

Improving Educational Outcomes for Students with Disabilities

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Executive Summary

The educational landscape for students with disabilities is undergoing vast changes. Thanks to the Individuals with Disabilities Education Act (IDEA) and its push for increased access to education for students with disabilities, and the No Child Left Behind Act (NCLB), with its push for improved student outcomes, educators across the U.S. are reexamining their practices to find ways to close the achievement gaps between groups of students. Students with disabilities are a focus of this attention, as schools and states labor to improve their academic outcomes. Policymakers are studying both the reauthorization of IDEA and the ongoing implementation of NCLB to determine the most effective means for serving students with disabilities.

The National Council on Disability (NCD) commissioned this paper to assist policy leaders and stakeholders in identifying, disseminating, and aligning evidence-based outcome producing practices with the Federal Government's commitment to leaving no child behind in the attainment of a free appropriate public education. This paper is a precursor to a more detailed analysis that NCD will be conducting in coming months to provide additional input and recommendations to Congress and the Administration. NCD is an independent federal agency making recommendations to the President and Congress on issues affecting Americans with disabilities. NCD's overall purpose is to promote policies, programs, practices, and procedures that guarantee equal opportunity for all individuals with disabilities, regardless of the nature or severity of the disability; and to empower individuals with disabilities to achieve economic self-sufficiency, independent living, and inclusion and integration into all aspects of society.

NCD is particularly interested in how IDEA and NCLB are improving outcomes for students with disabilities and to what extent evidence-based practices are being used to make policy decisions affecting students with disabilities. The outcomes for students with disabilities in which NCD is most interested include:

- 1) reducing the number/percentage of students with disabilities nation wide (currently at about thirty percent) who drop out of high school;

- 2) increasing the number/percentage of students with disabilities nation wide (currently at about 56 percent) who graduate high school with a diploma as opposed to a certificate of attendance; and
- 3) increasing the availability and usage of effective strategies to help students transition to and remain connected with postsecondary education.

Data for this paper were gathered by conducting a literature review and a series of interviews with a panel of policymakers, researchers, and practitioners from across the country. The literature review included major databases, but unfortunately resulted in few evidence-based research studies for students with disabilities. The questions for the panel (See Appendix A) focused on the impact of NCLB on students with disabilities, alignment of NCLB and IDEA, and the use of evidence-based research in decision-making processes at the school and district levels.

Major Findings with Regard to NCLB and IDEA

This paper explores how attitudes and expectations for students with disabilities are changing as a result of NCLB and the impact of IDEA. Overall, there is strong support for increasing expectations for students with disabilities and helping them to improve their academic outcomes. At the same time, there is concern about how states and schools will manage this process, largely as a function of lack of knowledge of effective interventions and strategies. At times there appears to be some lack of will to undertake the difficult change, and fall back on excuses, but findings reveal a hope that these laws and policies will result in more equitable outcomes for students with disabilities.

Many respondents in our interviews indicated that the focus on closing the achievement gap for certain student groups, such as students with disabilities, was a very laudable and necessary goal. One of the main messages is to change the low expectations people have for students with disabilities.

Findings also show that there is a great deal of concern about how educators will respond to the possible poor performance by students with disabilities on standardized assessments and high stakes tests. The pressure to meet adequate yearly performance (AYP) and the use of high stakes

tests to measure it is leaving states and districts with little time to think constructively how best to do that. Fears exist that high stakes tests may have a disproportionate impact on students with disabilities. “We’re very concerned about the unintended consequences of holding schools accountable for [the disability] population. We’re sensitive to the potential for pushing students out, for scapegoating students, for identifying these students as the reason that a school or a district isn’t measuring up.” (Mitchell D. Chester, assistant superintendent for policy development in the Ohio education department, cited in Education Week, 2004b, p. 16). Unfortunately, at this time, there is no data to indicate whether high stakes tests will increase the rate of dropout by students with disabilities, but it certainly needs more study.

There are also concerns about how states and schools will handle measuring adequate yearly performance (AYP) for subgroups of students with disabilities and whether they can “game” the system by setting unrealistically high subgroup levels that most schools will not meet, and therefore won’t have to report performance numbers. Others felt that a particular school could be punished for low scores in a subgroup, and administrators fear including students with disabilities.

One other concern expressed by several respondents is the limited focus on measuring academic skills because of the assessments required by NCLB. Particularly for students with disabilities, it is important to find ways to allow them to express their abilities in various ways, and they also benefit greatly from developing workplace competencies.

The role of school leadership and teacher qualifications was also explored. Not surprisingly, respondents noted that when school leaders had the vision and commitment to increase expectations for students with disabilities, the teachers and staff held similar views and were supported in their efforts to change teaching to help individualized needs students achieve.

A number of issues were raised regarding teachers. It was mentioned by several respondents that the push for highly qualified teachers is needed and that improved outcomes for students with disabilities should result from a better teaching force. But the logistical issues of finding and training those teachers is a difficult reality faced by schools.

The types of assessments and accommodations used for students with disabilities are also under review by school leaders. They are working to align assessment accommodations and instructional accommodations and align all of that with the standards – very time consuming and difficult work. Others saw value in more frequent assessments of students, saying “[A]ssessments are fundamental to education reform in this country, whether a regular assessment or high-stakes test. NCLB does not necessarily require a high-stakes test, it is an accountability test—not necessarily the same thing. It is forcing the question of how to test and assess.” But a final concern was expressed about the misuse of assessments, “If students with disabilities aren’t accommodated or there aren’t alternative assessments, school scores will be affected. If so, the school will figure out a creative way of counting these kids out or the kids will choose to leave.”

Evidence-Based Research and Practice

This paper also provides a summary of relevant scientifically-based research, as well as a discussion of how such research is used by education practitioners and policymakers. Unfortunately, the amount of rigorous, evidence-based research on programs that promote positive outcomes for students with disabilities is severely limited. First, most research is aimed at young students and strategies to help them learn to read. Second, the few evaluations that are available usually involve a very limited number of students, sometimes fewer than a dozen, which makes drawing conclusions about a broader group very difficult. Third, most of the evaluations only focus on one type of disability (e.g. severe cognitive disability or learning disability), again making general applicability of findings difficult. And last, while a few scientifically rigorous studies of programs were identified, there were almost none in the area of dropout prevention, and only a few on the transition from secondary to postsecondary education.

According to the research that does exist, strategies that seem to be most effective in helping students with disabilities persist in high school typically include counseling services, reading remediation, tutoring, attendance monitoring, or after-school clubs (Lehr, Hansen, Sinclair, & Christenson, 2003). Other services could include sustained and supportive monitoring interventions focused on school completion (Scanlon & Mellard, 2002). An early 1990s study of three dropout prevention programs for students with disabilities sponsored by the U.S.

Department of Education found that five components were common to all programs: persistence, continuity and consistency; monitoring; relationships; affiliation; and problem-solving skills.

To help students with disabilities transition from secondary to postsecondary education, strategies that appear to be most successful include:

- Competence in:
 - functional academic skills (e.g., reading, math, writing, and problem-solving);
 - community living skills (e.g., money management, community access);
 - personal-social skills (e.g., getting along with others);
 - vocational skills (e.g., career awareness, job search); and
 - self-determination skills (e.g., self-advocacy, goal setting);
- Participation in vocational education classes during the last two years of high school, especially classes that offer occupationally-specific instruction;
- Participation in paid work experience in the community during the last two years of high school;
- Participation in transition planning;
- Graduation from high school; and
- Absence of continuing instructional needs in functional academic, vocational, and personal-social areas after leaving school. (Benz, Lindstrom, & Yovanoff, 2000)

Even when there are evidence-based practices, practitioners, for various reasons, don't always end up using them. Two major barriers to the implementation of evidence-based practices are the lack of time and inadequate support from administrators. Other barriers include "pressures associated with high-stakes testing, insufficient materials, a mismatch between teacher style and the practice, a lack of fit between the practice and other methods mandated by the school district, and teachers' lack of in-depth understanding of the practice or forgetting" (p. 413). Practitioners need incentives and technical assistance in using evidence-based practices, yet little is done to help them learn to apply research to practice.

Comments were also made on the need to value the input by parents:

Which is more valid, the work of an evidence-based research center or the experiences of families of children with disabilities? What is the basis for the criteria? Someone's [research] numbers or someone's real life experience? For example, a school district got an evidence-based strategy from a university, but a parent suggested something else that they knew would work with their child. The strategies were polar opposites... There are parent groups organizing around what really works for their child. (Researcher)

Not only is a stronger research base sorely needed, but researchers must work more closely with practitioners and parents to help them understand how to use research findings and to incorporate and value practical and parental knowledge.

Conclusions and Recommendations

NCD recognizes that the bulk of change occurring in schools today is a result of NCLB's focus on accountability and outcomes. The change being brought about is very fundamental and deep, but also difficult, in that it involves changing attitudes, beliefs, and values about all young people being able to achieve to high standards. Another barrier to change has been the lack of evidence about what works, as well as the lack of disaggregated data. Fortunately, there are signs of positive change and evidence that holding students, including students with disabilities, to higher expectations results in improved outcomes, which leads to the first recommendation, which is "stay the course."

Stay the Course. While some naysayers believe that NCLB sets too high a bar for students and schools, the vast majority of people believe that we must maintain high expectations for all students, particularly students with disabilities.

Capacity Building. In order to help school leaders and education practitioners provide the support to help every child succeed to higher expectations, they need assistance in learning strategies that are effective. Public investments should be carefully directed to professional and leadership development efforts that are tightly linked to the specific needs of each school or district and that address capacity issues related to teaching and learning and helping all students, particularly students with disabilities, reach high standards.

Highly Qualified Teachers. Standards for highly qualified teachers should not be relaxed, although limited flexibility in reaching those standards, especially for rural schools, is appropriate. The U.S. Department of Education should conduct research and analysis on effective methods of teacher preparation, including alternative routes to certification, with a particular focus on special education. The higher education system also needs to find ways to prepare highly qualified teachers in routes unlike those we know of today.

Better Assessment Tools. A host of needs calls for a new generation of assessments that are designed to serve a broader range of students with diverse needs, are useful to inform instruction, and that measure a broader range of skills. The U.S. Department of Education can play an important role in supporting research and development efforts to create a new generation of assessments that are appropriate for a large number of diverse students; measure more than academic skills; can be used as instructional management tools; and result in an increased number of students taking alternative assessments.

Support and Disseminate Evidence-Based Research and Practice. It is clear that we need more rigorous research on effective strategies for older students with disabilities. Both IDEA and NCLB should support an enhanced research agenda and the U.S. Department of Education should bridge research efforts by the Office of Special Education and Rehabilitative Services and the Institute of Education Sciences. Research is particularly needed to understand how to teach more academic rigor to students with disabilities and to understand optimal assessment tools.

Support for Students. While research for students with disabilities is limited, a range of other research on high school reform points to strategies that are successful in improving student outcomes. The U.S. Department of Education should provide technical assistance on strategies to help students increase engagement in high school, reduce dropout rates, and increase preparation for postsecondary education and careers by: setting higher expectations, greater instructional personalization, self-advocacy, ongoing counseling and mentoring, parental involvement, and connections to the community and postsecondary learning options.

Final Thoughts

The shift towards accountability, outcomes, and higher expectations in our schools is leading us in the right direction, although we recognize that schools face legitimate difficulties during this change process. But the response to these challenges should not be to back down on expectations for students with disabilities and those who have been perceived as unable to meet the standards. Policymakers and practitioners must remain committed to the goal of closing the achievement gap for all students. To lessen this commitment would be to return to the days and the mindset that only some students could reach, and deserved to be taught to, high standards. We now know that by setting high expectations, and helping students, teachers, administrators, and family members reach those high standards, we can close the achievement gap for all students.

Introduction

America is focused on educational reform like never before. The No Child Left Behind Act (NCLB) has raised awareness of the poor performance of many of our schools and students, particularly those in disadvantaged and lower-income neighborhoods. Because the federal law now requires states, communities, and schools to collect data on student performance, broken out by categories of students based on their race and other factors, such as native language and disability, the public is finally beginning to understand the true magnitude of the problem. But a recent study indicates that despite our growing awareness and concern, we may have seriously underestimated the number of students who drop out of high school, revealing that the problem is greater than imagined (Swanson, 2004).

For many families with children in low-performing schools, or those who have children with individualized needs, the failure of our public schools to graduate every young person and prepare them for a career and livelihood comes as no surprise. Students with disabilities bear a particularly hard burden, as their rates of high school graduation, graduation with a diploma as opposed to a certificate of attendance, entry to postsecondary education, and success in the labor market are dramatically lower than rates for students without disabilities. More than 40 percent of secondary-aged students with disabilities do not attain a high school diploma at the end of high school, and dropout rates for youth with disabilities are three to four times higher than dropout rates for youth without disabilities.

The focus on school reform, particularly high school reform, is timely and much needed. NCLB is helping to shed light on which states and schools are doing the best job preparing their young people, including students with disabilities, for the challenges of further learning and economic self-sufficiency. While the public is more engaged in these discussions every day, there remains a lack of awareness of what works to help young people with educational challenges succeed. Old attitudes persist as well, and the reform process must change minds, values, and cultures so that we believe all students can achieve to the highest standards and that we adults are committed to helping them meet those standards in every way we know how.

The purpose of this research is to assist policy leaders and stakeholders in identifying, disseminating, and aligning evidence-based outcome producing practices with the Federal Government's commitment to leave no child behind in the attainment of a free appropriate public education. NCD expects that policy leaders and stakeholders will be able to use this research for a variety of purposes including to: identify existing federal resources being used (e.g., via NCLB and IDEA); identify new federal resources to develop, enhance, and sustain programs; determine whether existing resources are used effectively; improve alignment of resources, policies, and educational reform efforts; develop or modify policies and legislation to ensure the optimal use of resources; develop knowledge-utilization partnerships; analyze the impact of legislative changes on current resources; evaluate program effectiveness; and, accelerate changes in the nation's focus on leaving no child behind and improving educational results for all children.

The American Youth Policy Forum and the Educational Policy Institute were commissioned by the National Council on Disability (NCD) to review certain federal and state-level programs, strategies, and policies that enhance educational practices and improve valued outcomes for youth with disabilities. In particular, NCD sought better understanding of the early impact of the No Child Left Behind Act on students with disabilities, and its interaction with the Individuals with Disabilities Education Act (IDEA). In addition, NCD was interested in learning to what extent evidence-based research is used by policymakers and practitioners to make policy, programmatic, and instructional decisions for youth with disabilities.

The main outcomes of interest include:

- reducing the number of students with disabilities who drop out of high school;
- increasing the number/percentage of students with disabilities who graduate high school with a diploma as opposed to a certificate of attendance; and
- increasing effective strategies to help students transition to and remain connected with postsecondary education.

Methodology

There were two components to this paper's research: a review of the literature and a series of interviews with policymakers, researchers, and practitioners from across the country.

Literature Reviews

Two literature reviews were conducted. The first was conducted as an environmental scan of issues related to high school graduation and transition for students with disabilities. The second focused on evidence-based practices related to students with disabilities.

Our review utilized a variety of search engines, including ERIC, HighBeam, and the NICI Virtual Library. We also reviewed dozens of websites related to students with disabilities, including the major sites of the U.S. Departments of Education and Labor. In the end, we reviewed 150 carefully selected research studies and articles, approximately 100 of which were used in this paper. With regard to evidence-based practices, our search focused on articles that (a) were published in a professional journal or by a professional organization; (b) contained information on a program or programs that curbed high school dropout, supported assessment and accommodations, and promoted transition; (c) contained outcome data related to the intervention; and (d) used some modicum of empirical rigor in evaluating the intervention (i.e., experimental and quasi-experimental designs; random controlled trials).

Most of the research evaluations we reviewed focused on one type of disability (e.g. severe cognitive disability or learning disability), making general applicability of the findings difficult. In addition, the majority of the research was conducted at the elementary school level, rather than at the secondary level. Although we reviewed many published studies in an effort to identify evidence-based practices, we were consistently disappointed in the lack of empirical studies available on these issues, particularly with regard to dropout prevention. Many articles reported research results, but the methodology was often extraordinarily limited. Examples include self-reported interviews as the primary indicator of program success. The incorporation of control groups into research design was almost negligible. It is likely that more studies exist that have a higher level of empirical soundness to them, but they are not easily searchable, identifiable, collectable, or applicable. As we discuss later, there are two major challenges associated with research on evidence-based practices in special education: the paucity of research with an acceptable level of empiricism; and the relatively poor dissemination of such research to those who can benefit from this information.

Interviews

For the interviews, a panel of 16 federal, state, and local policymakers, researchers, and practitioners from across the U.S. were invited to participate in this project. Participants were selected based on input from a variety of individuals and organizations. As a first round, we developed a list of 55 individuals from the literature and from our perception of who were leaders in the field. During the interviews, we asked panel respondents to suggest individuals who would be valuable to our review. In most cases, panel respondents supplied us with names that were already on our list.

Panel respondents were guided through a series of questions developed for this project (see Appendix A: Interview Protocol on page 77). The questions were focused on the impact of NCLB on students with disabilities, the alignment of NCLB and IDEA, and the use of evidence-based research in decision-making processes at the school and district levels. All but one of the interviews were conducted by telephone. In several cases, participants were emailed follow-up questions to clarify their responses. Upon completion of the panel interviews, responses were collated and analyzed.

This paper is divided into three sections. Part I provides a discussion of numerous provisions of NCLB and IDEA that affect student outcomes, as well as comments and insights from the panel on implementation and alignment. Part II focuses on evidence-based research and practices issues (and the lack thereof) related to NCLB and IDEA requirements. Part III provides conclusions and recommendations for research and practice.

Appendices include the protocol used in interviewing the panel and a short synopsis of effective evidence-based programs and strategies.

Part I – Policies to Support Positive Outcomes for Students with Disabilities

The Individuals with Disabilities Education Act

The Individuals with Disabilities Education Act (IDEA) is one component of a three-tiered federal approach to supporting individuals with disabilities. The other two federal Acts are the Americans with Disabilities Act of 1990 and the Rehabilitation Act of 1973. Passed in 1975 as Public Law 94-142 and later given its current title, IDEA provides the foundation upon which students with disabilities are protected from discrimination and guaranteed to receive services designed to meet their special education and related services needs (American Youth Policy Forum & Center on Education Policy, 2002). Prior to that, an estimated 6 million children and youth with disabilities were left on their own to garner educational services. IDEA requires states, districts, and schools to ensure that:

- All children with disabilities ages 3 through 21 receive a free, appropriate public education that meets their unique needs, regardless of the type or severity of their disability.
- Children with disabilities be educated in the least restrictive environment possible, meaning that most students are to be taught in a general education—or regular—classroom. Districts and schools are responsible for providing whatever supplemental services or accommodations are necessary to fulfill this requirement.
- Each student with a disability is to have an Individualized Education Program (IEP) that describes the education and related services to be provided to that student. The IEP is developed by a small committee consisting of parents, special education personnel, teachers, and school administrators. The 1997 reauthorization of IDEA required students aged 14 and older to sit on their own IEP committee.
- Parents of students with disabilities have the right to notification, informed consent, due process, and involvement in key decisions about their child's eligibility, placement, IEPs, and other areas.

- Federal grants are authorized to help pay state and local costs associated with implementing IDEA mandates and serving students with disabilities. (American Youth Policy Forum & Center on Education Policy, 2002, p. 13)

The 1997 reauthorization of IDEA provided the most significant amendments since the initial law was passed almost a quarter century earlier. Included in these amendments was an increased emphasis on student outcomes data, reduction of paperwork and procedural complexity, and a reduction or consolidation of separately-funded research, training, and support programs. (American Youth Policy Forum & Center on Education Policy, 2002) The law also included a stronger focus on strategies to help students transition from high school to postsecondary education or a career, and the development of a transition plan as part of their IEP.

IDEA has been characterized as having fulfilled its primary goal of providing access for students with disabilities in public schools across America. In 1977, about eight percent of students were identified as having a disability and were receiving appropriate services. In 1999, 11 percent of all students were identified and served through IDEA (American Youth Policy Forum & Center on Education Policy, 2002). In 1977, 80 percent of students with disabilities were placed in institutions or separate facilities where many received little schooling. By 1997-98, 96 percent of students with disabilities were served in regular public schools (U.S. Department of Education, 2003, p. ix). Even in the short time since the 1997 reauthorization of IDEA, the number of students served through IDEA has increased from 3.7 million to over 6.5 million. Additionally, students with disabilities are also spending more time in inclusive classrooms. In 1997-98, 46 percent of students with disabilities spent at least 80 percent of their academic day in a regular classroom, compared to 31 percent a decade earlier (American Youth Policy Forum & Center on Education Policy, 2002, p. 20).

The No Child Left Behind Act (NCLB)

On January 8, 2002, President Bush signed into law the No Child Left Behind Act of 2001. The U.S. Department of Education touted the legislation as the “most sweeping reform of the Elementary and Secondary Education Act since its enactment in 1965” that “refines the federal role in K-12 education” (Pasternack, 2003). In addition to those claims, NCLB champions

accountability for “all students, including student groups based on poverty, race and ethnicity, disability and limited English proficiency.”

This legislative act contains four basic education reform principles:

- stronger accountability for results;
- increased flexibility and local control;
- expanded options for parents; and
- emphasis on teaching methods that have been proven to work. (National Center on Educational Outcomes, 2003).

Through NCLB, states must implement statewide accountability systems covering all public schools and students based on:

- Challenging state standards in reading and math (and science in 2005-2006);
- Annual testing for all students in grades 3-8 and at least once in grades 10-12; and
- Annual statewide progress objectives ensuring that all groups of students reach proficiency within 12 years (Pasternack, 2003).

According to the National Center on Educational Outcomes, the main difference between IDEA and NCLB is that the former specifically governs services that are provided to students with disabilities and provides individual accountability through IEPs developed on the basis of each child’s unique needs. The National Center believes that NCLB complements the IDEA provisions by providing public accountability at the school, district, and state levels for all students with disabilities. Secondly, NCLB builds on IDEA law by requiring the participation of students with disabilities in state and district-wide assessments (National Center on Educational Outcomes, 2003).

In its analysis of NCLB, the National Center on Educational Outcomes cited three critical areas of focus for those who serve students with disabilities: (a) academic content standards, which tell us what students should learn; (b) academic achievement standards, which tell us how well they

should learn; and (c) assessments, which tell us how well students achieved those standards (National Center on Educational Outcomes, 2003).

Adequate Yearly Progress

A key requirement of NCLB that has been praised by some but is the brunt of criticism from others is the calculation of “Adequate Yearly Progress” (AYP). According to the legislation, states must bring all students up to the “proficient” level on state tests by 2013-14, and individual schools must meet a measure of adequate yearly progress targets in mathematics and reading or language arts with all student groups from one year to the next (Education Week, 2004a). There are a number of disincentives for schools and states to meet these targets, but at issue with AYP is that all subgroups—including students with disabilities—must show progress. Of greatest importance is that a school will not meet AYP if any one of its subgroups fails to meet AYP. Schools and districts that fail to do so over time will be subject to “improvement, corrective action, and restructuring measures” (Pasternack, 2003). A school can still make AYP if a subgroup does not make AYP, but only on the condition that the subgroup in question decreased in size by ten percent from the previous year’s percentage AND manages to make progress on graduation rates or one other indicator designated by the state. Additionally, ninety-five percent of all students within a subgroup are required to take the assessment. Consequences for failing to meet AYP are as follows:

If a school fails to meet its adequate yearly progress target for two consecutive years, then it is designated as a school in need of improvement. Parents of students in a school so designated will be given the option of sending their children to another school. Continued failure of a school to attain AYP targets beyond two years can result in more severe consequences, to include restructuring or changes in governance. There are many more details to the accountability requirements pertaining to such things as inclusion rules and various situations, such as schools meeting their targets but with not all subgroups meeting them. (Kahl, 2003)

Concern exists among state and local officials about how students with disabilities—especially those with significant or multiple disabilities—are included in the overall school count. The issue raised by some is that it is unfair to include students with significant cognitive disabilities in the calculation of AYP. Given that approximately one percent of all students (or 15 percent of students with disabilities) is considered severely disabled, the U.S. Department of Education

offered an amendment to its guidelines in December 2003, now known as the “one percent rule.” This rule allows school districts to use alternative assessments (based on alternative standards) for up to one percent of all students to report either “proficient” or “advanced” in order to meet AYP (Goldstein, 2004). States are free to define which student groups or subgroups make up this one percent, but the policy is aimed at students with the most significant cognitive disabilities.

Strong Public Support

Despite challenges, NCLB has generally commanded wide support from policymakers, educators, and parents. According to a recent Phi Delta Kappa/Gallup Poll, there appears to be strong public and private support for the principles behind NCLB (Gehring, 2003). However, the survey also found that the public does not necessarily believe that a “test” is the best means to meet the goals of NCLB. Also, a recent survey by the Center on Education Policy (2004) found that an “overwhelming majority” (p. vi) of states agree with the basic premises of NCLB. Forty-two of the states surveyed agree that an accountability system based on content and performance standards would have a positive impact on student achievement, and seventy percent of states (33 of the 47 responding) believe that NCLB accountability requirements will help to raise student achievement a great deal. However, district-based respondents were not as optimistic as their state counterparts” (Center on Education Policy, 2004, p. vi).

Of course, not all news is good news. A number of individuals and groups have very specific concerns. On January 8, 2004, a group of Democratic Senators sent a letter to U.S. Secretary of Education Rod Paige criticizing the Administration for underfunding NCLB by “\$7.5 billion.” Although the senators consider NCLB to be a landmark Act that “made a clear federal commitment to improve the education of millions of students across the country,” they suggest that the U.S. Department of Education has been remiss on providing appropriate and timely technical assistance and guidance to states, districts, and schools, and also criticize NCLB language that focuses on AYP but can allow at-risk students—including students with disabilities—to experience higher dropout rates (Kennedy et al., 2004).

The concern goes well beyond the halls of Congress. In state houses across the country, Democrat and Republican legislators are complaining about the burdens of NCLB’s program. Utah and Virginia are examples of Republican-controlled states that are considering action

against NCLB. Virginia's Republican-led House of Delegates overwhelmingly approved a resolution in January calling the No Child Left Behind Act "the most sweeping federal intrusion into state and local control of education in the history of the United States" (Hoff, 2004a).

However, one study released in January 2004 announced that states should already have adequate funding to meet the requirements of NCLB (Education Leaders Council, 2004), although not all state legislators concur with the findings of that report (Hoff, 2004b). Still, others indicate that it is a matter of using the money differently to achieve different outcomes. During our interviews in support of this project, a district-level administrator discussed the financial burden associated with keeping up with NCLB requirements. "Certainly NCLB has added cost to us—testing time, testing organization, communications with testing populations. These things cost real money." However, others questioned whether NCLB is accurately depicted as an unfunded mandate.

The Center on Education Policy suggests that the Bush Administration and Members of Congress have made "lofty promises" for the success of NCLB and have underestimated the "magnitude of change that must occur in American public education to bring about those promises" (Center on Education Policy, 2003, p. iv).

IDEA Reauthorization and Alignment with NCLB

IDEA is currently in the process of reauthorization by Congress. While no large, sweeping changes are expected, a consideration during this round of amendments is how best to bring IDEA and NCLB into greater alignment. We asked our panel whether they believed that IDEA supports the goals of NCLB. As expected, the responses were diverse. Some felt that the two were diametric opposites and undermined each other, while a majority of our panel saw the two pieces of legislation working together. "In NCLB, [student] success is typically measured by a singular test score, where IDEA is a bunch of different measures, whatever is determined through the IEP and other policies." Others disagreed: "I think IDEA and NCLB are mutually exclusive. One is focused on the individual and the other is focused on accountability" (District Administrator). But even the "individual" nature of IDEA has some critics: "The big

unanticipated outcome of IDEA was that individual accountability will bring [students with disabilities] up, but it has hurt them by watering down the curriculum.”

In *Education Week's* recent *Quality Counts* report on special education, a lawyer was quoted as saying that the “individualized nature of IDEA is totally inconsistent with the group nature of NCLB, even though they talk about classes of kids who are disabled. To me, that’s a collision course, to hold a school responsible for Billy not reading at grade level, when Billy has a disability whose need is individually met at a prekindergarten level” (Lawyer Miriam K. Freedman, as cited in *Education Week*, 2004b, p. 13). Conversely, a district-level administrator saw IDEA and NCLB working in tandem:

NCLB creates a system of accountability to support IDEA. But IDEA is built on individualization where NCLB is a broad requirement for groups. Schools and districts are having a difficult time trying to bring these issues together—making the right decision for each child but also making sure you meet the NCLB accountability requirements.

Both pieces of legislation support the education of students; the disconnect is the relative importance of how you go about determining whether students are making progress. IDEA would suggest that you do an assessment that is appropriate for the child as determined by a committee. NCLB says you can do that as long as you meet AYP. (District Administrator)

One of our panel respondents suggested that the problem isn’t the legislative language, but the enforcement of the legislation. “I think IDEA has been consistent with NCLB. The problem isn’t what’s in IDEA, but rather, what has been enforced.” An example was provided of the challenge of implementing the transition planning that was part of IDEA ‘97. “In a lot of places, those plans aren’t there or are group manufactured. Thus, the problem isn’t IDEA—it’s the implementation or enforcement of IDEA” (Federal Policymaker).

A main element of the current reauthorization of IDEA is to align the two bills. “They are trying to integrate them,” said a researcher. “I think you will see pieces in the Senate bill that try to reaffirm NCLB. A bigger question is how do you do this? Everyone has gotten the new message that there is an attempted alignment at the federal level. Aligned in two areas: programs for students with disabilities will be aligned more closely with general curriculum and content

structures; and teacher development for special education teachers will be more similar to that of regular teachers. Practically, very few states can meet the teacher standards now, let alone the changes that are expected. Most peoples' perception of the requirement will jack up the percentage of teachers who are unqualified.”

A federal administrator involved in the reauthorization process thinks the two laws are being aligned in the current reauthorization. “In the House and Senate bills there have been important changes to align the two laws. The fight of 27 years ago—to get the kids in the classroom—is largely over. It isn't a fight that will ever be finished, but access is a given. Now, IDEA needs to reflect more on what gets done for these kids. The debate has changed to ‘What do you do with the child once he is there, not should he be there.’”

Stated a representative of the National Institute on Disability and Rehabilitation Research (NIDRR): “I've reviewed it [IDEA] for the umpteenth time. With regard to inclusion, prevention, etc., that's all the flavor of the mission of NCLB. I think the hardest part the Administration is facing is how to interpret the similarities to the public.” A special education researcher noted: “The verbiage would say yes, that IDEA supports NCLB, but to me it's backwards. NCLB should really support IDEA. The testing seems to counterbalance the individualization of IDEA. Philosophically, it sounds like the same, but when you get into it, it truly does not support IDEA. Hopefully reauthorization will bring them together.” A representative from a national organization commented: “Obviously, the extent that the two can be mutually reinforcing, the better. There will be some tweaks in IDEA to make that happen. I don't think there are fundamental conflicts.”

Perceived Impact of NCLB on Students with Disabilities

Overall, there is a general sense that NCLB can have and is already having a positive impact on most students with disabilities. However, the true impact of NCLB will depend on a number of factors, including the type of disability in question, how large the unintended consequences are from implementation of the law, how much states, districts and schools “game” the system, and how well these same entities provide support for special education teachers and paraprofessionals to meet the rigor required for adequate yearly progress (AYP).

The Center on Education Policy (2004) found that most states and districts were taking No Child Left Behind very seriously and were working hard to meet the new federal requirements of AYP. “NCLB is doing what federal laws tend to do best —focusing the attention of a large, decentralized education system on the same set of goals” (p. v). But the Center also found that many school districts were having various difficulties enforcing the law because of stringent or unworkable requirements.

Accountability

Although most of our respondents agreed that it is too early to tell what impact NCLB will have when fully implemented, most agreed that it has had an early impact on how people think of issues related to accountability and students with disabilities. By including all students in the calculation of AYP, educators must concern themselves with the treatment and education of students with disabilities. IDEA has been the main legislative instrument to support the teaching and learning of students with disabilities, but NCLB provides the accountability mechanism to supplement the programs and regulations of IDEA. As one federal government director suggested, “NCLB emphasizes the greater responsibility of looking at what works in preventive interventions for students with individualized needs. Because it is accountability based, it will improve internal system changes.” A special education director at the school district level remarked, “all students count and all teachers count. Standards are raised and focus turns to good instruction.” Another respondent added: “By forcing states—for the first time—to include students with disabilities in their assessment and accountability systems, we know that these kids are going to count and progress is going to be measured.”

The perception among most individuals is that if expectations and accountability rise, “phenomenal changes will occur.” However, how people truly perceive the barriers to inclusion and the education of students with disabilities could be the greatest barrier of NCLB.

“My philosophy is that the attitudinal barriers are sometimes a bigger disability than the disability itself. This is very much how I see NCLB. The major thing is to change the low expectations people have toward students with disabilities. We’ve already seen some of the impact. It’s been pretty clear that there has been a focus on students with disabilities that we have never seen before. And in many cases, this is very good; in some not so good. I’ve seen two kinds of reactions: oh my goodness, we see poor performance, so

what are we going to do to address this poor performance. Other states have made very positive, pro-active responses to the data they see. (Researcher)

IDEA has largely been successful in getting students with disabilities served. One respondent from a national organization hopes that NCLB will enhance this achievement: “I hope that the net effect will be that people will focus much less on making sure students are served and much more on getting students with disabilities to reach state standards. There will be a shift from inputs and services to outcomes. I am cautiously optimistic.”

The term “cautiously optimistic” probably best articulates the sentiments of most of the individuals interviewed for this review. A major consideration is how states and districts deal with this new layer of accountability. “We need to think about these kids achieving at a high level. IDEA stopped short of accountability. NCLB puts the accountability piece in. However, how well the accountability piece is thought out is another issue.” The AYP calculations have been a lightning rod of commentary in newspapers around the country, putting schools, districts, and states on the defensive. Because there is federal funding and control on the line, the stakes are high if compliance is not met within the federal guidelines.

The stakes are so high, and subgroups are now so important in calculation of AYP, there is little time for the states to think constructively about how to go about that. States are trying to look at a broad range of issues that impact students with disabilities in AYP calculations, but localities are desperately trying to deal with it now to meet the legislative requirements. States are trying to provide guidance, but in terms of locals, the stakes are so high—you are asking them to think broadly, but they are working with immediate impact—immediate consequences. (Organizational Representative)

Specifically, panel respondents pointed to a number of issues where there has been a more immediate impact on students with disabilities. Some of these areas include:

Academics. Although there is no data to account for the brief time since January 2002 and this paper, there is belief that NCLB is partly responsible for the academic progress of students with disabilities. A leading national researcher on disabilities suggests that NCLB has improved reading, math, and science learning and teaching. It has brought up the academic progress of

both good and bad schools. “It has not been universal, but it has—on average—benefited schools.”

Data. While the availability of student-level data from schools, districts, and states has been problematic in the general education field, it has been more problematic for special education. *Education Week* found that only 13 of 37 states providing data to its national survey “tested 95 percent or more of their special education students in reading and mathematics in grades, 4, 8, and 10, in the 2002-03 school year, or the most recent year for which data were available” (*Education Week*, 2004b, p. 7). Additionally, nine states and the District of Columbia could not provide any data (p. 13).

But this is better than it has been, and many believe that NCLB is pushing districts and states to collect data for federal reporting purposes. “One of the reasons we [national center] got started is that there was no data on students with disabilities. People were asking how they were doing on large-scale assessments, and students with disabilities were not included. Now they are because of NCLB. So now we have some data. We may not like it, but at least have it.”

A representative of a national organization added: “It’s not what the law does, but what people do to implement the law. I think NCLB will allow for collection of accurate data. Never before have I seen accurate data; NCLB may make that happen. Getting the data on the table will allow for a good discussion based on data.” Stated a district-level representative: “Data is horrific on the transition outcomes for students with disabilities, so this is a great opportunity to get it done.”

Increased Dialogue/Knowledge of Standards. Whether one agrees or disagrees with NCLB, there has been an undeniable increase in dialogue among educators, policymakers, and researchers. Our panel respondents noted a renewed cooperation between general education and special education teachers and more joint programming and professional development. “I hear chief state school officers talking about it now,” noted one researcher. “It is a very different discussion these days.” Again, much of this has happened because of AYP and the inclusion of students with disabilities into the performance reporting for schools.

NCLB has come at a time when the awareness, use, and support of academic standards are at their highest. Ninety percent or more of states reported having the same mathematics and reading content standards for students with and without disabilities (U.S. Department of Education, 2003). “If I had asked teachers 10 years ago about standards, the comments would be much different; today, people are certainly aware of what all kids are supposed to learn,” stated a researcher. Studies in the mid-1990s substantiated the belief that students with disabilities were being left out of the standards process. Specifically, students with disabilities were being excluded from participation in standards-based curricula and assessments (Furney, Hasazi, Clark-Keefe, & Hartnett, Fall, 2003). It appears that this is indeed changing because of NCLB, but it is difficult to ascertain to what degree states and districts are following the standards movement.

One panel respondent agreed that there has been a general shifting of special education services to be more in line with state standards due to NCLB, but warned that shifting and implementing do not equal achievement:

What supports do students need to achieve these standards is an open question of what will happen. Most people are projecting in 3-4 years that there is a good possibility that dropouts will increase for special education students because there aren't supports. There needs to be a reform of high school for students with disabilities. A lot of places are facing a big gap in what will occur. High schools have the kids in place who are a product of an older system; they have come up through segregated programs not addressing state standards; high school teachers are trying to address these standards, but the discrepancies are so large, that the kids are falling out. They are being babysat or not being supported to achieve standards at all. This is the frustration that we are hearing all over the country. (Researcher)

Of course, the success of NCLB for students with disabilities depends to some extent on which disabilities are included. It is known that “disability” is a broad catchphrase that captures mild learning difficulties, behavior difficulties, mental retardation, and multiple disabilities. One researcher noted that there is cross-disability diversity, as well as within-disability diversity. “Within most disability categories, there are a good number of kids with sufficient supports—they will do all right. Many students are very close to being proficient in NCLB terms, but

others—those with multiple disabilities, autism, mental retardation—have a long way to go. The story is much different for these different groups.”

The impact, due in part to NCLB, also has a differential effect depending on the performance of a given state or district before the legislation was authorized. “We’ve seen large gains in performance in those states that are proactive [with regard to disability]. We’ve seen that kids are making improvements in performance.” Not all respondents share this enthusiasm for what is transpiring. “I think that the standards movement, as well as many policies under testing, has undermined the ‘Forgotten Half’” (Researcher).

Unintended Effects of NCLB

As with all laws, there are always unintended consequences. “We’re very concerned about the unintended consequences of holding schools accountable for [the disability] population. We’re sensitive to the potential for pushing students out, for scapegoating students, for identifying these students as the reason that a school or a district isn’t measuring up.” (Mitchell D. Chester, assistant superintendent for policy development in the Ohio education department, cited in *Education Week*, 2004b, p. 16). This perception was widely held by our panel respondents. Several were worried about states “gaming” the system:

I have some real concerns about how the school districts will translate the NCLB [provisions] about dealing with and reporting the progress of students with disabilities. The anecdotal evidence from earlier attempts to provide accountability (state mandated proficiency testing) show significant abuses in many states—none to the advantage of students with disabilities. If the future funding of school districts is contingent on the right level of progress, their response will be to not deal with the disability. (Practitioner)

During our interviews, panel respondents discussed unanticipated outcomes and malicious compliance. “Some students with disabilities will do well on assessments and tests. But if you take students with disabilities as a large group we start talking about the potential of devastating effects. A particular school will be punished for low scores in a sub-group, and administrators fear including them.” Under NCLB, states must determine the size of the subgroup populations that will be included in the measure of average yearly progress (AYP), and it appears that some states and districts are using the size determination to avoid measuring certain categories of

students. For example, respondents noted that several states and districts seem to be artificially raising their subgroup size to a level where there is little possibility that the “subgroup” will ever be reached. An example was given of a proactive district providing a reasonable level of 15 students per subgroup in a school. In this case, if a school has only 10 students in a subgroup, their performance would not be included in AYP calculations. However, if the school had 15 students or more in that subgroup, their performance would be counted. We heard that there are states that have artificially raised subgroup size to 100 or more, meaning there must be at least 100 students within a subgroup to be considered in AYP, which, in the case of students with disabilities and non-English language learners, might be unlikely.

The worry is that, the way NCLB is structured with subgroups, schools will work to keep the subgroup small enough as not to be considered; they could start moving students around to other buildings to keep under the limits. Let’s say you have 60 students with disabilities in a typically-sized elementary school (600 kids). In Minnesota, that school has to be accountable as a subgroup, because they set a 15 person subgroup level per school. In Texas, virtually no school will be included. (Researcher)

According to respondents, states that are proactive in dealing with disabilities are setting reasonable levels; those that have not been proactive are setting very high subgroup levels. There is a sentiment that AYP has created an unfair playing field for states that have historically provided proactive legislation and programs for students with disabilities and other subgroups.

Implementation of the law, in terms of the very high stakes and consequences as disincentives to local administrators and practitioners, will vary by locality. Many people are focused on the consequences—to the extent that those who can manipulate legislation will. It becomes an issue of “the letter versus the intent of the law.” If we believe that other things have to be put in place for those subgroups to truly achieve the dream, then that will take a while. Otherwise, it will just be a legislative issue and local implementers will do what they need to do but no more. Those who have a deep conceptual belief will go further, but those who do not will only meet the letter of the law. (Organization Representative)

There appear to be other ways for schools and states to flaunt the intent of AYP. Regardless of the numerical count of subgroup populations, school administrators may be under pressure to remove students with disabilities, as they will be for other subgroups, from their rosters. “Districts will find ways of making students with disabilities ineligible for the pool; maybe

they'll say only students going for a [high school] diploma will be considered, and move students to certificates. If this is left as a loophole, this would be an area where schools will try and play around." A nationally-recognized researcher stated that she saw districts that were worried about performance reports and asked how they could get these kids out of their assessment system. Additionally, a school administrator remarked that another unintended consequence of NCLB is that as you improve the test scores of some higher performing students with disabilities your overall score may decrease because your best students do well enough that they no longer are considered special education, leaving your remaining pool with a lower standard.

AYP also has the unintended consequence of switching the focus of assessments from work-based and alternative assessments to more traditional forms of evaluation and testing. Research shows that work-based learning opportunities provide a sound learning platform for students with disabilities (Cobb, Lehmann, Tochtermann, & Bomotti, 2000; Johnson, Stodden, Emanuel, & Mack, 2002; Stodden, 1998), but panel respondents see that these opportunities may be lost through the focus on accountability and test outcome measures:

Where I think NCLB is hurting is not as a piece of legislation itself, but as a continuation of the standards and accountability movement. I believe standards and accountability have done wonderful things around the country, and I have talked to legislators and practitioners who believe the same thing. However, what I think has been, frankly, a disaster are two things: (1) the exclusion of work-based programs from the original standards movement; and (2) the almost myopic focus by researchers and policymakers and bureaucrats at The U.S. Department of Education in using the results of state-level high stakes tests as the only acceptable outcome variable to measure the quality of educational interventions. We do not need to sacrifice work-based learning if we want to increase math literacy. I think that is a tragedy. (Researcher)

Another panel member pointed similar criticism at the law:

Work-based experience is amongst the most important aspects of keeping youth in school and to help them in future employment. Research has shown that this is one of the most important predictors of success of special education. Within NCLB, work-based learning opportunities are becoming more difficult for schools to coordinate for students due to the emphasis on standardized testing. This could be a method of instruction that has gone to the past. Students with disabilities could be dealt a major blow if this happens, unless alternative assessments are encouraged and developed. And this is true for every category of student.

Whether in a resource room or self-contained classroom, whether their label is mental retardation or physical disability—research shows that all of these youth benefit from work-based learning opportunities. (Researcher)

Educators from many fields are grappling with this issue of developing assessments that measure more than just academic skills.

Impact of NCLB on the High School Dropout Rate of Students with Disabilities

Our panel respondents were both positive and negative about the impact of NCLB on the dropout rates of students with disabilities. On the positive side, several respondents felt that the focus on AYP and accountability will heighten awareness of outcomes for students with disabilities that will yield better teaching and learning.

I think dropouts will decrease. The combined emphasis of the President's Commission on Excellence in Special Education Report (2003) and the timing of NCLB can be a catalyst for educators and administrators to want to keep students with disabilities in school. NCLB clearly demonstrates that no child, regardless of need or learning disability, should be left out of general education. Greater attention will be given to them. (Federal Administrator)

A representative of an educational non-profit suggested that students with disabilities, like any other students, drop out not because school is too hard, but rather, because it is too easy. "Getting students to master skills needed in work and school will help them and encourage them to stay in school....I think the bar has been raised for students with disabilities, and I think they will meet it," suggested a federal Rehabilitation Services Administration (RSA) official. "However, if they don't get the remedial help now, they will never get it." Another federal official thought that dropout rates could rise while states and districts struggle, but that in the long term "it will provide tremendous benefit and reduce dropout rates."

Although most of our respondents felt that some students with disabilities will do better in part due to NCLB, others saw a negative effect on the dropout rates of certain students.

I actually think it will be a wash; some kids can actually benefit from it (from increased challenge). But some kids won't, and will actually leave. There are some kids with learning disabilities and emotional disturbances who are not going to see their way through the tests and they will get discouraged. These kids may

not get the type of services they actually need. If the focus of the school becomes the test, then where is the focus? If the kid needs therapy, the therapy is not directly related to test scores. (Researcher)

Expulsion rates for students with disabilities is another issue linked to the dropout problem. The *2003 Annual Report to Congress on the Implementation of the Individuals with Disabilities Education Act* stated what is largely known in the research and policy world: that the size of a district and the percentage of students receiving free and reduced lunch were directly related to whether schools used expulsion strategies for students with and without disabilities. As the size of the school increased or as the percentage of students on free and reduced lunch increased, so did the school's use of expulsion for disciplining students with and without disabilities (U.S. Department of Education, 2003, p. xvii). Some experts find that a good number of expulsions occur not because of the behavioral difficulties that students display, but rather, because of an effort by schools and districts to rid themselves of problem students. Stodden, Galloway, and Stodden (2003) posited that a real effect of standards-based reform could be an increased dropout rate for students with disabilities and a reduced rate of graduation. Such an effect could manifest itself in a number of ways.

This is where we don't have any research, so it remains to be seen. Intuitively, if there is no way of connecting students to what they are learning, students are prone to drop out. If students leave, schools don't have to deal with them. It saves the school from the effort of accountability. So it isn't necessarily a bad thing to force students out in some fashion. Either marginal performers or labeled students will be forced out, or one better: the student will say, "to heck with this, they're treating me as trash, I might as well not be here." Same outcome. (Researcher)

I don't think it will have any real impact on dropout rates. But here is what I think will happen. Based on my observations, school districts will help find ways to help students achieve on the test. In Texas, they kept students in grade nine forever. (Researcher)

There is also a notion that the policy itself isn't the problem. Rather, how the policy is ultimately implemented will be the defining outcome of NCLB on disability dropout and success. "I think it [NCLB] will increase dropouts. But it isn't the policy; it is the practice that implements the policy. It seems almost inevitable." (Researcher)

I can't say that NCLB will reduce the dropout rate. Conceptually speaking, yes, there is a potential for a reduction in dropout rates. In practice, we see significant challenges in place that could limit the effectiveness of NCLB for students with disabilities. People perceive a set of incentives that may or may not work to reduce dropout rates. Envisioned to work? Yes, but in practice it may be difficult. (Organization Representative)

According to researchers, the State of Delaware recently realized three consecutive years of a continual decrease in dropout rates for students with disabilities. However, the rates went back up in 2003. "They don't know why—don't know if it was because or due to NCLB—but something changed. They are now about to undergo research to find out why."

I think it is an unknown yet. One thing we need to be very careful about is that we are mixing up high-stakes testing with NCLB. There are a lot of studies going on right now with conflicting results—that high-stakes tests can lead to increased dropout rates. But the data are out right now. The dropout issue is very critical to watch, and we've had just enough evidence that people can play with the numbers. There are enough people who are concerned that we have to be careful of the loopholes and really watch what is going on here. (Researcher)

NCLB's Impact on Expectations for Students with Disabilities

While most teachers agree in principle that students with disabilities should be taught to higher standards, a recent survey by *Education Week* found that more than four in five teachers reject the notion that students who receive special education services should be held to the same standards and testing requirements as other students their age. Nearly as many say that students who receive special education services should be given alternative assessments rather than be required to take the same tests as general education students (*Education Week*, 2004b, p. 7). The survey also found that while teachers are positive about how much their students who receive special education services achieve each year, they also express reservations about whether all students with disabilities can actually meet state standards (*Education Week*, 2004b, p. 13).

These findings are particularly interesting in light of the responses from our panel. As per other dialogues, our panel vacillated on much of the discussion of expectations of students with disabilities. One chord of agreement, however, was about expectations for various types of

disabilities. “I think that attitudes about the potential of people with certain impairments, like sight, for example, have changed over time and will continue to change under NCLB. But students with cognitive disabilities and mental illness—there hasn’t been much change over the years with respect to expectations” (Federal Administrator).

I think expectations for students with disabilities are lower than they are for students without disabilities. That isn’t always inappropriate. Sometimes they aren’t always unreasonable. I’m all for those with severe cognitive disabilities being in school to get what they can out of it, but knowing that they can only do so much. (Practitioner)

A researcher agreed: “Expectations are higher than they used to be for students with disabilities, but I’m not sure if that is because of NCLB or IDEA.”

Panel respondents seemed to agree that students with learning disabilities have different abilities than those with significant cognitive disabilities or than students whose disability impacts their attitude. Whether students should be considered, depending on their disability, at the same grade-level as other students is open to discussion:

If nothing else, NCLB has drawn a line in the sand; you must bring kids up to snuff; a kid may know content, because they have the auditory capacity, but reading is behind, thus they do not test well. We must continue to accommodate that student until we are testing what they actually know. Unfortunately, NCLB hasn’t been around long enough to demonstrate content knowledge as suggested, and it isn’t necessarily part of IDEA to test kids. (Federal Administrator)

I can’t imagine that any logical person would think you could bring everyone to the same performance level given they come from different backgrounds and supports from home. However, I do think that we should set standards for gains and moving kids forward and moving them as far as we reasonably think they can go. Value added. (Researcher)

I think there is no question that most school and district educators expect considerably less from students with disabilities, even when it goes beyond cognitive capacity. Expectations for students with disabilities are the lowest—period. When I work with these people, you get the “oh, OK, we might be able to do this for poor and minority kids, but students with disabilities? No way.” (Organization Representative)

One researcher said that there is a belief among many that students who are enrolled and not functioning well at one grade level should be tested at a lower grade level. She suggested that this reflected a lower-expectation for students, with the result they fall further behind. But another panelist countered: “There are some students with disabilities who will never be at grade level. But through NCLB and IDEA, we are trying to show that students with disabilities have their own strengths and weaknesses and we try and work on those issues and meet whatever goals they set for themselves.” It was noted that this differential expectation contains a Catch-22 of sorts:

At some point, to say that they don’t have to meet the same standards suggests that there is some level of sorting out. It is that sorting out function that has been the problem with special education. If you are suggesting that there are alternate standards, it really opens up a set of problems. We need to balance it with individual needs. At what point do we keep the individual nature of IDEA over the more “here is the standard” of NCLB. Somewhere between the two is the answer. I don’t think the answer is suggesting that students with disabilities don’t need to meet the standard. There must be individual adaptation for students with severe disabilities or behavioral modification that must be addressed before you can meet standards. (Organization Representative)

Making this acceptance of standards happen and turning that into practice is difficult work. “Things need to change early on—putting kids in general curriculum and making sure supports are in place. The expectation has to be the same but the approach must be different. You can make the same comment about English as a Second Language or high-risk students. You have to change the approach. If, at the local level, teachers can understand that not every student will get there the same way, then they can go about it. However, if educators can’t conceptualize that, or can’t be adaptable, then they cannot begin to conceive how to teach differently.”

Some panel respondents found that expectations varied greatly for a number of other reasons. It was suggested that the building principal has much to do with the attitude that teachers, students, and parents have about students with disabilities. “Where there is collaboration between teachers, this seems to happen [expectations are higher]. Conversely, schools with principals overly concerned with accountability tend to have special education teachers who are less inclined and less confident working with general education teachers. When these things are seen as punitive, there is a negative view of students with disabilities because they are bringing down the group.”

The truth is, these expectations vary from state-to-state, district-to-district, and school-to-school. “We’ve heard from people who say that students with disabilities can’t learn, shouldn’t be expected to learn. But we’ve heard the opposite; my students with disabilities are smarter than anyone else, it’s just giving them the tools to let them demonstrate it,” reported a federal administrator. “In general, teachers should have the same expectations of all their students. But specifically, it depends on the specific students.”

Professional Development and Highly Qualified Teachers

In addition to calling for high academic standards (NCLB Section 1111), NCLB also calls for states to ensure a high-quality teaching force in schools, high-quality professional development activities, and high-quality curricula (NCLB Sections 1114 and 1115). This is a challenge for public secondary and postsecondary education, which is currently struggling through teacher shortages and quality issues, to identify, attract, hire, develop and retain highly-qualified teachers. The success of NCLB on students with disabilities is, of course, dependent on teaching and learning in the classroom. The level of professional development, teacher preparation, and teacher induction will have an enormous effect on how well schools and districts meet AYP for at-risk children.

At present, there are an estimated 39,000 special education teachers responsible for the education of over 600,000 students with disabilities (Smith, McLeskey, Tyler, & Saunders, 2002). According to Smith et al. (2002), many of these special education professionals lack “the most basic preparation to do their jobs” (p. 1). In terms of certification, it should be noted that just 14 states and the District of Columbia require general education teachers to complete one or more courses related to special education to earn their licenses. This situation is of interest because 76 percent of public school teachers teach students who receive special education services (*Education Week*, 2004b, p. 7). Still, national data illustrate that special education professionals are, as a group, more highly experienced than general education teachers. The average special education professional has taught for 14.3 years, 12.3 years of which were spent teaching special education. Over 90 percent of special education teachers were fully certified for their main teaching assignment, a rate almost ten percent higher than the national average for all educators.

Fifty-nine percent of special education teachers had a Master's degree, compared to forty-nine percent of regular education teachers (U.S. Department of Education, 2002b).

This is important, because, as a representative from a national organization noted, "people are starting to understand, in a concrete way, that a good teacher impacts schools' ability to help students with disabilities. Special education teachers are going to have more education and support. Under NCLB, only teachers who are highly qualified in academic content areas will be allowed to teach by 2005-06, although on March 15, 2004, the U.S. Department of Education issued a ruling providing additional flexibility for teachers in rural schools. NCLB has earmarked funds specifically to address the critical and growing need for teacher training and professional development. "Yet, supporting teachers in this way must be done systematically if it is to succeed" (Stodden et al., 2003, p. 14). But one researcher asked a more pointed question that has been largely unanswered: "Do the special education teachers know the standards related to NCLB?"

Several respondents noted the importance of attracting highly qualified staff and ensuring that existing staff can meet the certification and subject-area levels of expertise required to meet state and federal requirements and ensure that all students meet AYP. "I'm concerned with what NCLB will do with instruction for students with disabilities. On one hand, I'm encouraged that the focus will result in better teaching and learning. However, I worry that we will not have sufficient numbers of qualified teachers to meet that need." Says a special education director,

In a good way, you are going to have better prepared and qualified teachers to meet the challenge. So, students with disabilities will be instructed by more highly-qualified folks. Of course, hiring and retaining these teachers is a challenge that school districts will have to deal with, and incentives and other programs will be important. This ultimately involves institutions of higher education since they need to train these teachers. Can they deliver? I don't know.
(District Administrator)

Trying to find qualified staff was an inherent problem suggested by our panel. One district-based panel member noted that the issue of certification and credentialing will have to change. "In California, we have gone through a ton of credential changes over the past five years, making it

very difficult for teachers to get certified in special education. It must be streamlined and efficient, and it's not.”

Achievement Standards

Tightly linked to quality teaching and professional development are the standards by which students with disabilities are to be measured. *Education Week* reports that special education teachers express “reservations about whether all children with disabilities can actually meet state standards” (*Education Week*, 2004b, p. 13).

Under NCLB, there are three guiding principles inherent in federal law: (a) there will be challenging standards; (b) all students, including students with disabilities, should have the opportunity to achieve these standards; and (c) policymakers and educators should be held publicly accountable for every student's performance (Stodden et al., 2003). But standards are troublesome by some accounts. The National Center on Secondary Education and Transition's Capacity Building Institute (2001) found that there are both positive and negative consequences to standards-based reforms for students with disabilities. Positive consequences included:

- higher levels of learning and achievement toward common standards;
- increased access to general education curriculum;
- increased opportunities to learn grade-level material; and
- more meaningful diplomas because the students and system are held accountable.

Negative consequences included:

- misinterpretation of achievement results and inappropriate use of scores;
- higher rates of failure and dropouts due to challenging standards and inappropriate use of assessment data;
- staff burnout and students cheating on tests; and
- schools becoming less inclusive of students with disabilities because of test pressures and the probability that too many students with disabilities would lower the accountability index rating for the site (Quenemoen, Lehr, Thurlow, & Massanari, 2001).

This stated, the U.S. Department of Education found that ninety percent or more of the states reported having the same math and reading content standards for students with and without disabilities in 1999-2000, and ninety percent of students with disabilities participated in statewide or districtwide assessments (U.S. Department of Education, 2003, p. xvii). Still, Cobb, Lehmann, Tochtermann, and Bomotti (2000) suggest that the potential effects of current standards-based reforms are “extremely worrisome, since...intentions appear to be heavily weighted on the side of improvements for higher ability students” (p. 16).

Several studies suggest that there is a lack of connection among special and general education reform efforts (McDonnell, McLaughlin, & Morison, 1997) (McGrew, Thurlow, & Spiegel, 1993) (McLaughlin, Nolet, Rhim, & Henderson, 1999). The studies illustrated that many students with disabilities were being excluded from participation in standards-based curricula and assessments and thus received minimal or no benefit from reform efforts occurring in general education.

Federal policy initiatives designed to address this situation included the 1997 amendments to IDEA, which required students with disabilities to have access to the general education curriculum and state-mandated assessments; Goals 2000, which spoke to the need to ensure high performance for all students; and the No Child Left Behind Act, which emphasized the use of standards-based measures to assess and improve student performance and provided incentives and disincentives for schools failing to demonstrate adequate progress with respect to the standards. (Furney, Hasazi, Clark-Keefe, & Hartnett, 2003)

Additional concerns about whether students with disabilities can meet the standards include research that shows that students with disabilities are negatively affected by traditional instructional practices at the high school level (Gersten, 1998) (in Stodden et al., 2003). Recent research efforts support the use of various instructional supports for “promoting both the participation of students with disabilities in the general education classrooms and their attaining individualized learning objectives” (Stodden et al., 2003, p. 13). Examples provided by Stodden et al. include revising the curriculum, redirecting content-area planning, enhancing and adapting content-area instruction and textbooks, engaging students in peer tutoring, teaching students how

to learn, curriculum modification strategies, meta-cognitive approaches, learning strategies, and the use of a graphic organizer.

And finally, Browder and Cooper-Duffy (2003) suggest that, in spite of NCLB's focus on evidence-based practices, the inclusion of "students with significant cognitive disabilities in expectations for progress on states' academic content standards appears to be a values-based, rather than an evidence-based, policy."

Assessments and Accommodations

The 1997 reauthorization of IDEA and the more recent NCLB require states to ensure that all students take part in large-scale achievement testing, with or without the use of accommodations (U.S. Congress, 1997, 2002). In its Interim Report on State and Local Implementation of IDEA, the U.S. Department of Education found that states and districts have met this challenge with respect to statewide and districtwide assessments (U.S. Department of Education, 2003). The report states that ninety-six percent of schools reported administering a statewide assessment, of which ninety percent of students with disabilities participated. Of that group, two thirds used an accommodation. An additional three percent took an alternate test, and seven percent of all students who received special education services did not participate in any assessment. Two thirds (sixty-two percent) of schools reported administering a districtwide assessment, with similar participation rates as on statewide assessments (U.S. Department of Education, 2003, p. ix).

With regard to the use of accommodations, the U.S. Department of Education reported that states and districts allowed widespread use of accommodations by students with disabilities to participate in statewide assessments (U.S. Department of Education, 2003). Almost all states and districts (approximately ninety-four percent or higher) allowed the use of presentation, setting, and timing accommodations for students with disabilities. According to *Education Week's Quality Counts*, "Every state...provides at least one alternate assessment for students who received special education services if they cannot take part in regular state tests even with accommodations, or permits districts to do so" (*Education Week*, 2004b, p. 7).

The most prevalent type of presentation accommodation in use was reading test directions aloud (eighty-eight percent of schools), and the use of accommodations did not appear to vary significantly by type of disability, with the exception of students with sensory impairments who had a greater reliance on Braille or large-print editions of tests, magnifying or amplification equipment and tape-recorded answers (U.S. Department of Education, 2003, p. xi).

Not only are the numbers of students with disabilities taking large-scale tests increasing, but also their performance. According to the National Center on Educational Outcomes, the performance of students with disabilities on state assessments has increased in over half of the states and remained stable in one-third of the states (American Youth Policy Forum & Center on Education Policy, 2002, p. 28).

Our panel of respondents had a number of comments about accommodations and assessments. One researcher noted that IDEA '97 required states to take assessments seriously, but not until NCLB did they “really take it seriously.” She added, “NCLB has pushed things forward, and everyone is paying attention to it. Before, things were happening in only the leading states. Now they’re happening everywhere.”

The emphasis of IDEA and NCLB on achievement outcomes has resulted in schools and districts increasing their efforts to connect curriculum and assessments more intentionally with improved outcomes. Thurlow (2002) reports that “most assessment guidelines speak to the need for an alignment between assessment accommodations and instructional accommodations” (p. 4). But as one of our panel respondents said, not many are very far down this line. “There are people who saw this issue as soon as NCLB came out, but getting a critical mass of people to see this takes a while. They are starting to recognize issues and working with states to deal with issues. But again, it takes time, and people do not necessarily feel they have the time” (Organization Representative).

Others cautioned that people shouldn’t make the assumption that accountability through NCLB automatically results in only high-stakes tests. “Assessments are fundamental to education reform in this country, whether a regular assessment or high-stakes test. NCLB does not necessarily require a high-stakes test, it is an accountability test—not necessarily the same thing.

It is forcing the question of how to test and assess” (Federal Administrator). “There are no requirements for high-stakes tests,” said a representative of a national organization:

How will the required assessments affect students with disabilities? By and large, we will be assessing students with regular assessments, perhaps modified; secondly, because you need to assess, you will be assessing students who weren’t assessed before. That should change because of NCLB. I am seeing the early stages of people thinking of this issue differently at the district level. I can’t necessarily say that actions are any different, but the thinking is progressing, which is a start. (Organization Representative)

A high-ranking federal official from the Social Security Administration (SSA) said that “high-stakes tests” should be used as a diagnostic instrument, and that it isn’t fair to use them as the end piece when students don’t really know how best to prepare for them. The problem of using these assessments for purposes other than student development is a broad concern:

This is a complicated issue. I think if you have a test that measures absolute skills, you’re trying to figure out whether someone can read or add, I don’t have a problem applying it to everyone. On the other hand, if you are beginning to use results to let people in and out of programs, then it becomes complicated. If the tests are used for gathering information to rank schools or exclude or include, then I have a problem. This is often missing from the discussions. (Federal Administrator)

Panel respondents continued to worry about malicious intent issues with the law, especially with regard to accommodations and accountability. “If students with disabilities aren’t accommodated or there aren’t alternative assessments, school scores will be affected. If so, the school will figure out a creative way of counting these kids out or the kids will choose to leave” (Researcher). He was skeptical of the true intent of some of America’s schools:

Many schools are trying to hold special education programs at arms length. One example from Delaware. One school, when 8th grade students matriculate to the 9th grade. Instead of putting them in high school (9th grade), they put them in a special “9th grade academy” so their scores don’t count. There are several results. First, it segregates them from other students, so there is no inclusion. Second, the students are forced to take the 9th grade in high school over, thus they are now a grade behind. For students, this then becomes a watershed—do I repeat the grade because they made me, or do I drop out?

Panel respondents also pointed out the non-malicious types of outcomes. “I have a significant concern with grey-area students—those who are not taking alternative assessments but are not in the general curriculum/education. The students will be taking the tests but not really in a plan of accommodation. Those are the students who will potentially fall through the cracks” (Organization Representative). That panel member also pointed out her concern for the implications of spending time on testing. “Time spent on test preparation will take away from traditional time spent on transitioning issues. Some places are thinking about how to do this, but there are a number of places that are simply not doing it.”

Another panelist reiterated what we know from the research literature. “We are all over the place in terms of how to accommodate students with disabilities, even within districts. What guidelines are schools and districts using to make these decisions? Guidelines need to deal with how students are accommodated and how much time students get for testing” (Federal Administrator).

And one researcher voiced a concern common in the area of psychometrics:

My general sense is that we should see a blip in scores (we’ve already seen a blip in participation in state tests, just by requiring it) because previously students weren’t focusing on academic content; now they are, so the scores should elevate. But once beyond the blip, how do you maintain? How do you get the level of supports necessary? Can schools maintain that support? (Researcher)

The most recent issue with regard to assessments and accommodations in NCLB revolves around the “one percent” issue. In December 2003, the U.S. Department of Education outlined its final rule regarding the calculation of Average Yearly Progress (AYP) for students with disabilities. The rule allows states to “develop and use alternate achievement standards for students with the most significant cognitive disabilities for the purpose of determining the AYP of states, local education agencies, and schools” (U.S. Department of Education, December 9, 2003). An alternate achievement standard is an expectation of performance that differs in complexity from a grade-level achievement standard. An alternative assessment is an assessment designed for the small number of students with disabilities who are unable to participate in the regular state assessment, even with appropriate accommodations. Examples of alternative assessment may

include teacher observation, samples of students' work, and standardized performance tasks. In brief, the rule provides flexibility to states, districts, and schools to use, in the calculation of AYP, alternative assessments that score at the "proficient" and "advanced" level for students with disabilities, with a cap of one percent of all students. The Secretary of Education reserved the right to approve an exception for a specified period of time for a state, and the one percent cap does not pertain to individual schools to allow for flexibility, but only to districts and states. This rule took effect January 9, 2004 and will guide schools and districts and states for the current (2003-04) academic year.

Part II - Evidence-Based Research and Practice

An important component of No Child Left Behind is the focus on evidence-based practices. The U.S. Department of Education has moved toward a research-driven mandate supported by practices that rely extensively on random controlled trials (RCTs) and other high-end research methodology to inform policy and practice. The importance of this movement was illustrated by the retooling of the former Office of Educational Research and Improvement (OERI) into the Institute of Education Sciences (IES) in late 2002.

The impetus for the move toward evidence-based research and practices emanates from the Department of Education's belief that educational research is often poorly constructed:

The field of K-12 education contains a vast array of educational interventions – such as reading and math curricula, schoolwide reform programs, after-school programs, and new educational technologies – that claim to be able to improve educational outcomes and, in many cases, to be supported by evidence. This evidence often consists of poorly-designed and/or advocacy-driven studies. (Institute of Education Sciences, 2003, p. iii)

According to Davies (1999), evidence-based policy “helps people make well-informed decisions about policies, programs and projects by putting the best available evidence from research at the heart of policy development and implementation.” IES uses the criteria set by the Campbell Collaboration, an international effort to promote and make available systematic reviews of research studies.

Simply put, evidence-based research should be “systematically searched, critically appraised, and rigorously analyzed according to explicit and transparent criteria” (Davies, 2004, p. 7). The purpose is to produce information that will have enough rigor to appropriately inform the development of public policy and high quality programs.

As stated, NCLB requires evidence-based research and practices to be used in the field. In fact, NCLB includes more than 100 references to “scientifically-based research” (Browder & Cooper-

Duffy, 2003). States receiving NCLB funding and providing subgrants to local educational agencies (schools or districts) must use the funding:

...to implement a comprehensive school reform program that... has been found, through scientifically based research to significantly improve the academic achievement of students participating in such program as compared to students in schools who have not participated in such program, or ... has been found to have strong evidence that such program will significantly improve the academic achievement of participating children. (U.S. Congress, 2002, Section 1606(a)11(a & b))

IDEA also has provisions for conducting, using, implementing, and disseminating evidence-based research to improve educational practice and professional development, including the development of “model demonstration projects to apply and test research findings in typical service settings to determine the usability, effectiveness, and general applicability of such research findings in such areas as improving instructional methods, curricula, and tools, such as textbooks and media.” (IDEA ‘97 Section 672(c)(2))

One of the current challenges relates to the scarcity of research that meets the criteria set by IES for evidence-based research. A second challenge, to be discussed later, is how to turn available evidence-based research into practice.

Effective Evidence-Based Practices for Students with Disabilities

The use of evidence-based practices in special education is a new initiative, largely due to language authorized during the 1997 reauthorization of IDEA. Practitioners often have difficulty finding practices that are based on rigorous evaluation methods, either through the use of random controlled trials or other experimental methods. In an analysis of research-based instructional practices for students with disabilities, Gersten, Chard, and Baker (2000) were able to locate only one empirical study, which happened to be a Klingner, Vaughn, Hughes, and Arguelles (1999) study of reading approaches in the classroom. According to Gersten et al. (2000), research on special education has largely been “in the form of self-reflective essays” (p. 445).

Lehr et al. (2003) reported on an integrative review of published reports of dropout intervention outcomes. Out of more than 300 studies, 45 intervention studies were coded, and effect sizes

were calculated for 17 studies. Not one study incorporated a random selection process; 24 percent (only 11 students) used non-random procedures for selection but random assignment of participants to control and experimental groups; and 38 percent (17 students) assigned participants to control groups without random assignment. Only four studies (10 percent) utilized pre- and post-test controls. Another limitation of the research, according to the analysis by Lehr et al., is that only 9 of the 45 coded studies had some form of randomized design, of which 6 were focused on the high school population. Only two of those studies were conducted after 1994. The authors concluded that the greatest limitation of this review was that the status of the research base did not lend itself to conducting a meta-analysis, resulting in a “significant need for more rigorous research that incorporates sound methodology, evaluation, and impact data.”

Nietupski, Hamre-Nietupski, Curtin, and Shrikanth (1997) identified 785 articles in their review of research from 1976 to 1995 on students with significant disabilities. Fewer than ten percent of these articles focused on cognitive/academic skills, instead primarily focusing on social skills and social inclusion (Browder & Cooper-Duffy, 2003).

Browder and Cooper-Duffy (2003) found that critical limitations to research about students with significant disabilities include:

- sparse literature on students with complex, multiple disabilities;
- limited range of functional academics and lack of reading comprehension measures; and
- lack of research on teaching a broader range of academics to this population (e.g., science).

Our panel respondents suggested that finding and using evidence is a difficult task that is filled with a lot of grey area:

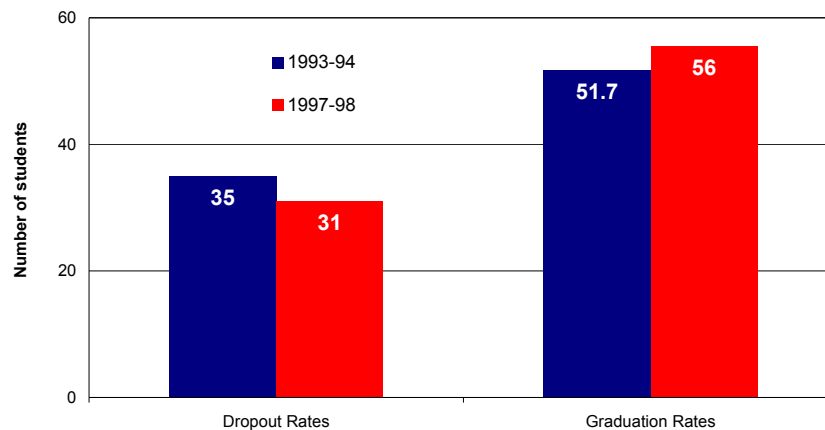
In the field, none of the interventions are so powerful so as to completely knock competing paradigms out of the box. In medicine, if someone has a broken arm, there is no debate about how an arm is healed. The arm is stabilized and put in some kind of splint or cast so that bone tissues can heal. No debate. In disabilities, we struggle on how best to learn to read (gradually add skills to repertoire or is it something that happens when there is a purpose to do so?). Some programs are marginally better, but not that good that they blow other stuff out. Is it because we

aren't that mature as a field? The real success of NCLB will be whether there is a real change in how we think about these issues. (Researcher)

Evidence-Based Practices to Reduce Dropout Rates for Students with Disabilities

Dropout rates among students with disabilities have always been a serious challenge for educators, parents, and policymakers. Even though there have been positive decreases in the percentage of students dropping out of high school, one third of all students with disabilities drop out (American Youth Policy Forum & Center on Education Policy, 2002). Put another way, only slightly more than half of students with disabilities graduate from high school (see Figure 1). An additional eleven percent of students graduate with a certificate (U.S. Department of Education, 2002a).

Figure 1. Dropout and Graduation Rates of Students with Disabilities, 1993-94 and 1997-98



SOURCE: American Youth Policy Forum & Center on Education Policy. (2002). Educating Children with Disabilities. Washington, DC.

Completion and dropout rates vary depending on the type of disability. As can be seen in Table 1 below, students with emotional disturbances are the least likely to receive a diploma, or alternative credential, and are most likely to drop out. Conversely, students with sensory impairments are most likely to earn a diploma and complete high school, and are least likely to drop out.

Table 1. High school completion and dropout rates by disability type, 2000-01

Disability	Completion Rate			Dropout Rate
	Diploma	Alternative Credential	Total Completion Rate	
All IDEA students	57	11	68	29
Emotional disturbances	39	6	45	53
Learning disabilities	64	8	71	27
Mental retardation	40	28	68	25
Other cognitive disabilities	57	20	77	13
Speech/language impairments	64	8	72	26
Orthopedic impairments	64	11	76	18
Sensory impairments	69	14	83	14
Other health impairments	68	7	75	23
Multiple disabilities	48	20	68	17

Source: U.S. General Accounting Office. (2003). SPECIAL EDUCATION: Federal Actions Can Assist States in Improving Postsecondary Outcomes for Youth. Report to the Ranking Minority Member, Committee on Health, Education, Labor and Pensions, U.S. Senate (GAO-03-773). Washington, DC: U.S. General Accounting Office.

A problem with the dropout rate is the lack of up-to-date and accurate data on educational progress with respect to students with disabilities. The U.S. Department of Education (2003) reported to Congress that fewer states and schools reported on the dropout rates of students with disabilities than on the dropout rates of general education students, and only eighteen percent of states reported rates separately for students with disabilities and general education students (p. xii).

Students with disabilities, like other students, drop out for a wide variety of reasons. According to Jordan, Lara, and McPartland (1996), these reasons can be categorized as those that push or pull students out of school. Push factors are usually considered the primary reasons for dropping out, and include repeating grades, low academic achievement, and insufficient evidence that school personnel care (Scanlon & Mellard, 2002). Factors that pull students out of school may include employment and pregnancy.

Dropout prevention strategies for students with disabilities typically include counseling services, reading remediation, tutoring, attendance monitoring, or after-school clubs (Lehr et al., 2003). Other services could include sustained and supportive monitoring interventions focused on school completion (Scanlon & Mellard, 2002). An early 1990's study of three dropout prevention programs for students with disabilities sponsored by the Office of Special Education

Programs found that five components were common to all programs: persistence, continuity and consistency; monitoring; relationships; affiliation; and problem-solving skills (Lehr et al., 2003).

Other researchers support these component areas, but warn about the efficacy of recent research. “The extent to which these interventions are systematically targeted for disengaged learners is unclear and closer examination suggests many of these practices are not evidence-based and have not been subjected to rigorous evaluation” (Lehr et al., 2003).

Evidence-based dropout strategies

The research literature on effective dropout strategies is extraordinarily limited. While there appears to be an abundance of anecdotal evidence of success of programs and strategies, only a marginal number have an empirical basis for that success. As presented previously, Lehr et al. (2003) recently conducted a meta-analysis of dropout research, only to find that of the 300 studies they reviewed, only forty-five studies could be coded, and only nine had some form of randomized design. In the end, only two conducted since 1994 were focused on high school students and had a randomized-control element in the evaluation.

However, we were able to identify information on a few dropout programs for students with disabilities. Sinclair, Christenson, Evelo, and Hurley (1998) conducted an evaluation of “Check and Connect,” a dropout prevention and intervention procedure developed to encourage middle school youth at high risk for dropping out to remain engaged in school and on track to graduate (See Appendix B: Evidence-Based Practices). Central to Check and Connect is a system “monitor” to keep students, parents, and teachers focused on the educational goals. Interventions included the sharing of information with students about the monitoring system, providing feedback to students about their progress, regularly discussing the importance of staying in school, and conducting risk-factor problem-solving sessions.

Ninety-four students were randomly assigned to a treatment or control group (n=47 each). Analysis found that students who received the Check and Connect intervention were more likely to still be enrolled after one year in the program (ninety-one percent vs. seventy percent) and more likely to graduate from high school within four years (forty-six percent vs. twenty percent).

The PASSAGEWAY (Program to Assist Secondary Students in Achieving Gainful Employment for West Alabama Youth) Program was designed to help at-risk special education students who either were potential dropouts or already had dropped out get back on track (Madison, Marson, & Reese, 1999). The program worked with students in six Alabama counties, providing literacy and employment training, employment opportunities, flexible scheduling, and family counseling. Services were provided by trained professionals, graduate students, and industry partners. Students were divided into two strands: strand one was defined for incoming ninth, tenth, and eleventh grade students identified as at-risk of dropping out; strand two was defined for students with disabilities who had dropped out four years prior to entry into PASSAGEWAY. Although the research article suggests that there were no strand one dropouts in three years of operation, and that half of the strand two (disability dropouts) had gained employment, there is no empirical evidence of success.

We reviewed several other programs that similarly were limited in their outcome data and analysis. For instance, the Transition Services Program of the Onondaga-Cortland-Madison Board of Cooperative Educational Services (New York), which serves students aged 13-21, most with mental retardation, serious emotional disturbance, specific learning disabilities, and multiple disabilities, claims to be “instrumental in reducing the dropout rate of at-risk students by increasing their awareness of opportunities available to them with training and a diploma.” Unfortunately, no evidenced-based data were available to support that statement.

Evidence-Based Practices in Transition

Transition from high school to postsecondary education and the workforce is a critical issue for students with disabilities, such that specific language was added to IDEA in 1997 to ensure that all students, by age 14 or earlier, would have a statement of transition services itemized in their IEP. In addition, IDEA also requires school districts to include students as participants in their transition planning meetings (Field & Hoffman, 2002). Regardless of the legislative language, research shows that the implementation of this policy has been slow and inconsistent across states (Hasazi, Furney, & DeStefano, 1999; Johnson, Sharpe, & Stodden, 2000; Johnson et al., 2002; National Council on Disability, 2000).

Fifty-seven percent of youth served under IDEA received a standard diploma and an additional eleven percent received an alternative credential when they left high school in 2000-2001 (U.S. General Accounting Office, 2003). In total, over 300,000 IDEA youth exited high school that year. Approximately thirty-seven percent of students with disabilities entered some type of postsecondary education (compared to seventy-eight percent for all high school graduates) (Blackorby & Wagner, 1996). Overall, an estimated 428,280 students with disabilities were enrolled in colleges in the United States in 1997-1998, almost half of whom were diagnosed as learning disabled (Skinner & Lindstrom, 2003).

At the postsecondary level, the number of students reporting a disability has increased dramatically, climbing from less than three percent in 1978 to nearly nineteen percent in 1996 (Blackorby & Wagner, 1996). To meet the needs of the students, there has been a ninety percent increase in the number of postsecondary programs offering opportunities for adults with disabilities to continue their education (Pierangelo & Crane, 1997). Nonetheless, the enrollment rate of people with disabilities in postsecondary institutions is still fifty percent lower than that of the general population, which has significant effects on the long-term employment prospects for people with disabilities (Stodden & Dowrick, 2000). It is hoped that an outcome of NCLB will be an increase in the number of students with disabilities who are prepared to pursue postsecondary education.

Education and training after high school is becoming more important for all students, especially for students with disabilities. Recent changes in the labor market have increased the importance of postsecondary education as a factor in the job market, and postsecondary education provides the opportunity for students to maximize their preparedness for future job market trends (Stodden & Dowrick, 2000). But according to Stodden and Dowrick, adults with disabilities are negatively and disproportionately affected by changes in general employment trends. They, unfortunately, face labor market liabilities which place them in the position of being the “last-hired and the first-fired” (Stodden & Dowrick, 2000).

In 1996, U.S. Census Bureau statistics indicated labor force participation rates at 75 percent for people without a high school diploma, 85 percent for those with a diploma, 88 percent for people with some postsecondary education, and 90 percent for those with at least four years of college. By contrast, only 16 percent

of people with a disability and without a high school diploma currently participate in today's labor force. However, this participation doubles to 30 percent for those who have completed high school, triples to 45 percent for those with some postsecondary education and climbs to 50 percent for adults with disabilities and at least four years of college (Stodden & Dowrick, 2000).

Still, significant numbers of students with disabilities remain in special education programs beyond their eighteenth birthday while their non-disabled peers go on to postsecondary education or the workforce. According to Hart, Zaft, and Zimbrich (2001), reasons for this discrepancy include:

- federal entitlements to public educational services that continue to age 21 (with most recent legislation through the Individuals with Disabilities Education Act Amendment, 1997);
- low expectations that students with significant disabilities such as mental retardation will go on to college; and
- adult service agencies with limited resources and long waiting lists.

The U.S. General Accounting Office (GAO)(2003) recently reported that students with disabilities have a “fear” of losing public assistance, per the first bullet above. An unintended consequence of Social Security Administration (SSA) programs and regulations is the potential discontinuation of benefits once a student leaves high school and enters postsecondary education. In fact, the SSA “Ticket to Work” program, which serves individuals with disabilities (Title II of the Social Security Act) between the ages of 18 and 64, has reported serving less than one percent of eligible youth. GAO visited three states and was told by SSA officials, school administrators, teachers, advocacy groups, and others that fear of losing federal and state benefits is a significant barrier to participation in federal work incentive programs such as the Ticket to Work program. SSA has recently partnered with the U.S. Department of Education to reverse those policies and allow students in postsecondary education to continue to receive benefits.

A senior administrator with SSA on our panel described it this way:

Under the 1997 amendments to SSA, we are required to reevaluate the one million individuals under the age of 18 who receive Supplemental Security Income (SSI) services upon their 18th birthday, and apply adult eligibility. The

result is that 30 percent of these kids are not eligible for Ticket to Work and other SSI services. What's been happening is that students have apparently been dropping out in order to keep their SSI and Medicaid services. Together with the Department of Education, we are about to issue a rule this spring which reverses incentives: if you are on SSI, and enrolled in school, and have an IEP, then we will delay the eligibility ruling. If you want to be certain that your child continues to receive benefits, then we have now made it that keeping them in school is the best thing, not the other way around. The prior rule evidently was a disincentive to stay in school. (Federal Administrator)

Financial aid is another barrier to postsecondary studies for students with disabilities. The Youth Advisory Committee of the National Council on Disability concluded that disabilities may prevent students from accessing financial aid for college and graduate school, because of “reduced course loads, extended number of semesters before the completion of a degree, difficulty with test taking and scholarship essay writing, an inability to participate in college work-study programs due to the nature of a disability, and discrimination against graduate school assistants with disabilities” (Youth Advisory Committee of the National Council on Disability, 2003).

In its study, the GAO (2003) **identified the problems reported by various stakeholders in the transition process** (see Table 2 below). As is evident in the table, each constituency had a different viewpoint. Students noted a lack of self-advocacy training, which helps empower them to develop the necessary skills to succeed in a postsecondary environment. Parents found that lack of information and support made it difficult to navigate the transitional period. Teachers and other educators talked about the problems in linking students with postsecondary and workforce opportunities and services. Researchers focused on the lack of work-based experiences for students, a notion we found mirrored by the researchers on our panel. And finally, government officials focused on the more tangible issue of transportation for students with disabilities. All are legitimate barriers to the successful transition of students, and all have their own set of difficulties in moving toward acceptable and appropriate remedies.

Table 2. Problems reported by stakeholders in the transition process

Stakeholders	Transition problem
Youth	Lack of self-advocacy training
Parents	Insufficient information about transition process
Teachers	Absence of linkages between school systems and service providers
Researchers	Lack of vocational education and community work experience
Federal, state, and local officials	Lack of transportation

Source: (U.S. General Accounting Office, 2003, p. 18, using data from National Youth Leadership Network 2001-02 Youth Survey, site visits, Study of Personnel Needs in Special Education (SPeNSE), NLTS2, and GAO interviews.)

In a synthesis of special education literature, Skinner and Lindstrom (2003) identified six critical areas where students with disabilities are at a disadvantage compared to non-disabled students with regard to postsecondary education attainment:

- deficits in study skills such as test preparation, note-taking, and listening comprehension;
- problems with organizational skills;
- difficulties with social interaction;
- deficits in specific academic areas, with reading and written composition being the most frequent;
- low self-esteem; and
- higher school dropout rates.

If these are the main challenges to transitioning to postsecondary life for students with disabilities, what policies and programs can remedy or ameliorate these challenges? To inform our discussion, we identified a taxonomy, developed jointly by Western Michigan University and the Transition Research Institute at the University of Illinois, of transition practices for students with disabilities (ERIC Clearinghouse on Disabilities and Gifted Education, 2000). Based on an exhaustive review of the literature and reviews of model projects and exemplary programs, the findings were organized into the following five categories:

- Student-focused planning;

- Student development;
- Interagency and interdisciplinary collaboration;
- Family involvement; and
- Program structure and attributes.

The director of the study said they found that effective transition relied on “more than a special education teacher or a transition specialist to implement these practices—it takes the entire school community” (ERIC Clearinghouse on Disabilities and Gifted Education, 2000).

Skinner and Lindstrom (2003) identified the following factors that have shown empirical evidence in influencing success. These include: (a) the extent of student knowledge of the nature of their disability and compensatory strategies; (b) how able a student is to manage a disability in a proactive manner (e.g., self-advocacy, goal setting, knowledge of disability law, selection of an appropriate college, self-identification, organizing for living and learning, etc.); (c) the availability of emotional and academic support; (d) the severity of the disability (e.g., a diagnosis of Attention Deficit Disorder compared to learning disabilities); (e) strength of the student’s motivation; and (f) how willing he or she is to persevere under adverse conditions.

Evidence-Based Transition Strategies

What practices work in transition? Unfortunately, the evidence-based research in this area is limited. In addition, the difficulty in targeting interventions during the complex period of adolescence has steered researchers away from high school and transition issues. It is difficult to determine which specific intervention at the secondary education level is responsible for an outcome, given the many inputs (adolescent development, curriculum, impact of peers, high school structure, teacher quality, etc.) Because of many of these complexities, research will likely continue to focus in the short term on early education and reading, leaving a void in research for secondary school students with disabilities, and transition.

A secondary limitation to the research literature is the small size of studies. To provide an example within the transition arena, Serebreni, Rumrill, Mullins, and Gordon (1993) looked at the implementation and effectiveness of Project Excel, a six-week summer transition program designed to (a) facilitate the transition to college for incoming students with disabilities, and (b)

promote academic excellence for high-achieving students with disabilities at the University of Arkansas. Program activities were clustered into three categories: psychosocial adjustment, academic development, and university and community orientation.

According to Serebreni et al. (1993), students who participated in Project Excel received academic advising and personal counseling, and six hours of college credit, and participated in a wide range of social and recreational activities. On a post-program Likert scale evaluation questionnaire, students rated Project Excel as a good-to-excellent college preparatory experience. The study's authors concluded that Project Excel enabled students to "develop friendships, successfully complete two college courses, and acquaint themselves with the university and surrounding community" (Serebreni et al., 1993). We use this example to show that, while Project Excel and other programs like it may be good models, it is difficult to make that assumption from this study due to obvious limitations, most specifically empirical rigor. The number of students included in the study was only 12. There are other examples of similarly-challenged studies where the sample size is—at best—limited.

This stated, there are still "pockets" of information, some evidence-based, that are worthy of discussion. For instance, Benz, Lindstrom, and Yovanoff (2000) reviewed the research on transition factors associated with secondary and postsecondary outcomes for students with disabilities. Their search yielded six programmatic factors that resulted in better opportunities for students with disabilities:

- Participation in paid work experience in the community during the last two years of high school;
- Competence in:
 - functional academic skills (e.g., reading, math, writing, and problem-solving);
 - community living skills (e.g., money management, community access);
 - personal-social skills (e.g., getting along with others);
 - vocational skills (e.g., career awareness, job search); and
 - self-determination skills (e.g., self-advocacy, goal setting);
- Participation in transition planning;

- Participation in vocational education classes during the last two years of high school, especially classes that offer occupationally-specific instruction;
- Graduation from high school; and
- Absence of continuing instructional needs in functional academic, vocational, and personal-social areas after leaving school. (Benz et al., 2000)

Hart, Zafft, and Zimbrich (2001) implemented and evaluated a model approach for creating access to college for all students, including students with disabilities who have a significant physical or mental impairment. The model, supported through an Office of Special Education Programs grant, was built around a student's strengths and preferences, involved family members, and used a collaborative interagency team (Student Support Team) to create innovative strategies that support student access to inclusive college settings. A consortium of five urban high schools and their local college was created with the primary purpose of improving adult outcomes for students with significant disabilities. The project used a student-centered framework and modeled many of the "best practices" outlined by the National Transition Alliance.

The development of a Student Support Team (SST) at each high school was at the core of the model. The SST included college faculty, parents, students, and disability professionals, and its role was to develop individual services and supports for students who expressed an interest in pursuing postsecondary education. The SST met monthly to identify individual services and supports for participants, aged 17 - 22, with significant disabilities. Each SST developed a sample menu of individualized services and supports, some of which included academic coaching, transportation training, career connections to employment, mentoring, technology, and social networks (Hart et al., 2001).

Hart et al. (2001) found that several (no numbers provided) of the 25 high school students with significant disabilities who were served through the project completed high school and continued to take courses at their local college. Others worked part-time and took a course, while still others worked in areas related to their preferences and college experiences. Students expanded their social networks to include peers without disabilities, and reported a greater sense of pride in

themselves. As part of the project, a check-list was created to identify the essential skills or activities that each student needed to accomplish (see list below).

Suggested activities to help prepare students with disabilities for college

- Set postsecondary education & career goals (consider person-centered planning).
- Obtain college catalogue(s) and review carefully with support from high school staff (e.g., guidance counselor) and your family, as needed.
- Have the documentation of your disability updated.
- Be able to describe how you learn best.
- Know what accommodations and technology you may need (e.g., reader, note taker, scribe, books-on-tape, speech-to-text software, screen reader).
- Know your rights and responsibilities under the laws (e.g., IDEA '97, ADA, Section 504).
- Visit college(s) before making final choice.
- Meet with college Disability Services Office (DSO) staff to talk about documentation and learn about the college accommodation system and how it differs from high school.
- Discuss goals, learning needs, and how to access specific accommodations, including academic supports that are available for all students (e.g., tutoring, writing support) with DSO staff before classes begin.
- Identify if the college has a mentorship program. If so, find out how to connect with a mentor.
- Work with the high school and DSO to learn organizational and study skills and how to recognize when you need help.
- Set up transportation prior to the start of school (e.g., driving, car-pooling, learning to use public transport, travel vouchers).
- Attend summer orientation sessions and get to know the college campus before classes start.
- Fill out financial aid forms and make sure that funding for all costs is arranged (e.g., tuition, books, fees, transportation).
- Identify how financial support you receive impacts other benefits (e.g., SSI, SSDI).
- Know what services are available through adult human service agencies (e.g., vocational rehabilitation — tuition, books, transportation, employment supports; One-Stop Career Centers).

Research by Hasazi et al. (1999), Kohler (1993), and Benz et al. (2000) identified organizational factors associated with exemplary secondary and transition programs and better outcomes for students, including:

- the use of written interagency agreements between schools and adult agencies to structure the provision of collaborative transition services, and
- the establishment of key positions funded jointly by schools and adult agencies such as vocational rehabilitation to deliver direct services to students in transition.

In 1989, the Marriott Foundation, with assistance from TransCen, Inc., initiated a program to enhance employment opportunity for youth with disabilities called “Bridges . . . From School to Work” (Marriott Foundation, 2004). The program was developed to address the traditionally high unemployment rate of youth with disabilities as they exit high school by providing them with critical job experience, and to help employers meet their human resources needs. The unique aspect of “Bridges” was paid internships for youth with disabilities during their last year of high school. Students are placed in internships in local companies where the employer pays the intern directly.

In addition to the more than 6,000 youth who have benefited from this program to date, eighty-four percent of youth placed in employment successfully completed the program and eighty-nine percent of them received offers of ongoing employment. A follow-up study completed 24 months after program completion found that, on average, fifty-seven percent of the students remained employed with an eleven percent increase in wages and a twenty-four percent increase in hours worked per week. Nineteen percent of the students were unemployed but pursuing further education (Marriott Foundation, 2004).

The success of the Bridges program underscores the importance of paid work experience as an adjunct to high school curricula for youth, regardless of disability category or severity of disability. The Bridges program is particularly interesting because one of our panel respondents was involved in the evaluation of the program. This respondent reiterated the success of the program, but also worried that this type of program—an evidence-based practice that illustrated

real results in workplace preparation—would be lost in an NCLB world of academic accountability measures.

Other challenges found by the National Center on Secondary Education and Transition (NCSET) is that school administrators, teachers, staff, students, and community members do not necessarily believe that all students can achieve to high standards, that supports in high school do not adequately take into account the complexity of the transition process, and that students aren't actively involved in their transition planning. To help demonstrate to teachers and staff what types of quality interventions are most successful, NCSET developed the following chart that compares standard and quality accommodations for students with disabilities:

A comparison of minimum and quality accommodations

Accommodation	Quality Accommodation
Secondary school student has been invited to participate in Individualized Education Plan (IEP) meeting.	Student is invited and encouraged to participate in IEP meeting and then does.
General academic standards are set for all secondary students in the state.	High standards for both academics and career preparation are set for all secondary students in the state.
The student's educational goals are set to achieve outcomes within the current environment.	The student's goals focus upon outcomes to be achieved in both the current and future environments.
Secondary school student (via parents) is regularly informed of student progress.	Self-determination skills are infused into the secondary education curricula and self-determination is actively encouraged in parent/school interactions.
A Statement of Needed Transition Services is included in the student's IEP.	The preparing environment (i.e. secondary school) is gradually molded to fit the receiving environment (i.e. post-secondary school).
The post-secondary education student must initiate support provision.	Students with disabilities and faculty members are given comprehensive information about, and encouraged to explore, various support options.
In post-secondary school, diverse teaching materials are faculty-specific and require the student to personally advocate for accommodations.	Post-secondary faculty increase their capacity to teach diverse learners, including students with disabilities.

Source: Jones, M. (March, 2002). Providing a Quality Accommodated Experience in Preparation for and During Post-Secondary School, *Information Brief* (Vol. 1). Minneapolis, MN: National Center on Secondary Education and Transition.

Evidence-Based Research on Assessments and Accommodations

The lack of empirical evidence on accommodations and assessments for students with disabilities is discouraging. “Regrettably, there is virtually no current research regarding the differential effects that various accommodation services, supports and programs have in relation to postsecondary education access, participation and long-term outcomes such as student retention, graduation rates and high quality employment opportunities” (Stodden & Dowrick, 2000; Tindel,

Heath, Hollenbeck, Almond, & Harniss, 1998). Thurlow, Ysseldyke, and Silverstein (1995) suggest that part of the reason for this dearth of evidence was the limitation in making testing accommodations available prior to the reauthorization of IDEA.

Schulte, Elliott, and Kratochwill (2001) noted that, when selected and implemented appropriately, testing accommodations are believed to lead to technically sound test results. “Yet, to date there is limited experimental evidence to support this assertion” (Schulte et al., 2001). In their study of the effects of testing accommodations on the mathematics test scores of a sample of 86 fourth-grade students, including 43 students with disabilities, Schulte et al. found that not all students benefited from testing accommodations. “In fact, approximately one third of students with and without disabilities in this study actually had lower scores in the accommodated condition than the non-accommodated condition” (Schulte et al., 2001). Furthermore, a report of results from a similar research project indicated that fourteen percent of students with disabilities and eight percent of students without disabilities experienced a negative effect of testing accommodations (Elliott, Kratochwill, & McKeivitt, 2001). The researchers did not have any special explanation for why students had negative results, but called for more research.

Helwig and Tindal (2003) conducted a randomly assigned study of the efficacy of teachers assigning accommodations to students for a mathematics achievement test with 973 general education and 245 students who received special education services at the elementary and middle school levels. The accommodation in question was reading aloud instructions and questions to students during the assessment. Summary findings indicated that teachers were unsuccessful at predicting which students would benefit from the accommodation, thus casting serious doubt on the assignment process. The authors found that prior studies resulted in similar outcomes (Fuchs, Fuchs, Eaton, Hamlett, & Karns, 2000; Weston, 1999), with the exception of Fuchs et al., who found that the efficacy of assignment could be increased if teachers had prior accommodation and testing information.

Helwig and Tindal (2003) concluded that their study confirmed prior research that found that teachers are not accurate in their assignment of accommodations. However, they cautioned:

The importance of accommodation decisions for students in special education remains, considering the need for validity in testing and federal mandates to include all students in large-scale testing programs. Because teachers are the individuals working closest with students, and possessing the greatest knowledge of each student's capabilities, it is the job of researchers to develop methods to increase teacher efficiency rather than to bypass them in the decision-making chain. (p. 223)

The authors also caution that their findings should not discourage teachers from assigning a reading accommodation. Teachers and IEP team members should “rely on their knowledge of students' reading and mathematics achievement, learning styles, classroom experiences, and testing behaviors.” (Helwig & Tindal, 2003, p. 224)

While research on testing and accommodations for students with disabilities is very limited, emerging practices may help shed some light on how schools and school districts can improve outcomes for students. The Charlotte-Mecklenburg, NC school district asked all special education teachers to review the placement of students with disabilities in alternative assessments to determine if they could take standard assessments. Following a complete review, the school district discovered that 27 percent of the students who had been directed to take alternative assessments were successful in taking the regular assessment (some with accommodations). The district assistant superintendent indicated that they were able to make these determinations because teachers use student assessment data on a regular basis (in some cases, every six to seven days) to manage their instruction and learning (Testimony of Jane Ryne, Assistant Superintendent Charlotte-Mecklenburg Schools, Charlotte, NC before the U.S. House of Representatives Committee on Education and the Workforce, Washington, DC, March 3, 2004).

Turning research into practice for students with disabilities

According to Klingner, Ahwee, Pilonieta, and Menendez (2003), two barriers to the implementation of evidence-based practices are (a) a lack of time and (b) inadequate support from administrators. Other barriers include “pressures associated with high-stakes testing, insufficient materials, a mismatch between teacher style and the practice, a lack of fit between the practice and other methods mandated by the school district, and teachers' lack of in-depth understanding of the practice or forgetting” (p. 413).

From a teaching and learning perspective, there are many factors that impact the use of evidence-based research in the planning and implementation of proven practices in the classroom. Sparks (1988) found that teacher beliefs, self-efficacy, attitudes, and perceptions all had an impact on whether and to what degree a teacher tried new strategies. Additionally, teachers who face challenges during the implementation of evidence-based practices will often revert to their traditional, comfortable practices (Lieberman, 2000). As Gersten, Chard, and Baker (2000) note, “Even when there is an awareness of the existing knowledge base, sustaining implementation in classrooms is infinitely more complicated than telling teachers and others that there is a knowledge base on effective practices and they should be using it.” Davies (2004) reports that moving research into practice “repeatedly shows that practitioners need incentives to use evidence and to do things that have been shown to be effective” (p. 20).

Through their review of the extant literature, Klingner et al. (2003) identified the following ways that researchers overcome the burdens of implementation:

- actively recruiting teachers and schools;
- demonstrating both the general value of the practice and its potential for improving student performance on high-stakes tests;
- assuring the feasibility and fit of the practice in the classroom;
- developing an ongoing reciprocal partnership with school personnel;
- providing teachers with sufficient mentoring and feedback;
- maintaining open lines of communication; and
- providing materials and other resources. (Klingner et al., 2003, p. 413)

A federal administrator on our panel suggested that researchers don’t know how to push their research. “If you want to change behavior, you have to reach them where they are—parents at the grocery stores, teachers through the National Education Association and the American Federation of Teachers. We must get smarter about getting messages on research.”

Turkstra (2003), using a medical model, fires off a warning about being too tied down by evidence-based practices (EBP):

The potential danger of focusing on EBP is that it leads to a disproportionate emphasis on the tools of the experimental design rather than the specific questions that need to be answered. Evaluations and recommendations for clinical practice should not be based only on the amount of random controlled trials or other evidence but also on reasoned assessments of the problems inherent in attributing treatment cause to experimental effect; the degree of generalizability; and the scientific, social, and ethical implications of a decision in favor of or against assessing a cause to an effect. Also, such evaluations and recommendations should not discount the role of reasoned judgments made by experienced clinicians.

Turkstra (2003) adds that “statistically significant” is not synonymous with “clinically meaningful,” that judgment is always required in individual cases, and random controlled trials may be impractical or inappropriate for answering many research questions. One of our panel respondents reiterated this issue:

I believe that the Institute of Education Sciences and the U.S. Department of Education, in the promotion of evidence-based research, could be straightforward to the field in its knowledge that quasi-experimental designs only answer some types of research questions and other types of designs are essential to answering other types of questions. (Researcher)

I think districts think they are using evidence-based research to inform practice, and the best districts are, but I do think it is hit or miss. They actually do it serendipitously, through colleagues, hearing someone speak, by following people. And it is also by how easily information can be accessed, not necessarily the quality. The marketing of it is often more important. We don't necessarily find that the best quality evidence has the best quality distribution and marketing. So, the big need in our field falls on the backs of the regional technical assistance centers in special education. They need to filter the well-done studies from less well-done studies and promote the use of evidence-based practices as they go out and work with districts. (Researcher)

A district administrator working through the challenges of NCLB stated that the U.S. Department of Education put together an evidence-based list of effective strategies for serving students with disabilities. “The research-based list from the federal level is based on ideology, not necessarily the quality of research. You have researchers arguing about whether it is a functional methodology or not or whether it is a good research methodology. The difference now is that the federal government has taken sides. This is a difficulty for us.” He adds, “I don't think

there are any barriers other than absence of knowledge and absence of research. Having it accessible; being able to understand it. I think we've been moving in that direction.”

One researcher suggested that there is a potential collision ahead with regard to evidence-based practices and local decision making:

Which is more valid, the work of an evidence-based research center or the experiences of families of children with disabilities? This has arisen several times. What is the basis for the criteria? Someone's [research] numbers or someone's real life experience? For example, a school district got an evidence-based strategy from a university, but a parent suggested something else that they knew would work with their child. The strategies were polar opposites. No one wants to touch this, especially those who defend NCLB. There are parent groups organizing around what really works for their child. Someone is going to have to address this.
(Researcher)

Practitioners and researchers on our panel were asked how they made district-level decisions on classroom strategies for students with disabilities. The strategies varied considerably. One school district was very constructive in its approach to research and program adoption. “When we adopted Open Court¹, we researched, read, talked to teachers, and visited school districts. Same with Language! [another literacy program]. We had people basically convince us that it was the way to go. We did due diligence.” Once through adoption, they didn't stop there. “We actually used control groups to see how the program worked. Open Court was full hog—everyone did it—but we conducted correlation studies to prove its worth. We did test-matrix methodologies to see what areas in state assessments students weren't performing, and then mapped the curriculum backward to Open Court to place a focus on those issues.”

Another school district relied on its disability committee. “We have been looking at research-based programs. We look at the validity of these programs, their norms, so we are adopting something that isn't just packaged and is aligned with standards. This isn't new. We've always done this. Last summer we had a pilot program using a new reading program to see how well it worked.”

¹ *Open Court Reading* is a research-based curriculum grounded in systematic, explicit instruction of phonemic awareness, phonics and word knowledge, comprehension skills and strategies, inquiry skills and strategies, and writing and language arts skills and strategies.
(www.sraonline.com/index.php/home/curriculumsolutions/reading/ocr/622).

Researchers weren't entirely convinced that practice was sufficiently informed by evidence-based research. "They are definitely not using evidence-based research," said one researcher. "It has more to do with accountability than what works, and most of the teaching is teaching to the test."

Removing barriers to adoption of evidence-based practices

Because NCLB relies so heavily on evidence-based practices, the removal of barriers to the adoption of these practices is critical to the success of schools and districts in meeting AYP and also in meeting the individual goals of students with disabilities. Our panel listed a number of barriers to adoption in this early stage of NCLB.

There needs to be some endorsement of research and practice to have it taken seriously. The Network for the Dissemination of Curriculum Infusion² is an example, where there are standards for program excellence. That's what we need—some endorsement by a recognized organization or process. (Federal Administrator)

Researchers don't know how to get good research adopted. There must be a lot more marketing—best example was when [former U.S. Secretary of Education] Bill Bennett gave \$1 million to package information on ADD (Attention Deficit Disorder) (through the Office of Special Education Programs). They packaged everything for teachers, students, parents, policymakers. They put ADD on the map. (Federal Administrator)

Boards of education need to start looking at the data. Funding isn't a good reason for not doing better. I think leaders of organizations aren't looking at the right stuff. It doesn't have to be driven by test scores. If we are looking at achievement and students aren't improving, then something's wrong. People who supervise principals and those who supervise the supervisors must start thinking this way. (District Administrator)

As long as we consider just telling someone about evidence-based practice as translating research to practice, we will be in the same trouble. We need a fundamental switch to getting individuals involved, getting personal meaning, and engaging people to understand why "this" is a better way of doing things. Getting

² The Network for Dissemination of Curriculum Infusion based at Northeastern Illinois University has been funded by the U.S. Department of Education to support the development of Curriculum Infusion programs on a national basis. The network is staffed principally by teaching faculty who have experienced success implementing Curriculum Infusion at Northeastern and disseminating the Curriculum Infusion process at national and regional meetings and workshops. (www.neiu.edu/~cinfusi/intro.htm#network).

groups of teachers to adapt practice, help each other, creating knowledge. If simply telling people worked, it would have worked 25 years ago. Practitioners and administrators need to reflect. (Organization Representative)

There was a concern among some panel respondents that curriculum marketers pushed school districts into believing that their products are evidence-based. “The biggest barrier is that they [educators] are convinced by sales people. How do they get beyond that? It’s pretty glitzy. The sales people can say what they want. It’s going to take the feds to come out with glitzy evidence-based stuff. It has to be easy to look at, simple to understand, so that they look and read it.” (Researcher)

“There are a lot of curriculum marketers who distribute, but they don’t necessarily have the first part: the evidence-based piece,” said another researcher. “We need to follow the pharmaceutical practice of holding clinical trials.”

Local folks are trying harder to get evidence of impact. But in most parts of the country, they are terribly dependent on publishers to provide that evidence. We need third-party, unbiased organizations and individuals to provide evidence-based information for use by practitioners, and it just doesn’t exist. (Organization Representative)

A national organization representative said that the success in implementing evidence-based practices and improving the education of students with disabilities comes from a two-pronged approach:

The evidence has raised our thinking to a new awareness. Everyone is now asking for the data. As a matter of influencing policy and practice, that becomes the evidence. That is clearly on a new level nationally, state, and locally. In terms of influencing policy, stories still show people what it means in practice. Aggregated data shows broad strategies, but people need to see what it means in practice. We need a balanced combination of database decision-making and the story of the scenario of what it looks like in practice. (Organization Representative)

Researchers clearly understood their own limitations in pushing research to practice. “Many of us who do research consider the end work a journal article, and that in no way moves that work into usable information. There is a huge gap between what we determine is the end point and what educators require. We’ve always relied on ED [U.S. Department of Education] to do this.”

Another strategy to help translate research is to assemble a cross-section of stakeholders to look at evidence-based practices. “We have to find simple, meaningful ways to look at these complex issues, and learn to learn with each other. Then that will become the means to a self-perpetuating end.” One researcher remarked: “How do you get people to do something differently? How do you make change? Incentives? Motivators? What I see happening is the data that has to be generated by a school to stay above the level of being a non-performing school is driving all of this right now. If I can get scores up for schools, who cares what the method is.”

Other strategies focused on faculty development and graduate training, the requirement of strong leadership with a clear vision for faculty development. “I think one barrier is that there is a tendency to see the kind of support that students need is contingent on well-trained teachers and staff. One-shot in-service is really insufficient. Pre-service and in-service training programs need to utilize evidence-based practice in how they prepare personnel.”

Part III - Conclusions and Recommendations

The release of this paper comes at an opportune time in many respects. The Individuals with Disabilities Education Act is currently in the process of being reauthorized, the reauthorization of the Higher Education Act is also underway, and the rules, regulations, guidance, and practice of how best to manage the implementation of NCLB are being refined, with states and communities learning from each other as they go. We believe this paper can help inform all of these efforts.

Affecting change in any large organization is difficult, but making change in an enterprise as complex as the U.S. public educational system can seem overwhelming. Yet, as we have seen from the research and the comments contained in this paper, American schools are on the threshold of a fundamental, systemic, and structural redefinition of schooling. Just as American business and industry went through significant restructuring as a result of the quality improvement movement with its laser-like focus on outcomes, public education is moving down a similar path as it becomes oriented to outcomes and accountability, not inputs and process.

The impetus for the recent wide-scale change in education can be traced to the No Child Left Behind Act. States and schools are scrambling to ensure that all their students are performing at proficient levels. The requirement of NCLB to provide outcome data on groups of students may be the most powerful motivator of this change. For the first time, communities are learning that their schools are not as good as they thought. Often, the low performance of at least two categories of students – students with disabilities and non-English language learners – has gone undetected. Low expectations for these and other groups of students (primarily low-income students and students from diverse cultures) have frequently resulted in dismal outcomes that are only now being widely reported in the press. Particularly for students with disabilities, we have labored under the false impression that disability means inability and let too many of our young people go through high school taking low-level, non-rigorous classes.

Of course, change is never easy, and it certainly hasn't been easy as the standards-based reform movement has taken hold and grown over the past decade. Almost daily reports in the media reflect dissatisfaction and anger over standardized testing programs, rigid and limited

curriculum, and the threat of being named a low-performing school. The challenge is for the education enterprise to recognize that this is part of the evolutionary process of moving from an input-based system to an outcomes-driven system. There is no easy way to make the dramatic and far-reaching types of changes that need to be made in teaching, instruction, school design, professional preparation and development, assessment, and community input to reach our desired outcome: that every child is prepared for postsecondary education and training, a career, and participation in society.

Signs of change are becoming evident across the country. In some cases, change is slower than in others, and in some communities, it is more difficult and more complex. The amount of social capital and the capacity of school leaders and teachers directly influence how quickly attitudes and values change and how rapidly schools can be restructured to increase student achievement.

One obstacle that has slowed progress is the almost-nonexistent body of scientifically- and evidence-based research to help guide policymakers and practitioners in what works. In a similar vein, policymakers often have not collected the information they need (such as disaggregated data) to make informed decisions. At other times, data has been collected, but has not been used to inform policymaking in a meaningful way.

Before NCLB focused on closing the achievement gap for all students, many educators paid little attention to the performance of certain groups of students, such as those with disabilities. While IDEA has been absolutely critical in increasing the number of students with disabilities who have access to inclusive classes, it has also, in some respects, resulted in a parallel education system. For many years, students with disabilities have been separated from their peers, not just physically, but through differential instruction, assessment, teacher corps, and accountability systems. At the local level, this has meant that students with disabilities were often left out of accountability systems, and many general educators did not feel responsible for the outcomes of students with disabilities. At the U.S. Department of Education, this parallel system has resulted in a similar approach of students with disabilities being “taken care of” by the Office of Special Education and Rehabilitative Services. Other offices generally did not concern themselves with the outcomes of the students (just as non-English language learners were “taken care of” by the

Office of English Language Acquisition). However, NCLB has changed that equation. Now, every office at the U.S. Department of Education must contribute to the performance of all students, including students with disabilities and non-English language learners. Every office must signal through its policy guidance, technical assistance, and programs that they are all working toward improved outcomes for all groups of students. From a leadership perspective, the Department of Education needs to ensure that every office is responsible for fully implementing NCLB.

There are already many positive lessons to be learned in the implementation of NCLB from the field, and our respondents gave us many insights into what states and communities are doing to ensure that every student succeeds. The respondents also provided insights into the challenges faced by states and schools as they seek to fulfill the vision of NCLB. The following are our recommendations for policymakers, practitioners, and researchers as they work to improve the outcomes for students with disabilities, based on the findings of this paper.

Stay the Course. While there are naysayers who believe that NCLB sets too high a bar for schools to meet, the vast majority of the public, researchers, and those interviewed for this project believe that we must maintain high expectations for all students, particularly students with disabilities. Providing exemptions for students with disabilities will only reinforce the belief that they cannot meet rigorous standards. Congress should not back down on its commitment to helping students with disabilities achieve the same high standards as other students. Already, we have seen that students with disabilities have been able to master rigorous curriculum and assessments, and given the necessary supports, these numbers should increase. We must, however, recognize the individualized needs of students with serious cognitive disabilities. The recent “one percent rule” and added flexibility for states to negotiate with the Department of Education in the consideration of Adequate Yearly Progress for students with severe cognitive disabilities is reasonable. To further maintain its commitment, Congress and the Department of Education will need to ensure consistent monitoring, compliance and enforcement of IDEA and NCLB.

Capacity Building. Both the research literature and responses from our panel point to the importance of strong leadership at the school and district levels to encourage and support large-scale change. Strong leadership is critical in the development of teachers and classroom practices that can improve student learning. In order for teachers and school leaders to help students with disabilities learn to higher standards, they often need to learn new instructional skills, as well as to change their beliefs and values. Not only do special education teachers need to learn new skills, but the general education teachers who are increasingly called upon to teach students with disabilities need more tools in their teaching arsenal. General and special education teachers need to learn to team teach, to understand multiple and diverse learning styles and methods for teaching heterogeneous groupings of students, using data and assessments as instructional management tools, and learn ways to change the culture of the school to one of success for each student. Strong leadership is needed at both the district and school levels to set high expectations, change the culture, and manage the capacity-building process. Learning about each of these activities involves a great deal of ongoing professional development for teachers and school leaders, team meetings, review of student and teacher work, and a supportive environment. Public funding should be carefully directed to professional and leadership development efforts that are tightly linked to the specific needs of each school or district and efforts that address capacity issues related to teaching and learning and helping all students, particularly students with disabilities, to reach high standards. The Department of Education must ensure that the billions of dollars available for professional development and instructional improvement through NCLB are used to support meaningful activities linked to each school's capacity-building needs.

Highly Qualified Teachers. Currently, many schools lack highly qualified special education teachers and teachers in certain disciplines. Rural and small schools face even greater challenges. The education system, including higher education, must find ways to prepare highly qualified teachers in routes unlike those we know of today. Additionally, schools and school districts need to encourage team teaching as well as the use of community resources to put a qualified individual in each classroom. The Department of Education should conduct research and analysis on effective methods of teacher preparation, including alternative routes to certification, with a particular focus on special education. Standards should not be relaxed, but limited flexibility such as that recently announced by the Department of Education to allow more time for teachers

to demonstrate their qualifications in multiple disciplines and to give states flexibility in how they determine qualifications is a step in the right direction.

Better Assessment Tools. While schools and school leaders are becoming more sophisticated in assigning students with disabilities appropriate accommodations when they are assessed, or in using alternative assessments, improvements to the regular or underlying large-scale assessments may have a greater impact on students with disabilities and many ultimately benefit all children. First, assessments can be universally designed so as to be used by the maximum number of children with diverse learning needs, not only students with disabilities, but also non-English language learners. This includes, of course, consideration of universal design of test preparation materials – which would obviously also be made available in alternative formats. Also, most statewide assessments currently in use measure only academic skills (as required by NCLB), but it is clear that the public, especially parents, would like assessments that measure more than just academic skills. For students with disabilities who might also be able to express themselves in ways other than academic knowledge, this could be very helpful. The Department of Education should conduct research and help develop assessments that measure a broader range of skills (such as workplace knowledge) that will help all students be more successful in careers and engaged as civic members of our society. Lastly, assessments need to be used by teachers and school staff on a more regular basis to provide feedback on instruction. Teaching and professional development programs should help teachers learn how to do this. The Department of Education has an appropriate role to support research and development efforts to create a new generation of assessments that:

- 1) are appropriate for the largest number of diverse students;
- 2) measure more than academic skills;
- 3) can be used more effectively as an instructional management tool; and
- 4) result in a reduction in the number of students who take alternative assessments.

Congress should also support these activities in the IDEA reauthorization.

Support and Disseminate Evidence-Based Research and Practices. NCLB’s focus on data and evidence-based research has led to a growing awareness of the importance of rigorous research and evaluations in making policy and programmatic decisions. Yet, we are hampered by the lack of quality studies, especially on students with disabilities, and especially in certain areas, such as dropout prevention. We clearly need a continued strong investment in high quality research, and both NCLB and IDEA should support the means to that end. The Department of Education should bridge research efforts conducted by the Office of Special Education and Rehabilitative Services and the Institute of Education Sciences, and it should support research to understand how to teach more academic rigor to students with disabilities and develop optimal assessment tools. We look to Congress to support such activities in the reauthorization of IDEA.

Even when research is available, it doesn’t automatically translate into practice in the classroom. The Department of Education should provide support and leadership in translating research into capacity-building tools and technical assistance for practitioners and teachers. It is our hope that the Institute of Education Sciences’ *What Works Clearinghouse* and other federal efforts will play a significant role in disseminating research in a way that is usable and meaningful to teachers in their daily work.

At the same time, Congress and the Department of Education will need to obtain and use the research and evaluation data generated as a result of NCLB to inform and refine their decisions in terms of the: (a) guidance provided to states and locales that are implementing NCLB (and IDEA), and (b) overall direction the Federal Government provides in its implementation of NCLB (and IDEA).

Lastly, because we are faced with a scarcity of quality research affecting students with disabilities, practitioners and policymakers must recognize that a great deal of practical knowledge does exist, and until more rigorous research becomes available, the Institute of Education Sciences should determine when this “craft and clinical knowledge” is legitimate.

Supports for Students. While there is not a great deal of scientifically-based research on programs to help students with disabilities improve their educational outcomes, there are several studies and meta-analyses of effective practices that support a strong theoretical base for much of

this work. There is also an emerging consensus on the principles of effective high schools and the conditions needed to increase student achievement for secondary school students. This body of knowledge needs to be integrated into the body of knowledge regarding students with disabilities. Given that we don't have the luxury to wait for the returns of recent research-based studies, we should use the evidence we have regarding successful supports and interventions for students. Strategies for students to increase engagement in high school, reduce dropout rates, and increase preparation for postsecondary education and careers include higher expectations and goal setting, greater instructional personalization, self-advocacy, ongoing counseling and mentoring, parental involvement, and connections to the community and postsecondary learning options. The Department of Education should ensure that its technical assistance draws upon the knowledge base and practices from all offices in its efforts to improve outcomes for students with disabilities.

Final Thoughts

The shift towards accountability, outcomes, and higher expectations in our schools is leading us in the right direction, although we recognize that schools face legitimate difficulties during this change process. But the response to these challenges should not be to back down on expectations for students with disabilities and those who have been perceived as unable to meet the standards. Policymakers and practitioners must remain committed to the goal of closing the achievement gap for all students. To lessen this commitment would be to return to the days and the mindset that only some students could be and deserved to be taught to high standards. We now know that by setting high expectations, and helping students, teachers, administrators, and family members reach those high standards, we can close the achievement gap for all students.

Appendix A: Interview Protocol

This review, sponsored by the National Council on Disability, was designed to gain insight into policies and practices that have shown particular success in helping students with disabilities progress through the public school system. Because the No Child Left Behind Act (NCLB) requires school districts to factor in outcomes of students with disabilities into Adequate Yearly Progress (AYP) calculations, how districts serve the students under the law is of critical importance.

Specifically, we were interested in identifying practices that effectively:

- Reduce the number of students with disabilities who drop out of high school;
- Increase the number/percentage of students with disabilities who graduate high school with a diploma as opposed to a certificate of attendance; and
- Help students transition to and remain connected with postsecondary education.

Given the focus of our review, we raised a number of issues with respondents, focused around the following questions:

- What impact do you believe NCLB will have on programs and policies affecting outcomes for students with disabilities at the state, district, and school levels? Will NCLB help reduce the number of students with disabilities who drop out of high school or increase the numbers, as some have suggested? How will the required assessments or high stakes tests affect students with disabilities? Have you seen evidence of change at this early stage of implementation?
- Does IDEA support the goals of NCLB? Could or should IDEA be changed to be more supportive of NCLB or to be better aligned with the goals of NCLB?
- What about the Higher Education Act? Are there areas that could be amended to allow for greater participation by students with disabilities?
- What do you think the expectations for students with disabilities in your school/district are? Are they the same as students without disabilities? Is it reasonable to expect that students with disabilities should meet the same expectations and standards as students in general education?

- Are you aware of programs that produce these positive results for students with disabilities that have been evaluated or that are based on research? If so, please describe these programs (follow up for contact information).
- Which special education populations/designations do you work with?
- What do the programs look like? What are the practices employed? Are these programs and practices based on evidence or research? Is it research from the special education field or general education field?
- Whom do these programs serve? Do they work selectively for some groups and not others? For which groups are they most effective? Can certain strategies work with students regardless of their disability?
- What programs or strategies typically do not work?
- What are the scientific criteria for effectiveness used to judge those practices? And who sets the criteria for determining what programs or practices would be used?
- Which factors ensure OR prevent evidence-based outcome producing practices from being adopted by school districts, tribal governments, etc.?
- What general steps need to be taken to remove the barriers to adoption of evidence-based outcome producing practices so that outcomes for students with disabilities are improved?
- How does research-based evidence influence your programs and policies, as well as the staff involved in administering the programs or working directly with students? Are front-line staff familiar with research-based practices?
- Who would you recommend we get in touch with regarding state and/or district practices that improve post-graduate opportunities for students with disabilities?

- end -

Appendix B: Evidence-Based Practices

Appendix B provides a sample of evidence-based research on four interventions aimed at students with disabilities. This list is not meant to be exhaustive of the research, but rather, an illustration of the type of research that is currently available. This said, we will note that finding evidence-based research on educational interventions and strategies for students with disabilities is a mind-numbing practice. Quite simply, there is little research in available distribution streams that fits the rigor suggested by either the Institute of Educational Sciences (which has funded most of the research in this area) or by the Campbell Collaboration, which provides the standards for empirical investigation of education and social science. We eagerly await the outcomes of a current Office of Special Education Programs (OSEP)-funded study by the Colorado State University on evidence-based practices for students with disabilities, expected to conclude in 2005. That study, which will review more than 3,000 reports, studies, and articles, should shed considerably more light on evidence-based practices for students with disabilities.

In our review, a large majority of studies relied on simple descriptive outcome data (e.g., percentage of students that completed the program; grade point averages of students, etc.). Very few utilized a control group, and even fewer used random assignment procedures to create treatment and control groups. Second, we feel that it is possible that some researchers have not bothered to publish their findings, or that publication bias has possibly eliminated their studies from publication. The reality is that, if unpublished in some form that prohibits dissemination, the studies literally might as well not exist. We believe that this has happened to many OSEP-funded projects.

If anything is learned from our experience, the following summaries should serve to bring attention to the problem associated with finding evidence-based practices for professionals who serve students with disabilities. If they can't find them, they can't implement them.

Please note that we use some verbatim language in the following research summaries to provide more accurate depictions of the programs, rather than a presentation of our insightful and

creative ability to transform the words of others into something coherent. We just want to be accurate. We have provided references for each summary.

TITLE: DROPOUT PREVENTION FOR YOUTH WITH DISABILITIES: EFFICACY OF A SUSTAINED SCHOOL ENGAGEMENT PROCEDURE

SOURCE: Sinclair, M. F., Christenson, S. L., Evelo, D. L., & Hurley, C. M. (1998). Disability Targeted: Students with learning and emotional/behavioral disabilities. *Exceptional Children*, 65(1).

OVERVIEW: *Check and Connect* is a dropout prevention and intervention procedure developed to encourage middle school youth at high risk of dropping out to remain engaged in school and on track to graduate. The procedure was shaped by the collaborative efforts of individuals who interacted directly with the target students, including teachers, family members, and community outreach workers, as well as by the input of a district special education coordinator, researchers from the University, and the students themselves. A core component of the model is a “monitor” whose primary goal was to keep students, families, and teachers focused on the education process and reduce and prevent the occurrence of absenteeism, suspensions, failing grades, and other warning signs of school withdrawal. The monitor regularly checked students’ engagement with school and promptly facilitated efforts to build and maintain connections that would help students stay in school. A monitor working 20 hours per week carried an average caseload of 25 students, and often worked with the same students over several years.

Risk factors were logged each day by the monitor and tabulated each month (the “Check”). The “Connect” consisted of two interventions: basic interventions provided to all students at least once a month; and intensive interventions that were provided to students who showed “high risk” on the daily monitor logs.

Basic interventions consisted of four strategies: (a) sharing general information with the student about the monitoring system, (b) providing regular feedback to the student about his or her educational progress, (c) regularly discussing the importance of staying in school, and (d) problem-solving with the student regarding risk factors. Intensive interventions drew upon three broad areas of support: (a) problem-solving, (b) academic support, and (c) recreational and community service exploration.

METHODOLOGY: An experimental design was used to evaluate this program. One treatment group (47 students) and one control group (47 students) were selected from a universe of students with emotional/behavioral disabilities enrolled in a northern Midwest urban school district. All 94 students received dropout prevention interventions in Grades 7 and 8. At the end of eighth grade, the students were randomly assigned to either the treatment or control group using a stratified selection procedure (ethnicity, sex, socioeconomic status, disability, age, as well as a variable referred to as the “profile rating”). Half of the students continued to receive intervention through ninth grade.

The effectiveness of the *Check and Connect* intervention was assessed by conducting post-test comparisons between the treatment and control groups in the ninth grade (pretest comparisons found no differences). The appropriate test statistic was used (e.g., t-test, chi-square test of independence), depending on the type of data.

EVIDENCE OF SUCCESS: Students who received intervention through ninth grade were significantly more engaged in school than control group students. The treatment students were more likely to be enrolled in school at the end of the year (91%) than were students in the control group (70%), $X^2(1) = 6.87, p < 0.05$, and treatment students were more likely to persist in school during ninth grade (85%) compared to the control students (64%), $X^2(1) = 5.60, p < 0.05$. The treatment students were also more likely to complete their course assignments than were control students, $t(47) = 2.79, p < 0.05$.

Similarly, the school performance measures indicated that treatment students were significantly more engaged in school. Students who participated in the *Check and Connect* intervention through ninth grade earned, on average, significantly more credits during the first year of high school than control group students, $t(90) = 4.01, p < 0.05$.

Treatment students were also more likely to be on track to graduate in 4 years (46%), earning 15 or more credits in ninth grade, than students in the control group (20%), $X^2(1) = 6.77, p < 0.05$. Similarly, treatment students were more likely to be on track to graduate in 5 years (68%), earning 12 or more credits in ninth grade, than students in the control group (29%), $X^2(1) = 14.13, p < 0.05$.

In addition, special education teachers rated students in the treatment group as more academically competent, $t(41) = 2.13, p < 0.05$, while general education teachers rated the treatment students as demonstrating fewer behavioral problems, $t(46) = 2.08, p < 0.05$. No significant difference between treatment and control groups emerged on general education teacher ratings of academic competence or special education teacher ratings of problem behavior.

CONCLUSIONS: The authors conclude that *Check and Connect* participants (treatment group) were more likely to be “engaged in school and on track to graduate.” They persisted in school, completed class assignments, and earned more course credits.

TITLE: STEPS TO SELF-DETERMINATION CURRICULUM

SOURCE: Field, S., & Hoffman, A. (2002). Lessons learned from implementing the steps to self-determination curriculum. *Remedial & Special Education, 23*(2).

OVERVIEW: The *Steps to Self-Determination* curriculum was published in 1996 in response to the emerging emphasis on self-determination in special education. This emphasis on self-determination came about as persons with disabilities and their friends and families began to advocate for roles and expectations for individuals with disabilities that were more consistent

with adult expectations, and as educators, advocates, and policymakers searched for strategies to improve post-school outcomes for students with disabilities.

The purpose of *Steps to Self-Determination* curriculum is to help students develop the knowledge, beliefs, and skills that they need to become more self-determined. *Steps to Self-Determination (Steps)* is an 18-session curriculum based on a self-determination model that includes five major components: Know Yourself, Value Yourself, Plan, Act, and Experience Outcomes and Learn. The first two components, Know Yourself and Value Yourself, describe the internal processes that provide the foundation for self-determination, and the latter three components describe specific skills that evolve from that foundation and comprise the action stage of the model. The action stage includes the achievement of skills associated with self-determination and the evaluation and celebration processes that enhance and crystallize a sense of self-determination.

Steps is an experientially-based curriculum. Students establish and work toward goals as they learn self-determination knowledge and skills. The curriculum was designed to be used in integrated (i.e., including students with and without disabilities) or separate (e.g., resource room, self-contained class) environments and in a variety of scheduling arrangements. It can be included in existing courses or taught as a separate class or extracurricular activity. Teachers participate in the curriculum as co-learners with the students, to provide role models and to create a collaborative classroom climate. Parents or other significant persons in the students' lives are also involved, to support the students' efforts.

As a result of the increased emphasis on self-determination, the *Steps* curriculum has been used for 5 years in both high school and middle school settings and in general and special education settings. Through federally-funded outreach projects, specialized support has been provided to assist teams in implementing the curriculum in the states of Illinois, Massachusetts, Michigan, Utah, and Washington. Support for implementation of the curriculum has also been provided in other states, through state and local initiatives.

METHODOLOGY/EVIDENCE OF SUCCESS: The curriculum was initially field tested in diverse socioeconomic and ethnic high school settings in the U.S. Midwest, and consisted of a treatment group that used the *Steps* curriculum and a control group that did not use the curriculum. A t test between the treatment and the control group indicated a significant increase ($p = .002$) in the correct responses on the Self-Determination Knowledge Scale, with an effect size of 1.02. This effect size is considered to be a very large treatment effect. To put this in perspective, if a group's knowledge of self-determination skills was at the 50th percentile, the curriculum would be expected to improve that level to the 85th percentile. Second, the effect of a pre-test/post-test treatment vs. control group of the effectiveness of the curriculum, as measured by the Self-Determination Observational Checklist scores showed a significant increase ($p = .000$) in student behaviors that are considered to be correlates of self-determination. A subsequent study of the *Steps* curriculum with students with behavioral and learning disabilities found a significant pre-post increase in internal locus of control after participation in the *Steps* curriculum, while yet another did not find any significant post-test outcome.

CONCLUSIONS: Additional research has found that use of the *Steps* curriculum resulted in an increase in knowledge and behaviors associated with self-determination, an increase in locus of control, and a decrease in features associated with depression. Self-determined, innovative teachers have embraced the process of change and implemented a self-determination focus in ways that meet specific needs of students in their classrooms through implementation of the *Steps* curriculum. This points to the need to develop and implement additional resources to support the self-determination of teachers.

TITLE: YOUTH IN TRANSITION (YIT)

SOURCE: Horne, R. L., & Hubbard, S. (1995). *Youth Transition Program (YTP) Case Study Report* (Draft Research Report). Washington, DC: National Institute for Work and Learning, Academy for Educational Development.

OVERVIEW: This case study discusses school-to-work transition for students with disabilities through the Youth Transition Program (YTP), a statewide collaborative effort including 26 communities throughout the state of Oregon. YTP began in 1990 as a cooperative effort between the Oregon Department of Education (ODE), the Oregon Vocational Rehabilitation Division (OVRD), the University of Oregon (UO), and the local public school systems.

The YTP was developed with the basic goal of placement in meaningful competitive employment or career-related postsecondary training for youth with disabilities. The YTP serves disabled youth beginning in their completion year of high school and continues for two years of follow-up services, depending upon the student's needs. YTP's services are provided jointly by school and vocational rehabilitation staff and include: paid job training with on-site monitoring and support; job-related instruction in academic, vocational, independent living, and personal/social content areas; individualized transition planning; placement in a job upon leaving school; and follow-up support.

The YTP serves disabled youth who are eligible for vocational rehabilitation services and who are able to become competitively employed without long-term support. This includes students who: (1) are on track to complete school, but need YTP services to achieve post-school vocational goals; (2) are still in school, but at great risk of dropping out; and (3) have already dropped out of school, and are unemployed or underemployed. YTP started as a pilot project that included 7 sites. By 1993 13 local communities were serving as YTP sites. When this study was conducted in 1995, a total of 26 communities representing 24 of 26 vocational rehabilitation field offices and half of all high school districts in the state were participating in YTP. Since 1990, through a combination of state and federal funding, approximately 8.5 million dollars has been allocated to support YTP activities through 1995. Statewide, over 1,500 students with disabilities will receive YTP services between 1990 and 1995.

METHODOLOGY: Unlike most school systems and programs, YTP has carried out a comprehensive evaluation effort to document the impact of the program on specific student outcomes and systems change. Data were collected from each site on a variety of demographic and programmatic factors (e.g., student demographic data, job placements, training efforts,

community outreach activities, improvements in coordination, etc.), and data were collected during a two-year follow-up period. YTP outcome data were analyzed relative to the outcomes of comparison groups, including a statewide sample of students with disabilities who exit school, a sample of non-YTP/VR clients in the state, and a nationwide sample from the *National Longitudinal Transition Study (NLTS)* (Wagner and Shaver, 1992). Second, YTP examined student outcomes separately for two groups of program participants in order to determine of the program's impact: (1) rural versus non-rural YTP participants; and (2) YTP students identified as "at-risk" compared to those not considered "at-risk."

EVIDENCE OF SUCCESS: When YTP compared employment outcomes for students' highest paying jobs within two years of leaving school, YTP students:

- earned higher hourly wages than the students in the Oregon disability sample (\$5.69/hour vs. \$5.31/hour).
- earned higher weekly wages (\$181/week vs. \$157/week).
- were more likely to still be on the job (70% vs. 56%).
- were less likely to have lost a job for negative reasons (27% vs. 40%).

When YTP/VR clients were compared to VR clients of similar ages, types, and disabilities, YTP clients were more likely to:

- be determined eligible for VR services (76% vs. 52%).
- remain in the rehabilitation process (57% vs. 27%).
- earn higher weekly wages at closure (\$177/week vs. \$143/week).

YTP examined student outcomes compared to a national sample drawn from the NLTS in the areas of employment and productive engagement. NLTS defines productive engagement as students either working or participating in postsecondary activities. When the YTP students were compared to the national NLTS sample for the first two years out of school, YTP students were:

- more likely to be competitively employed (67% vs. 46%).
- more likely to be employed full-time (39% vs. 25%).
- less likely to be unemployed (32% vs. 46%).
- more likely to be productively engaged (95% vs. 64%).

Another demonstration of YTP's success is the fact that it appears to equally benefit students who are living in rural areas and non-rural areas, as well as at-risk students.

CONCLUSIONS: In summary, the Youth Transition Program had an impact on outcomes for students who demonstrate moderate to severe disabilities and face significant barriers to employment. The YTP shows that positive outcomes occur when systems intervene early in the transition years and provide for people-centered planning and placement activities. The program also demonstrates encouraging effects on students' social development when programs provide for students' independent living and social support needs. YTP's success is also linked to the implementation of a program designed from a research-base. The local success of individual YTPs attest to the utility of incorporating universal design concepts across sites, while maintaining program flexibility. Finally, YTP can be credited with creating local systems change through state-level support.

TITLE: TAKE CHARGE FOR THE FUTURE

SOURCE: Powers, L. E., Turner, A., Westwood, D., Matuszewski, J., Wilson, R., & Phillips, A. (2001). TAKE CHARGE for the Future: A controlled field-test of a model to promote student involvement in transition planning. *Career Development for Exceptional Individuals*, 24(1), 89-103.

OVERVIEW: This article describes a randomized field-test of *TAKE CHARGE* for the Future, a multi-component model to promote student involvement in transition planning. *TAKE CHARGE* for the Future has as its centerpiece student-directed participation in personally-relevant transition planning and preparation activities in school, community, and home settings. Students learn that they are responsible for promoting their own transition success: they are exposed to specific strategies to identify, communicate and achieve their transition goals, and they are provided with the information and support necessary to ensure their success. Students complete a self-help focused curriculum, and they receive coaching and support to identify their transition goals, participate in their transition planning meetings, formulate systematic plans for goal attainment, and perform activities to achieve their goals. Information and support are concurrently provided to school staff and families to expand their capacities to assist youth. Peer support and mentorship opportunities are organized to bolster youth transition knowledge, confidence and support networks.

METHODOLOGY: Forty-three youth (14 to 17 year olds) from 4 high schools in small, medium and large communities in New Hampshire, North Carolina, Oregon and Wisconsin participated in the study. The youth experienced learning, emotional, orthopedic or other health disabilities. A two-independent group, repeated measures design was utilized to evaluate the impact of the intervention. Following consent, participants were randomized to the treatment or wait list group. Subjects in the treatment group participated in *TAKE CHARGE* for 4 months. The intervention included 5 elements: (a) individual, 50 minute bi-weekly coaching sessions for youth, (b) monthly community-based workshops for youth, their parents and successful adult mentors, (c) community activities performed by mentors and students, (d) telephone and home visit support for parents, and (e) inservice education for transition staff. Various instruments were used to measure youth participation in transition planning, student and parent transition awareness, youth empowerment, and student participation in transition planning meetings.

Evidence: The findings generally support the efficacy of the *TAKE CHARGE* model for promoting student involvement in transition planning. Students who participated in *TAKE CHARGE* had higher outcomes in measures of student involvement in transition planning activities, transition awareness, empowerment, and engagement in transition planning meetings than those in the control group. Additionally, students in the treatment group were more directive and engaged while other participants were less dominant and more responsive to student engagement. Findings confirm that, without systematic intervention to promote their involvement, many students sit passively in their transition planning meetings while others control the discourse.

CONCLUSIONS: On the whole, the findings suggest that interventions such as *TAKE CHARGE* hold promise for enhancing the transition planning of youth with disabilities. Other

approaches that emphasize skill development, mentorship, or family support lend credibility to our findings, which highlight the importance of these intervention components.

The most important contribution of this study is likely its validation of the impact of a semester-long intervention on the transition planning competence and behavior of youth, as judged by youth, parents, educators, and outside observers. It is clear that many of the competencies required for successful transition planning – identifying and working toward future goals, building partnerships with others, and managing barriers that arise – are critical for success throughout life. If educators, parents and community members can work together to assist young people to cultivate these capacities during adolescence, it can lead to an important investment in the future.

The authors note that the results of this study should be interpreted cautiously because of the “relatively small sample size” which impacts the generalizability of the findings.

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