speaking trainees. At the time of publication, 6 were about to complete their Master's degree.
Gross- man, H. (1992)	<i>ERIC Education Document</i>	San Jose State University	U.S. Depart- ment of Education, Office of Bilingual Education and Minority League Affairs Received 6 cycles of federal funding and 2 cycles of state funding	44-credit graduate level credential program leading to credential in Special Education and a Certificate in Bilingual Special Education	Trainees already credentialed and fluent in both English and a Target Language (Spanish, Chinese, Pilipino, Vietnamese, Portuguese)	From 1979- 1992, the pro- gram trained 429 bilingual special education teachers

Study	Publication Source	Geographic location	Funding Sources	Degree/Licensure	Trainee Characteristics	Program Outcomes
Bay & López-Reyna (1997)	<i>Teacher Education and Special Education</i>	Chicago	Federally funded (not specified)	2-year Master's degree in education with a specialization in Bilingual Special Education and a teaching certificate in either Learning Disabilities or Behavior Disorders with a Bilingual Special Education approval.	20 trainees were admitted to the program. All fluent in Spanish, 15 Latino, 5 European-American. All had experience with and understanding of Latino cultures. Experienced teachers and non-education majors.	18 graduated
Rodríguez, R. F. (1998)	<i>ERIC Education Document</i>	Western New Mexico University	U.S. Department of Education Personnel Training Unit	36-credit Master's degree in Bilingual Special Education (elementary grades)	Trainees already certified in special education. Employed in rural districts serving bilingual minority students with disabilities. 7 Caucasians 16 Latinos 2 Native Americans	25 graduated
Gallegos & McCarty (2000)	<i>Teacher Education and Special Education</i>	New Mexico State University	U.S. Department of Education, Office of Special Education and Rehabilitation Services, Office of Bilingual Education and Minority Language Affairs	Master's and Doctoral degree program	Not reported	From 1989 to 2000, 50 students graduated from the master's program. From 1992-2000, 12 students completed the doctoral program

Study	Publication Source	Geographic location	Funding Sources	Degree/Licensure	Trainee Characteristics	Program Outcomes
Wolfberg, LePage, & Cook (2009)	<i>International Journal of Whole Schooling</i>	San Francisco State University	U.S. Department of Education (not specified)	Multiple subjects credential, ELL certificate, and educational specialist credential.	Not reported	79 candidates projected to graduate by 2010
Zetlin, Beltran, Salcido, González, & Reyes (2011)	<i>Teacher Education and Special Education</i>	California State University, Los Angeles	No external funding reported	7 online professional development modules to prepare beginning special education credential candidates to work with ELLs with disabilities.	50 preservice special education candidates, of which 20% were finishing their undergraduate degree and 80% were enrolled in a 5-year teacher preparation program. Most had minimum experience working with special needs populations.	50 candidates completed Module 1-6 training in one year.
Dykes, Gilliam, Neel & Everling (2012)	<i>Current Issues in Special Education</i>	University of Texas at Tyler	No external funding was reported	123-credit integrated degree program with certification in three areas: Early Childhood through Grade 6 Generalist, Special Education and ELL	Not reported	Not reported

Publication Source

Four studies (44%) were published in *Teacher Education and Special Education*, the journal administered by the Council for Exceptional Children's Division of Teacher Education. One study (11%) was published in each of the following journals, *British Columbia Journal of Special Education*, *International Journal of Whole Schooling*, and *Current Issues in Special Education*. Finally, two teacher preparation program reports (22%) included in this review were published on the ERIC database.

Geographic Location

The current data set revealed that most of the bilingual special education programs were housed in universities in California ($n = 4$; 44%). Two (22%) were offered in universities in New Mexico and one each was located in Virginia, Illinois, and Texas.

Funding Sources

Seven programs (78%) received funding from the US Department of Education, either through the Office of Bilingual Education and Minority League Affairs, or the Office of Special Education and Rehabilitation Services. One program (11%) received six cycles of federal funding and two cycles of state funding.

Degree/Licensure

The majority of the teacher preparation programs ($n = 7$; 78%) included in this review led to a master's degree in special education and a certificate in bilingual education. One program (11%) offered both master and doctoral level training in bilingual special education. Another program (11%) provided training at the undergraduate level.

Trainee Characteristics

Five studies (56%) reported the languages spoken by their respective trainees. Spanish was the most common language spoken, followed by Vietnamese, Arabic, Chinese, Pilipino, and Portuguese. These bilingual trainees were native speakers of one of the above listed languages.

Program Outcomes

Approximately 709 candidates were trained in bilingual special education from 1980 to 2014. This total number of candidates is based on information on program completion provided by seven articles (78%) included in our analysis (see Program Outcomes column in Table 1 above).

Program Descriptions

Findings pertaining to program descriptions, including field experiences, are summarized in Table 2. Eight studies (89%) described the program's conceptual model as integrated (i.e., courses reflected concurrent bilingual and special education competencies and topics). Five programs (56%) provided complete course sequence and program information. The majority of the programs ($n = 6$) included one or more courses on first and second language acquisition. Three programs reported (33%) that some courses were

team taught and enlisted faculty members with expertise in general education, special education, and bilingual education. Two programs (22%) explicitly designed content courses that were taught by bilingual faculty in target languages (e.g., Spanish, Vietnamese). Two programs (22%) required courses on collaboration between home, school, and community.

Table 2

Program Descriptions and Field Experiences

Study	Program Description	Field Experience
Valero-Figuera, E. (1986)	<p>Program trained two types of professionals:</p> <ul style="list-style-type: none"> • Special education teachers who were conversant with the issues of bilingual special education and able to adapt their teaching skills to the needs of their bilingual exceptional children • Bilingual special education teachers with specific skills in working with CLD exceptional children <p>Training provided through three levels:</p> <ul style="list-style-type: none"> • Bilingual special education issues were infused into all traditional special education courses • Special sections were created in existing special education courses to address bilingual special education issues • A new course was created to address primary and secondary language acquisition in ELL with special needs and bilingualism • Field experiences with bilingual children with special needs were added for certain courses • Courses were taught by regular, bilingual and special education faculty. 	Field experiences with ELLs with special needs embedded throughout courses.
Chavez, J. (1989)	<p>Complete course sequence was not included.</p> <p>Two-year 48-credit program:</p> <ul style="list-style-type: none"> • 6 courses (22 credits) exclusively on bilingual special education • Courses team taught by a special education faculty and a bilingual education faculty • Some courses were taught entirely in Spanish <p>Complete course sequence was not included.</p>	<p>Each trainee was matched with at least one Spanish speaking child with special needs and followed through the assessment, instruction, and parent involvement process during the summer program (6 consecutive weeks).</p> <p>A stand-alone practicum course was also required in a special education classroom serving a large number of Spanish speaking students.</p>

Study	Program Description	Field Experience
Grossman, H. (1992)	<p>Trainees have 4 program options to choose from:</p> <ol style="list-style-type: none"> 1. Credential Program <ul style="list-style-type: none"> • Leading to a credential in special education with a certificate in bilingual special education. Trainees in this category had a general education credential and were fluent in English and a Target Language (TL) • Integrated bilingual special education model. • Trainees take 8-15 courses in English, 5 or 6 courses in their TL 2. Advanced Training Program <ul style="list-style-type: none"> • Credentialed special educators take 2 courses in English and 6 courses in their TL. Trainees received a certificate of competency in bilingual special education upon completion of the program. 3. Interactive Television Fixed System (ITFS) <ul style="list-style-type: none"> • Trainees in the Hispanic Learning Handicapped Program who lived outside of commuting distance from the university received their training (11 courses) via an ITFS housed in 5 community colleges and local school districts. 4. Interuniversity program <ul style="list-style-type: none"> • Trainees outside of SJSU commuting distance took their regular special education courses at their local universities but took all bilingual special education courses at SJSU <p>Complete course sequence was included. Program content included the following areas:</p> <ul style="list-style-type: none"> • Introduction to Special Education • Nonbiased Assessment • Language Acquisition and Development and ESL and Bilingual Methodologies • Culture • Behavior Management and Counseling • Instruction • Practicum with Limited English Proficient (LEP) Students with Special Needs <p>Bilingual faculty taught courses in English and target language (i.e. Spanish, Chinese, Pilipino, Vietnamese, & Portuguese).</p>	<p>No traditional student teaching required.</p> <p>Practicum experiences were built into most courses.</p> <p>Over 90% of the trainees were employed by school districts as either special educators or bilingual educators. These trainees were observed and supervised on the job regularly by bilingual faculty.</p>
Bay & López-Reyna (1997)	<p>Complete course sequence was included. Program content included the following areas:</p> <ul style="list-style-type: none"> • Foundations and Current Issues • Child Characteristics & Development • Assessment • Pedagogy • Collaboration Among Home, School and Community 	<p>Field experiences were infused throughout the program. Each course contained assignments that required trainees to interact with LEP children with special needs. Two internships. One full semester student teaching in bilingual special education classrooms.</p>

Study	Program Description	Field Experience
Rodríguez, R. F. (1998)	<p>Three-year program. Complete course sequence was included. Program content included the following areas:</p> <ul style="list-style-type: none"> • Research Method • Foundation of Multicultural and Bilingual Education • Introduction to ESL • Second Language Acquisition Theory & Method • Method in Language Instruction • Method in Teaching CLD Students • Method in Teaching CLD Students with LD & EBD • Multicultural Assessment 	150 hours of practicum with multicultural bilingual students with special needs.
Gallegos & McCarty (2000)	<p>Trained both master and doctoral level bilingual special educators.</p> <p>Complete course sequence was not included. Sample courses included:</p> <ul style="list-style-type: none"> • Exceptional Minority Student • Curriculum, Methods, and Materials for Bilingual Multicultural Special Education • Multicultural Assessment • Sociocultural Issues in Bilingual Multicultural Special Education • Professional Seminar in Bilingual Multicultural Special Education 	<p>Required but didn't specify the total number of hours. Field based experiences varied, such as team teaching university courses; writing for publication and external funding; editing bilingual multicultural special education newsletter; supervising practica students in bilingual settings; and participating in research projects.</p>
Wolfberg, LePage, & Cook (2009)	<p>Complete course sequence was included. Program content included the following areas:</p> <ul style="list-style-type: none"> • Ethics and Professionalism in Integrated Settings • Analyzing Child's Behavior in a Culturally and Linguistically Diverse Setting • Positive Behavior Support • Second Language Acquisition • Assessment • Foundation of Education and Special Education • Technology and Instruction • Curriculum and Instruction • Practicum I, II, III • Student Teaching <p>Courses were co-developed and co-taught by general and special education faculty from both the university and the public schools.</p> <p>Trainees attended the university full time for two years and earned a multiple subjects credential with an ELL certificate and an educational specialist credential.</p>	<p>15 credits in student teaching.</p> <p>Required to complete 180 hours of clinical work in each of three areas: general education, special education, and education of ELLs .</p>

Study	Program Description	Field Experience
Zetlin, Beltran, Salcido, González, & Reyes (2011)	<p>Training consisted of 7 online professional development modules. Description of each module was included.</p> <ul style="list-style-type: none"> • Characteristics of students receiving special education services who are ELLs • Federal and state guidelines of procedures assessments to identify ELLs in California • Theoretical foundations of 1st and 2nd language acquisition • Effective English language development instructional practices • Formal and Informal assessment used with ELLs • Instructional approaches supporting ELLs studying grade-level content • Apply skills needed to assess and instruct students with IEPs who are ELLs 	<p>Module 7 (application module) was to be completed at the end of the professional credential program. Trainees were required to produce a comprehensive case study of an actual student who was an ELL receiving special education services.</p>
Dykes, Gilliam, Neel & Everling (2012)	<p>Newly revised State-approved credential program, which consisted of 4 phases and 123 credit hours. Each phase had specific requirements to be completed prior to progressing to the next phase. Complete course sequence was not included. New courses were developed to address the needs of ELLs with special needs:</p> <ul style="list-style-type: none"> • Introduction to Special Populations • Language and Literacy Acquisition • Managing Classrooms and Behavior in School Settings • Assessment for Instruction • Instructing Diverse Learners/ELLs • Collaborating with Families and Community <p>Modules related to special education and ESL were developed to be implemented throughout the curriculum. These topics included:</p> <ul style="list-style-type: none"> • Diversity • Language Differences vs. Learning Disabilities • Basic Interpersonal Communication Skills (BICS) and Cognitive Academic Language Proficiency (CALP) <p>Some courses were co-taught by faculty with expertise in special education, ELL, and reading</p>	<p>Phase II required 30 hours of field experience. Phase III required 60 hours of field experience. Phase IV required a full semester student teaching</p>

Field Experience

All programs specifically required field experiences with ELL students with special needs; however, the length, depth, and scope of these experiences varied. For example, some programs provided trainees supervision by bilingual faculty (Grossman, 1992). Not all programs provided detailed information about how their trainees were supervised during field experiences. Preservice programs generally required a full semester of student teaching, with the exception of the program at San Jose State University. This program recruited bilingual teachers and special education teachers who were already employed in local public school districts. As such, their practicum experiences were embedded across courses.

Discussion

This study was designed to contribute to the emerging body of research focused on bilingual special education teacher preparation. Of central interest was the extent to which programs explicitly prepared teachers to successfully meet the complex needs of students identified as ELLs with disabilities. Overall, it is encouraging that bilingual special education has been identified as a priority area, as evidenced by federal policy and funding (United States Government Accountability Office, 2009). It is equally encouraging that many programs have embedded leading scholars' recommendations with respect to program design, in particular the inclusion of specific coursework on language acquisition and use of integrated rather than discrete bilingual and special education teacher preparation formats (Cochran-Smith & Dudley-Marling, 2012; Delgado, 2010; Gay, 2010; Rueda & Stillman, 2012; Villegas, 2012).

Despite these encouraging findings, the present study also illustrates the need for the field of bilingual special education to maintain its attention on a number of enduring concerns that were well described in the literature dating back to the 1980s (for example, Chavez, 1989; Trent & Artiles, 1998). These include an urgent need to clarify the professional competencies that should be expected of bilingual special education teachers (Gay, 2010; Townsend, 2002); increased inclusion of comprehensive coursework and field experiences in the context of formal teacher preparation, with specific emphasis on multicultural and bilingual training, sensitivity, and instructional approaches (Blanton et al., 2011; Gay, 2010; Villegas, 2012); and active recruitment of bilingual and ethnically diverse preservice K-12 teachers and teacher educators to disrupt and offset longstanding disproportionate representations of minorities in the teacher workforce (McCardle et al., 2005; Rueda & Stillman, 2012; Tyler et al., 2004). The importance of these interrelated issues is further strengthened by findings in the present study as well as reports that teachers continue to experience difficulty distinguishing between students' language learning versus disability influenced needs; creating learning environments that maximize all students' strengths, experiences, and learning histories; and including and communicating with students' families (Casey, Dunlap, Brister, Davidson, & Starrett, 2014; Ochoa, Brandon, Cadiero-Kaplan, & Ramírez, 2014; Paneque & Rodríguez, 2009; Rodríguez, 2009).

Conceptual Training Model

Eight programs (89%) reviewed in this study adopted an integrated model of teacher preparation, arguably the most effective training model (Baca & Amato, 1989; Lucas, Villegas, & Freedson-González, 2008). This might be taken as an improvement over earlier findings described in the 1982 report from the University of Colorado's Multilingual Special Education Program MUSEP, which indicated that 42% of the then existing 30 bilingual special education teacher preparation programs used an integrated model for the preparation of their trainees (Baca & Amato, 1989). Integrated models are built around the needs of ELLs with disabilities and corresponding teacher competencies to inform the development of courses and field experiences. As such, they result in "a new and unique body of knowledge" (Baca & Amato, 1989, p. 169). These models are characterized by combining competencies that reflect constructs and practices of bilingual, special, and multicultural education (Graves & McCarty, 2000). One example of a teacher preparation

program that followed an integrated model was one suggested by Rodríguez & Carrasquillo (1997). The program intertwined special education and bilingual education methodological foundations. It included the use of appropriate assessment procedures, the concept of culture as a core value, and extensive training in delivery of instruction in two languages.

In 2000, a report by the National Clearinghouse for Professions in Special Education indicated that there were only 15 teacher preparation programs in bilingual multicultural special education in the United States. Clearly the number of bilingual special education programs decreased from 1982 to 2000; however, Gallegos and McCarty (2000) noted that even with the introduction of new programs, others dissolve. This state of affairs results in a consistently small number of programs in bilingual special education. The field would benefit from a more accurate, updated national survey to determine (a) how many bilingual special education teacher preparation programs are currently available, (b) how many implement their program via an integrated training model, and (c) what other models are in use. To date, and based on this study's comprehensive search of the literature, no additional work has been published to advance further development of a conceptual framework for bilingual special education teacher preparation. Additionally, there was no update on the current number of integrated bilingual special education teacher preparation programs across the US.

Course Work on First and Second Language Acquisition

The critical role of first and second languages in the development of academic competence in ELLs has gained increased focus in prevailing scholarship on the needs of ELLs. Most notably, teachers require sufficient training and skill development in distinguishing learning and language differences as well as instructional practices that support second language acquisition (Hardin, Roach-Scott, & Peisner-Feinberg, 2007; Rodríguez & Carrasquillo, 1997; Zetlin et al., 2011). Four studies (44%) included in this review did not provide complete course sequences, thus it is unclear whether they required courses on first and second language acquisition and targeted methods courses. However, six programs explicitly included such information. This comports with recommendations encouraging native language development and incorporating culturally responsive teaching as these approaches are positively correlated with higher levels of English proficiency (Kushner 2008; Panequez & Rodríguez, 2009; Rodríguez, 2009).

National data show that approximately half of all ELLs receive content area instruction with significant native language support, and that ELLs with disabilities are less likely to receive instructional support in their native language (Artiles, Rueda, Salazar, & Higuera, 2005; Delgado, 2010; Paneque & Rodríguez, 2009). This warrants more focused attention and inquiry, in particular since "it is unlikely that students who have struggled to acquire academic skills in their dominant language will excel in their weaker language" (Kushner, 2008, p. 46). At minimum, bilingual special education teacher preparation programs need to ensure the inclusion of courses on first and second language acquisition.

Content Courses Taught in Languages Other Than English

One encouraging finding observed from two programs (Chavez, 1989; Grossman, 1992) was the requirement for bilingual special education content courses to be taught entirely in a language other than English, e.g., Spanish, Vietnamese. This approach allowed

the trainees to practice their receptive and expressive skills in the target language. While the literature supports the use of native languages during content area instruction for ELLs with disabilities, it is also critical to ensure that teachers present “comprehensible inputs” (Krashen, 1982) to ensure effective scaffolding of instruction for their ELLs (Paneque & Rodríguez, 2009; Rodríguez, 2009). These components are also consistent with studies focused on the efficacy of teachers who work with ELLs with disabilities (Paneque & Barbetta, 2006). In particular, Paneque (2004) found that teachers’ proficiency in the language of their students was positively correlated with high teacher efficacy. Another advantage of knowledge and fluency in the native language of ELLs is that teachers are able to communicate directly with families and parents.

Course Work on Culturally Responsive Teaching

Leading diversity educators and advocates have recommended for teacher preparation programs to include expanded coursework and training in culturally responsive teaching (CRT) pedagogy (Gay, 2002; Townsend, 2002). In broad terms, CRT pedagogy includes structured opportunities for preservice teachers to examine, expand, and learn about their own and others’ cultures, values, and beliefs; explicit instruction in strategies to identify and incorporate students’ diverse cultural experiences into the design of classroom environments and curriculum units; foundational and practical strategies related to bilingualism and the ways that first and second language learning and proficiency intersect and manifest; and an emphasis on the creation of inclusive additive language learning environments, which are built around thematic, cross-disciplinary units and student centered comprehensible inputs (Chu & García, 2014; Gay, 2002, 2010; Rueda & Stillman, 2012; Townsend, 2002; Villegas, 2012).

Six studies (67%) included in this review described at least one standalone course that was focused on multicultural topics. These courses reflected varied foci, such as Culture; Foundations of Multicultural and Bilingual Education; Curriculum, Methods, and Materials for Bilingual Multicultural Special Education; and Sociocultural Issues in Bilingual Multicultural Special Education. This is encouraging; however the scope and depth of these courses and their inclusion of critical CRT components and pedagogy was undeterminable given the limited course descriptions provided in the articles. It is therefore unclear whether trainees in these programs were comparably supported to examine their own beliefs, frames of reference, or what Townsend (2002) described as “alterable behaviors” (p. 729), or in the underlying skills needed to effectively design and implement culturally responsive instructional programs and supports for their ELLs with disabilities (Gay, 2002; Kushner, 2008; Rodríguez, 2009; Trent et al., 2008).

Field Experiences and Practicum

All nine programs included field experiences in classrooms for ELLs with disabilities. Also all programs designed course assignments that required trainees to interact with ELLs with disabilities. One program (11%; Grossman, 1992) explicitly provided trainee supervision by bilingual faculty. These experiences served to contextualize candidates’ application of pedagogical knowledge to classroom settings.

Trainee Issues

Issues related to the recruitment, support, and retention of ethnically and culturally diverse teacher trainees have represented challenges at the national level for decades. Although many of the trainees in these nine bilingual special education teacher preparation programs were from culturally and linguistically diverse backgrounds, only one program (Chavez, 1989) discussed the obstacles that bilingual candidates encountered more often than their Anglo counterparts. In this study the researcher noted that many factors could hinder bilingual candidates from entering the teaching profession. These included lack of financial resources, competing demands from work and family, unfamiliarity with university procedures, and a lack of proficiency in English reading and writing skills commensurate with those expected at the graduate level and/or to pass standardized state teacher licensure and credential exams.

Tyler et al. (2004) reported that individuals from CLD backgrounds experience high familial pressure to choose financially lucrative and prestigious professions rather than teaching. In addition, these same individuals are aggressively recruited by competing fields such as business, health, and life sciences, and are offered enticing financial incentives. As Chavez (1989) observed over twenty years ago, “the bilingual teacher pool has been said to be one that is understocked and overfished” (p. 132).

While seven programs (38%) provided candidates support in the form of tuition and stipends, this may not be sufficient for these candidates. That is, bilingual candidates appear to benefit from cohort models that include peer support and ongoing advisement meetings with faculty and school administration in addition to academic support in the form of tutorial programs, study, and test-taking workshops (e.g., Bay & López-Reyna, 1997; Chavez, 1989). Increased use of technology within course content and for alternative methods of assessment was also found to be effective in retaining diverse candidates in special education teacher preparation programs (Tyler, et al., 2004). Despite these supports, pervasive shortages of teacher candidates from culturally and linguistically diverse backgrounds remain a national challenge.

Implications of Federal Funding

Seven reviewed studies (78%) received federal funding to support their teacher preparation programs. This is consistent with earlier findings (Baca & Amato, 1989) and reflects programs' need for an infusion of varied support, including financial resources, in order to initiate new and innovative programs (Costa, McPhail, Smith, & Brisk, 2005; Townsend, 2002; Wolfberg et al., 2009). For example, one program indicated that courses were team taught by faculty with expertise in bilingual and special education; another program was able to offer courses that were team taught by general and special education faculty; and one other program was able to infuse bilingual special education courses into all traditional special education courses.

Structural supports that were described by these studies included the use of cohort models for student trainees both to support trainees' sense of community and facilitate administrative tasks related to scheduling and staffing courses. However, the studies did not consistently provide sufficient detail about the mechanisms and strategies that they used to recruit faculty with expertise in both bilingual and special education or support faculty to deliver new courses. As well, it is unclear whether faculty endorsement (i.e., “buy

in”) for these new programs was brokered. All of these elements have been described as critical for institutional level success and sustainability (Costa et al., 2005; Gay, 2002, 2010; Grossman, 1992; Rueda & Stillman, 2012; Villegas, 2012). As a result it is unclear whether these programs initiated the “difficult conversations” that Villegas and Gay (2010) described as crucial to address institutional level barriers that often thwart the development of comprehensive, collaborative teacher preparation programs such as those needed for bilingual special education teachers.

Limitations

The current literature review has a number of limitations. First, descriptions across the nine bilingual special education teacher preparation programs were not equally clear or detailed. Some studies included many more details than others. This lack of continuity across the studies constrains efforts to compare programs in depth. A second limitation relates to the scope of information garnered from the present review. Inclusion of studies or reports was restricted to those that contained quantitative descriptions and/or those published in peer-reviewed journals. Thus, it is possible that this review inadvertently excluded potentially useful and important reports that provided qualitative data descriptions and/or journal articles published in other venues.

Directions for Future Research

The most current data available indicate that there are fewer than 15 programs across the US that prepare teachers to work with bilingual students with special needs (Gallegos & McCarthy, 2000; Paneque & Barbeta, 2006). This represents a substantial challenge and concern for the field of bilingual special education, especially in light of changes in the overall demographics and educational needs of the nation’s public school student population (McCardle et al., 2005; Synder & Dillow, 2013).

There is an urgent need for more specific information about state mandated certification requirements for bilingual special educators across all 50 states. This could be accomplished through a national survey of all states since many have bilingual education certification requirements and all states have special education certification requirements. Information from such a survey would clarify the current state of bilingual special education and help clarify changes, if any, since Salend and Fradd’s 1985 survey that found that California was the only state which had established a formal certification for bilingual special education. With the demographic shifts in the US, we are hopeful that more states have mandated certification for bilingual special education.

Information is also needed to clarify states’ certification requirements as these vary greatly from state to state and may not sufficiently reflect the breadth and scope of competencies required for these specialists. For example, in the state of Texas, fully certified teachers can become certified to teach ELLs or in special education settings if they pass required state exams (Dykes, Gilliam, Neel, & Everling, 2012). Explicit inquiry is needed to clarify how many teachers are certified as bilingual special educators in the US. This could be accomplished by requiring states to report this as part of the Individuals with Disabilities Education Improvement Act (IDEA) Part C and Part B data reporting mandates (2004). However, it remains unclear whether teachers assigned to work with ELLs who

have special needs are in fact adequately skilled in these specialty areas (Baker et al., 2010; Holdheide et al., 2010; Salend & Fradd, 1985; Steele et al., 2010).

Finally, research is needed to clarify which practices have the strongest evidence base for effectively preparing teachers to meet students' diverse social, language, academic, and learning needs. To realize these goals, studies must explore current teacher preparation practices relative to teachers' employment outcomes, perceived effectiveness, and impacts on students' academic and other school outcomes. Longitudinal, descriptive, and exploratory studies are needed to address these questions.

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*Indicates program was reviewed for this article.