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TEACHER PREPARATION TO DELIVER INCLUSIVE SERVICES TO STUDENTS WITH DISABILITIES

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Improving Student Outcomes in
General and Special Education

Teacher Preparation to Deliver Inclusive Services to Students With Disabilities

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Overview

Teacher preparation to deliver inclusive services to students with disabilities is increasingly important because of changes in law and policy emphasizing student access to, and achievement in, the general education curriculum. Inclusion of students with disabilities in general education environments has a long history in special education law; however, recent developments have markedly enhanced the implementation of inclusive services as a means to improve the educational achievement and other outcomes of students with disabilities.

This Issue Paper presents a brief review of the legal and policy foundations and best professional practices for inclusive services. It also provides a discussion of key components of inclusive services that should be incorporated in teacher preparation at the preservice and inservice levels. In addition, it offers an Inclusive Services Innovation Configuration, which can be used to evaluate general and special education teacher preparation and professional development programs.

Legal and Policy Foundations: Least Restrictive Environment

The principle of least restrictive environment (LRE) was foundational in the landmark Education of All Handicapped Children Act (1975), which was reauthorized as the Individuals with Disabilities Education Act (IDEA) in 1991 and 1997, and then reauthorized as the Individuals with Disabilities Education Improvement Act in 2004. LRE has been defined in the implementing regulations since 1977 as follows:

> Each public agency must ensure that—
>
> i. To the maximum extent appropriate, children with disabilities, including children in public or private institutions or other care facilities, are educated with children who are nondisabled; and
>
> ii. Special classes, separate schooling, or other removal of children with disabilities from the regular educational environment occurs only if the nature or severity of the disability is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily. (IDEA, 2004, 34 C.F.R. 300.114[a][2])

The Office of Special Education Programs (OSEP, n.d., Table 2-2) defines three levels of participation in general education classrooms within local public school attendance centers: greater than or equal to 80 percent, 40 percent to 79 percent, and less than 40 percent of the school day in general education classrooms and environments.. In addition, five categories are recognized as settings where students with disabilities also may receive services (e.g., separate school, residential facility, parentally placed in private school, correctional facility, and home/hospital environment). The least restrictive of the OSEP placement categories is participation in the general education classroom for greater than or equal to 80 percent of the school day.

Currently, the percentage of students with disabilities included in general education settings for greater than or equal to 80 percent of the school day, ages 6–21 across all categories of students

with disabilities, varies from 78 percent in North Dakota to 10 percent in Virginia, with an unweighted average of 54 percent across states. Degrees of LRE vary significantly by disability category as well: higher (84 percent) in speech/language impairments and lower (16 percent) in mental retardation (OSEP, n.d., Table 2-2). It should be noted that placement of greater than or equal to 80 percent in a 6½-hour school day still permits instruction in a special education setting for approximately 75 minutes per day.

The LRE principle ensured greater emphasis on educational services in general education environments but did not guarantee a particular level of inclusion. *Inclusion* holds various meanings for policymakers, schools, teachers, parents, and students. Wikipedia (2008) defines inclusion as "a term that refers to the practice of educating students with special needs in regular classes for all or nearly all of the day instead of in special education classes." For some advocates of inclusive services, *full inclusion* means placement in the general education environment 100 percent of the school day. However, no legal mandate exists to impose a particular definition or level of inclusion for students with disabilities in general education settings and curricula.

LRE placement data shed light on the percentage of students with disabilities included in the general education classroom but provide little evidence on the type of curricular content (e.g., science versus music) and whether inclusion results in increased access to and progress in the general education curriculum. There is little or no experimental evidence to prove that inclusive services lead to improved achievement outcomes (Scruggs, Mastropieri, & McDuffie, 2007). Studies suggest that positive consequences associated with inclusion include the following:

- Better friendships and social skills (e.g., Stainback & Stainback, 1996; Strully & Strully, 1985; Vaughn, Elbaum, Schumm, & Hughes, 1998)
- Improved learning (e.g., Brinker & Thorpe, 1984; Cole, Waldron, & Majd, 2004; Staub & Hunt, 1993; Waldren & McLesky, 1998)
- Higher self-worth (e.g., Duvdevany, 2002; Helmstetter, Peck, & Giangreco, 1994; Staub, 1999)

Other reported consequences of inclusion include reduced social isolation (e.g., Bak, Cooper, Dobroth, & Siperstein, 1987; Gartner & Lipsky, 1987) and equivocal academic gain for students with disabilities (e.g., Staub & Peck, 1995; Zigmond et al., 1995).

Research on the instructional conditions in inclusive environments (e.g., Baker & Zigmond, 1995), teacher planning in inclusive classrooms (e.g., Schumm, Vaughn, Gordan, & Rothlein, 1994), and the attitudes of general and special education teachers (e.g., Scruggs & Mastropieri, 1996) has generally indicated a lack of expertise and training for general and special education teachers, insufficient resources, inadequate shared planning time, and the absence of administrative support as the primary barriers to inclusive efforts (e.g., King & Youngs, 2003; Scruggs & Mastropieri, 1996; Scruggs et al., 2007).

Research findings to date offer no conclusive answers regarding the best profile of placement options (e.g., Gable & Hendrickson, 2000; Madden & Slavin, 1983). Students with high incidence disabilities—such as specific learning disabilities, emotional disturbance, other health-

impaired learning, and mild mental retardation—do not achieve significantly better in more restrictive settings such as special classes than they would if they remained in general education without special education services (Forness, Kavale, Blum, & Lloyd, 1997; Kavale, 2007). Although research on this question is complex, further empirical evidence is needed to guide inclusion efforts.

Recent IDEA Reauthorizations

The 1997 reauthorization of IDEA added important new requirements concerning the participation of students with disabilities in the general education curriculum and high-stakes state assessment systems. IDEA (2004) and the No Child Left Behind (NCLB) Act (2002) advanced improved results for students with disabilities by holding them to high standards and improved results on state standardized assessments. In addition, IDEA (2004) required OSEP to develop a set of outcome indicators to further enhance the accountability of state education agencies (SEAs) and local education agencies (LEAs) for improved results with students with disabilities. The current outcome indicators, which are available through the *Part B State Performance Plan and Annual Performance Report: Indicator Measurement Table* (U.S. Department of Education, 2007) include specific provisions regarding improvement of the SEA and LEA LRE profile toward greater inclusion and higher success rates on state high-stakes tests.

In short, inclusive services are essential to meeting several of the OSEP outcome indicators. The obvious challenge to SEAs and LEAs is to determine ways for students with disabilities to acquire and master the general education curriculum standards reflected in high-stakes state assessments. The obvious answer for the overwhelming majority of students with disabilities is to be involved directly in the general education classroom where the general education curriculum is delivered to all students. Inclusion services today—including those indicated in the Inclusive Services Innovation Configuration presented in the Appendix—are driven by federal LRE policy and outcome indicators and are designed for best professional practices conceptions.

Teacher Preparation and Inclusive Services

Attempts to inform general educators on issues pertaining to special education have generally involved a single, required, introductory-level special education course (Turner, 2003). Such courses usually provided information concerning legal requirements and eligibility classification regarding the 13 categories of disability (Winn & Blanton, 2005) but often did not provide information on successful instructional strategies for students with disabilities. Likewise, special education teacher candidates' coursework focused on diverse instructional strategies and means to accommodate exceptional learners but provided little general curriculum content knowledge (Pugach & Warger, 1995; Winn & Blanton, 2005). Together, these circumstances may have hindered the capacity for general and special education teachers to work cooperatively in inclusive environments.

Separate general and special education teacher preparation programs and services contribute to the barriers experienced with inclusion (Winn & Blanton, 2005). A few general and special education teacher preparation programs are unifying the training of general and special educators through overlapping courses and field experiences (e.g., Brownell, Ross, Colon, & McCallum,

2005; Ross, Stafford, Church-Pupke, & Bondy, 2006; Van Laarhoven et al., 2006). However, relatively few studies or examples of inclusive teacher preparation programs exist (e.g., Blanton, Griffin, Winn, & Pugach, 1997; Griffin, Jones, & Kilgore, 2007).

Brownell et al. (2005) found that teacher preparation programs that integrated coursework content into field experiences promoted better skill development for beginning teachers. Likewise, OSEP's Study of Personnel Needs in Special Education (SPeNSE) (Westat, 2000) revealed that beginning teachers with more weeks of student teaching rated their preservice programs as *good* or *exceptional*, and general education teachers reported learning best when provided multiple experiences for working with experienced teachers (e.g., Griffin et al., 2007; Hamre & Oyler, 2004; Henning & Mitchell, 2002). Several teacher preparation programs have explored the use of combined general and special education cohorts. Results within these programs suggest a positive influence on the willingness, knowledge, and skills of general and special education teacher candidates (Ross et al., 2006; Van Laarhoven et al., 2006).

Improved integration of students with disabilities into the general education classroom is challenging. Physical presence alone does not lead automatically to effective participation and improved achievement. Genuine access and improved achievement are largely dependent on the relevant competencies of both the general and special education teachers. The availability of highly qualified teachers with broad competencies to offer diverse instructional strategies is essential to improved results in inclusive services. Improved teacher preparation programs and professional development activities are necessary for realizing the goals of inclusive services—specifically, improving results for students with disabilities.

Innovation Configuration for Inclusive Services

This Issue Paper presents an Inclusive Services Innovation Configuration that can be used to evaluate general and special education teacher preparation and professional development programs. It appears in the Appendix.

Innovation configurations have been used for at least 30 years in the development and implementation of educational innovations and methodologies (Hall & Hord, 1987; Roy & Hord, 2004). They most often have been used as professional development tools to guide implementation of an innovation within a school and to facilitate the change process. Innovation configurations also have provided a form of self-assessment and reflection and can be used in program evaluation as a means to determine the degree to which educational policies are implemented within coursework and supervised field experiences.

Innovation configurations typically are established through tables that have two dimensions: one specifying the key principles, and the other specifying different levels of implementation (Hall & Hord, 1987; Roy & Hord, 2004). The *essential components* of the innovation or program are listed in the rows of the table's far-left column, along with descriptors and examples to guide application of the criteria to program coursework, standards, and classroom practice. The second dimension is the *degree of implementation*. In the top row of the table, several levels of implementation are defined. For example, no mention of the essential component is the lowest

level of implementation and might be assigned a score of a zero. Increasing levels of implementation are usually assigned progressively higher scores.

The innovation configuration described in this Issue Paper is designed to improve teacher preparation and professional development, which, in turn, will lead to improved achievement for students with disabilities in the general education curriculum. Use of this innovation configuration to evaluate teacher education programs provides a broad overview of the competencies taught and practiced within general and special education teacher preparation programs. Use of this innovation configuration advances collaborative practices and encourages an examination of the similarities, differences, and gaps among programs. Innovation configuration results provide credible information on current practices and can be used as the basis or rationale for policy and program changes in teacher preparation programs at the state and university levels (e.g, developing general and special education cohort teacher preparation programs, requiring dual certification).

Components of the Inclusive Services Innovation Configuration

The essential components of the Inclusive Services Innovation Configuration are as follows:

- Inclusion foundations
- Inclusive services models
- Collaborative teaming/planning
- Collaborative skills
- Access to the general education curriculum: universal design for learning
- Access to the general education curriculum: differentiated instruction
- Learning strategies, classroom organization and behavior management, and scientifically based reading instruction
- Family involvement
- Student self-determination and collaboration

These nine components are based on the extensive literature addressing the integration of students with disabilities in the general classroom setting (e.g., Brownell et al., 2005; Choate, 2000b; Friend & Bursuck, 2006; Scruggs et al., 2007; U.S. Department of Education, 2005). The following sections briefly describe the essential components in the Inclusive Practices Innovation Configuration. General and special education teacher preparation should address these nine components. Preparation in these components will establish the foundations for greater participation by students with disabilities in the general education curriculum and improved results on high-stakes tests.

Inclusion Foundations

Administrators and general and special education teachers should know the major legal and policy foundations for inclusive practices. Deep knowledge of the LRE principle, civil rights conceptions of inclusion, and prior research on inclusion are essential areas of background knowledge.

Inclusive Services Models

Various models of inclusive teaching have been described, including the following: (1) the consultant model in which the special educator consults with the general educator in areas pertaining to curriculum adaptation, instructional accommodations, remediation for struggling students, and assessment accommodations and/or modifications; (2) the coaching model in which the general and special educators take turns coaching students in those areas of the curriculum and instruction in which they have more knowledge and expertise; and (3) the collaborative teaming model in which the special and general educator share equal responsibility for the lesson design, implementation, and assessment of instruction (Austin, 2001; Fishbaugh, 1997; Friend & Bursuck, 2006; Pugach & Seidl, 1995; Scruggs et al., 2007).

Choices among inclusion models should be guided by several factors, including student abilities, needs, teacher philosophy, knowledge, expertise, collaboration time, and administrative support (Cole, Horvath, Chapman, Deschenes, Ebeling, & Sprague, 2000; Friend & Bursuck, 2006; Snell & Janney, 2000). All factors are integral to the decision-making process and are enormously variable depending on the student, school climate, and educational personnel (Gee, 2002; Snell & Janney, 2000).

General and special education teacher candidates' exposure to a variety of inclusive services models influences their willingness and readiness to implement inclusive practices (McLesky, Waldren, So, Swanson, & Loveland, 2001; Van Laarhoven et al., 2006). Moreover, teacher candidates with basic knowledge of and experience in alternative inclusive services models are better equipped to participate in designing individualized education programs (IEPs) that foster better integration of students with disabilities into the general education curriculum, standards, and assessments. Teacher preparation programs and professional development that provide both the knowledge and experience in various service delivery models equip teacher candidates with the background knowledge and experience to deliver effective inclusive services.

Collaborative Teaming/Planning and Collaborative Skills

Historically, teaching has been a practice in which teachers spent most of their day alone in a classroom, left to independently teach subject matter and manage discipline issues with little opportunity to work with their colleagues (e.g., Friend & Bursuck, 2006; Gable & Hendrickson, 2000; Smith, Doll, & Gengel, 1998). This isolation has changed somewhat over the years as professional educators have acknowledged the need to work in partnership with colleagues in order to meet the needs of diverse students (Cole et al., 2000). The national and state high standards and accountability requirements are driving the growth of collaborative practices within the public schools (Austin, 2001).

Collaboration is not new to special education. Yet, collaboration in inclusive classrooms adds complexity to educational programs and teachers' roles. Simply "getting along" and sharing ideas within an IEP meeting are but small first steps toward the level of collaboration required in inclusive teaching models. The variation in teaching roles and responsibilities required in collaborative arrangements often are uncharted territories for both general and special education teachers. Both are uncertain about what role they should play within the classroom. Special education teachers may feel like aides in the classroom, and general education teachers may not be comfortable sharing instructional responsibilities. Whatever the circumstances, collaborative teaching arrangements require a belief that all students can learn, coupled with competent communication and problem-solving skills (Friend & Bursuck, 2006; Gable & Hendrickson, 2000).

A growing body of literature recommends the collaborative teaming model as the preferred model in inclusive classrooms because it capitalizes best on the talents and skills of the participating teachers (e.g., Boudah, Schumacher, & Deschler, 1997; King-Sears, 1995; Miller & Savage, 1995; Minke, Bear, Deemer & Griffin, 1996; Pugach & Seidl, 1995; Villa, Thousand, & Chapple, 1996; Walther-Thomas, Bryant, & Land, 1996). Best practices regarding the

characteristics of effective collaborative teams include congruent goals and philosophies, the ability to recognize other contributions as equal, the ability to work as equal partners with shared responsibility and accountability, and pooling/sharing resources (Friend & Bursuck, 2006; Snell & Janney, 2000).

Administrators are pivotal in the implementation and maintenance of effective collaboration, and they play a key role in nurturing a supportive inclusive environment (Bateman & Bateman, 2002; Friend & Bursuck, 2006; Lipsky & Gartner, 1997; Snell & Janney, 2000; Wood, 1998). Administrators must provide ample training opportunities for both educators and related services personnel and the resources and support to establish shared planning times (Bateman & Bateman, 2002; Friend & Bursuck, 2006; Snell & Janney, 2000). A high level of collaboration requires a significant amount of trust between partners and an open, flexible approach in lesson planning and implementation of instructional strategies. Planning time requires a structure in which the teachers' roles and responsibilities are identified and negotiated along with daily management and instructional decisions (Cole et al., 2000; Friend & Bursuck, 2006; Wood, 1998).

In order to maintain collaboration skills and collaborative teaming, instruction and coaching are required (e.g., Friend & Bursuck, 2006; Gable, Korinek, McLaughlin, 2000; Snell & Janney, 2000). Effective collaboration grows and evolves with time and experience (e.g., Friend & Bursuck, 2006). According to Waters and Burcroff (2007), graduates of teacher education programs that "practice what they preach" (p. 306) and provide general and special education teacher candidates opportunities to see and experience collaboration in practice are better equipped to engage in collaborative teaching models.

Access to the General Education Curriculum: Universal Design for Learning and Differentiated Instruction

Competencies with diverse instructional strategies are foundational to successful inclusion and a key component of the Inclusive Practices Innovation Configuration. The student population in current classrooms has changed considerably over the past several decades (Coulter, 2007). Some parts of increased diversity are readily apparent, such as students' race or ethnicity. Other less obvious but important sources of diversity also exist. Diversity in ways that students learn and retain information and illustrate their knowledge can be just as varied as the students themselves. Teaching all students in the same way no longer meets the rigorous academic demands of today's education reform (Hitchcock, Meyer, Rose, & Jackson, 2002). Successful engagement of diverse students requires diverse instructional methodology, curriculum materials, and assessment methods (Bateman & Bateman, 2002; Hitchcock et al., 2002).

Access, participation, and progress in the general education curriculum for students with disabilities calls for an examination of the curriculum intended for the general population (Hitchcock et al., 2002). Insights gained from inclusion efforts throughout the nation have identified inflexible curricular materials and instructional methods as barriers to higher achievement by students with disabilities (e.g., Hall, Strangman, & Meyer, 2003; Hitchcock et al., 2002). The Center for Applied Special Technology (CAST) applied the universal design concept, originated in the architecture field, to curriculum materials and instructional methods as

a means to provide equitable access (Dolan & Hall, 2001; Hitchcock et al., 2002; Meyer & Rose, 1998; Pisha & Coyne, 2001; Rose, 2001; Rose & Dolan, 2000; Rose & Meyer, 2002). CAST's (2008) *Universal Design for Learning* (UDL) framework in curriculum design establishes challenging, yet attainable goals for all students and provides flexibility in the curriculum materials, instruction, and assessment methods (Hitchcock et al., 2002; Rose & Meyer, 2002). With UDL, the critical content to be learned must be identified and multiple, flexible methods for presenting concepts, engaging students, and means of expressing knowledge provided (Hitchcock et al., 2002; Hall et al., 2003). Essential to UDL is the use of technology as an accommodation (e.g., text-to-speech software, speech-recognition software) and as a tool to modify curriculum (e.g., digitized text) (Hall et al., 2003).

Accessible curricula establish greater learning opportunities for students with disabilities. Accessibility alone, however, may not foster student engagement or drive academic achievement. Instructional strategies also require diversification in order to effectively engage all students. Tomlinson (1999; 2001) has written extensively on the subject of differentiated instruction, distinguishing three elements of instruction that can be differentiated: content, process, and product. Differentiated instruction is designed to engage all students in learning by altering the process by which students are taught and allowing choices in the content and product (Choate, 2000a).

Alteration in content allows for student choice and flexibility in the content being taught and the materials and activities being used (Choate, 2000a; Tomlinson, 2001). Modifications in instructional processes allow flexibility in activities that reinforce the students' understanding of key concepts (Choate, 2000a; Tomlinson, 2001). Choice in the product allows for a multitude of avenues in which students can demonstrate their knowledge as a result of instruction (Choate, 2000a; Tomlinson, 2000). Teachers modify their instruction according to the students' readiness, interest, and learning profile (Choate, 2000a; Tomlinson, 2001). When provided with choices, students are able to learn through their strengths and are more likely to then take responsibility for their own learning (Dunn, DeBello, Brennan, Krimsky, & Murrain, 1981).

Both general and special education teacher candidates need to have a wealth of knowledge about curriculum and instruction for successful inclusion of students with disabilities in the general education classroom (Smith et al., 1998; Winn & Blanton, 2005). The principles associated with UDL, when implemented in the formulation and implementation of the curriculum through differentiated instruction to meet student needs, improve access and progress in the general education curriculum for students with disabilities (e.g., Csikszentmihalyi, Rathunde, & Whalen, 1993; Hitchcock et al., 2002; Kulik & Kulik, 1991; Lou, Abrami, Spence, Poulsen, Chambers, & d'Appollonia, 1996; Tomlinson, 2000; Tomlinson, Brighton, Herberg, Callahan, Moon, & Brimijoin, 2003). General and special education teacher preparation programs and ongoing professional development opportunities that reinforce the concepts associated with UDL and differentiated instruction equip teachers with the skills necessary to promote access to and progress in the general education curriculum for all students.

Learning Strategies, Classroom Organization and Behavior Management, and Scientifically Based Reading Instruction

Teacher preparation in the use of evidence-based instructional strategies—including learning strategies, classroom organization and behavior management, and scientifically based reading instruction—are integral to the success of students with disabilities in the general education classroom. Teachers skilled in scientifically based reading instruction and classroom organization and behavior management have the competencies to establish classrooms conducive to learning and improved results in reading. Innovation configurations in classroom organization and behavior management and in scientifically based reading instruction are incorporated by reference in the Inclusive Practices Innovation Configuration. (See the Classroom Organization and Behavior Management Innovation Configuration in the National Comprehensive Center for Teacher Quality Issue Paper titled *Effective Classroom Management: Teacher Preparation and Professional Development* [Oliver & Reschly, 2007]; see also the Scientifically Based Reading Instruction Innovation Configuration in the TQ Research & Policy Brief titled *Barriers to the Preparation of Highly Qualified Teachers in Reading* [Smartt & Reschly, 2007].) Further development of innovation configurations relating to effective instructional strategies and progress monitoring with formative evaluation are under way.

Family Involvement

Family Involvement is a critical component of the Inclusive Services Innovation Configuration. Parent and family advocates for students with disabilities sometimes present differing inclusion views. Advocates for persons with significant cognitive disabilities and multiple impairments generally have promoted full-time inclusion (that is, 100 percent) in natural environments, citing social and academic benefits (Scruggs et al., 2007). In contrast, advocates for students with specific learning disabilities are less convinced of the effectiveness and desirability of full inclusion services, pointing to evidence indicating an absence of differentiated instruction and accommodations in the general education classroom (e.g., Crockett, Myers, Griffin, & Hollandsworth, 2007; Dyson, 2007; Tankersley, Niesz, Cook, & Woods, 2007; Vaughn & Schumm, 1995) and typically seek a combination of pullout tutoring and participation in the general education classroom.

Informed and supportive students and families often are powerful advocates for inclusive services (Friend & Bursuck, 2006; Wood, 1998). The failure to anticipate student and parent concerns, however, can undermine inclusion efforts. Sharing consistent and frequent information on the purposes and benefits of inclusion and involving the students and families during the development and implementation of inclusion plans facilitates buy-in and secures support (e.g., Choate, 2000b; Friend & Bursuck, 2006; Karten, 2005; Smith et al., 1998). Moreover, offering data regarding student academic and social outcomes, in addition to family and teacher inclusion-satisfaction information, can be very persuasive and affirming (Gable et al., 2000). Teacher preparation programs and professional development activities that provide teacher candidates with opportunities to acquire and practice family-involvement strategies facilitate support for inclusive practices.

Student Self-Determination and Collaboration

No one has a greater interest in the success of inclusive efforts than the students with disabilities themselves. Students who are actively involved and engaged in planning and evaluating their learning experiences are more likely to improve academic achievement (Choate, 2000b). The independence of students with disabilities, in terms of effort and task persistence, is essential in an effective inclusive services environment and even more critical as these students exit school and move on to postsecondary education and the world of work (Choate, 2000b; Friend & Bursuck, 2006; Gee, 2002). Unfortunately, the literature and research have suggested that students with disabilities often lack an awareness of their strengths and weaknesses (Brinckerhoff, 1994; Scanlon & Mellard, 2002) as well as skills in self-determination and advocacy (Durlack, Rose, & Bursuck, 1994; Field, 1996; Janiga & Costenbader, 2002). These competencies cannot be acquired to a high level through a single lesson or unit; rather, they must be acquired through multiple opportunities to apply relevant skills with constructive feedback (Choate, 2000b). General and special education teacher preparation programs and professional development activities that recognize these needs and provide learning opportunities for general and special education teachers and teacher candidates to observe and practice explicit instructional techniques in self-monitoring and self-management promote student self-determination in inclusive environments (Choate, 2000b; Friend & Bursuck, 2006).

Recommendations

This section discusses the recommendations for improving teacher preparation and professional development in serving students with disabilities in the general education classroom. The recommendations are organized around the following four themes:

1. **General and special education teachers and teacher candidates should have ample opportunities to learn instructional strategies that promote student access to and progress in the general education curriculum** (e.g., Bateman & Bateman, 2002; Friend & Bursuck, 2006; Smith et al., 1998). This recommendation requires attention to the following:

   - Provide all teachers (general and special education) with a background in content knowledge and specialized instructional strategies to meet the needs of diverse learners (Bateman & Bateman, 2002; Friend & Bursuck, 2006; Griffin, Otis-Wilborn, & Winn, 2005).
   - Integrate the concepts of UDL and differentiated instruction in both general and special education methodology coursework (Friend & Bursuck, 2006).
   - Ensure that teachers have ample opportunities to see, experience, and participate in guided practice with feedback on instructional strategies proven to be effective in inclusive environments. Such strategies include UDL, differentiated instruction, scientifically based instructional strategies, learning strategies, and classroom organization and behavior management (Bateman & Bateman, 2002; Choate, 2000b; Friend & Bursuck, 2006; Kozleski, Pugach, & Yinger, 2002; Oliver & Reschly, 2007; Smartt & Reschly, 2007; Smith et al., 1998).
   - Analyze and revise content in university courses to appropriately reflect the principles of inclusive practices (Paul, Epanchin, Rosselli, Duchnowski, & Cranston-Gingras, 2002).
   - Ensure opportunities for sustained and continued learning regarding inclusive practices (Kozleski et al., 2002; Smith et al., 1998).

2. **General and special education teachers and teacher candidates must have multiple opportunities to work together in real classrooms to learn and apply critical competencies specified in the Inclusive Practices Innovation Configuration** (e.g., Friend & Bursuck, 2006; Smith et al., 1998). This recommendation requires attention to the following:

   - Create experiences for general and special education teachers and teacher candidates that shift from traditional to collaborative roles with shared responsibility for planning, instructing, and assessing student performance (Friend & Bursuck, 2006; Gable et al., 2000; Griffin et al., 2005; Smith et al., 1998; Snell & Janney, 2000; Winn & Blanton, 2005).
   - Develop partnerships with schools to provide opportunities for both general and special education teachers to see and experience alternative service models, including differing levels of inclusive practices (Smith et al., 1998).

- Develop university-school partnerships to ensure that higher education faculty have opportunities to observe the daily decisions, interactions, frustrations, and experiences faced by teachers implementing inclusive practices and can incorporate these experiences in teacher preparation programs (Kozleski et al., 2002; Paul, et al., 2002; Smith et al., 1998).
- Restructure general and special education teacher preparation programs so that general and special education teacher candidates are provided opportunities to participate in and learn about inclusive practices with diverse students (Brownell et al., 2005; Miller & Stayton, 2006; Paul et al., 2002; Ross et al., 2006; Turner, 2003; Van Laarhoven et al., 2006).
- Establish field experiences in which teacher candidates participate with feedback in situations where inclusive practices and collaboration occur routinely (Kozleski et al., 2002).
- Establish opportunities for general and special education teachers and teacher candidates to reflect on their experiences, share ideas, and draw conclusions about effective and ineffective inclusive practices (Brownell et al., 2005).

3. **General and special education teachers and teacher candidates must acquire competences in working with students and families to promote inclusive practices and improved academic and social outcomes** (Smith et al., 1998). This recommendation requires attention to the following:
   - Ensure that general and special education teachers and teacher candidates acquire information and competencies with successful family involvement strategies specific to inclusion, accompanied by supervised practice in implementing these strategies (e.g., Friend & Bursuck, 2006; Smith et al., 1998).
   - Ensure learning opportunities for general and special education teachers and teacher candidates to observe and practice explicit instructional strategies that facilitate student involvement in the planning, learning, and evaluation of the learning experience (Choate, 2000b; Friend & Bursuck, 2006; Gee, 2002).

4. **Current and future school administrators must acquire knowledge and competencies related to leading school programs that implement inclusive practices for students with disabilities.** This recommendation requires attention to the following:
   - Ensure that practicing and prospective administrators acquire the background knowledge and competencies that facilitate administrative support for inclusive programs and practices (Bateman & Bateman, 2002; Snell & Janney, 2000).
   - Establish administrative licensing standards that include requirements regarding successful inclusion practices and supervised experiences applying the leadership strategies necessary to implement inclusive services successfully.
   - Ensure administrator knowledge of and competencies with evaluation of teachers implementing inclusive services.
   - Provide practicing and prospective administrators with information on the change process and the stages of systemic change (Anderson, 1993).

Conclusion

General and special education teacher preparation programs and professional development activities can increase access to and progress in the general education curriculum for students with disabilities by providing teachers with content and guided practice with feedback related to the components of the Inclusive Services Innovation Configuration. Effective inclusion of students with disabilities requires a comprehensive approach, including general and special education teachers' and teacher candidates' knowledge of inclusion and diverse instructional strategies, collaborative skills and experience for general and special education teachers and teacher candidates, competencies with promoting student and family involvement, and leadership skills required to implement and sustain inclusive efforts.

Use of the Inclusive Services Innovation Configuration (see Appendix) can assist general and special education teacher-preparation programs in identifying gaps in the essential inclusive services components and level of implementation in their programs. The innovation configuration framework should be applied to a program of study in a teacher preparation program as opposed to a single course.

Examination and modification of general and special education teacher preparation programs and professional development activities by way of the Inclusive Services Innovation Configuration is a creditable step toward improving access to and progress in the general education curriculum for students with disabilities. Development of state program approval and requirements consistent with inclusive practices will produce further support for inclusive services. Further research exploring the links between the innovation configuration components, general and special education teacher preparation and professional development, and student achievement will provide validation and the basis for revisions to the Inclusive Services Innovation Configuration.

This Issue Paper highlights best-practice considerations to establish joint general and special education efforts to improve the access and achievement of students with disabilities in the general education curriculum. These combined efforts hold promise for improving the achievement of students with disabilities and for realizing the academic expectations of NCLB and IDEA.

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Appendix. Inclusive Services Innovation Configuration

Instructions: *Place an X under the appropriate variation implementation score for each course syllabus that meets the criteria specified from 0 to 4. Then indicate the number of the code in the Rating column. Score and rate each item separately.*

Essential Components	Code = 0	Code = 1	Code = 2	Code = 3	Code = 4	Rating
Descriptors and/or examples are listed below each of the components.	**No evidence** that the concept is included in the class syllabus.	Syllabus **mentions concept** by listing it (e.g., classroom environment, structure).	Syllabus mentions concept and required **readings, tests, and/or quizzes.**	Syllabus mentions concept in class, with readings, tests, and **assignments, projects for application.** • Observations • Lesson plans • Clsrm. demon. • Journal response	Syllabus mentions concept in class, with readings, tests, assignments, projects, and **teaching with application and feedback.** • Fieldwork (practicum) • Tutoring	Rate each item as the number of the highest variation receiving an X under it.
Inclusion Foundations • Legal mandates a litigation. • History/research. • Social & moral underpinnings. • Identified barriers/successful inclusive strategies. • Participation in general education curriculum and assessments.						**Rating**:
Inclusive Services Models • Educating students with disabilities in the general education setting. • Alternative service delivery models (resource, consultant, teaming and collaborative, co-teaching). • Strategies to select an approach. • Characteristics of inclusion: ▪ School climates ▪ Classrooms ▪ Instructional programs						**Rating**:
Collaborative Teaming/Planning • Teaming involvement in the prereferral, referral, & IEP process. • Shared responsibility for the design, implementation, and assessment of instruction. • Roles and responsibilities identified. • Identification of available resources. • Problem solving/data-based decision making. • Evaluation of outcomes.						**Rating**:
Collaborative Skills • Foster staff interactions. • Trust-building strategies. • Conflict resolution/problem solving.						**Rating**:
Column Subtotals:						

Essential Components	Code = 0	Code = 1	Code = 2	Code = 3	Code = 4	Rating
Access to the General Education Curriculum: Universal Design for Learning • Familiarity with the scope & sequence of the content & standards. • Determining curricular goals for all students. • Linking IEP goals & objectives to general curriculum. • Technological applications: ▪ Computer-assisted instruction ▪ Technology as a learning accommodation (e.g., text-to-speech software) ▪ Technology as a tool to modify instruction ▪ Technology as a resource for project-based learning ▪ Determining assistive technology needs • Adaptations to input, output, size, time, difficulty, level of support, degree of participation.						**Rating**:
Access to the General Education Curriculum: Differentiated Instruction • Knowing your students (interest, prior knowledge, strategic abilities, & acquired skills). • Determining curricular modifications (content, process, and/or products). • Linking IEP goals & objectives to general curriculum. • Adaptations to input, output, size, time, difficulty, level of support, degree of participation.						**Rating:**
Column Subtotals:						

Essential Components	Code = 0	Code = 1	Code = 2	Code = 3	Code = 4	Rating
Learning Strategies **Classroom Organization and Behavior Management** **Scientifically Based Reading Instruction**	Refer to associated innovation configurations in *Effective Classroom Management: Teacher Preparation and Professional Development* (Oliver & Reschly, 2007) and *Barriers to the Preparation of Highly Qualified Teachers in Reading* (Smartt & Reschly, 2007).					
Family Involvement • Role of the family in the collaborative process (e.g. IEP development). • Developing partnerships with families. • Communication skills for working with families. • Assisting diverse families.						**Rating:**
Student Self-Determination & Collaboration • Classroom is student centered and students are partners in learning. • Explicit instructional techniques for fostering student independence and self-determination (student self-monitoring & management skills). • Explicit instructional techniques for fostering positive peer relationships and self-advocacy.						**Rating:**
Column Subtotals:						
Column Totals (pp. 1–3):						