What do Special Educators Need to Know and Be Prepared to Do for Inclusive Schooling to Work?

Douglas Fisher, Nancy Frey, & Jacqueline Thousand

Abstract: This article focuses on the role of the special educator in an inclusive school. The authors review the development of a special education knowledge base and specific schools' change to an inclusive service delivery model. They then use that information to suggest that special educators' roles include instruction, assessment, curriculum, leadership, and record keeping.

Twenty-five years of special education research and practice has served the profession well. The body of knowledge constructed since Public Law 94-142 was passed has resulted in a deeper understanding of students with disabilities and the systems that serve, or fail to serve them. Prior to 1975, many students with significant disabilities either did not receive a public education or received their entire school experience segregated from their peers without disabilities. Today, in many places across the country and world, students with disabilities are participating in integrated academic, social, and community settings that were unimagined just 25 years ago (Cuckle, 1997; Ellger-Rutgardi, 1995; McLeskey, Henry, & Axelrod, 1999). Teacher education over these 25 years has also changed and must continue to keep pace as the profession changes. This article summarizes the history of education for students with significant disabilities, examines the current needs of inclusive schools, and then addresses questions commonly asked regarding the generalist perspective of special education teacher training. Although of equal importance, this article does not specifically address the preservice and inservice training needs of general educators (see Beloin & Peterson, 1998). However, we believe that many of the concepts in this article do apply to the education of all teachers.

The Development of a Professional Knowledge Base

Several trends in the education of students with significant disabilities have influenced the training of teachers, past and present (see also Pumpian, 1999). Early on, the principle of normalization (Wolfensberger, 1972) guided efforts to provide "training" to individuals with significant disabilities, many of who lived in institutions. Normalization efforts resulted in large numbers of people with disabilities learning basic skills in self-care, socialization, and recreation. In addition, normalization efforts resulted in a deinstitutionalization movement and many more students with significant disabilities accessing public education.

The Least Restrictive Environment (LRE) provision of PL 94-142 was heavily influenced by Wolfensberger and others who had been building and criticizing special education service delivery models of the time.
The LRE provision clearly follows the logic of the Cascade (Deno, 1970)—placement options should all be chosen and designed to maximize integration. However, it was not until Brown, Nietupski, and Hamre-Nietupski (1976) introduced the Criterion of Ultimate Functioning that supports and services for students with significant disabilities were substantially altered. Teachers began teaching students with significant disabilities based on expectations of age-appropriate activities in natural environments. Teachers began learning how to analyze community environments and how to provide instruction within those environments.

As with LRE and Normalization, the principle of partial participation (Baumgart et al., 1982) reinforced the notion that students with disabilities should have access to important activities, even if independent skill mastery was questioned. The principle of partial participation was unique in that it required teachers to develop competencies in creating adaptations to activities and environments for students with disabilities. As students gained access to new activities and environments, another tenet was adopted: Community-based instruction (CBI) (Falvey, 1986). CBI established a precedent for students with disabilities to be educated outside of the special education classroom, in natural environments where skills could be used. However, the prevalent methods of staffing during this time were regional and cluster programs that served students with low-incidence disabilities, especially those with significant cognitive disabilities, in programs far from their homes. These concentrated pockets of students with disabilities often resulted in community-based instruction that more closely resembled field trips. Instruction in natural environments was foiled by the unnatural proportions of students with disabilities in the environment. Although transportation costs increased due to the long distances created by the location of these classes, districts and states accepted the practice because it complied with legal requirements to educate all students.

As functional and community-based curricula continued, new opportunities for students with significant disabilities to learn in general education increased. Coupled with the emphasis on neighborhood school placement (e.g., Brown et al., 1989), more students with significant disabilities were being educated in regular schools and general education classrooms than ever before. As a result, many of the regional or cluster programs were decentralized and classes for students with significant disabilities were opened on elementary and high school campuses.

With a new emphasis on neighborhood schools and inclusive education, there were frequently not enough students with significant disabilities to hire a full-time special teacher (NASBE, 1995). Thus, schools often relied on itinerant (traveling) special educators to provide supports and services to students with significant disabilities. A considerable problem in this staffing model was the diminished ability for the special educator to establish relationships with students and to collaborate with general educators. Precious time that could have been spent on these critical facets was instead used for travel.

Given the increased focus on access for students with disabilities to core curriculum (e.g., Individuals with Disabilities Education Act [IDEA]), the federal funding initiatives on inclusive schools (e.g., the statewide systems change initiative), and the advocacy of parents, it seems reasonable to suggest that increasing numbers of students will attend their home school with support provided in general education classrooms. This has caused a dilemma for teacher educators. The environments, activities, and expectations for students with disabilities are changing. Teacher educators are asking how these changes impact the skills, knowledge, and attitudes of special educators in inclusive schools (Hutchinson & Martin, 1999). In other words, if students with significant disabilities are being educated in the general education classroom with a diverse group of peers (including students with learning disabilities, students who are gifted, and English language learners), what knowledge base will best serve their teachers? Our answer is based on several experiences, including the changes made at two schools with extensive experience with inclusive education.
Perspectives From Inclusive Schools

Clark Elementary School and Kennedy High School are examples of places where inclusive schooling practices have been established and sustained over an 8-year period of time (for detailed information see Fisher, Sax, & Grove, 2000; Rodifer, Castagnera, Fisher, & Sax, 1999). In each of these schools, the faculty faced a number of critical decisions about supports and services for students with disabilities. Both schools started their evolution toward inclusive practices with special education teachers who were responsible for students based on each student’s categorical label (learning disability, severe disability, deaf, etc.). Over the years, alternative support structures were proposed. The result, in both cases, was cross-categorical supports for students, with special educators joining the existing structures of governance for the school.

At the elementary school, many general education teachers were frustrated with the number of different adults coming in and out of their classrooms to provide support for students. As Ms. Katz said, “there are three different teachers coming in my classroom for three different kinds of kids. Why can’t we coordinate this?” Following a series of meetings, a cross-categorical support system was proposed for special education. Thus, special education teachers became responsible for all students with IEPs in specific grades, rather than all students with specific disability labels across grades K–5. Given their success with this change, the teachers at Clark decided to further integrate categorical programs. The result was support for students in the primary grades coordinated by Title 1 teachers and support for students in the upper grades coordinated by Special Education. All the teachers who did not have general education classroom assignments were then re-titled “Resource Teachers.” This eliminated the perception of difference between bilingual, Title 1, and special education teachers. However, it did not eliminate the perception of difference between general education and categorical teachers.

At the high school, a very similar conversation occurred. The general education teachers were frustrated with the number of adults who needed access to their classrooms. They appreciated the support, but not the fact that two different special education teachers may be asking them about their lesson plans. The special education teachers were frustrated with the number of content areas that they were required to master. Every special education teacher had to know the English, science, math, social studies, arts, and vocational curriculum in order to provide accommodations, modifications, and personal support. Over a series of planning retreats, the special education faculty met and re-conceptualized their service delivery system. They each assumed responsibility for a content area in the school. For example, Ms. Rodifer became the English department contact. She attended English department meetings, coordinated supports for the students with IEPs who were in English each term, and provided curriculum modifications for the English teachers.

Teachers from these two schools and others like them were provided time to meet and discuss the education of future special educators. The first task assigned to the group was to develop a list of job responsibilities for a special education teacher in an inclusive school. Their list, in Table 1, was organized into five categories: instruction, assessment, communication, leadership, and record keeping.

What, Then, are Some of the Skills, Knowledge, and Beliefs Required of All Teachers?

In the last decade considerable attention has been paid to the identification of the skills, knowledge and dispositions that enable all teachers to embrace and successfully implement inclusive educational practices (Ryndak, Jackson, & Billingsley, 1999–2000). For example, in a comprehensive review of practices that foster inclusive education, Udvari-Solner and Thousand (1995) state that “the innovative changes occurring in general education are the same kinds of changes required for effective inclusion” (p. 87). These initiatives include outcomes-based education (e.g., Spady & Marshall, 1991), multicultural education (e.g., Sleeter & Grant, 1994), Multiple Intelligences Theory (Gardner,
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<table>
<thead>
<tr>
<th>TABLE 1. The Role of the Special Educator in an Inclusive School</th>
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<tbody>
<tr>
<td>Instruction</td>
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<tr>
<td>* Instructing individual students</td>
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<tr>
<td>* Adapting materials and instruction</td>
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<td>* Providing small group instruction</td>
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<td>* Teaching the whole class</td>
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<td>* Monitoring students' academic work</td>
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<td>* Coordinating support for individual students (including medical and behavioral needs)</td>
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<tr>
<td>Assessment</td>
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<tr>
<td>* Grading students' performance</td>
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<td>* Developing appropriate exhibitions and demonstrations of student work</td>
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<td>* Administering educational tests</td>
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<td>Communication</td>
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<tr>
<td>* Attending planning meetings</td>
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<tr>
<td>* Communicating with parents and families</td>
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<td>* Attending problem solving meetings</td>
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<td>* Providing information about inclusion</td>
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<td>Leadership</td>
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<tr>
<td>* Training and supervising paraprofessionals</td>
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<td>* Coordinating peer tutors</td>
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<td>* Facilitating the use of related services professionals</td>
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<td>* Encouraging natural supports and friendships</td>
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<td>Record Keeping</td>
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<tr>
<td>* Developing the IEP</td>
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<tr>
<td>* Maintaining records of student performance</td>
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<tr>
<td>* Maintaining records of curriculum accommodations and modifications</td>
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1983), constructivist learning (e.g., Brooks & Brooks, 1993), interdisciplinary curriculum (e.g., Jacobs, 1997), service learning and community reference instruction (e.g., Kinsley & McPherson, 1995), authentic ways of assessing student learning (e.g., Seidel, 2000), multi-aged grouping (e.g., Kasten, 1998), instructional technology (e.g., Guzdial, 1998), peer-mediated instruction such as cooperative group learning and partner learning (e.g., Johnson & Johnson, 1994), and teaching responsibility and peacemaking through the development of positive social skills and schoolwide behavior management and discipline approaches (Brendtro, Brokkenleg, & Van Bockern, 1990; Elias & Clabby, 1992; Villa, Udis, & Thousand, 1994). Darling-Hammond (1997) also has suggested the ability to collaborate with parents and colleagues is a requisite skill for the teaching workforce. Each of these initiatives will require changes in the skills, knowledge, and dispositions of all teachers. For example, it is not enough to know how to use instructional technology, future teachers must also believe that it is important. One especially important disposition, consistent with other professions and professionals, is the idea that teachers must see themselves as lifelong learners. To accomplish this, teachers must engage in professional educational as an ongoing part of their professional role. In summary, teachers of the future "need to acquire through preservice and inservice experiences a common disposition conceptual framework, language and a set of technical skills to work with the diverse learners who enter the schoolhouse door" (Villa, Thousand, & Chapple, 2000, p. 533).

What, Then, are Some of the Specialized Skills, Knowledge, and Beliefs Needed for Special Educators to Promote Inclusive Schooling?

In the early years of special education teacher preparation, it was understandable that teacher preparation programs produced categorical teachers to serve categorical students. Ironically, many special education programs at that time required as little as nine weeks of undergraduate training to add a category to one's teaching certificate. There simply wasn't a large body of knowledge to study. Today, special educators who employ inclusive practices have often experienced a gap between their teacher preparation programs and the demands of general classroom settings (e.g., Kilgore & Griffin, 1998; Zaino, 1999). As schools move away from maintaining separate systems, they need special educators who can interrelate curriculum and communicate with others. This skills and dispositions include providing instruction and assessment to students with and without disabilities and facilitating collaborative problem solving when difficulties arise in these areas. Leadership skills extend to the supervision of paraprofessionals and the coordination of related services personnel in a variety of settings. Equally important is the encouragement of natural supports and friendships among peers. None of these abilities or dispositions is disability-specific, nor do they rely on etiology to be realized. In-
stead, they are common factors that transcend the restrictions of labels and categories.

In addition to the changing knowledge base, special educators are also being held to performance standards (e.g., CEC, 2000). Similar to the outcomes-based measures for teaching effectiveness, performance measures used for special educators are designed to ensure that the teachers know what to teach and how to teach it (Dudzinski, Roszmann-Millican, & Shank, 2000). For example, the CEC standards suggest that university credential programs develop standards including the knowledge and skills required of special educators, the ethical practice of special education, and the expectation that special educators continue to complete professional development activities.

The work that has been done with in-service training for inclusive education (e.g., Cross & Villa, 1992; Falvey & Villa, 1997; Fisher, Sax, & Grove, 2000) led to a number of innovations in the preparation of future special educators. Based on these experiences, five high priority focus areas emerged: collaborative teaming and teaching, curricular and instructional modifications and accommodations, personal supports, assistive technology, and positive behavioral supports. Recent research suggests that literacy instruction can and does include all students and that special educators have a critical role in the delivery of literacy instruction (Allington & Baker, 1999). The following provides an overview of these focus areas.

**Collaborative Teaming and Teaching**

Inclusive educators do not maintain separate classroom responsibilities. Instead, they assimilate into the varied settings in which their students participate. The ability to collaborate with general educators, coaches, related services professionals and vocational personnel is fundamental because they are the instructional providers. Special educators streamline information dissemination, problem solving, and accessing materials, strategies and services. Successful special educators are masters of collaboration and skillful negotiators—a disposition that is difficult for teacher educators to teach. Their administrators need to support special educators to collaborate by modeling collaborative decision-making, providing incentives for collaboration, establishing collaboration as expected practice through job descriptions and performance evaluations, and otherwise communicating that collaboration is not a voluntary act (Villa, Thousand, Meyers, & Nevin, 1996).

**Curricular and Instructional Modifications and Accommodations**

Although general educators provide instruction for all students, accommodations and modifications to the curriculum may be necessary to ensure that students with disabilities can access the curriculum and content (e.g., Park, 1998). Decisions on when, why, and how to make these adaptations are the responsibility of the special educator. Essential knowledge necessary includes an understanding of the student's IEP, and a comprehension of the curriculum and its standards. The role of the inclusive educator is to create accommodations and modifications that maintain the integrity of the lesson while addressing the unique learning needs of the student. Successful special educators have an extensive knowledge base of curriculum accommodations and modifications on which to draw and are creative in using specific adaptations with students.

**Assistive Technology**

The explosive growth of technology has lead to wider availability of devices that enhance communication, mobility, and learning. Remaining current with this rapidly changing aspect of education requires effort. However, beyond knowing the current "laundry list" of available technology is the more essential capacity to select assistive technology that is well-suited to the individual and the setting's demands. Successful special educators understand the needs of students, the requirements of classroom tasks, and how assistive technology can be used to foster independence.

**Positive Behavioral Support**

Students with challenging behavior need positive supports that transcend the variety
of settings in which they participate. Inclusive special educators need an understanding of the principles of positive behavioral supports and the role of collaboration between families and professionals in developing goals of intervention. When these goals are focused on improving the student's quality of life, teachers are able to provide consistent support and opportunities for teaching replacement skills. Fragmentation of behavioral supports may result when categorical teachers move in and out of these environments, advising contradicting strategies. Successful special educators develop behavioral support systems that generalize across environments and provide information to the entire team about implementing the support plan.

Personal Supports

Meaningful support of students with disabilities in general classrooms often requires paraprofessionals and peers. Yet without the guidance of a special educator, the effectiveness of these individuals is diminished. Best practice has also demonstrated the positive influences of peers. The use of peers as natural or structured support requires an understanding of the developmental features of typical peers. In addition, the role of special educator as a facilitator of friendships adds another dimension to interactions with general education students. Special educators must be able to articulate the differences between these strategies and dovetail their knowledge with the characteristics of the students. Successful special educators use peers and paraprofessionals wisely and ensure that these strategies do not interfere with friendship development and the social relationships between students with and without disabilities (e.g., Nabuzoka & Ronning, 1997).

Literacy and Content Instruction

Among the greatest barriers in the inclusion of students with disabilities are literacy and academic content. Even otherwise supportive and innovative general educators may struggle with the why and how of creating literacy experiences for students with significant support needs (Ryndak, Morrison, & Sommerstein, 1999) or how students will complete algebra requirements. Special educators need a comprehensive understanding of literacy development for students with and without disabilities because this becomes the "Rosetta stone" in their translation of curriculum. Secondary special educators also need to understand the content that they are going to adapt and modify. Educators and students rely on the special educators' ability to transform theory into practice through the use of materials and strategies. Successful special educators know about language development, understand the use of augmentative and alternative communication devices, and can access various forms of print for students with varied reading fluencies (Vaughn, Hughes, Schumm, & Klinger, 1998). In addition, successful special educators in secondary schools use their talents in specific content areas to ensure that students with disabilities are provided access to English, science, math, social studies, art, music, and other subjects.

Discussion

Special education teachers of the future need to know what they've always needed to know; namely, the skills, knowledge, and beliefs articulated above as core competencies for all teachers. Over the past two decades a number of specialized skills also have emerged (collaborative teaming and teaching, curricular and instructional modifications and accommodations, personal supports, assistive technology, positive behavioral supports, and literacy instruction). New directions in teacher preparation in special education not only require changes in what teachers in preparation need to know, these directions also require changes in where special educators work (i.e., general education classrooms) and with whom they collaborate (i.e., classroom teachers, parents, building principal, students, paraprofessionals, as well as range of related services personnel).

With the move toward inclusive schooling and the subsequent changes required in teacher knowledge, skills, and dispositions, a number of questions arise, including the following three.

But Don't Future Teachers Need to Know About Specific Disabilities?

Beliefs about people with disabilities have shifted rapidly in the last quarter-cen-
tury. Centuries worth of deficit models have given way to strengths-based, person-centered planning and the academic experiences designed to achieve these outcomes. Yet many of our teacher preparation and certification models still reflect a medical model of diagnosing and categorizing individuals by a collection of characteristics they may or may not possess. This medical model erroneously suggests that students with a particular disability can be understood and educated in a monolithic fashion. Although teachers new to inclusive education think they need and say that they want disability-specific information (Bradley & West, 1994), disability specific information such as the prevalence of autism or Trisomy 21 provides little information regarding the supports that these students require to be successful in general education classes. Statistics teaches us that the variance within a category is far greater than the variance between categories. In other words, providing future teachers with information about cerebral palsy in general is less helpful than providing them information about the ways a student communicates, successful learning strategies, or behavioral supports. As a result, the “disability-of-the-week” courses are giving way to in-depth studies of systems of supports and characteristics of the educational needs of all students.

What About Access to Specialists?

The continued use of categorical special educators has been a barrier to the social and educational inclusion of students with disabilities. Perpetuation of a “specialist paradigm” deludes educators, administrators, and parents into believing that the only teacher qualified to deliver effective support is the one with a label that corresponds with the student’s. This leads to staffing models that defy logical patterns because they relegate to secondary status important elements like grade level or subject area enrollment, case load size, or even the inability of any person to simultaneously occupy two classrooms at the same time. Instead, students may be placed in courses or classrooms that are more restrictive or unsuited to their goals and interests in order to achieve a categorical “match to sample”—student to teacher.

Specialization, where necessary, is available to students and educators in the related services fields. Trained clinicians of occupational and physical therapy, and speech/language therapy can be made accessible to students and their teachers (e.g., Mackey & McQueen, 1998). The application and practice of these therapies in a variety of settings increases generalization of skills. Knowledge of how to create those opportunities is the role of the new special educator, both as a collaborator, coordinator of services, and interpreter of meaning. Ironically, related services providers are not themselves trained as categorical therapists (i.e., we don’t employ one speech therapist for students with high incidence disabilities and another one for students with low incidence disabilities). Perhaps this is because these fields understand that the common ground outstrips the areas of difference.

Won’t We Need Fewer Special Educators as a Result of Inclusion?

The need for trained special educators is not diminished by the increase of inclusive schooling practices. In fact, as students with disabilities participate in a wider array of settings, the need for teachers who understand the complexities of many systems becomes essential to ensure student success. It is the knowledge base itself that is continues to evolve. In addition to the actual job responsibilities required of special education teachers in inclusive schools, the essential skills required by educators, administrators, and caregivers will continue to expand.

Future Directions

Clearly, as inclusive education takes hold in the United States and worldwide, and special and general educators assume shared responsibility for all students, many questions about shifts in the roles, rules and responsibilities of everyone who works with and for students with disabilities will spring forth, many of which have not been even been considered to date. Experience is a great teacher. Twenty years ago, a handful of educators and parents had the vision and took action to
create the first inclusive school communities (Schattman & Keating, 2000). They had nothing but questions and they searched and created the answers, which we count on today as our knowledge base. Yesterday’s unanswered questions ARE tomorrow’s knowledge base.

References


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