Teacher Education and Students with Significant Disabilities: Revisiting Essential Elements

Prepared for the Center on Personnel Studies in Special Education

by
Alison Ford
Wanda Blanchett
University of Wisconsin at Milwaukee

Lou Brown
Professor Emeritus
University of Wisconsin at Madison

IDEAs
that Work

Center on Personnel Studies in Special Education

UNIVERSITY OF FLORIDA

http://www.copsse.org

Center on Personnel Studies in Special Education

University of Florida

Johns Hopkins University

Vanderbilt University

University of Colorado · Boulder

Instructional Research Group, Long Beach, CA

COPSSE research is focused on the preparation of special education professionals and its impact on beginning teacher quality and student outcomes. Our research is intended to inform scholars and policymakers about advantages and disadvantages of preparation alternatives and the effective use of public funds in addressing personnel shortages.

In addition to our authors and reviewers, many individuals and organizations have contributed substantially to our efforts, including Drs. Erling Boe of the University of Pennsylvania and Elaine Carlson of WESTAT. We also have benefited greatly from collaboration with the National Clearinghouse for the Professions in Special Education, the Policymakers Partnership, and their parent organizations, the Council for Exceptional Children and the National Association of State Directors of Special Education.

Recommended citation:

Ford, A., Blanchett, W., & Brown, L. (2006). *Teacher education and students with significant disabilities: Revisiting essential elements. (COPSSE Document Number IB-11).* Gainesville, FL: University of Florida, Center on Personnel Studies in Special Education.

IDEAs that Work

U. S. Office of Special Education Programs

Additional Copies may be obtained from:
COPSSE Project
P.O. Box 117050
University of Florida
Gainesville, FL 32611
352-392-0701
352-392-2655 (Fax)

CONTENTS

ABSTRACT

The status of teacher education and students with significant disabilities is examined in the context of five essential elements that characterized the development of the field in the mid-1970s. The five elements are: (1) a clear teacher role with advocacy at the center, (2) a focus on student learning and meaningful outcomes, (3) strong curriculum guidance, (4) partnerships with parents and schools, and (5) the national capacity to develop a sufficient number of quality teachers. On revisiting these elements and examining today's teacher education practices, the authors offer recommendations for research and practice in teacher education.

INTRODUCTION[1]

Hey, Don't Forget About Me! Education's Investment in the Severely and Profoundly Handicapped (Thomas, 1976) was among the pivotal publications coming out of national meetings and conferences held in the early and mid-1970s. As the title suggests, until the early 1970s, many individuals with significant disabilities[2] were "forgotten about" or denied a public school education, a practice that was completely legal at the time. Through the advocacy of parents and professionals, such as those involved in the landmark cases of Pennsylvania Association for Retarded Citizens v. Commonwealth (1972) and Mills v. Board of Education of the District of Columbia (1972), students with significant disabilities gained the right to a free and appropriate public school education that had been previously denied them. This parent advocacy, leadership at the federal level, and ultimately in 1974 the formation of a professional organization [TASH]—now The Association for Persons with Severe Disabilities—contributed to the "professionalization of teaching and learning for children with severe disabilities" (Sontag & Haring, 1996, p. 39). The changes brought about by this united advocacy movement were dramatic. Students previously denied public schooling gained access to schools and increasingly became "included" in regular schools and classes. These students for whom society had so few expectations began to graduate and enter the work force. Their parents, and to some extent the students themselves, had a voice in developing individualized educational programs. Although many stakeholders contributed to these new and positive outcomes for students with disabilities (e.g., parents, community advocates, school leaders) large scale change would not have been possible without a strong and committed teaching force with the skills to meet the needs of this new school population. Many universities around the country played a major role in this effort as they expanded their research and teacher education programs to include a focus on teaching students with significant disabilities.

The purpose of this paper is to reflect on the elements that characterized the development of teacher education in the area of severe disabilities, consider their status today, and discuss research and practice implications for the future. We have drawn from the historical account of Sontag and Haring (1996), who chronicled a series of national activities and meetings held in the early 1970s to prepare for the entry of individuals with significant disabilities into public schools. In this article, the underpinnings of a "movement" are described, along with essential elements for building the capacity to educate students with significant disabilities. This paper is organized around five elements in our own terminology while reflecting the professionalization of the field as outlined by Sontag and Haring (1996).

A first essential element was a clear teacher role, with advocacy at the center. The goal was to gain meaningful access to public schooling; and newly prepared teachers needed to understand that it would take both expertise and advocacy to make this happen. Second, there was a focus on student learning and meaningful outcomes. There was much to prove about the learning potential and possible accomplishments of students with severe disabilities. Third, there was a recognition that strong curriculum guidance and "systematic instructional procedures and materials" needed to be developed and disseminated nationally (Sontag & Haring, 1996, p. 43). Fourth, partnerships with parents and schools were viewed as essential in order for teacher

---

[2] "Significant" and "severe" disabilities are used interchangeably in this paper.

education programs to demonstrate the possibilities to future teachers and others. And finally, the national capacity to develop a sufficient number of quality teachers was an ongoing consideration. The goal was to populate the profession with talented teachers who had a high level of commitment and specialized expertise with respect to educating students with significant disabilities.

As we reflect on these five elements and consider the current status of teacher education in the field of significant disabilities, many questions arise. Are we still in need of the focused advocacy that characterized the profession in its early years? How is the changing role of the special educator influencing teacher preparation, particularly with regard to working within an inclusive context? Toward what high school graduation outcomes should today's teachers aim— successful transition to supported work, post-secondary education, and/or a passing score on the state's alternate assessment? To what extent do new teachers feel accountable for these outcomes? What specialized curriculum is needed? Are newly prepared educators who work with students with significant disabilities more responsive to issues of race, culture, and poverty; or does having a severe disability "trump" all other aspects of one's life? Are future regular educators given clear guidance with respect to their collaborative roles in educating students with significant disabilities? How strong are our partnerships with parents, consumers, and schools? Are these still the driving force in program design and implementation? Finally, how well are we doing with respect to developing the capacity to populate the profession with diverse, committed, and talented educators? These and other questions will be addressed as we revisit essential elements of teacher education programs designed to serve students with significant disabilities.

A CLEAR TEACHER ROLE WITH ADVOCACY
AT THE CENTER

A well-designed teacher education program is driven by a clear and compelling vision of what schooling should look like and the role teacher candidates should play in achieving this vision. The strong vision that propelled the field of significant disabilities in the 1970s—access, inclusion, participation in work and community life—effectively unified the field and created dramatic change. Teacher candidates embraced this inclusive vision and understood that, in addition to providing good instruction, advocacy would need to be at the center of their role. Through focused advocacy efforts, they were to achieve recognition and integration for a group of marginalized and segregated individuals. Are we still in need of the focused advocacy that characterized the profession in its early years? If so, is there sufficient clarity and consensus about the role of the special educator that the desired advocacy role is well understood by newly prepared teachers?

Focused Advocacy

Students with significant disabilities. Much of the advocacy focus has been on the inclusion of individuals with significant disabilities, e.g., in regular schools, in regular classes, in the regular curriculum, in extracurricular offerings. One way to determine whether this type of advocacy is still needed is to look at the annual data on the implementation of the Individuals with Disabilities Education Act [IDEA] (e.g., U.S. Department of Education [USDOE], 2005). Through Annual Reports to Congress and the IDEAdata.org website, it is possible to track the percentage of students with disabilities who attend regular schools and "spend more than 60% of their time outside regular classroom" or are "self-contained" (to use a simplified term for purposes of discussion). Based on the latest available data, about half of the students with significant disabilities are in self-contained settings. To determine this, we examined the data on educational environments provided for the three disability categories most closely associated with "significant disabilities"—mental retardation, multiple disabilities, and autism. In recent years (1998-2004, IDEAdata, Table 2-5), the percentage of students in self-contained classrooms has changed minimally for students with mental retardation (54.28% in 1998 and 53.92% in 2004) and multiple disabilities (62.3% in 1998 and 60.18% in 2004). For students with autism, there was a more significant progression toward inclusion (60.44% self-contained in 1998 and 47.15% in 2004). Nonetheless, newly hired teachers serving students with significant disabilities are likely to begin their careers in self-contained settings and will need to advocate for changes in these structures. While this advocacy role should not be theirs alone, it is also clear that movement toward inclusive education cannot occur without their leadership and support—they are central to any change process.

Racial and ethnic disparities. IDEA's annual data can be used to gauge progress in other areas including the extent to which we are reducing gaps in opportunities for White students and those of color who have significant disabilities. Education Week used these data to analyze the differences in placements of African American, Hispanic, and White students. Of the students who spend more than 60% of their day outside of the regular class (or in self-contained classrooms), disproportionately higher percentages are African American or Hispanic compared to White (Viadero, 2004, p. 25). Indeed, the 2004 data from IDEAdata.org reveal that 27.78% of the African-American students with all disabilities were in self-contained classrooms and 22.86% of the Hispanic students were self-contained. This is in contrast to 13.78% of White students who were in self-contained classrooms (IDEAdata, Table B4C). These data convey

one of many persistent patterns of inequity. Transition data also reveal persistent differences in post-school outcomes, with White youth showing a significant increase in post-secondary employment and education but no significant change or, in some cases, reduction for African-American and Hispanic youth (Wagner, Newman, Cameto, & Levine, 2005). Any advocacy of inclusive education must also recognize and address these racial and ethnic disparities head-on.

Is there a need for continued, focused advocacy with and on behalf of students with significant disabilities? The answer is yes. We simply are not finished yet. While we have made impressive strides with respect to inclusion, we have far too many students with significant disabilities who do not have meaningful access to the regular classroom and school experience, as the previously cited IDEA data suggest. With some important exceptions (e.g., Correa & Tulbert, 1991; Harry, 1992; Harry, Kalyanpur, & Day, 1991; Meyer, Hyun-Sook Park, Grenot-Scheyer, Schwartz, & Harry, 1998; Reyes-Blanes, Correa, & Bailey, 1999), it was not until relatively recently that attention was drawn to the role of race, culture, and poverty in the lives of students with significant disabilities. It was as though a "severe disability" trumped all other aspects of one's life—and little relevance was ascribed to other potentially more defining influences, e.g., culture, race and poverty (Meyer, 2001). When we do not consider race or poverty, we overlook disparities such as those related to inclusion and transition. In sum, continued advocacy is needed to ensure an inclusive education and to help teachers guard against the biases that have resulted in even less access for students of color who have significant disabilities.

Toward Clarity

Purpose and role. The issue of job design and role ambiguity of special educators has been studied extensively by Gersten and his colleagues, particularly in the context of teacher retention. Their survey of 887 special educators from three large urban districts examined factors leading to teacher attrition and retention. A leading negative factor and predictor of stress was related to job design and "role dissonance" or the "degree to which educators perceive dissonance between their expectations about the job and the job's actual requirements" (Gersten, Keating, Yovanoff, & Harniss, 2001, p. 562). Along with the more obvious job design stressors (e.g., burdensome paperwork and extensive meetings), the study revealed teacher stressors related to limited opportunities for individualization and managing wide ranges of student performance levels. As the authors conclude, addressing the issue of job design is critical, particularly as the role of the special educator becomes increasingly complex.

This role confusion among teacher candidates of students with severe disabilities can be expressed in the following way:

> If I want to teach students with significant disabilities and put myself in the best possible role to make a difference, what do I do? Do I have my school assign me all of the students with significant disabilities (but, isn't cross-categorical better)? Do I work toward a model where I give up the resource/special ed room and work entirely in regular classes as a co-teacher, differentiating the curriculum? Is it still okay to do *some* functional and vocational curriculum …or is that no longer considered good practice? I guess what I am saying is that I am still confused about what my role should be. [Representative comments made by a graduating teacher candidate.]

Many teacher educators will recognize the role confusion expressed in this representative example. Much of the confusion lies in the underlying conflict between striving for a fully inclusive model while still feeling the need to provide specialized instruction in areas such as vocational and functional curriculum (Dymond & Orelove, 2001).

Inclusion and role complexity.   In years past, teacher advocacy centered on gaining access to regular schools and to some regular classes. Special educators learned to do this mainly from an "outsider" perspective (e.g., finding the receptive regular education teacher, offering high levels of special education support, and renegotiating every year). More recently, persuasive arguments have been made that inclusion is best achieved when approached from an insider's perspective: "We must begin with the majority perspective and build the tools and strategies for achieving inclusion from the center out rather than from the most exceptional child in" (Ferguson, 1995, p. 284). Similar calls for restructuring have been presented by others (see Biklen, 1992; Ferguson, Kozleski, & Smith, 2001; Lipsky & Gartner, 1996; Sailor, 2002; Sailor & Skrtic, 1995; Villa, Thousand, Stainback, & Stainback, 1992).

As compelling as this "insider's" perspective is, it poses significant challenges for special educators and teacher education.   We want to embrace the notion that schools can be restructured to truly support the full range of learners. We want to trust that students with significant disabilities are so fully owned by schools that their needs and interests are consciously and routinely considered at all levels of decision-making. In this scenario, we see the special educator as a member of a collaborative team with regular education teachers and other colleagues that figures out how to meet all students' needs. Collaboration and shared ownership have wide support in the professional community. At the curriculum level, however, tensions arise. As students get older, it is more and more difficult to plan challenging units and design assessments with the full range of students in mind. To keep the instruction anchored in grade-level expectations, the team generally begins with the regular curriculum and differentiates it to include students with significant disabilities. While there are good case examples of how this is possible (Downing, 2002; Fisher & Frey, 2003; Jorgensen, 1998), we are still challenged by these two questions: (1) What will all these differentiated experiences add up to? (2) In addition to working from a curriculum designed for the majority, should not we also insist on schools recognizing and valuing learning priorities that arise from focusing on the needs of this 1-2% of the school population?

Returning to the discussion of the newly prepared teacher who expresses confusion around his or her role, we address these questions:

1. Should he or she work as an insider, collaborate within a regular team structure, and plan and differentiate the curriculum together with the "whole" group in mind? *Yes. Inclusion is paramount.*

2. Should this newly prepared teacher also focus on learning priorities that arise from considering the unique needs of students with significant disabilities, realizing that they will not be sufficiently addressed even in a strong, collaborative planning model? *Yes. A dual curriculum role is required*. In addition to differentiating the regular curriculum, this teacher should be prepared to identify unique learning priorities, advocate for their inclusion in the curriculum, and ensure that meaningful learning opportunities occur (even if it means scheduling alternative, activity-based learning that will only be experienced by a subset of students).

3. Finally, is it acceptable for this teacher to focus mainly on students with significant disabilities rather than working cross-categorically to take full advantage of developed expertise? *Yes, a focus on students with significant disabilities is acceptable as long as this approach is done collaboratively, does not isolate the students with significant disabilities, or force a clustering model that denies students access to their home schools.*

It should be noted that this is sometimes difficult to achieve, particularly at the elementary level. Elementary schools tend to have smaller enrollments and are unlikely to have more than one or two students with significant disabilities. In this case, a teacher must be prepared to work cross-categorically and have a strong commitment and base of expertise to support the full range of learners with IEPs in the collaborative classes to which he or she is assigned.

The answers to questions regarding role confusion are ours. We know of no literature or professional standards that provide the type of direct response that teachers are seeking. We believe there should be. It is important that teacher education programs operate from a clear picture of the present and desired role of the teacher. How we picture the role of the special educator influences how we advocate for state licensing structures (categorical or not; age-level breakdowns or not), what specialized curriculum is included in methods courses, and even who we hire as faculty. To date there has been little professional discourse that will lead to a clearly endorsed role—at least not in the practical terms posed by the future teacher in our example.

Working toward consensus on the role of the special educator serving students with significant disabilities is an important research and practice agenda item. It makes sense to start with common ground. The field remains strongly committed to an inclusive structure. It also sees the need for a continuing advocacy, both from a broader social justice perspective and from a practical "not done yet" perspective—too many students with significant disabilities remain excluded, ignored and under-served. Perhaps by acknowledging this common ground, the more complex tensions related to role and curriculum can be resolved.

A FOCUS ON MEANINGFUL OUTCOMES

In the mid-1970s, when Brown and his colleagues (1976) published "The Criterion of Ultimate Functioning" paper, the beginnings of large-scale accountability emerged for learners with significant disabilities. The criterion of ultimate functioning was to successfully work and live as part of our heterogeneous society.

> Nearly all curriculum models that followed (Browder, 1987; Falvey, 1989; Ford, et al., 1989; Giangreco, Cloninger, & Iverson, 1998; Neel & Billingsley, 1989; Wilcox & Bellamy, 1987) shared two common characteristics: (a) identification of life domains for curriculum planning (e.g., community, vocational, home, recreation) and (b) some type of prioritization process to select skills for a student based on preferences and functional use. (Browder & Cooper-Duffy, 2003, p. 158)

Indeed, thousands of students with significant disabilities who have progressed through our school systems are functioning in real jobs in the real world of work that pay at least minimum wages and include employer-provided benefits. They are experiencing success in post-secondary education and training programs. They are enjoying reasonable social lives interacting with a wide array of family members and others with and without disabilities who are not paid to be with them. They travel to and from, and engage effectively in, a variety of integrated community environments and activities. They live in supported and unsupported apartments and homes. We have come to expect these outcomes as a function of schooling (Brown, et al., 1987; Meyer, Peck, & Brown, 1991; Phelps & Hanley-Maxwell, 1997; Turnbull, Turnbull, Wehmeyer, & Park, 2003; Wagner, et al., 2005).

We are now in an era of standards-based reform. The question for those concerned with learners with significant disabilities is whether the prior standards (i.e., working and living in the community) that have served this population well should be replaced by standards more closely aligned with the academic core of the regular curriculum, e.g., language arts, mathematics, science, social studies (Browder, et al., 2004; Ford, Davern, & Schnorr, 2001; Kleinert & Kearns, 2001; Quenemoen & Thurlow, 2004). The push toward greater access to the regular curriculum as articulated in IDEA (1997) and alignment with regular education standards as outlined in the No Child Left Behind Act [NCLB] (2001) are greatly influencing how school districts and states are answering the question. In an effort to raise the achievement of students with disabilities, NCLB required states to more fully include students with IEPs in the regular assessment system. Initially only 1% of IEP students were to be exempt from the regular assessments and therefore eligible to participate in an alternate assessment; recently this policy has been increased to 2% (USDOE, 2005).

Alternative Assessments: A Missed Opportunity?

The IDEA Amendments of 1997 pushed forward the notion that accountability must extend beyond the individual child's team—beyond the IEP. The idea is that there are large-scale outcomes that can be measured through a state-administered alternate assessment system for which districts (and potentially, teachers) should be held accountable. Recognizing that students with significant disabilities should not be held to the same level of standards as the majority, IDEA '97 required states to design alternative assessments. States were given a relatively short deadline of July, 2000 to accomplish this task. This mandate for large-scale assessment of learners with significant disabilities had the potential to set in motion national discussions and

deliberations on what outcomes should be viewed as priorities for students with significant disabilities. Indeed, for other professional groups, the standards-setting process involved extensive national debates before standards (e.g., mathematics, science, English, social studies) were proposed. However, this national debate about "what performance matters most" did not occur for alternate assessment, leaving individual states to determine how best to comply with this new legislative expectation.

Today there is great state-by-state variation in alternate assessments and indications that states are moving in many different directions (Thompson & Thurlow, 2000). Some states started their planning process using a functional skills framework. Others used their state academic standards as a starting point, although more recent data suggest that only 8% of states now use only a functional framework (Thompson & Thurlow, 2001). While there are legitimate concerns about using a functional-only framework, there is also a concern about using a watered-down version of regular education academic standards that leads states to portray isolated outcomes such as "touching a relief map" and "matching pictures" as meaningful (Ford, Davern, et al., 2001). What is at stake is having new teachers work from standards that do not make sense for students or bear little relationship to important life outcomes (Kleinert, et al., 2002; Turnbull, et al., 2003). Until major stakeholders come together, engage in serious debate about priority outcomes, and build some type of consensus, a state's alternate assessment may not be the best vehicle to help teacher candidates measure their effectiveness.

Instilling a Personal Sense of Accountability

New teachers will face accountability on different levels. In addition to state and district alternate assessments, on a more personal level, teachers must be prepared to track how students' repertoires change as a result of their good instruction. This could take the form of a personal "Teacher Success Portfolio" or it could be in a form that allows for some type of aggregated data (e.g., benchmark gains in literacy and communication; percentage of students receiving above average rubric scores on regular classroom projects, percentage of students receiving a positive rating for performance on a school or community-based job; number and type of extracurricular activities completed by students). Again, to make these accountability measures meaningful, some direction-setting in the field as to which outcomes teachers should track over time is needed.

Finally, new teachers may find themselves occasionally but persistently defending why their students deserve a high-quality, formal education. Only a decade after IDEA was enacted, Timothy W.'s case made its way to the U.S. Court of Appeals (Timothy W. v. Rochester, New Hampshire, School District, 1989). Timothy, an eight-year-old with multiple disabilities, was denied an education because his school district believed that he was incapable of benefiting from one. In this landmark case, the Court ruled in favor of Timothy, making it clear that IDEA was unequivocal on the mandate to serve *all* children regardless of the severity of their disability (Orelove, 1991). Still today, teachers must fend off the occasional colleague who has questions about educational worth (e.g., Why do we need a certified teacher? Couldn't we just hire another aide? Why is he in school anyway—I don't see how he is benefiting). Thus, instilling a personal sense of accountability is an important undertaking for those educating students with significant disabilities. Today's challenge is agreeing on the outcomes for which to assume responsibility.

STRONG CURRICULUM GUIDANCE

Norris Haring, the first president of TASH and one of the early leaders in the field, concluded his remarks at the 1975 Kansas City meeting,

> . . . the effectiveness of educational programs then implemented for students with severe disabilities would depend on systematic procedures, a curriculum based on teaching functional skills, and the positive attitudes and support of the individuals in the lives of these students. (Sontag & Haring, 1996, p. 44)

Indeed, a curriculum based on teaching functional skills, systematic instructional methods, and a positive support system have been the underpinnings of curriculum and methods courses for teachers of students with significant disabilities for quite some time. What is different for teachers today is that IEP teams are expected to be more selective in what functional skills get addressed in schools, in part because this "functional" curriculum content now competes with other content areas considered important, e.g., literacy, other academics, and the arts. With respect to teaching methods, today's teachers are learning that there is still room for applied behavioral analysis but that this approach is limited and must be complemented by other methods that take a deeper and more holistic look at the learner, including the learner's cultural background. In terms of the learning environment, today's teachers are expected to have a more sophisticated understanding of how to facilitate support systems and involve peers in a wide range of relationships. As we discuss these three areas—(1) curriculum content, (2) teaching methods, and (3) peer connections and support systems—we will emphasize aspects that require strong guidance in teacher education programs for students with significant disabilities.

Curriculum Content

Organizations that develop professional teaching standards have achieved some level of alignment in licensing frameworks and the standards of performance expected of teachers. The professional standards developed by the Interstate New Teacher Assessment and Support Consortium [INTASC] (2001); Council of Exceptional Children [CEC] (2003); and the National Board for Professional Teaching Standards [NBPTS] (2001) all use a non-categorical approach.[3] Most divide licensing and program accreditation into a Mild/Moderate vs. Severe disabilities framework, although CEC uses these labels: Individualized Regular Curriculum for Mild/Moderate and Individualized Independence Curriculum for Severe Disabilities (CEC Board of Directors, 2004). While CEC and INTASC focus on the entry-level teacher, NBPTS focuses on the standards expected of a more accomplished teacher. When outlining the curriculum content important for teachers of students with significant disabilities, all three organizations indicate that expertise in both adapting the regular curriculum and implementing specialized curricula is required. CEC and INTASC standards mention what constitutes specialized content (e.g., social, communication, motor, functional and independent living skills, self-advocacy, employment-related skills) (CEC, 2003, p. 60; INTASC, 2001, p. 3). The NBPTS standards, in contrast, provide fairly explicit and extensive descriptions of the specialized "subject matter" needed by teachers of students with significant disabilities in nine disciplines (i.e., The Arts; Literacy and English Language Arts; Mathematics; Science; Social Studies; Health, Physical Education, and Leisure; Transition/Vocational Skills; Social Skills; and Functional Life Skills)

---

[3] The areas of Deaf/Hard of Hearing and Blind/Visual Impairments are exceptions; a separate category also exists for Early Childhood Special Education.

(NBPTS, 2001, pp. v21-v31).   While we may not agree with all that is described, NBPTS standards represent an impressive attempt to be explicit about the specialized curriculum expertise teachers should have. Without an explicit delineation of what curriculum is important, special educators will have difficulty establishing high expectations for their students and determining the appropriateness and quality of the regular classroom experience (Pugach & Warger, 2001).   With this in mind, we have drawn on the NBPTS standards and our understanding of promising practices to suggest curricular content that should be prominent in programs preparing teachers for students with significant disabilities. This curriculum content falls within three broad areas: (1) adapted regular curriculum, including the arts; (2) vocational preparation, transition, and daily functioning skills; and (3) literacy, social, communication, and mobility as foundational skills.

Adapted regular curriculum, including the arts. There is little dispute in the field about whether special educators should be expected to demonstrate basic content knowledge and some pedagogical knowledge in core curriculum areas (e.g., language arts, mathematics, social studies, science) and in enrichment areas (e.g., the arts). However, as indicated in the NBPTS, "As generalists, these teachers cannot be expected to have a specialist's in-depth subject-specific knowledge in each and every aspect of the curriculum" (NBPTS, 2001, p. 39). Thus, the goal is to have a sufficient working knowledge in the regular curriculum that will enable special educators to adapt the curriculum, collaborate effectively with colleagues, and strategically "opt out of" curriculum areas or parts of the curriculum because of competing priorities in specialized curriculum areas.

Having basic knowledge about the regular core curriculum is an important competency; and the ability to adapt it is an important related cluster of skills. Until recently, the extensive literature on curricular adaptations consisted of categories and lists of adaptations with case examples of how they were created for particular students.   Missing were coherent decision-making frameworks that could be used in a collaborative planning process between regular and special educators. Such frameworks now exist. Some are broad and tend to be focused more on students whose needs are closer to the classroom norms, such as "Differentiated Instruction" (Tomlinson, 2001) and "Universal Design for Learning" (CAST, Inc.; Pisha & Coyne, 2001) yet offer a useful planning approach that regular and special educators can adopt.   Others have been developed specifically with students with significant disabilities in mind, such as the "Uniform Plan of Support" process (Hunt, 2003; Hunt, Doering, Hirose-Hatae, Maier, & Goetz, 2001). These frameworks share a collaborative planning process in which decisions about adaptations become routine for both the regular and special educators involved. This represents a major advancement from prior practice when special educators would find curricular plans in their mailboxes on Friday and would spend the weekend creating adaptations for the upcoming week.

Another challenge that is faced by new teachers of students with significant disabilities is adapting the regular curriculum in a way that results in both active participation and meaningful outcomes or progress. As stated earlier, today's special educators can no longer be satisfied with gaining access to regular classes or even achieving active participation through curriculum accommodations. In the end, they will need guidance on how to measure what these efforts add up to and how to answer the question, "What noticeable and desired changes will occur in the repertoire of the learner as a result of his or her participation?"   The answer needs to come early in the collaborative decision-making process in order to adapt accordingly and proactively to measure progress toward this outcome. Presently, any accountability is often post facto. (How did she benefit from the science class?) Teacher candidates will need to be sensitive to this issue and incorporate clear, up-front learning expectations in their approach to curriculum adaptation.

Vocational preparation, transition, and daily functioning skills. Teachers of students with significant disabilities are expected to function from a now-well-accepted vision of graduates living and working in the community. Follow-up data reveal that this vision—particularly with respect to work—has become a reality for an increasing number of graduates. In the most recent National Longitudinal Transition Study [NLTS2] (Wagner, et al., 2005), data from 2003 and 1987 were compared to gather information about out-of-school youth who have worked for pay during the first years after high school. These data reveal an increase in working for pay by students with significant disabilities. Using the two relevant disability categories presented in the study, percentage increases went from 37.9% to 41.5% for students with mental retardation and from 9.6% to 36.1% for students with multiple disabilities/deaf-blindness. While this increase is notable (particularly for students with multiple disabilities) and reinforces the notion that work is a realistic graduation outcome, these data also indicate that about 60% of the graduates are still unemployed. While some graduates may be transitioning into postsecondary education options, 13% for youth with mental retardation and 40% for youth with multiple disabilities/deaf-blindness (Wagner, et al., 2005, p. 4-4), this does not offset the concern about the lack of paid work for over half of the graduates. Teacher candidates will need to be aware of graduation outcomes and understand their implications for curriculum design. We know that school-sponsored work experiences and functional curricula positively influence post-school outcomes (Brown, et al., 1987; Hasazi, Gordon, & Roe, 1985; Phelps & Hanley-Maxwell, 1997). We also learned decades ago that even extensive vocational preparation during school years does not on its own lead to graduation with a job or a postsecondary school experience. Transition planning and adult service connections are needed to protect the investment made by the school program (Brown, et al., 1987; Siegel, 2003/04). Thus, vocational preparation and transition planning remain key competencies for special educators working with students with significant disabilities, particularly at the secondary level.

Finally, vocational preparation has had a fairly consistent place in curriculum for years, but there are some who question the place of daily functioning curriculum (Jorgensen, Fischer, Tashie, & Sgambati, 2003). As a colleague recently asked, "Are functional skills in or out these days?" Our reply is simple, "How could they be out?" Daily functioning routines provide an important structure for all of us as well as a basis for learning, easing transitions, exercising choices, and increasing independence. For students with significant disabilities, we have long understood that learning these routines requires explicit instruction. The alternative is having students sitting passively by while someone else does a daily functioning routine for them (e.g., putting belongings in a locker, emptying the contents of a lunchbox, purchasing a snack, cleaning up art a space in the art room). While the view of functional skills has evolved over the years (Nietupski, Hamre-Nietupski, Cortin, & Shrikanth, 1997), the commitment toward addressing this essential area as a component of a comprehensive curriculum needs to remain strong.

Literacy, social, communication, and mobility as foundational skills. *Foundational skills* is the term used by the authors of *What Work Requires of Schools: A SCANS Report for America 2000* (U.S. Department of Labor [USDOL], 1991).These skills provide the basis for interacting with people and information, successfully navigating the tasks of living, solving problems, making contributions, and doing so within an ethical framework (Ford, Davern, et al., 2001). Foundational skills refer to basic academic and cognitive skills, including reading, writing, basic math, expressive and receptive communication, and thinking skills (Phelps & Hanley-Maxwell, 1997; USDOL, 1991).We would add social and mobility skills to this list. Most students without disabilities will learn many foundational skills (e.g., time management, social interaction skills, positioning and handling materials) incidentally, using everyday input to

guide their learning. Instruction needs to be explicit in these important areas to build the strongest possible foundational repertoire.

The areas of social communication and mobility functioning have received considerable attention in curricula designed for students with significant disabilities for quite some time. The type of literacy that Mirenda (1993) describes is a relatively new focus area:

> Literacy is more than learning to read, write and spell proficiently. It is learning to enjoy words and stories when someone else is reading them. It is learning to love books and all the worlds that can be opened by books. It is a way of achieving social closeness through sharing literary experiences with friends or classmates. It is finding out about the way things are in places we have never visited or in places that have never existed. If we understand that literacy is all of these things and more, we can also understand that everyone can achieve some degree of literacy. . . . (p. 7)

We have moved away from the functional sight word approach and thus must prepare teachers to play an active role in establishing print/symbol-rich learning environments and incorporate books for enjoyment as well as those for learning (Musselwhite & King-DeBaun, 1997). It is also important to prepare them to make great use of technology to enhance literacy instruction (Downing, 2005; Walsh-Cassidy, Gardner-Fox, Herlihy, Hogan, & Kenny, 2000). Furthermore, teacher candidates will need to recognize writing opportunities throughout the day and the importance of expecting more and more competence as students use a variety of journals to convey various messages (e.g., home-school journals, daily agendas, social studies or science journals).

Teacher candidates need to learn that many foundational skills can be taught in an embedded manner where the teacher targets important social, communication, and motor skills within regularly scheduled activities or opportunities. For example, a student works on targeted mobility skills while climbing stairs during daily opportunities to run errands and to travel to classes, or a student works on targeted communication skills during a cooperative learning activity in the regular class. Yet, there are times when this embedded approach will not provide sufficient power to achieve the desired changes in students' repertoires. Teaching a fourth grader with significant disabilities to advance to the next level of reading (from reading patterned stories to reading stories with controlled vocabulary and simple story lines) is likely to require daily direct and small group specialized instruction. In this case, teachers need to find a place in the schedule where this specialized instruction can occur.

Teaching Methods

> Accomplished teachers adjust and refine their approaches until they determine an effective set of strategies for each student. . . . They know that students come to school with different backgrounds, experiences, and abilities…and use a broad range of instructional techniques and activities that enable all students to achieve success. (NBPTS, 2001, p. 47)

Because this paper cannot discuss the many instructional methods that are important for teachers to know, we have highlighted a few areas that may need revisiting in programs that prepare educators for students with significant disabilities.

Leaving some room for applied behavioral analysis. There has always been much to prove about the learning potential of students who at one time were considered merely "trainable" or even "uneducable." In the early 1960s, Congress passed legislation supporting the development of 24 national research centers to examine the causes of mental retardation and successful intervention (Sontag & Haring, 1996). Study after study and demonstration after demonstration showed the successful application of behavioral principles based on the work of Skinner (1968), proving that even students with the most profound disabilities could learn (Gold & Barkley, 1973; Haring, McCormick, & Haring, 1994, as cited in Sontag & Haring, 1996). Many of today's "interventions" or teaching practices continue to be influenced by a behaviorist tradition, particularly the notion that tasks need to be broken down into small, manageable, learning steps with well-thought-out prompts and positive feedback systems. Of course, it is also important for teacher candidates to understand the major criticisms of behavioral interventions and its long association with demeaning and harmful treatments of individuals with significant disabilities who manifest challenging behavior (Lovett, 1985; McGee, Menolascino, Hobbs, & Menousek, 1987).

For understandable reasons, behaviorism has been downplayed in many teacher education programs, while cognitive and constructivist approaches are emphasized. The behaviorist emphasis on discrete trial learning is considered too myopic, ignoring the need for teachers to acquire a deep understanding of the learner and the whole child. Particularly as it relates to students with significant disabilities, another concern is the behaviorist history of being used without values to address students with challenging behavior, e.g., the abuses [pinching, water spray to the face, prolonged restraint] cited in the *TASH Resolution Opposing the Use of Aversive and Restrictive Procedures* (2001). Today most realize that there are merits to behaviorism and that both the merits and drawbacks need to be understood by teacher candidates.

What is important is that teacher candidates, both regular and special education, not summarily reject behaviorism but see the possible benefits (e.g., explicitness, carefully planned steps over which a student can feel a sense of mastery) within a humanistic context. What this may require of teacher educators is a careful review and discussion of the intended or unintended messages being sent to future teachers enrolled in learning theory or methods courses (e.g., "behaviorism is out, constructivism is in").

Culturally responsive instruction. While educators and advocates involved with students with significant disabilities have done an excellent job of documenting many "best practices," these practices have been based on a mono-cultural, White, middle-class world view. As a result, many students of color with severe disabilities and White children who are not middle class do have not have access to culturally responsive pedagogy and other curriculum priorities. Culturally responsive teaching involves "using the cultural characteristics, experiences, and perspectives of ethnically diverse students as conduits for teaching them more effectively" (Gay, 2002, p. 106). Culturally responsive teachers may or may not be racially/ethnically diverse themselves. It is not the race or ethnicity of these teachers that determines their pedagogical practices, but rather it is their values and beliefs regarding teaching, learning, and what their students bring to the learning environment that make them successful.

It may seem that a logical first step for teacher educators is to help teacher candidates understand the cultures and lives of their students. However:

> Prior to this step, professionals need to become aware of their own values and of the fact that most human values are not universal but are generated by the needs of each culture.

Such awareness is not too much to ask, since it is through the eyes of the school that a child officially comes to be defined as a success or failure. The school system must, therefore, accept the tremendous responsibility that accompanies such power. (Harry, 1992, p. 161)

Special educators must also open their eyes to continuing inequities and recognize that institutional racism and the effects of poverty also influence how students with significant disabilities are served (Blanchett, Brantlinger, & Shealey, 2005; Harry, Klingner, & Hart, 2005). Many teacher education programs have a well-developed "Cultural Foundations" or "Urban Education" component that can help candidates develop the self-awareness discussed by Harry and others (e.g., Banks, 2001; Ladson-Billings, 1999; Nieto, 2000; Sleeter, 2001; Sleeter, Torres, & Laughlin, 2004). The challenge is to keep this foundational knowledge and self-examination active throughout the entire teacher education program.

Finally, a culturally responsive teacher has the disposition and skills needed to support children linguistically as well as culturally. It is estimated that there are 357,325 English Language Learners who also have disabilities enrolled in our nation's schools (Zehler, Fleischman, Hopstock, Pendzick, & Stephenson, 2003). Some English Language Learners are students with significant disabilities. Like other educators, their special education teachers are challenged with supporting the native language and developing the meaningful use of English. A critical element in this process is developing a close working relationship with families and making concentrated efforts to respect and accommodate their family's views on disability and language development (García, Pérez, & Ortiz, 2000). Yet in a study by Mueller, Singer, and Grace (2004), teachers tended to made decisions without the input of parents about which language should be used to instruct English Language Learners with moderate to severe disabilities. These teachers, however, did indicate a need for guidance, training, and resources. As one teacher said:

I have some confusion because I have some students in my class who are regarded as English Language Learners, but I do not provide any Spanish instruction. I do provide some Spanish support if necessary. . . . I'm not really sure of the process and no one can really explain it to me. They just show me a huge book of guidelines telling me that this is what we need to follow, but nobody can really tell me where it goes and whether I am giving this child a disservice by not administering their education in their primary language. (Mueller, et al., p. 243)

Preparing teachers of students with significant disabilities to be culturally responsive will require strong collaboration among the special education faculty and those involved in bilingual education, multicultural and urban education foundations courses, and other areas that address the unique needs of a region (Pugach, 2005). In addition, special education faculty, like others, will likely benefit from ongoing faculty development so that we are not asking our students to examine critical issues and develop competencies with which we have not yet ourselves attained a reasonable level of comfort.

Authentic instruction and assessment. Authentic instruction stresses the importance of using real-life contexts and materials to learn new tasks. Much of this authentic instruction occurs right in the school setting in regular classes, hallways, computer labs, cafeterias, libraries, and school offices. There are obvious examples of daily living skills taught authentically and routinely, when, e.g., a student takes off his coat and manages his belongings at the start of the day, does a classroom or school job, has a snack or eats lunch, locates the computer lab, uses a touch screen to master the latest software program. There are also powerful examples of how

authentic instruction can occur in regular education classes, such as students setting up the next science lab, downloading photos for a group presentation in social studies, or doing project-based lessons in math. The literature contains countless examples of these efforts (Downing, 2002; Fisher & Frey, 2003; Fisher, Sax, & Pumpian, 1999; Jorgensen, 1998; Kluth, 2003; Snell & Janney, 2000; and Wehmeyer, Sands, Knowlton, & Kozleski, 2002). Authentic instruction, if done well, does not short-change inclusion in the regular classroom but extends the educational experience by offering a richer context from which to work.

Authentic instruction can also mean providing instruction in community settings. If a team decides that it is important for a student to learn how to cross a street safely, take a city bus, or function appropriately in a restaurant, there is no way to simulate effectively this experience (although history shows that we have tried). When a community-based activity becomes a learning priority, authentic instruction in that exact setting is usually required.

A logical extension of authentic instruction is using authentic measures of student growth and progress, many of which can be collected in student portfolios. The process of collecting and sorting through key pieces of student work helps teachers maintain a focus on priorities. When well thought out, these portfolio items can provide significant information about student progress and what has truly changed in a student's repertoire as well as provide useful tools for communication with students and their parents. Parent-teacher conferences take on a new dimension when the discussion is around authentic artifacts from a student's portfolio (e.g., pre- and post-video clips of communication progress, journal entries from different times in the school year, progress checklists and anecdotal comments about the school job, or sample pages from books that the student can now read). Portfolios also become helpful tools as students present themselves to new teachers or as they transition to new settings (Demchak, 2000). Teacher candidates will need to see many examples in order to incorporate authentic instruction and measurement into their repertoires.

Assistive technology and integrated therapies. Assistive technology devices are "any item, piece of equipment, or product system, whether acquired commercially off the shelf, modified, or customized, that is used to increase, maintain, or improve functional capabilities of a child with disabilities" (USDOE, 2000, p. III-34). These devices are often categorized as either low tech (e.g., pencil grips, photo sequence cards) or high tech (e.g., voice recognition systems). When we get it right, it changes everything for a student. Consider Sabrina's example:

> An important goal of early childhood classrooms is developing independence. For 5-year-old Sabrina, who cannot speak or point, making and being able to act on choices is a challenge. With the help of an eye-gaze board—a simple apparatus consisting of a Plexiglas frame with Velcro tabs—Sabrina is able to communicate with adults and other children in her classroom. For example, during free choice time, an instructional assistant places the eye-gaze board perpendicular to Sabrina's wheelchair tray and fastens six pictures of her preferred activities around its edges. The aide stands behind the board to gauge where Sabrina's eyes are pointing. By looking directly at one of the pictures, Sabrina chooses to read a book on the computer. The computer is equipped with a feature that turns the pages when Sabrina "hits" a switch, allowing for even more independence. The teacher is especially pleased, as the eye-gaze system is quickly assimilated by Sabrina's peers, who use it to interact with her during free time. (USDOE, 2000, p. III-37)

Becoming thoughtful and creative with assistive technology is a practice all teachers and related service personnel must develop. How do we make this happen? Most teacher education programs have developmental expectations to guide teachers as they demonstrate increased proficiency in technology. Using e-mail and online resources, creating electronic portfolios, critiquing and using teaching software programs are examples. We must become just as clear about our expectations in assistive technology competency. At the very least, teacher candidates focused on students with significant disabilities should have knowledge and experience with augmentative communication systems, word prediction software, computer-generated picture symbol programs, switch devices, leveled reading and language experience software programs that produce meaningful reading materials and age-appropriate software for leisure time engagement. In addition, teachers must demonstrate a commitment to equity in opportunity, understanding their role in advocating for equipment and materials that may be more readily accessed by more privileged students. Finally, they must function from a set of guiding principles that ensures informed decision making with the students themselves and their families, leading to a well-integrated and enduring use of selected assistive technology.

Finally, physical, occupational, and speech-language therapists as well as vision and mobility specialists all make important contributions to the use of assistive technology and to the overall quality of the educational experience. We know that these and other therapies must be well integrated into day-to-day routines and the curriculum to make a difference (Rainforth, 1997). Teacher candidates need to understand the importance of collaborating with therapists and taking full advantage of their expertise.

Peer Connections and Support Systems

For quite some time, our field counted and constructed typologies of the interactions that occurred between students with significant disabilities and those without. Judith Snow and Marsha Forest (1987) and Jeff and Cindy Strully (1989) changed the dialogue around interactions and basically asked us to consider two questions: (1) Do we understand the importance of relationships (not just "peer interactions")? (2) Have we confronted biases that may interfere with believing that a person without disabilities would want to become a friend of someone with significant disabilities? Through a Circle and Maps process, Snow and Forest (1987) helped us understand the confined relationships that often characterize the lives of students with significant disabilities. Their social circles were mostly filled with family members and people who were paid to be in their lives (e.g., therapists, respite workers, teachers). Through an active process involving the student with disabilities and regular education peers, Snow and Forest demonstrated how educators could expand the circle to include many meaningful friendships. This meant that teacher candidates needed to see the importance of friendship development as part of the curriculum:

> Developing friendships is not something that comes easily or naturally to most of us, children or adults. Most people simply have trouble connecting with other people. The schools, for their part, pay little attention to the social and educational value of friendships. Yet, it is our friendships and relationships that are our only real hope, our guideline to being true members of our community. It is friendships that protect us from vulnerability and ensure that our lives are rich and full. However, the lives of people who are labeled as mentally retarded, developmentally disabled, or whatever, seem to be filled with loneliness and isolation, that is, with few, if any friends. This is something that all of us must work to change. (Strully & Strully, 1989, p. 61)

This would mean that, as part of the teacher education curriculum, special educators would understand and be able to carry out their role in facilitating friendships (Turnbull, Pereida, & Blue-Banning, 2000).

For students with behavioral challenges, facilitating friendships and other types of support circles often have a greater importance. The student who has many outbursts or significantly withdraws will almost certainly be lacking in reciprocal relationships. Teacher candidates will need to extend their repertoires so that they are equally equipped with strategies to reduce the student's isolation and thoughtfully promote positive peer relationships. This is not to suggest that the answer to all behavioral issues lies just with developing relationships. Developing a strong repertoire of behavioral support strategies is critical to the success of teachers (Horner & Carr, 1997). Effective behavioral support continues to be a major concern of first-year special educators (Mastropieri, 2001). Even though it is covered in teacher education programs, we agree with Mastroprieri that teacher candidates need more guided practice implementing behavioral support strategies during their programs.

Being Explicit about Curriculum Expertise and Getting Help from Well-Designed Materials

Curriculum clarity, like role clarity, is desperately needed in our special education teacher education programs. It is not unusual to examine university program outlines and course syllabi and find little about what curriculum expertise is expected of the candidates. Given little guidance except for the NBPTS standards with respect to curriculum knowledge in teaching standards documents, this section presented explicit curriculum areas that should be prominent in teacher education programs for special educators of students with significant disabilities. Some areas sufficiently overlap with the expertise needed by other teachers and do not require a separate course or experience directed at those preparing to teach students with significant disabilities (e.g., adapted regular curriculum, culturally responsive instruction, assistive technology). Other curriculum areas, in our judgment, simply do not overlap to the extent necessary to develop the depth of expertise required and need to be addressed in several targeted courses/experiences where teacher candidates focus exclusively on learners with significant disabilities (e.g., vocational and daily functioning preparation, literacy, communication and other foundational skills, authentic instruction and assessment). If teacher candidates are expected to develop a reasonable level of expertise in these areas, teacher education programs must make space for them.

In addition to becoming more explicit about the curriculum content in which candidates should acquire depth, it is important to consider curriculum guides and other teacher materials. If designed well, these materials can help teachers with the pressing matters of what to teach, how to teach it, and how to measure progress. Through analyzing the literature and their own longitudinal study of three English teachers, Grossman and Thompson (2004) drew several important conclusions about new teacher learning and the use of curriculum materials. They found that new teachers spend large amounts of time searching for helpful curriculum materials and that these materials do in fact greatly influence their ideas about classroom practice. They also discuss the observed progression of materials use—with the new teachers "sticking close to the materials they have at hand" (p. 3), then later making adjustments as they learn more about their students and further develop their curriculum expertise. Finally, they discuss the importance of teacher candidates analyzing and critiquing curriculum materials during their teacher education program to avoid a situation where new teachers flounder as they search for

materials or perhaps "latch on to curriculum materials uncritically" (p. 24). Teacher educators know that candidates are resource hungry. We could do much more to help them find good teacher guides and curriculum materials. We could also increase our efforts toward collaborating with accomplished teachers to create and publish much-needed curricular products.

PARTNERSHIPS WITH PARENTS AND SCHOOLS

Hey, Don't Forget About Me! (Thomas, 1976) is a book connected to an Invisible College, a structure used by CEC to bring together key leaders for the purpose of discussing and disseminating important practices in the field. Norris Haring, Lou Brown, and Richard Sherr asked 12 individuals to write chapters in this pivotal book. According to Thomas, the editor, "A parent [Ruth Sullivan] was chosen as one contributor to represent those who live the vigorous role of advocate and consumer" (p. ix). Sullivan, the parent of a 16-year-old son with autism, begins her chapter by discussing four realities and realizations:

1. The first and hardest thing to accept is that the problem is severe, unrelenting, and lifelong.

2. The second realization is that there are few, if any, services for the child.

3. Shortly comes the third realization—that unless the system changes, most of these children will never get what they need.

4. A growing number of parents come to yet a fourth realization—that the system is changeable…that many within the system itself are becoming their allies and that by banding together with others this new parent power can crumble walls which only a few years ago were considered impregnable. (Thomas, 1976, p. 37)

The notion of teachers becoming allies with parents and working together to change systems has very strong roots in the professionalization of teaching students with significant disabilities. For the new teacher, this can be a very intimating proposition, not just from the standpoint of becoming a co-advocate, but also because parent partners, as Sullivan (1976) indicates, "often perceive their children's needs at least as well as professionals do" (p. 40). It takes a mature professional to enter into a partnership and understand that the parent may have the best working knowledge of how to do many things that are also addressed in the school curriculum. The professional needs to manage their feelings of being intimated by parents (Boyer & Lee, 2001) and see them as vital resources and allies in the education process.

Allies with Parents

Teacher candidates should understand that partnerships between families and professionals often fall short of recommended practices (Summers, et al., 2005). Even today, parents continue to express the "stress and exhaustion caused by the perceived necessity to fight for services, cope with humiliating or disrespectful regulations or provider attitudes, or otherwise deal with breakdowns in their relationship with professionals" (Blue-Banning, Summers, Frankland, Nelson, & Beegle, 2004, p. 182).

Helping teachers understand the importance of reciprocal partnerships is a critical part of a teacher education program. One of the many ways to address this is by using case studies as in *Culture in Special Education: Building Reciprocal Family-Professional Relationships* (Kalyanpur & Harry, 1999). Their rich case studies emphasize the importance of developing a "posture of cultural reciprocity." In one example, a professional makes the assumption that Rani,

a 22-year-old Native American woman, needed to move out of her parents' home and become more financially and physically/geographically independent. Had this professional:

> …engaged in a dialogue with Rani's parents, he might have discovered that although moving out may be an option as Native American children become adults (Clay, 1992), it does not always entail leaving the reservation—indeed, Rani's six older sisters live within proximity of their parents on the same reservation—and that the family places an emphasis on interdependence and on "looking after one's own" (Kalyanpur, 1998, p. 320). Furthermore, Rani's disability gives her special status, and there is no stigma to her not moving out. On the contrary, her family assumes that she will continue to remain with her parents for as long as they can look after her, after which she would move into the care of one of her sisters. (Kalyanpur & Harry, 1999, p. 126)

What about students whose parents might not have the access, resources, or feelings of empowerment to bring about changes for their children? One rule of thumb we can offer our teachers in training is: for every child who directly benefits from one's advocacy, identify another child or two who do not now receive this level of support and make it happen for them.

It is hard to imagine where our field would be without the strong parental voice that has pushed and shaped our work. This voice needs to be heard throughout the teacher education program. Parents are important in introductory courses where they routinely talk to classes, co-teach sessions, or teach the class; in case studies, and, most importantly, in experiences where teacher candidates are paired with students and their families. In addition, they are important in culminating methods courses where teacher candidates demonstrate their ability to communicate effectively with parents, including those relationships where cultural differences exist between teachers and families (Harry, et al., 1999; Harry, et al., 2005). Teacher candidates will also need extensive practice (including role playing) and critical feedback on how they work with parents when designing IEPs, developing behavioral support plans, advocating for inclusion, and addressing issues deemed as important to families (Kroth & Edge, 1997).

Student Voice

Years ago Houghton, Bronicki, and Guess (1987) did a study revealing that staff teaching learners with significant disabilities responded to student-initiated expressions of preference or choice at a very low rate. Staff responded to only 15.4% of the initiations during structured activities and about 7% of the time during unstructured activities. This study was cited in Williams' (1991) call for a communication imperative where "every person, regardless of the severity of his or her disabilities, has the right and ability to communicate with others, express everyday preferences, and exercise at least some control over his or her daily life" (p. 543). According to Williams, such an imperative requires that we acknowledge that

> individual preferences of persons with disabilities are often ignored because their expressions have been seen by others as aberrant, off-task, non-compliant, inappropriate, excessive, challenging, aggressive, self-injurious, or nonsensical, are rarely as attempts to communicate to others their valid wants, needs, fears, wishes, or desires. (p. 543)

Today, attitudes toward student empowerment have shifted considerably. We now have student-led IEPs, students participating in transition planning, and an increasing body of work about the

importance of self-determination (Browder, Wood, Test, Karvonen, & Algozzine, 2001; Malian & Nevin, 2002; Test, Fowler, Wood, Brewer, & Eddy, 2005).   We need to help current and future teachers take this empowerment seriously and never to be satisfied with token gestures. Many of us have sat through IEP meetings where the student with significant disabilities is questioned half-heartedly about preferences (e.g., "Which school job do you like, the office job or library job?). The student, without real purpose, points to the picture of the office job. Being treated as a token part of the decision-making process is not the same as having a voice. We know that truly understanding a student's preference requires an extensive amount of give and take, active encouragement, and listening.   If a student's input is a result of this extensive process, then the teacher has done his or her job. If not, much work needs to be done to help the teacher understand the complexities involved in achieving true empowerment. This and other competencies with respect to student empowerment need to find their way into teacher education courses (Thoma, Nathanson, Baker, & Tamura, 2002).

School Partnerships and Model Demonstration

One of the most powerful ways to learn best practices is through sustained involvement in a setting where these practices exist. The true strength of a teacher education program lies in the ongoing collaborative relationships with schools (Holmes Group, 1986) where both partners see the immense value of working together to prepare the next generation of teachers. Teacher educators incorporate examples and lessons from the field into their repertoires; school staff become a part of a network of teachers focused on best practices and continued professional development.   Together, teacher educators and school staff share the commitment to resolving and demonstrating new and promising educational approaches.   "Carefully crafted field experiences," as noted by Brownell and colleagues (2005), is one of the seven critical features of teacher education, based on the results of two recent large-scale studies: a study sponsored by the Association of American Colleges of Teacher Education [AACTE] (Darling-Hammond, 2000) and a study by the International Reading Association [IRA] (National Commission on Excellence in Elementary Teacher Preparation for Reading Instruction, 2003). Model demonstrations served the field of significant disabilities well in its early years and will continue to be important as districts and universities work together to show that wide-scale implementation of promising practices is possible.

CAPACITY TO DEVELOP A SUFFICIENT NUMBER OF DIVERSE, COMMITTED AND TALENTED TEACHERS

The national capacity to prepare qualified teachers for students with significant disabilities was a major agenda item in the mid-1970s, when large numbers of previously unserved students entered public schools. One early proposal to address the personnel needs was to prepare individuals who would *not* need a baccalaureate degree or traditional certification. The thinking was that students with significant disabilities could be served by paraprofessionals because they were viewed as incapable of learning much beyond basic daily functioning skills (Sontag & Haring, 1996). This proposal lost out to stronger voices advocating for comparability in teaching standards and a recognition that highly skilled teaching was needed, not simply caregiving or basic support in daily functioning. Today the expectation is that students with significant disabilities will be served by certified special educators who will work in collaboration with regular educators, therapists, and paraprofessionals to meet the extensive needs of their assigned students.

Addressing Continuing Shortages

Populating schools with diverse and highly qualified special educators is a continuing challenge for our profession. Using three major sources of national data, Boe and Cook (2004) established that the shortage of fully certified special education teachers was 9-11% from 1987-1988 to 1999-2000 (p. 2). When the data are examined to focus exclusively on beginning special educators, the shortage of those fully certified climbs to 31.8% (Boe & Cook, 2004, p. 3; also see Billingsley, 2002). Shortages are likely to be an even bigger problem in urban areas (Carlson, Brauen, Klein, Schroll, & Willig, 2002; Darling-Hammond & Sclan, 1996).

Analyzing the records of randomly selected students from a large, urban system for 4 or 5 years could be revealing. How many of the special education teachers assigned to a particular student were fully certified? For example, brief consideration of this question led to observations about several students with significant disabilities known to the authors. Brandon is a first grader. In his young career he already has been assigned two intern teachers who are learning on the job. Ellis is in middle school. His current teacher is an intern, and his previous two teachers were also emergency-certified. The mother of Brandi, a 10th grader with severe disabilities, expressed concern that her daughter has never been assigned to a fully licensed special educator. Yolanda is considered lucky because 3 of her most recent 4 teachers were certified. What is the cumulative effect of being educated year after year by someone who is not fully licensed and is learning almost everything on the job?

We need to envision the day when all districts (urban and rural) actually get to choose from a pool of highly qualified applicants. One powerful way to understand how far away we are from achieving this goal is to look at the applicant pools in our own communities. For example, the Milwaukee Public Schools average two applications for every opening compared to some Milwaukee suburbs that "can draw from a pool of 500 to 700 candidates for the most popular jobs" (Zahn & Schultze, 1998). It does not take a major study to conclude that any organization with only two applicants for each opening is in deep trouble. Given shortages like this, it is clear that teachers need to be drawn from all pipelines, including alternative certification, and that we must ensure multiple pathways to teaching while learning how to make each pathway effective in producing high-quality teachers (Zeichner & Conklin, 2005).

Alternative certification. The teacher shortage has led to many alternative and fast-track programs for post-baccalaureate students interested in becoming teachers. About 10 percent of beginning special educators complete their certification through an alternative route program (Billingsley, 2002). While many questions remain about the effectiveness of these programs, the programs have clearly been able to attract a more diverse pool of teacher candidates than traditional teacher education programs (Wilson, Floden, & Ferrini-Mundy, 2002). About 38% of students in special education in our U.S. schools are from culturally and linguistically diverse backgrounds, yet only 14% of their teachers are from similar backgrounds (McLeskey, Tyler, & Flippin, 2003). As Rosenberg and Sindelar (2005) aptly point out, traditional special education teacher preparation programs have not been particularly successful in their quest to recruit and retain teacher candidates of color. While we believe that White teachers are certainly capable of practicing culturally responsive teaching, this is not a substitute for a strong and visible presence of teachers from underrepresented racial and ethnic backgrounds. In addition, simply because alternative certification programs often yield greater diversity does not mean that this pathway should become the predominant route for recruitment. Using data from a longitudinal study of career urban educators, Lyons (2004) concluded that the ethnically and socioeconomically diverse study participants are "not looking for the easiest or fastest route to a credential, but are attracted to a high-status, two year master's program that emphasizes equity through education" (p. 30).

Another important characteristic of the teachers prepared in alternative certification programs is that many are choosing teaching as a mid-career path. This group of candidates tends to be older than their undergraduate counterparts and have more life experience. They are more likely to be parents and have already had a job or career. For the most part, these students have already transcended the self-oriented student preoccupations characteristic of many young undergraduates and are more "other-oriented" (Goodlad, 1990, p. 288), potentially making the transition to teaching a smoother process. The attrition rate for those entering teaching mid-career is much lower than for younger special educators (Billingsley, 2004), another factor to consider when addressing severe teacher shortages.

Alternative certification programs are not the sole answer to chronic teacher shortages but should be recognized as an important part of the array of programs offered by an institution. Alternative program content, expectations, and course scheduling must be linked with real experiences for nontraditional teacher candidates. There should be sensitivity to the professional and personal demands placed on them as they teach while enrolled in the program (Rosenberg & Sindelar, 2005). This by no means translates to lowered standards or expectations. Indeed, these candidates must be held to the same rigorous set of standards as traditional students. One challenge is to structure the alternative program to assure a reasonable level of expertise before the teacher candidate assumes full on-the-job responsibility. Many programs (52% according to the Center on Personnel Studies in Special Education, 2005) have no more than 3 months training before they are expected to assume a teaching position. If the field continues to implement programs of this nature, in essence, we are accepting models in which large numbers of students end up sacrificing their learning so that their on-the-job teachers can learn. Teacher educators and their district partners must work creatively to redesign programs so that children are guaranteed a qualified teacher from the first day. Finally, no matter what model is constructed, all require well coordinated and building-based mentor support and strong induction experiences (Ingersoll, 2003; Rosenberg & Sindelar, 2005).

Non-categorical licensing. "In the last 30 years there has been a clearly identifiable shift from special education licensure models that were based solely on categories of disabilities to

models that retain categorical options and also offer non-categorical options" (Geiger, Crutchfield, & Mainzer, 2003, pp. 22-23). The shift toward non-categorical licensing makes sense in that 46% of beginning teachers work with students from two or three disability groups, and 31% serve students from four to six disability groups (Billingsley, 2002). As schools become more inclusive and create collaborative team structures with special educators as members, flexibility in the role of the special educator is highly desired. For example, an elementary school may have two special educators, one assigned to the primary team, the other to the intermediate team. The expectation is that the special educator will work across disability areas, advocating for and meeting the needs of any student with an IEP at that level. It is logical that many graduates of non-categorical programs may not feel fully prepared to serve students with significant disabilities or other students with whom they did not have sufficient contact. In this case, it is important to ensure mechanisms for advanced training are in place (Ryndak, Clark, Conroy, & Stuart, 2001; *TASH Resolution on Teacher Education,* 2002). This advanced training would specifically target the areas of curriculum specialization discussed in the previous section and would ensure supervised field experience with students with significant disabilities. Consistent with the notion of advanced training, many states with a primarily non-categorical licensure structure can and usually do have specialty endorsements for particular disability areas, e.g., Severe Disabilities (Geiger, et al., 2003).

Adding alternative certification programs to the preparation pipeline and using a non-categorical licensing structure are two strategies that should help ease the shortage of a diverse and talented teaching pool. However, a related issue is retaining the teachers once they begin their careers (Ingersoll, 2003). Because teaching conditions contribute to attrition (McLeskey, et al., 2003), it is important to work in concert with the district to improve conditions.

Helping to Prepare Other Team Members: Regular Educators, Therapists, and Paraprofessionals

It is possible for special education faculty to devote all their teaching resources to the direct preparation of special educators. However, the capacity to provide a good education to students with significant disabilities depends on much more than the special educator. To the extent possible, it makes sense for special education faculty to work collaboratively with faculty who prepare other critical team members, including regular educators and therapists. In addition, special educator teacher candidates (and to some extent regular educators) will need to be prepared to work with paraprofessionals who are essential members of the team.

Regular educators. Almost all regular education teachers will teach students with IEPs—an average of 74% according to *Education Week*'s Quality Counts survey (Olson, 2004). Unless preparation is substantial and well-integrated, pre-service students are likely to feel unprepared to work with students with disabilities (Cook, 2002). While there is much activity in teacher education related to preparing candidates to work with students with disabilities (collaborative programs, restructured introductory courses, co-teaching, field experiences, accommodation strategies built into methods courses), a sustained line of research to determine the strategies that have the greatest impact is needed (Pugach, 2005).

How much expertise related to teaching students with significant disabilities is reasonable to expect of an initially licensed regular education teacher? This question was addressed by the Collaborative Teacher Education Program for Urban Communities at University of Wisconsin Milwaukee that led to the development of an initial list of expectations for regular education

teachers in their work with students with significant disabilities (Ford, Pugach, & Otis-Wilborn, 2001). Minimally, regular education teacher candidates should:

- be committed to teaching the full range of learners with disabilities
- have an understanding of disability that demystifies it and goes beyond the label to appreciate more fully "what's going on with a learner"
- be reasonably prepared to anticipate high priority needs and make routine accommodations for the students with IEPs
- be prepared to work within an inclusive and collaborative structure
- demonstrate awareness of the political, social, and historical context of special education, particularly as it relates to the urban schools/districts in which they work. (p. 278)

It helps that texts about inclusive education are increasingly written for regular educators with the intent of helping them see their students with significant disabilities as academic learners. For example, in their edited book, *Access to Academics for ALL Students: Critical Approaches to Inclusive Curriculum, Instruction and Policy,* Kluth, Straut and Biklen (2003) present chapters on literacy, mathematics, music, science, social studies, and extracurricular activities that call for pedagogy that is responsive to all students while providing rich and challenging expectations.

Clarifying the desired expertise of regular educators and ensuring that it is sufficiently addressed in teacher education will more likely occur if there is a regular presence of special education faculty throughout the program. This is the stance taken by many programs (Blanton, Winn, Griffin, & Pugach, 1997), including UW-Milwaukee's Collaborative Program:

> The fact that regular teacher education faculty are committed to accepting the need to prepare our graduates to work with students with disabilities in principle is not a powerful enough teaching strategy, even in combination with a dedicated course in special education.   It simply does not provide our students with access to faculty who are steeped in special education as their fundamental professional identity. Rather, a heavy, regular and continuous presence of special education faculty is necessary across the regular education preservice program if we are to be effective in assuring that our graduates are prepared to work effectively with students with disabilities. Together these experiences provide a nearly continuous authentic context for what students have been learning and thinking about in relationship to working with students with disabilities. (Ford, Pugach, et al., 2001, p. 278)

In summary, we have known for some time that we have to go beyond the one time inclusion course for regular educators and more fully situate disability studies and inclusive pedagogy into the overall curriculum. The presence of special education faculty in the regular education teacher education program as well as in programs that prepare therapists and paraprofessionals seems especially critical to make a difference in this area.

Other special educators, therapists and paraprofessionals.   While collaboration brings rewards, teacher candidates will also need to recognize the challenges and manage the demands on many fronts. Not only is it important for special educators to function as part of a team with regular education staff, they must also find time and meaningful ways to collaborate with special education staff. Often it is important for special educators to meet regularly with other special educators in the building (e.g., to adjust teaching loads, share resources, solve scheduling problems). Also of critical importance are the multidisciplinary teamwork and

coordinated integrated therapies (Harn, Bradshaw, & Ogletree, 1999; Rainforth, 1997) in which special educators must play a key role. Ideally, some collaborative practice occurs at the preservice level (with speech and language therapists, occupational therapists, physical therapists) so that the special educator feels reasonably empowered prior to his or her first teaching assignment.

Finally, one pressing collaborative relationship encountered by new teachers is working effectively with paraprofessionals. As more and more students with significant disabilities access inclusive classrooms and community vocational settings, there has been an increasing reliance on paraprofessionals and some concern about whether there is over-reliance on this support model (Brown, Farrington, Ziegler, Knight, & Ross, 1999; French & Pickett, 1997; Giangreco & Broer, 2005; Giangreco, Edelman, Broer, & Doyle, 2001). Giangreco and Broer used feedback on questionnaires from 737 school personnel and parents to examine the utilization of paraprofessionals in inclusive schools. This study confirmed that special educators spend a significantly smaller percentage of time on instruction than do the paraprofessionals they supervise (p. 21) and that nearly 70% of the paraprofessionals agreed that they were making curricular and instructional decisions without always having oversight by a teacher special educator (p. 23). Paraprofessionals play a critical role in helping to extend special education services to a wide range of environments. The paraprofessional role can also serve as a career ladder strategy by providing a potentially strong pool of individuals from which to select teacher education candidates. While some efforts can be made to enhance the qualifications of and improve training for paraprofessionals, Giangreco and Broer make a compelling argument that real change will not occur without a corresponding focus on preparing regular and special educators to improve their support of their paraprofessional team members. Teacher educators must find a place in an already compact program to help candidates develop the skills necessary to support and supervise teaching assistants in a collaborative manner.

Following Teacher Education Graduates: Induction and Continued Professional Development

We are in an era of increased accountability that includes mandated teacher testing, a stronger push toward program accreditation, and pressures from politicized, competitive forces that challenge "traditional" routes to certification and, in some cases, pose the question about whether teachers need to be certified at all (Wilson & Youngs, 2005). Rather than resist accountability, a better response might be for teacher education faculty to decide which questions are reasonable to ask about their programs. Examples of such questions include:

- Exactly how many special educators were prepared this year to work with students with significant disabilities?
- What basic profile information do we have about these completers—how diverse are they and how successful were they in fieldwork, coursework, portfolio reviews, and test scores?
- What predictive information can be discerned from the admissions data?
- What positions did they fill and what was the effect on teacher shortages?
- What impact are they having on the achievement of their students and do the students' parents and school administrators agree with this assessment?
- How are our graduates performing after completing the program at one year out, three years out, five years out, assuming they are still teaching?

Once the questions are agreed on, the challenge is to implement a sustainable process that goes well beyond the pass rates on tests required in the 1998 accountability provisions of Title II of the Higher Education Act (Public Law 105-244).

Examining how well our teacher education graduates are doing will require some contact with them during their induction years. While there are many critical features of programs designed to support teachers in their first years of teaching (e.g., responsiveness to their unique stressors and needs; a supportive and nurturing school culture), the involvement of a mentor is often seen as one of the most critical support structures (Griffin, Winn, Otis-Wilborn, & Kilgore, 2003). Building-based mentors for new teachers of students with significant disabilities is very important on many fronts, but the building may not have an experienced teacher who can provide good modeling and strong expertise in teaching students with significant disabilities. It will be important to work with the district to develop and draw from a network of teachers who are in the position to provide this support.

Finally, we know that a teacher education program must have a dynamic element that promotes continued professional development and brings teacher-leaders back into the mix (National Commission on Teaching & America's Future, 1996). Like the induction years, it is critical that continuing development efforts are done in close collaboration with districts. One of the more exciting vehicles for achieving this is through study groups or task forces where groups with similar interests get together to study or develop curriculum. This serves at least two purposes: (1) it provides a professional development vehicle for new and experienced teachers, and (2) such groups can actually produce much needed, practical curriculum materials that can be disseminated through commercial publications, district curriculum manuals, and online. We understand the frustration of new teachers who get excited about the possibilities, yet come up short when looking for curriculum manuals to help guide their instruction (e.g., What do home-school journals look like? What does a day-by-day reading program look like? How do you incorporate school and classroom jobs into the daily schedule? What about community-based jobs for older students?). Thus, one very important professional growth opportunity is the development of practical curriculum materials that are sorely needed by initial teachers of students with severe disabilities.

IMPLICATIONS FOR PRACTICE AND RESEARCH

In many ways, teacher education for students with significant disabilities has been the powerful force envisioned in the mid-1970s meetings described by Sontag and Haring (1996). This paper provided an opportunity to revisit some critical elements that contributed to professionalization of the field and to examine their relevance today. The analysis presented in this paper offers a starting point to consider revisit practices and consider their value as we shape today's teacher education programs focused on student with significant disabilities. Our recommendations are outlined below.

1. Focused Advocacy: *Maintain a focus on significant disabilities, while continuing to push for inclusive structures; help teacher candidates recognize that advocacy is needed, not only because having a significant disability still makes one vulnerable in our society, but also because injustices related to race, ethnicity, and poverty exist for students with significant disabilities and require diligence and action.* Continued research is needed to understand the advocacy stance of prospective teachers and how it is developed, particularly in non-categorical licensure programs. What identities are being developed by teacher candidates? Is it important to have a subset of special education teacher candidates who have a passion for and identify primarily with students with significant disabilities? Do teacher candidates of students with significant disabilities see gender, race, culture, and poverty as significant or does "severe disabilities" trump all other aspects of their students' lives? How do these concerns about identity and advocacy affect students? Does it make a difference in how learners with significant disabilities are served and what they achieve?

2. Meaningful Outcomes: *Join with others and play a leadership role in defining the outcomes desired for learners with significant disabilities; these outcomes should be inclusive, but not to the point that they no longer respect the unique and valued contributions we know are possible and necessary for students with significant disabilities.* Here, we would advocate strongly for a national consensus panel of leaders (including parents, consumers, and curriculum leaders) who can debate and ultimately define meaningful outcomes for learners with significant disabilities. This panel would develop clear expectations and standards that can be used by states when revising their alternate assessment systems and by teacher education programs as they help new teachers evaluate the attainment of meaningful student outcomes. Like all other teacher education professions, we need good research and demonstration efforts to establish practical and effective ways for teacher education programs to judge the performance of their candidates, based in part on the achievements of their students with significant disabilities.

3. Curriculum Guidance: *Ensure that teacher education programs provide strong curriculum guidance in both the overlapping and the specialized content.* A national consensus panel would go a long way toward helping to define the specialized content needed in teacher education programs for students with significant disabilities. An analysis of this content expertise could produce interesting results and might lead to a large-scale discussion of what curriculum is considered a priority when preparing new teachers. Also research is needed to gain a better understanding of the influence of state standards and alternate assessment systems as well as professional teacher education standards in influencing the curriculum for students with significant disabilities.

4. Partnerships: *Create enduring partnerships with parents and individuals with significant disabilities so that teacher candidates hear their voices throughout the teacher education program. Create an interdependent relationship with school districts—one that is so powerful that teacher candidates feel that they are a part of this partnership.* Far more needs to be understood and published about the role that parents and consumers can have on the preparation of future teachers. Our field would be helped by drawing on the research and practice designs used in urban teacher education to study dispositional change in prospective teachers with respect to racial and cultural biases. We need to know more about the most effective ways to challenge candidates about their views on disabilities and working with parents. We also need to share tested, powerful techniques to help candidates develop the skills necessary to engage in reciprocal parent relationships and to empower learners with significant disabilities. If we have not already done so, teacher educators need to initiate the development of PK-16 partnerships or councils. Many current issues (e.g., teacher shortages, alternate certification programs, retention, induction) require discourse and action at levels beyond Professional Development Schools and individual faculty partnerships.

5. Capacity for staffing schools with diverse and high quality teachers: *Develop district-university councils that jointly plan, oversee, and seek innovative solutions to staffing needs. Take accountability seriously and track the success of one's program, addressing and routinely reporting on issues related to capacity.* Develop a set of questions to monitor each year, such as the questions posed in this paper: How many new teachers have we fully prepared to work with students with significant disabilities? How diverse are they? How effective are they? How have we made a difference in Districts' capacity to address the needs of students with significant disabilities? Do parents and district officials agree with our assessment? We will need manageable and meaningful models to account for program effectiveness. These models should be based on collaborative relationships with the Districts whose shortages we are trying to address. Like other teacher education fields, we must struggle through the process of identifying valid ways to measure the effectiveness of our graduating teachers based on the performance of their students. Because parents have so much at stake here, their views must be part of any evaluation tool.

This represents a starter list of research and practice directions based on revisiting five essential elements of teacher education in significant disabilities. Given how much has changed in the past few decades, it is an appropriate time to reflect on the status of teacher education for students with significant disabilities and firm up new directions. Inclusive education, non-categorical licensure, and unified special/regular teacher education programs are major developments with major implications. There are many unresolved issues for teacher educators and other stakeholders. Now seems like an important time to work toward resolution.

CONCLUSIONS

The professionalization of teaching and learning for students with significant disabilities emerged from a strong, grassroots advocacy movement. The elements that characterized this movement have proved helpful when reviewing the current status of teacher education programs and setting directions for the future. Many issues were raised throughout this paper, but none more compelling than the need to maintain some level of focused advocacy on behalf of students with significant disabilities. As the field has become more inclusive and cross-categorical (both positive directions), students with significant disabilities are positioned to benefit from schooling in more ordinary and less specialized ways.

Yet, in this inclusive school we envision a continuing role for a special educator who has unique expertise in supporting students with significant disabilities. This is an educator who is not overwhelmed by the new student who has Prader-Willi, deaf-blindness, or severe autism. He or she has a base of knowledge from which to work when understanding this learner and the role that disability may play. This educator knows how to advance the learning of students whose pace of skill acquisition is quite discrepant from their peers and works closely with family members, exchanging daily insights and information of mutual concern. This educator seeks to prevent inequities that might occur because of race, ethnicity, or poverty and is very responsive to students' cultural and linguistic differences. This educator advocates for inclusion and collaborates effectively with colleagues to ensure that the regular curriculum meaningfully accommodates learners with significant disabilities. He or she also works collaboratively to ensure that specialized curriculum needs are addressed without isolating the student or disrupting the regular experience. This educator is very concerned about results. Regardless of the age of the student, he or she has a sense of responsibility for the outcomes achieved once the student transitions from school into employment and/or a postsecondary school setting. This educator maintains student portfolios, involving the students as well as parents and school administrators in the process. Finally, she or he is an accomplished teacher who stays abreast of the field and communicates regularly with others who share the same passion for educating students with significant disabilities.

REFERENCES

Banks, J. (2001). Citizenship education and diversity: Implications for teacher education. *Journal of Teacher Education*, *52*(1), 5-16.

Biklen, D. (1992). *Schooling without labels: Parents, educators, and inclusive education.* Philadelphia: Temple University Press.

Billingsley, B. (2002). *SPeNSE: Beginning special educators: Characteristics, qualifications, and experiences.* Retrieved August 1, 2004, from http://www.spense.org/IHEsummary final. pdf

Billingsley, B. (2004). Special education teacher retention and attrition: A critical analysis of the research literature. *The Journal of Special Education*, *38*(1), 39-55.

Blanchett, W., Brantlinger, E., & Shealey, M. (2005). Brown 50 years later—exclusion, segregation, and inclusion: Guest editors' introduction. *Remedial and Special Education, 26*(2), 66-69.

Blanton, L. P., Griffin, C. G., Winn, J., & Pugach, M. C. (Eds.). (1997). *Teacher education in transition: Collaborative programs to prepare general and special educators.* Denver, CO: Love Publishing Company.

Blue-Banning, M., Summers, J. A., Frankland, H. C., Nelson, L., & Beegle, G. (2004). Dimensions of family and professional partnerships: Constructive guidelines for collaboration. *Exceptional Children, 70*(2), 167-184.

Boe, E. E., & Cook, L. H. (2004). *The chronic and increasing shortage of fully-certified teachers in special and general education*. Retrieved April 2, 2006, from the University of Pennsylvania, Center for Research and Evaluation in Social Policy Web site: http://www.gse.upenn.edu/cresp

Boyer, L., & Lee, C. (2001). Converting challenge to success: Supporting a new teacher of students with autism. *The Journal of Special Education*, *35*(2), 75-83.

Browder, D. (1987). *Assessment of individuals with severe handicaps*. Baltimore: Paul H. Brookes.

Browder, D., & Cooper-Duffey, K. (2003). Evidence-based practices for students with severe disabilities and the requirement for accountability in "No Child Left Behind." *The Journal of Special Education, 37*(3), 157-163.

Browder, D., Flowers, C., Ahlgrim-Delzell, L., Karvonen, M., Spooner, F., & Algozzine, R. (2004). The alignment of alternate assessment content with academic and functional curriculum. *The Journal of Special Education*, *37*(4), 211-223.

Browder, D., Wood, W. M., Test, D., Karvonen, M., & Algozzine, B. (2001). Reviewing resources on self-determination. *Remedial and Special Education*, *22*(4), 233-255.

Brown, L., Farrington, K., Ziegler, M., Knight, T., & Ross, C. (1999). Fewer paraeducators and more teachers and therapists in educational programs for students with significant disabilities. *Journal of the Association for Persons with Severe Handicaps, 24*, 249-252.

Brown, L., Nietupski, J., & Nietupski, S. (1976). Criterion of ultimate functioning. In M. Thomas (Ed.), *Hey, don't forget about me!* (pp. 2-15). Reston, VA: Council for Exceptional Children.

Brown, L., Rogan, P., Shiraga, B., Zanella Albright, K., Kessler, K., Bryson, F., VanDeventer, P., & Loomis, R. (1987). *A vocational follow-up evaluation of the 1984 to 1986 Madison Metropolitan School District graduates with severe intellectual disabilities*. Seattle, WA: TASH.

Brownell, M. T., Ross, D., Colón, E., & McCallum, C. (2005). Critical features of special education teacher preparation: A comparison with regular education. *The Journal of Special Education, 38*(4), 242-252.

Carlson, E., Brauen, M., Klein, S., Schroll, K., & Willig, S. (2002). *SPeNSE: Key findings*. Retreived May 3, 2004, from http://www.spense.org/Results.html

CAST (Center for Applied Special Technology), Inc. (n.d.). *What is universal design for learning?* Retrieved June 12, 2006 from http://www.cast.org/research/udl/index.html

Center on Personnel Studies in Special Education. (2005). *Research preview: Special education alternative route certification programs: What do we know about them?* Retrieved August 1, 2005, from the University of Florida/COPSSE Web site: http://www.coe.ufl.edu:16080/copsse/research-focus-areas/alternative-certification.php

Clay, J. A. (1992). Native American independent living. *Rural Special Education Quarterly*, *11*(1), 41-50.

Cook, B. G. (2002). Inclusive attitudes, strengths, and weaknesses of pre-service regular educators enrolled in a curriculum infusion teacher preparation program. *Teacher Education and Special Education, 25*(3), 262-77.

Council for Exceptional Children. (2003). *What every special educator must know: Ethics, standards, and guidelines for special educators*. (5th ed.). Arlington, VA: Author.

Council for Exceptional Children Board of Directors. (2004). *The Council for Exceptional Children definition of a well-prepared special education teacher*. Arlington, VA: Author.

Darling-Hammond, L. (2000). *Studies of excellence in teacher education*. Washington, DC: AACTE Publications.

Darling-Hammond, L., & Sclan, E. (1996). Who teaches and why. In J. Sikula, T. Buttery, & E. Guyton (Eds.), *Handbook of research on teacher education* (2nd ed., pp. 67-101). New York: Macmillan.

Demchak, M. (2000). A transition portfolio for Jeff, a student with multiple disabilities. *Teaching Exceptional Children*, *32*(6), 44-49.

Dymond, S., & Orelove, F. (2001). What constitutes effective curricula for students with severe disabilities? *Exceptionality*, *9*(3), 109-122.

Downing, J. (2002). *Including students with severe and multiple disabilities in typical classrooms: Practical strategies for teachers* (2nd ed.). Baltimore: Paul H. Brookes.

Downing, J. (2005). *Teaching literacy to students with significant disabilities: Strategies for the K-12 inclusive classroom*. Thousand Oaks, CA: Corwin Press.

Falvey, M. (1989). *Community-based curriculum: Instructional strategies for students with severe handicaps*. Baltimore: Paul H. Brookes.

Ferguson, D. (1995). The real challenge of inclusion: Confessions of a "rabid inclusionist." *Phi Delta Kappan*, *77*(4), 281-287.

Ferguson, D., Kozleski, E., & Smith, A. (2001). *Transformed, inclusive schools: A framework to guide fundamental change in urban schools*. Retrieved on May 10, 2005, from National Institute for Urban School Improvement Web site: http://www.urbanschools.org/publications/ transformed_schools.html

Fisher, D., & Frey, N. (2003). *Urban inclusive schools*. Baltimore: Paul H. Brookes.

Fisher, D., Sax, C., & Pumpian, I. (1999). *Inclusive high schools: Learning from contemporary classrooms*. Baltimore: Paul H. Brookes.

Ford, A., Davern, L., & Schnorr, R. (2001). Learners with significant disabilities: Curricular relevance in an era of standards-based reform. *Remedial and Special Education*, *22*(4), 214-222.

Ford, A., Pugach, M., & Otis-Wilborn, A. (2001). Preparing regular educators to work well with students who have disabilities: What's reasonable at the preservice level? *Learning Disabilities Quarterly*, *24*(4), 275-287.

Ford, A., Schnorr, R., Meyer, L., Davern, L., Black, J., & Dempsey, P. (1989). *The Syracuse community-referenced curriculum guide for students with moderate and severe disabilities*. Baltimore: Paul H. Brookes.

French, N. K., & Pickett, A. L. (1997). Paraprofessionals in special education: Issues for teacher educators. *Teacher Education and Special Education, 20*, 61-73.

García, S., Pérez, A. M., & Ortiz, A. (2000). Mexican American mothers' beliefs about disabilities: Implications for early childhood intervention. *Remedial and Special Education, 21*(2), 90-100.

Gay, G. (2002*).* Preparing for culturally responsive teaching. *Journal of Teacher Education, 53*(2), 106-116.

Geiger, W., Crutchfield, M., & Mainzer, R. (2003). *The status of licensure of special education teachers at the beginning of the 21st century.* Retrieved August, 2004, from University of Florida, Center on Professional Studies in Special Education [COPSSE] Web site: http://www.copsse.org

Gersten, R., Keating, T., Yovanoff, P., & Harniss, M. (2001). Working in special education: Factors that enhance special educators' intent to stay. *Exceptional Children, 67*(4), 549-567.

Giangreco, M. F., & Broer, S. (2005). Questionable utilization of paraprofessionals in inclusive schools: Are we addressing symptoms or causes? *Focus on Autism and Other Developmental Disabilities, 20*(1), 10-26.

Giangreco, M. F., Cloninger, C. J., & Iverson, V. S. (1998). *Choosing options and accommodations for children* (2nd ed.). Baltimore: Brookes.

Giangreco, M. F., Edelman, S. W., Broer, S. M., & Doyle, M. B. (2001). Paraprofessional support of students with disabilities: Literature from the past decade. *Exceptional Children, 68*, 45-64.

Gold, M. W., & Barclay, C. R. (1973). The learning of difficult visual discriminations by the moderately and severely retarded. *Mental Retardation*, *11*(2), 9-11.

Goodlad, J. I. (1990). *Teachers for our nation's schools*. San Francisco: Jossey-Bass Publishers.

Griffin, C., Winn, J., Otis-Wilborn, A., & Kilgore, K. (2003). *New teacher induction in special education.* Retrieved September, 2004, from University of Florida, Center on Professional Studies in Special Education [COPSSE] Web site: http://www.copsse.org

Grossman, P., & Thompson, C. (2004, January). *Curriculum materials: Scaffolds for new teacher learning.* Retrieved March 9, 2005, from the Center for the Study of Teaching and Policy Web site: http://www.ctpweb.org

Haring, N. G., McCormick, L., & Haring, T. G. (1994*). Exceptional children and youth.* New York: Merrill/Macmillan College Publishing Co.

Harn, W., Bradshaw, M., & Ogletree, B. T. (1999). The speech-language pathologist in the schools: Changing roles. *Intervention in School & Clinic*, *34*(3), 163-170.

Harry, B. (1992). *Cultural diversity, families, and the special education system: Communication and empowerment.* New York: Teacher's College Press.

Harry, B., Klingner, J. K., & Hart, J. (2005). African American families under fire: Ethnographic views of family strengths. *Remedial and Special Education, 26*, 101-112.

Harry, B., Kalyanpur, M., & Day, M. (1999). *Building cultural reciprocity with families: Case studies in special education.* Baltimore: Paul H. Brookes.

Hasazi, S., Gordon, L. A., & Roe, C. A. (1985). Factors associated with the employment status of handicapped youth exiting high school from 1979 to 1983. *Exceptional Children*, *51*, 455-469.

Holmes Group. (1986). *Teachers for tomorrow's schools*. East Lansing, MI: Author.

Horner, R. & Carr, E. (1997). Behavioral support for students with severe disabilities: Functional assessment and comprehensive intervention. *The Journal of Special Education*, *64*(2), 167-180.

Houghton, J., Bronicki, G. J., & Guess, D. (1987). Opportunities to express preferences and make choices among students with severe disabilities in classroom settings. *Journal of The Association for Persons with Severe Handicaps*, *12*(1), 18-27.

Hunt, P. (2003). Collaborative teaming to support students at risk and students with severe disabilities in regular education classrooms. *Exceptional Children, 68*(3), 315-332.

Hunt, P., Doering, K., Hirose-Hatae, A., Maier, J., & Goetz, L. (2001). Across-program collaboration to support students with and without disabilities in a regular education classroom. *Journal for the Association for Persons with Severe Handicaps*, *26*, 240-256.

Individuals with Disabilities Education Act Amendments of 1997, 20 U.S.C. § 1401(26).

Individuals with Disabilities Education Act Data-Table 2-5. Retrieved April 4, 2006, from https://www.ideadata.org/tables28th/ar_2-5.htm

Individuals with Disabilities Education Act Data-Table B4C. Retrieved April 4, 2006, from https://www.ideadata.org/docs/PartBTrendData/B4C.html

Ingersoll, R. (September, 2003). *Is there really a teacher shortage? A research report.* Seattle, WA: University of Washington: Center for the Study of Teaching and Policy.

Interstate New Teacher Assessment and Support Consortium. (2001). *Model standards for licensing general and special education teachers of students with disabilities: A resource for state dialogue.* Washington, DC: Council of Chief State School Officers.

Jorgensen, C. (1998). *Restructuring high schools for all students: Taking inclusion to the next level.* Baltimore: Paul H. Brookes.

Jorgensen, C., Fisher, D., Tashie, C., & Sgambati, M. (2003). What matters most: Ensuring that high school students with disabilities are members of…. In V. Gaylord, T. Vandercook, & J. York-Barr (Eds.), *Impact: Feature Issue on Revisiting Inclusive K-12 Education*, *16*(1). pp. 22-23. Minneapolis: University of Minnesota, Institute on Community Integration.

Kalyanpur, M. (1998). The challenge of cultural blindness: Implications for family-focused service delivery. *Journal of Child and Family Studies*, *7*(3), 317-332.

Kalyanpur, M. & Harry, B. (1999). *Culture in special education: Building reciprocal family-professional relationships.* Baltimore: Paul H. Brookes.

Kleinert, H., Garrett, B., Towles, E., Garrett, M., Nowak-Drabik, K., Waddell, C., & Kearns, J. (2002). Alternate assessment scores and life outcomes for students with significant disabilities: Are they related? *Assessment for Effective Intervention*, *28*(1), 19-30.

Kleinert, H., & Kearns, J. F. (Eds.). (2001). *Alternate assessment: Measuring outcomes and supports for students with disabilities.* Baltimore: Paul H. Brookes.

Kluth, P. (2003). *"You're going to love this kid!": Teaching students with autism in the inclusive classroom.* Baltimore: Paul H. Brookes.

Kluth, P., Biklen, D., & Straut, D. (2003). Access to academics for all students. In P. Kluth, D. Biklen, & D. Straut (Eds.), *Access to academics for all students: Critical approaches to inclusive curriculum, instruction, and policy* (pp. 1-32). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

Kluth, P., Straut, D., & Biklen, D. (Eds.). (2003). *Access to academics for ALL students: Critical approaches to inclusive curriculum, instruction, and policy.* Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

Kroth, R. L., & Edge, D. (1997). *Strategies for communicating with parents of exceptional children* (3rd ed.). Denver, CO: Love.

Ladson-Billings, G. (1999). Preparing teachers for diversity. In L. Darling Hammond & G. Sykes (Eds.), *Teaching as the learning profession* (pp. 86-123). San Francisco: Jossey-Bass.

Lipsky, D. K., & Gartner, A. (1996). Inclusion, school restructuring, and the remaking of American society. *Harvard Education Review*, *66*(4), 762-796.

Lovett, H. (1985). *Cognitive counseling and persons with special needs*. New York: Praeger.

Lyons, K. B. (2004). *Specialized recruitment: An examination of the motivations and expectations of pre-service urban educators*. Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.

Malian, I., & Nevin, A. (2002). A review of self-determination literature—Implications for practitioners. *Remedial and Special Education*, *23*(2), 68-74.

Mastropieri, M. (2001). Is the glass half full or half empty?: Challenges encountered by first-year special education teachers. *The Journal of Special Education,* *35*(2), 66-74.

McGee, J. J., Menolascino, F. J., Hobbs, D. C., & Menousek, P. E. (1987). *Gentle teaching: A non-aversive approach to helping persons with mental retardation.* New York: Human Sciences Press.

McLeskey, J., Tyler, N., & Flippin, S. (2003). The supply of and demand for special education teachers: A review of research regarding the nature of the chronic shortage of special education. Retrieved July 22, 2004, from University of Florida, Center on Professional Studies in Special Education [COPSSE] Web site: http://www.copsse.org

Meyer, L. (2001). Multiculturalism and severe disabilities. *Journal of the Association for Persons with Severe Handicaps (JASH), 26*(3), 204-205.

Meyer, L. H., Park, H. S., Grenot-Scheyer, M., Schwartz, I. S., & Harry, B. (1998). *Making friends: The influences of culture and development.* Baltimore: Paul H. Brookes.

Mills v. Board of Education of the District of Columbia, 348 F. Supp. 866 (DC 1972).

Mirenda, P. (1993). Bonding the uncertain mosaic. *Augmentative and Alternative Communication*, *9*, 3-9.

Mueller, T. G., Ginger, G. H. S., & Grace, E. (2004). The Individuals with Disabilities Act and California's Proposition 227: Implications for English language learners with special needs. *Bilingual Research Journal*, *28*(2), 231-251.

Musselwhite, C., & King-DeBaun, P. (1997). *Emergent literacy success: Merging technology and whole language for students with disabilities.* Park City, UT: Creative Communicating.

Nastasi, B. K., Pluymert, K., Varjas, K., & Moore, R. B. (2002). *Exemplary mental health programs: School psychologists as mental health services providers* (3rd ed.). Bethesda, MD: National Association of School Psychologists.

National Board for Professional Teaching Standards. (2001). *NBPTS standards: Exceptional needs.* Retrieved on August 1, 2005, from http://www.nbpts.org/candidates/guide/whichcert/11EarlyChildYoungAdult2004.html

National Commission on Excellence in Elementary Teacher Preparation for Reading Instruction. (2003). *Prepared to make a difference.* Newark, DE: International Reading Association.

National Commission on Teaching and America's Future. (1996). *What matters most: Teaching for America's future.* New York: Teachers College, Columbia University.

Neel, R. S., & Billingsley, F. F. (1989). *IMPACT: A functional curriculum handbook for students with moderate to severe disabilities.* Baltimore: Brookes.

Nieto, S. (2000). Placing equity front and center: Some thoughts on transforming teacher education for a new century. *Journal of Teacher Education*, *51*(3), 180-187.

Nietupski, J., Hamre-Nietupski, S., Curtin, S., & Shrikanth, K. (1997). A review of curricular research in severe disabilities from 1976 to 1995 in six selected journals. *The Journal of Special Education, 31*(1), 36-55.

No Child Left Behind Act of 2001, Pub. L. No. 107-110, 115 Stat. 1425 (2002).

Olson, L. (January 8, 2004). Enveloping expectations: Federal law demands that schools teach the same content to children they wrote off a quarter-century ago. *Education Week, 23*(17), 8-21.

Orelove, F. (1991). Educating all students: The future is now. In L. H. Meyer, C. A. Peck, & L. Brown (Eds.), *Critical issues in the lives of people with severe disabilities* (pp. 67- 87). Baltimore: Paul H. Brookes.

Ornelles, C., & Goetz, L. (2001). Considerations for changing populations: Supporting nontraditional students acquiring special education licensure. *The Journal of the Association for Persons with Severe Handicaps, 26*(3), 171-188.

Pennsylvania Association for Retarded Citizens v. Commonwealth, 334 F. Supp. 1257 (E.D. Pa.1971) and 343 F. Supp. 279 (E.D. Pa. 1972).

Phelps, L. A., & Hanley-Maxwell, C. (1997). School-to-work transitions for youth with disabilities: A review of outcomes and practices. *Review of Educational Research*, *67*(2), 197-226.

Pisha, B., & Coyne, P. (2001). Smart from the start: The promise of Universal Design for Learning. *Remedial and Special Education*, *22*(4), 197-203.

President's Commission on Excellence in Special Education. (2002). *A new era: Revitalizing special education for children and their families.* Jessup, MD: U.S. Department of Education: Author.

Pugach, M. (2005). Research on preparing regular education teachers to work with students with disabilities. In M. Cochran-Smith & K. Zeichner (Eds.), *Studying teacher education: The report of the AERA Panel on Research and Teacher Education* (pp. 549-590). Mahwah, NJ: Lawrence Erlbaum Associates.

Pugach, M., & Warger, C. (2001). Curriculum matters: Raising expectations for students with disabilities. *Remedial and Special Education*, *22*(4), 194-196.

Quenemoen, R., & Thurlow, M. (2004). *I say potato, you say potahto: An AERA conference discussion paper.* Retrieved on September 20, 2005, from University of Minnesota, National Center on Education Outcomes Web site: http://education.umn.edu/nceo/ Presentations/AERA2004QuenThur.pdf

Rainforth, B. (1997). *Collaborative teamwork for students with severe disabilities: Integrating therapy and educational services* (2nd ed.). Baltimore: Paul H. Brookes.

Reyes-Blanes, M., Correa, V., & Baily, D. (1999). Perceived needs of and support for Puerto Rican mothers of young children with disabilities. *Topics in Early Childhood Special Education, 19*(1), 54-64.

Roach, A., Elliot, S., & Webb, N. (2005). Alignment of an alternate assessment with state academic standards: Evidence for the content validity of the Wisconsin Alternate Assessment. *The Journal of Special Education*, *38*(4), 218-231.

Rosenberg, M., & Sindelar, P. (2005). The proliferation of alternative routes to certification in special education: A critical review of the literature. *The Journal of Special Education, 39*(2), 117-127.

Ryndak, D., Clark, D., Conroy, M., & Stuart, C. (2001). Preparing teachers to meet the needs of students with severe disabilities: Program configuration and expertise. *Journal of the Association for Persons with Severe Handicaps*, *26*(2), 96-105.

Sailor, W. (Ed.). (2002). *Whole-school success and inclusive education: Building partnerships for learning, achievement, and accountability.* New York: Teachers College Press.

Sailor, W., & Skrtic, T. (1995). Modern and postmodern agendas in special education: Implications for teacher education, research and policy development. In J. Paul, H. Roselli & D. Evans (Eds.), *Integrating School Restructuring and Special Education Reform* (pp. 418-433). New York: Harcourt Brace.

Seigel, S. (2003/04). Providing seamless connections between high school and adult services in Seattle. *Impact: Feature issue on achieving secondary education and transition results for students with disabilities*, *16*(3). Retrieved August 6, 2005, from Minneapolis,

University of Minnesota, Institute on Community Integration Website: http://ici.umn.edu/products/newsletters.html

Skinner, B. F. (1968). *The technology of teaching*. New York: Appleton-Century-Crofts.

Sleeter, C. (2001). Preparing teacher for culturally diverse schools: Research and the overwhelming presence of whiteness. *Journal of Teacher Education*, *52*(2), 94-106.

Sleeter, C., Torres, M., & Laughlin, M. (2004). Scaffolding conscientization through inquiry in teacher education. *Teacher Education Quarterly, 31*(1), 81-96.

Snell, M., & Janney, R. (2000). *Teachers' guides to inclusive practices.* Baltimore: Paul H. Brookes.

Snow, J., & Forest, M. (1987). Circles. In M. Forest (Ed.), *More education integration.* Downsview, Ontario: G. Allan Roeher Institute.

Sontag, E., & Haring, N. G. (1996). The professionalization of teaching and learning for children with severe disabilities: The creation of TASH. *The Journal of The Association for Persons with Severe Handicaps, 21*(1), 39-45.

Strully, J., & Strully, C. (1989). Friendships as an educational goal. In S. Stainback, W. Stainback, and M. Forest (Eds.), *Educating all students in the mainstream of regular education* (pp. 59-68). Baltimore: Paul Brookes.

Sullivan, R. C. (1976). The role of the parent. In M. Thomas (Ed.), *Hey, don't forget about me!* (pp. 36-45). Reston, VA: Council for Exceptional Children.

Summers, J. A., Hoffman, L., Marquis, J., Turnbull, A., Poston, D., & Nelson, L. (2005). Measuring the quality of family-professional partnerships in special education services. *Exceptional Children*. *72*(1), 65-81.

TASH Resolution Opposing the Use of Aversive and Restrictive Procedures. (2001). Retrieved July 18, 2005, from http://tash.org/resolutions/res02aversive.htm

TASH Resolution on Teacher Education. (2002). Retrieved February 12, 2004, from http://www. tash.org /resolutions/res02teachered.htm

Test, D., Fowler, C., Wood, W., Brewer, D. M., & Eddy, S. (2005). A conceptual framework of self-advocacy for students with disabilities. *Remedial and Special Education*, *26*(1), 43-54.

Thoma, C., Nathanson, R., Baker, S. R., & Tamura, R. (2002). Self-determination: What do special educators know and where do they learn it? *Remedial & Special Education, 23*(4), 242-248.

Thomas, A. (Ed.). (1976). *Hey, don't forget about me! Education's investment in the severely and profoundly handicapped.* Reston, VA: Council for Exceptional Children.

Thompson, S. J., & Thurlow, M. L. (2000). *State alternate assessments: Status as IDEA alternate assessment requirements take effect* (Synthesis Report No. 35). Retrieved November 1, 2004, from Minneapolis, MN, University of Minnesota, National Center on Educational Outcomes Web site: http://education.umn.edu/NCEO/OnlinePubs/Synthesis 35.html

Thompson, S. J., & Thurlow, M. L. (2001). *2001 state special education outcomes: A report on state activities at the beginning of a new decade.* Retrieved November 1, 2004, from Minneapolis, MN, University of Minnesota, National Center on Educational Outcomes Web site: http://education.umn.edu/NCEO/OnlinePubs/2001StateReport.html

Timothy W. v. Rochester, New Hampshire, School District, 875 F. 2nd 954 (1st Cir. 1989).

Tomlinson, C. A. (1999). *The differentiated classroom: Responding to the needs of all learners.* Alexandria, VA: Association for Supervision and Curriculum Development.

Turnbull, A., Pereira, L., & Blue-Banning, M. (2000). Teachers as friendships facilitators: Respeto and personalismo. *Teaching Exceptional Children, 32*(5), 66-70.

Turnbull, H. R., Turnbull, A., Wehmeyer, M. L., & Park J. (2003). A quality of life framework for special education outcomes. *Remedial and Special Education, 24*(2), 67-75.

U.S. Department of Education. (2005). *Raising achievement: Alternate assessments for students with disabilities.* Retrieved April 4, 2006, from http://www.ed.gov/policy/elsec/guid/raising/alt-assess-long.html

U.S. Department of Labor. (1991). *What work requires of schools: A SCANS report for America 2000*. Washington, DC: Author.

Viadero, D. (January 8, 2004). Disparately disabled. *Education Week*, *23*(17), 22-26.

Villa, R. A., Thousand, J. S., Stainback, W., & Stainback, S. (Eds.). (1992). *Restructuring for Caring & Effective Education: An Administrative Guide to Creating Heterogeneous Schools.* Baltimore: Paul H. Brookes.

Villa, R., & Thousand, J. (2000). *Restructuring for caring and effective education: Piecing the puzzle together.* (2nd ed.). Baltimore: Paul H. Brookes.

Wagner, M., Newman, L., Cameto, R., & Levine, P. (2005). *Changes over time in the early postschool outcomes of youth with disabilities. A report of the findings from the National Longitudinal Transition Study (NLTS) and the National Longitudinal Study-2 (NLTS2).* Menlo Park, CA: SRI International. Available at http://www.nlts2.org/pdfs/str6_completereport.pdf

Walsh-Cassidy, P., Gardner-Fox, D., Herlihy, D., Hogan, N., & Kenny, K. (2000). *Using technology to enhance literacy skills for students with special needs.* (Available from the Collaborative Center for Assistive Technology & Training; Hampshire Educational Collaborative; Northampton, MA 01060; www.pappanikou.uconn.edu/hecart2.html

Wehmeyer, M., Sands, D., Knowlton, E., & Kozleski, E. (2002). *Teaching students with mental retardation: Providing access to the regular curriculum.* Baltimore: Paul H. Brookes.

Wilcox, B., & Bellamy, G. T. (1987). *The activities catalog: An alternative curriculum for youth and adults with severe disabilities.* Baltimore: Paul H. Brookes.

Williams, R. (1991). Choices, communication, and control: A call for expanding them in the lives of people with severe disabilities. In L. H. Meyer, C. A. Peck, and L. Brown (Eds.), *Critical issues in the lives of people with significant disabilities* (pp. 543-544). Baltimore: Paul H. Brookes.

Wilson, S., Floden, R., & Ferrini-Mundy, J. (2002). Teacher preparation research: An insider's view from the outside. *Journal of Teacher Education, 53*(3), 190-204.

Wilson, S., & Youngs, P. (2005). Research on accountability processes in teacher education. In M. Cochran-Smith & K. Zeichner (Eds.), *Studying teacher education: The report of the AERA Panel on Research and Teacher Education* (pp. 591-643). Mahwah, NJ: Lawrence Erlbaum Associates.

Zahn, M., & Schultze, S. (1998, May 24). Wanted: Teachers by the thousand. *Milwaukee Journal Sentinel*. Retrieved September 15, 2004, from JS Online. http:// www2.isonline.com

Zeichner, K., & Conklin, H. (2005). Teacher education programs. In M. Cochran-Smith & K. Zeichner (Eds.), *Studying teacher education: The report of the AERA Panel on Research and Teacher Education* (pp. 645-736). Mahwah, NJ: Lawrence Erlbaum Associates.

Zehler, A., Fleischman, H., Hopstock, P., Pendzick, M., & Stephenson, T. (2003). *Descriptive study of services to LEP students and LEP students with disabilities* (Special Topic Report #4)*.* Arlington, VA: Development Associates, Inc.