

*The National Center on Secondary Education and Transition,
University of Minnesota, and the Council for Exceptional
Children's Division on Career Development and Transition*

present a Capacity Building Institute on

Proceedings

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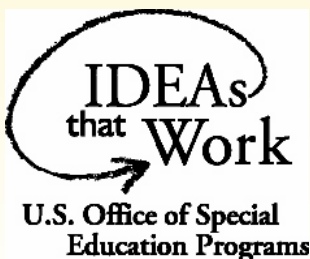
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Research-Based Tools and Strategies for Improving Outcomes for Secondary Youth with Disabilities

Wednesday, October 19, 2005

preceding the Division on Career Development and Transition Conference
La Posada Hotel, Albuquerque, NM



Background

On October 19, 2005, the Division of Career Development and Transition (DCDT) of the Council for Exceptional Children and the National Center on Secondary Education and Transition (NCSET) co-sponsored a Capacity Building Institute on *Research-Based Tools and Strategies for Improving Outcomes for Secondary Youth with Disabilities* to present some of the latest developments in the field of secondary education and transition. The day included reflective dialogue around:

- Findings/outcomes of the National Longitudinal Transition Study-2;
- Youth perspectives on how to achieve successful outcomes;
- Research results and practical interventions that improve outcomes for secondary youth with disabilities around the key areas of schooling, career preparatory experiences, youth development/ youth leadership, family involvement, and connecting activities; and
- Employer perspectives on how to achieve successful outcomes.

Our intention for the workshop was to provide participants with practical, useful information that had meaningful application to their daily work.

In the following proceedings you will find the Institute agenda, a summary of the Institute, and biographical information about the presenters.

David R. Johnson, Director
NCSET

Research-Based Tools and Strategies for Improving Outcomes for Secondary Youth with Disabilities

Agenda

7:30	Registration and Continental Breakfast	
8:30	Welcome and Agenda Review	David R. Johnson, <i>Director, National Center on Secondary Education and Transition, University of Minnesota-Twin Cities, Minneapolis, MN</i> Larry Korterling; <i>Professor, Department of Language, Reading, and Exceptionalities; Appalachian State University</i>
9:00	Opening Remarks	Bonnie Jones, <i>Education Research Analyst, Office of Special Education Programs, U.S. Department of Education</i>
9:00	National Longitudinal Transition Study-2	Renée Cameto, <i>Co-Director, National Longitudinal Transition Study-2; Senior Research Social Scientist, Center for Education and Human Services, SRI International, Menlo Park, CA</i>
10:20	Reaction from the Field	Paula Kohler, <i>Associate Professor, Department of Educational Studies, Western Michigan University</i> L. Allen Phelps, <i>Professor, Department of Educational Leadership and Policy Analysis; Director, Center on Education and Work, University of Wisconsin-Madison</i>
10:45	<i>BREAK</i>	
11:00	Youth Voices	<i>Moderator: Donna Wandry, Associate Professor, Department of Early Childhood and Special Education, West Chester University</i> <i>Youth Panelists: Phillip Contreras, Erin Davis, Victor Gonzales, Chris Hollis, Maria Nieves</i>
12:00	<i>LUNCH</i>	
1:00	Featured Researchers	<i>Schooling: Larry Korterling, Martha Thurlow</i> <i>Career Preparatory Experiences: Paula Kohler, L. Allen Phelps</i> <i>Youth Development/Youth Leadership: James Alarid, James Martin</i> <i>Family Involvement: Deborah Leuchovius, Mary Morningstar, Amy Pleet</i> <i>Connecting Activities: Debra Hart, Robert Stodden</i>
2:30	<i>BREAK</i>	
3:00	Facilitated Discussions with Featured Researchers	(see Featured Researchers above)
4:00	<i>BREAK</i>	
4:15	Putting It All Together: An Employer's Perspective	Mark Cornett, <i>Director, IWORK Program, Kemtah Group, Albuquerque, NM</i>
5:15	Closing Remarks	Larry Korterling

Summary

Overview

The Capacity Building Institute (CBI) on *Improving Academic Performance and Access to the General Curriculum for Secondary Youth with Disabilities* brought together researchers, practitioners, policymakers, and advocates to discuss research results, methodological issues, and research-based interventions related to improving academic performance of and access to the general curriculum for youth with disabilities. Co-sponsored by the National Center on Secondary Education and Transition (NCSET) at the University of Minnesota and the Institute for Academic Access at the University of Kansas, the CBI's intent was to provide participants with practical, useful information that would have meaningful application in their daily work.

The CBI opened with remarks from Dr. Louis Danielson, director of the Research to Practice Division of the Office of Special Education Programs (OSEP), U.S. Department of Education. Dr. Lynn Newman, co-director of the National Longitudinal Transition Study-2 (NLTS2) then presented findings from Wave 1 of the study, and Dr. Jean B. Schumaker and Dr. Donald Deshler of the Center for Research on Learning at the University of Kansas discussed the work of the Institute for Academic Access as it relates to improving academic performance and access to the general curriculum for youth with disabilities.

Following the plenary presentations, the CBI participants met in six small groups to hear presentations by 18 nationally-known featured researchers. The small groups then reflected on the implications of existing research results and discussed research needs and barriers. Dr. Naomi Zigmond of the University of Pittsburgh concluded the day by presenting her insights and thoughts about future challenges facing the secondary education of youth with disabilities.

Welcome and Agenda Review

Dr. Johnson welcomed the CBI participants and explained that NCSET was funded in the year 2000 by the U.S. Department of Education. NCSET coordinates national resources, offers technical assistance, and disseminates information related to secondary education and transition for youth with disabilities in order to create opportunities for youth to achieve successful futures. The CBI was one of a series of NCSET events that have included the National Leadership Summit on Improving Results for Youth, held in September 2003 in Washington, DC. A second National Leadership Summit scheduled for June 2005 will again bring together teams from each state and territory. NCSET also disseminates information through its Web site (www.ncset.org), which receives approximately 10,000 hits a day.

The purpose of each CBI is to organize researchers around a key theme to share the best of research in special education and related fields. This CBI was designed to discuss research results, methodological issues, and research-based interventions to improve academic performance of and access to the general curriculum for secondary school youth with disabilities. The CBI was co-sponsored with the Institute for Academic Access at the University of Kansas.

Dr. Johnson thanked the CBI speakers, including Dr. Lynn Newman of SRI International, Dr. Jean Schumaker and Dr. Donald Deshler of the University of Kansas, Dr. Naomi Zigmond of the University

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of Pittsburgh, and the featured researchers. He also thanked the planning committee, including Donna Johnson of NCSET, Dr. Jean Schumaker, and Dr. Bonnie Jones of OSEP.

Dr. B. Keith Lenz, Senior Research Scientist, Center for Research on Learning, and Associate Professor, Department of Special Education, University of Kansas, Lawrence, Kansas

Dr. Lenz, the CBI moderator, outlined the day's agenda and introduced the first speaker, Dr. Louis Danielson, who has been with the U.S. Department of Education for more than 20 years.

Opening Remarks

Dr. Louis Danielson, Director, Research to Practice Division, Office of Special Education Program (OSEP), U.S. Department of Education, Washington, DC

Dr. Danielson began his remarks by describing OSEP's National Activities Improvement Paradigm, which includes technical assistance (TA) and dissemination, technology, parent information, State Improvement Grants, studies and evaluation, research and development, and professional development. This paradigm represents an investment in knowledge development, scaling up of research, support of parents, and evaluation of the overall impact of investments made (e.g., through the National Longitudinal Study Transition Study-2).

The No Child Left Behind Act (NCLB) is a landmark piece of legislation and is the first since the Individuals with Disabilities Education Act (IDEA) that is not a disability law, but has a strong disability focus, Dr. Danielson said. To demonstrate NCLB's value, models and positive success stories are needed, and it is important to continue working toward research-based practice and providing TA for both general and special education. One of OSEP's roles is to work with schools and states toward this goal.

General education teachers who have been surveyed report the need for additional training and support to work with students who have diverse learning needs. It is also known that students with disabilities need access to high-quality instruction to make progress. This access can be realized through the availability of highly qualified and effective teachers, the use of evidence-based practices, and alignment of assessments with instruction, curriculum, and standards—an area in which OSEP is making substantial investments.

Dr. Danielson highlighted research findings regarding academic performance and access to the general curriculum for secondary school youth with disabilities. For example:

- *Graduation rates:* When the Government Performance and Results Act (GPRA) was passed in 1993, OSEP identified graduation rates as a performance indicator. Between the 1995-96 and 2001-02 school years, the rate of youth with disabilities graduating from high school with a standard diploma rose from 42 percent to more than 51 percent. Despite the progress that has been made, this figure remains too low. For some populations (e.g., students with emotional disabilities), the dropout rate also is very high. To address this problem, OSEP established a dropout TA center in January 2004.
- *Academic course taking:* Many of the 1997 amendments to IDEA were designed to address the issue of academic course taking. Data from the National Longitudinal Transition Study (NLTS) and NLTS2 show that between 1993 and 2003, there was a dramatic increase in the proportion of students with disabilities who take challenging courses that are often associated with preparation for postsecondary education.

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- *Vocational course taking:* NLTS demonstrated the powerful role of vocational education in helping youth with disabilities to stay in school and achieve positive postschool outcomes. Nearly two-thirds of youth with disabilities are enrolled in at least one vocational course. However, since NLTS was conducted, participation in vocational courses has declined markedly while participation in academic courses has increased. It is not clear whether this shift is beneficial in terms of postschool outcomes.
- *Literacy:* NLTS2 found that most students with disabilities make at least adequate progress, as reported by teacher grades. However, teacher grades may not accurately reflect how well students are doing in school. When standardized test performance was compared with students' actual grades, students with disabilities were found to be an average of 3.6 years behind grade-level performance in both reading and math.
- *Employment:* Many students with disabilities do not consider themselves to be disabled after they leave school. The Bureau of Labor Statistics reports much lower employment rates for persons with disabilities than do NLTS2 data.
- *Self-determination:* More focus and more research-based practices are needed in this area.

Dr. Danielson concluded his remarks by listing challenges facing schools. These challenges include:

- Ensuring access to the general curriculum;
- Increasing high school graduation rates;
- Ensuring preparation for postsecondary education and employment;
- Increasing informed parent involvement in education planning, life planning, and decision making;
- Promoting students' self-determination and advocacy;
- Improving collaboration and links with systems at all levels;
- Ensuring a qualified workforce in schools and agencies; and
- Collecting and use of postschool outcome data for program improvement.

Findings from the National Longitudinal Transition Study-2

Dr. Lynn Newman, Co-Director, National Longitudinal Transition Study-2, SRI International, Menlo Park, CA

Dr. Newman began by saying that thinking about access and inclusion has changed tremendously over time. In the 1980s, the focus was on *where* students would receive their education (e.g., general education versus special education settings), but little thought was given to *what* was happening in those classrooms. The focus of NLTS2 moved beyond studying classroom access to studying curriculum access and how the experiences of students in special education compare to those of students in general education.

Now in Year 4 of the 10 years, NLTS2 is also collecting more information about every aspect of students' lives. For example, it is gathering data about students' experiences both within and outside of schools (e.g., data about friendships and employment) and is following students until they become young adults. NLTS2 began in the 2000-01 school year. Students' ages at the beginning of the study spanned from 13 to 16 years, and the researchers are following them for nine years. The study includes more than 11,000 students, and the findings generalize to all special education students who are in the NLTS2 age range, to each of the 12 special education disability categories, and to each single-year age cohort. The study is designed to gather

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information from multiple perspectives, including parents, students, teachers, and school transcripts.

Dr. Newman then presented findings from NLTS2 Wave 1 (2001-02 school year) School Program Study and General Education Teacher Survey. NLTS comparisons presented below are from school record abstracts for 1985-86 and 1986-87. She highlighted the following findings:

Academic course taking:

- Academic courses account for most of the course loads of the students with disabilities. A large majority of these students take language arts, math, social studies, and science courses. This generally mirrors academic courses taken by general education students, except that general education students are more likely to take foreign language courses (50% of general students compared to 21% of students with disabilities).
- Since NLTS, there has been a marked increase in the proportion of students with disabilities who take science, fine arts/performing arts, foreign language, social studies, and math courses, and a decrease in students who take vocational education courses.

Instructional settings of students with disabilities:

- Most students with disabilities take courses in general education settings (88%) and special education settings (70%). More than one-fourth of the students are fully included, taking all general education courses in a general education academic setting—a figure that is much higher than that found in the first NLTS.
- Sixty-nine percent of students take academic courses in general education settings.
- An average of 60% of students' course loads are taken in a general education setting.
- Students with speech impairments take an average of 76% of their courses in general education classes. This compares to 24% of those with multiple disabilities, 26% of those who are deaf/blind, 31% of those with mental retardation, and 33% of those who have autism.
- Compared to NLTS student participants, NLTS2 Wave 1 student participants are more likely to take academic courses in general education settings and less likely to take academic courses in special education settings.

General education academic classroom context:

- Students with disabilities take classes very much like those taken by other students and are not tracked into lower performing classes, according to teacher reports of the performance level of classes of students with disabilities by subject areas.
- Among the disability categories, students with visual impairments are most likely to be in advanced placement/honors courses. Those with traumatic brain injury, mental retardation, or multiple disabilities are most likely to be in below-grade-level classes.
- On average, general education academic and special education class sizes were about the same (24 and 20 students, respectively).
- Special education classrooms are more likely to have aides, one-to-one instructional assistants, specialists, and adult volunteers in the classroom than are general education classrooms. General education classes have a 21 to 1 student-teacher ratio, compared to 6 to 1 for special education classes.
- Eighty-eight percent of students with disabilities have general education teachers who are white, and

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96% of students with disabilities have teachers who are credentialed to teach their classes.

- Ninety-five percent of general education academic teachers of students with disabilities feel they have some support. Sixty-one percent said they receive information about student needs or abilities, and 51% said they receive consultation services by special education staff.
- Ninety-three percent of students with disabilities enter general education classes with supports and accommodations to help them achieve. Seventy-five percent of the students receive more time in taking tests, and 66% of the students have additional time to complete assignments.
- Students with disabilities also receive learning supports, including monitoring of progress by a special education teacher (60%) and more frequent feedback (35%).

Classroom instructional practices in general education academic classes:

- Fifty-two percent of students with disabilities in general education academic classes receive some curriculum modification, 35% receive unmodified curricula, and 11% receive substantially modified curricula.
- Students in math classes are least likely and those in science classes most likely to have a modified curriculum.
- Students with speech impairments and hearing impairments are most likely to have an unmodified curriculum.
- Students with and without disabilities in general education academic classes generally receive the same type of discipline. Those with autism and multiple disabilities are least likely to receive the same type of discipline as their peers.
- Most general education academic classes enrolling students with disabilities use whole-class instruction rather than small-group instruction. Students with disabilities receive very little individual instruction from teachers, but are more likely than others to receive individual instruction from another adult.
- Students with disabilities and other students are nearly equally likely to be in general education academic classes that use textbooks, worksheets, and workbooks.
- Computers are “rarely or never” or only “sometimes” used by students with disabilities and other students in general education academic classes.
- For both students with disabilities and other students, very few general education academic classes do instructional activities outside the classroom (e.g., school-based field trips and community-based instruction/experience).

Students' classroom participation:

- Students with disabilities are not passive recipients of their education. However, they are less likely than their non-disabled peers to participate in class. For example, students with disabilities in general education academic classes are half as likely as their peers to respond frequently to questions, and half of students with disabilities rarely or never present to a class or group.
- Students with disabilities are less likely to participate in discussions in general education academic classes than in vocational education and special education classes.

Teachers' perceptions and expectations of students' performance:

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- Teachers report that only 8% of students are inappropriately placed and 66% of students are appropriately placed in general education academic classrooms.
- Ninety-seven percent of students with disabilities are expected to keep up with other students in general education academic classes, but only 71% do keep up. The rate of keeping up differs by disability category, with the greatest gap for those with mental retardation, other health impairment, and emotional disturbance.

The NLTS2 researchers also examined the relationship between spending more time in regular education classes and students' engagement in school, academic performance, and social adjustment. They performed multivariate analyses to look at relationships independently and to control for variables of disability/functioning, individual and household characteristics, parent support, and school program/performance. Students were found to have both positive and negative associations with spending more time in a general education classroom. More time spent in general education classrooms was associated with lower grades (NLTS found these students are most likely to drop out), but fewer days absent per year, stronger math and reading abilities, lower rates of disciplinary action at school, and higher rates of school or community group membership.

Dr. Newman concluded that the Wave 1 NLTS2 results suggest that:

- Students with disabilities are more likely to have school programs that emphasize academics and participation in general education classes than they did in the past.
- Youth with disabilities in general education academic classes are likely to be in grade-level classes and in larger classes with less access to adult help.
- Youth with disabilities in general education academic classes are likely to have teachers who receive support for serving students with disabilities; to receive a variety of accommodations, modifications, and supports; and to have at least some modifications to their curricula.
- Many teacher-driven activities in general education academic classes are experienced equally by students with disabilities and by the class as a whole.
- Students with disabilities consistently participate less actively than their classmates in general education academic classes.
- Youth with disabilities in general education academic classes are likely to have teachers who consider the students' placement in class to be at least somewhat appropriate and to expect them to keep up with other students in the class.

In response to questions from the CBI participants, Dr. Newman said that:

- Students' parents had three opportunities to sign and return informed consent forms. If they did not respond to the third request, a "passive consent form" was sent to tell parents that their children would be included if no response was received.
- Reliability of responses to the NLTS2 questions was verified through pretesting. Validated questions from other national surveys with the general population and from the first NLTS were also used.
- NLTS2 gathered data about family income and ethnicity. African-American students are less likely to be enrolled in general education courses, and students who are wealthier are more likely to be enrolled in general education courses.
- NLTS2 included students in special education schools and sampled from school district rosters, but

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did not select specifically for students in alternative schools.

- Comparing student transcripts across schools is challenging. Schools were asked to annotate transcripts to indicate whether students are in special education, general education, or vocational education.

The NLTS2 Web site (www.nlts2.org) offers more information about the study and offers data in a searchable format.

Institute for Academic Access

Dr. Jean B. Schumaker, Professor, Departments of Human Development and Special Education, and Associate Director, Center for Research on Learning, University of Kansas, Lawrence, Kansas

Dr. Donald D. Deshler, Professor, Department of Special Education, and Director, Center for Research on Learning, University of Kansas, Lawrence, Kansas

Dr. Schumaker said that IAA's purposes are to create real access to the high school general education curriculum for students with disabilities and to improve educational outcomes achieved by those students. When IAA was established, the research partners included a planning team, an instructional methods team, and a materials and assessment team. The target population for IAA's work is high school students with disabilities who have been formally classified as disabled, who are expected to earn standard high school diplomas, who are or have been enrolled in a rigorous general education curriculum, or who could be enrolled in such a curriculum if support were available. Four strands of research conducted were: descriptive research on contextual factors; student-learning research; teacher-learning research; and school-change research.

The performance gap of students with disabilities is a concern, Dr. Schumaker said. IAA researchers have observed general education classrooms to find out what was happening in them and what techniques teachers were using. They learned that much of the time was spent in non-instructional time. In general education, 51% of time was spent in lecture/reading to students and 22% was spent giving directions. In special education, 51% of classroom time was spent in lecture/reading to students, 14% was spent giving directions, and 44% was spent listening. Activities helpful to students with disabilities were not frequently observed.

The researchers also asked schools about course options for students with disabilities (i.e., courses taught by special education teachers for special education students, courses taught by general education teachers for low achievers and at-risk students, rigorous courses taught by general education teachers with heterogeneous groups of students, advanced placement courses taught by general education teachers, and other courses taught by general education teachers). They found that rigorous general education enrollment for students with disabilities was far less than possible enrollments (682 out of 3,220 possible enrollments) and that 44% of students with disabilities had C averages.

Dr. Deshler then described a model for ensuring access and positive outcomes for students. This model includes:

- Program planning—a program rubric and intervention mosaic;
- Program components—homework assistance, learner-friendly courses, and skills and strategies instruction feeding into the individual education plan (IEP) process;
- Formative evaluation tools—student progress measures and benchmark assessments; and

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- Final outcomes—success in rigorous courses, high school graduation, passing scores on state assessments, and enrollment in postsecondary education.

The Content Literacy Continuum (CLC), which is based on the concept of whole-school reform, dovetails with the above model. The CLC model includes five levels:

- Level 1: Enhanced content instruction;
- Level 2: Embedded strategy instruction;
- Level 3: Intensive strategy instruction;
- Level 4: Intensive basic skill instruction; and
- Level 5: Therapeutic intervention for students with severe language problems.

The continuum also includes strategic tutoring before or after school, extending the instruction time “box.”

Dr. Deshler noted that much of IAA’s early work focused on the middle school and high school classroom as the unit of analysis. However, the IAA researchers have since learned that there is a lot of fragmentation, which presents problems for students. The CLC is a way to look beyond the classroom to the context of the entire school. IAA researchers are seeking ways for general education teachers to teach academically diverse classes in which the integrity of the content is maintained, critical content is selected and transformed to make it more learner-friendly, and the content is taught with active involvement.

Content enhancement routine clusters within the CLC include:

- Planning and leading learning, including course, unit, and lesson organizers/roadmaps that tell students how they will be evaluated;
- Teaching concepts (content mastery) using a concept comparison table, concept anchoring routine, recall enhancement routine, question exploration guide, and course organizer;
- Explaining text, topics, and details; and
- Increasing performance.

Dr. Schumaker discussed strategy instruction, noting that students with disabilities often fail tests, although they may make up for test failure through assignments, class participation, and other activities. Levels 2 and 3 of the CLC are concerned with teaching students strategies they need to get the best grades possible. During the past 25 years, IAA staff has developed the Learning Strategies Curriculum, which has three strands: acquisition of information; storage of information; and expression and demonstration of competence. A learning strategy is defined as how a person plans, acts, and evaluates performance on a task and its outcome. Research has shown the positive outcomes for sentence writing, paragraph writing, error monitoring, and theme writing strategies. Furthermore, students who learned all of the writing strategies who took the district competency exam exceeded results for all students in the district. Performance of students who used the theme-writing strategy exceeded results compared to those who did not.

Dr. Schumaker and Dr. Deshler went on to explain the idea of strategic tutoring, a new type of tutoring in which the tutor assesses the student, the tutor and student construct a strategy, the tutor teaches the student how to use the strategy, and the student transfers the strategy into practice. The roles of the tutor are to explain the content and build knowledge, to share extensive knowledge of strategies, to apply principles of strategic instruction, and to mentor or connect with students. Strategic tutoring can be used at levels 2 and 3

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of the CLC framework.

After the first round of intervention research in the late 1970s and early 1980s, IAA made a commitment to transfer the learning strategies to teachers. Initial efforts included traditional staff development (in-service on in-service days), but the results were not encouraging. Later, the researchers used an “enlightened” professional development approach that included interviews with teachers, partnership learning, participant choice, in-class modeling, and ongoing development. Today, the researchers are studying a third approach that involves instructional coaches. This approach includes all components of the enlightened approach, as well as onsite coaching and collaboration. Research has shown a large increase in implementation of teaching strategies with the presence of an onsite coach. For example, knowledge, skill acquisition, and classroom application increase when concepts are presented, modeled, and practiced; feedback is presented; and coaching is provided. Based on this research, IAA has created a CD-ROM that helps teachers to adopt strategies.

Dr. Schumaker then discussed the impact of school-change for students, including students with disabilities, using state competency test results as an outcome measure. To improve state competency test results, many teachers within a school must be trained and work together for change, she said. Research has shown that:

- Content enhancement yielded positive results for 10th grade general education economics students with and without disabilities at a high school in Muskegon, MI, in 2001-02. In physical science, students’ scores increased by approximately one letter grade. Failing students gained the most on unit tests.
- Also in Muskegon, MI, over three years, more than 90% students passed the writing competency exam, surpassing the state average and the average for suburban schools.
- Among Muskegon students who had been reading two or more years below grade level and received intensive instruction using the word identification strategy, their scores increased by about three grade levels. Students with reading comprehension scores two or more years below grade level were placed in a strategic reading class, and their scores increased by about one grade level in one semester.
- In the Topeka, KS, school district, students’ use of complete and complicated sentences increased after the students learned the sentence writing strategy in English class.
- Mean test scores for math, writing, and reading increased over three years for all students taking the Maryland seventh grade functional test. Scores for students with disabilities increased in the third year.

Dr. Schumaker and Dr. Deshler concluded that, based on IAA’s work, it appears that success for students with disabilities depends on validated practices that are implemented with fidelity in a coordinated fashion in a variety of venues. In addition, high-quality professional development experiences for teachers and strong administrative leadership must be present.

In response to questions from participants, the speakers said that:

- It is important to incorporate learning strategies like those they described into pre-service education for teachers. Such practices are being incorporated at the university level, but most professors say they do not have a venue to deliver the practices. Like high school teachers, university faculty members have limited time to teach these instructional practices and students do not have enough time to master them.

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- They have found that only two or three new strategies can be taught successfully in one academic year because of teachers' full schedules.
- IAA staff has trained 1,500 people in all 50 states to share the learning strategies with other teachers. IAA also is developing teams of professional development experts to effect change in individual schools.
- To ensure gains of students with disabilities, it is important to consider teachers' experiences (e.g., to affirm their roles as professionals and give them a sense of hope) and to have strong administrative leadership.

Future Challenges in Secondary Education for Youth with Disabilities

Dr. Naomi Zigmond, Professor of Special Education, Department of Instruction and Learning, University of Pittsburgh, Pittsburgh, Pennsylvania

Dr. Zigmond shared her insights and views about future challenges for secondary school youth with disabilities. To begin, she suggested that, "There is a place in research for detective work as well as for finely crafted experimental studies," and that some of the most interesting detective work being done is the NLTS2.

Second, much has been learned about secondary school education—about what students with disabilities need to learn and how students with disabilities learn. However, the reality is that high school teachers continue to teach content, high stakes exams continue to be a challenge for all students, and students with disabilities should not be exempt from accountability standards and should have access to the curriculum.

Dr. Zigmond argued that students with disabilities need to learn mainstream content, as well as vocabulary, background knowledge, how to read for information, strategies for remembering and retrieving information, how to write in various genres, self-awareness, career planning, self-advocacy skills, social skills, how to read for pleasure, and how to fill leisure time. In other words, they need to learn what other secondary school students learn and much more that usually is not taught in school. Students with disabilities also need explicit, systematic, direct instruction to learn what others pick up incidentally; more practice to achieve mastery; and more time (although even with more time, they may master less than their peers). They also need to work longer and harder (although they may not learn as much even when they do work longer and harder).

Third, the co-teaching model of special education services for secondary students with disabilities is flawed as a concept and needs to be changed because co-teaching models focus on the reality of secondary schools, favor inclusion in content subject classes, define the role of special education as supporting access to general education curriculum, and relegate the special education teacher to be a support.

There is no evidence that students with disabilities learn with nothing more than support, Dr. Zigmond asserted. If students with disabilities are to learn content, then they should be placed in content classes with content experts who are given support to do a better job. Therefore, the role of the "consulting teacher" should be reinvented as a "coach" who works with general education content teachers to "teach it right the first time" to all of their students, including students with disabilities. Coaches also should instruct teachers on content enhancement strategies and routines that make content subject instruction user-friendly. There

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is also a need to find time in the secondary school schedule for explicit, direct instruction in the unique curricula that students need to learn that can also be delivered by the special education teacher. These curricula should include self-awareness, self-advocacy, social skills, career and transition planning, and reading skills and strategies.

Fourth, this plan provides a new definition of a highly qualified secondary special education teacher, as someone who is a highly skilled teacher responsible for teaching adolescent literacy, content reading, learning, remembering, test-taking strategies, social skills, self-awareness, self-advocacy, career planning; and transition planning. This individual would be a consultant teacher (coach) who can make the content more user-friendly.

In conclusion, Dr. Zigmond said that special education is at a crossroads. Challenges at this crossroad include to:

- Redefine secondary special education;
- Reinvent what should be the services for students with disabilities;
- Rethink the roles of secondary special education teachers;
- Rethink the preparation of secondary special education teachers; and
- Rethink preparation of general education and special education teacher educators.

Dr. Johnson and Dr. Jones ended the CBI by thanking the planners and participants and by suggesting that the participants adopt Dr. Zigmond's challenge to rethink special education and how it can best serve students with disabilities.

Small Groups Discuss Research Implications, Gaps, and Barriers

Following the presentations about NLTS2 and the work of IAA, the CBI participants met in six small groups with featured researchers to learn more about current research and to discuss the implications of research results, gaps in the current research agenda, and barriers to research. One of the small groups met with Dr. Lynn Anderson-Inman, director of the Center for Advanced Technology in Education (CATE)/Center for Electronic Studying at the University of Oregon, and Dr. Michael Hock, assistant director of the Center for Research on Learning at the University of Kansas. The group was facilitated by NCSET Director, Dr. David Johnson.

Dr. Anderson-Inman said that one of the Center for Electronic Studying's initiatives, Project EXCEL, addresses three barriers to success for struggling students: ineffective techniques for studying and learning; reading materials that are above students' literacy levels; and classroom presentations that students find confusing or difficult to process. The project empowers students by teaching computer-based study strategies, providing electronic reading environments in which supports (e.g., definitions and interactive opportunities) are embedded in electronic text, and using projected note taking in which notes taken by students are projected on a screen during class and made available to all students. The CATE researchers studied the interventions in urban middle and high schools in the context of whole-school reform. They found that inhibitors to school-wide adoption of the technology-supported interventions included teachers' preconceptions and low expectations of students, outdated and limited technology at the schools, the desire to have everyone at the school who was interested to be involved, and the intensive amount of time

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needed to effect changes by teachers. These inhibitors were overcome through data-based decision making to determine how best to leverage and use resources, increased funding for hardware and software, intensive involvement of a manageable number of teachers, and efforts to reach students directly through online learning (e.g., an online school through which students were taught computer-based study strategies).

Dr. Hock discussed the strategic tutoring model that is part of the Content Literacy Continuum. Using this model, a tutor helps students complete an assignment and fill in knowledge gaps, with the outcomes being immediate academic achievement, increased student knowledge base, good information processing, and “connected students.” To succeed, he said, the tutors must have a rich knowledge of the strategies students need, strategic teaching skills, and the ability to mentor students. The model has four instructional phases: assessing the student’s knowledge and strategies; constructing a new or revised strategy; teaching the strategy through modeling, guiding, and supporting; and transferring the strategy. IAA’s research demonstrates that strategic tutoring can be effective with middle school students and under-prepared university students. After receiving strategic tutoring, students were able to: complete assignments successfully; acquire new content knowledge; learn and apply effective strategies; become “good information processors;” and feel “connected” with mentors.

After hearing from the featured researchers, the small group participants noted that:

- Ensuring schools’ “ownership” of the new strategies helps to sustain the strategies after research funding ends.
- Professional development must go beyond one-day in-service training to include coaching of teachers.
- Whole-school reform eliminates the possibility of doing experimental design research, which requires very circumscribed conditions.
- Schools struggle with competing reform movements and mandates, and any successful school reform effort must tackle that problem at the school level.
- Pre-service education has not evolved to include new strategies and technologies, so public schools cannot be expected to incorporate new strategies and technologies successfully. In other words, teacher educators need to “walk the walk.”
- There must be a paradigm shift in teachers’ roles to focus on students as learners (i.e., giving students the strategies they need), rather than thinking of teachers as content specialists.
- There is a need to connect similar projects so project teams can cross-fertilize ideas. This might be accomplished through OSEP (e.g., through NCSET’s Communities of Practice).
- New, research-based developments must be scaled up and widely implemented. For example, publishers should make the strategies available. Grants must also be large enough for multiple states to collaborate on scaling up the research.
- There is a need for better communication within states, but politics play a role.

This report was supported in whole or in part by the U. S. Department of Education, Office of Special Education Programs, (Cooperative Agreement No. H326J000005). However, the opinions expressed herein do not necessarily reflect the policy or position of the U. S. Department of Education, Office of Special Education Programs, and no official endorsement by the Department should be inferred.

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Facilitated Discussion Questions

1. Based upon the research and practical strategies presented here today, what actions to improve outcomes for secondary youth with disabilities would you like to see taken at the state and local levels?
2. What do you perceive to be the barriers or obstacles to (academic performance, career preparation, youth development/youth leadership, family involvement, interagency collaboration) in your community/work setting?
3. What practical strategies presented here today do you plan to replicate in your community/work setting?
4. What would be helpful to you or your organization to receive on an ongoing basis to improve outcomes for secondary youth with disabilities? (If you have more than one need, please prioritize.)

Presenter Biographies

Dr. Jim Alarid has worked in the field of education for over 30 years, first in public schools and later in higher education. He has taught at the University of New Mexico, the University of Connecticut, the University of Arizona, and New Mexico Highlands University (NMHU), and spent two years at the New Mexico State Department of Education. Since returning to NMHU in 1984, he has held various administrative positions, including Director of Education, Assistant to the Provost, and Vice President of Academic Affairs. Currently, he is Special Education Program Chair, teaches courses in Special Education, and directs a CARF-accredited program, Vistas Sin Limites, the State's first supported employment program. He is also Chair of the New Mexico Governor's Developmental Disabilities Planning Council and the Statewide Transition Coordinating Council.

Renée Cameto, Ph.D. has more than 15 years of experience in quantitative and qualitative research. She has conducted research on program evaluation and policy implementation at the program, state, and national levels and currently co-directs the National Longitudinal Transition Study-2 (NLTS-2), a national study of youth transitioning from secondary special education to adult life. She previously co-led the design of the study, which included multi-stage sample selection and the development of several data collection instruments. Dr. Cameto also holds senior research positions on other major longitudinal studies for which she has similar responsibilities. For the NLTS-2 and the Special Education Elementary Longitudinal Study, she recruited the state education agencies, local school districts, and state-sponsored special schools to participate in the studies. For the national Early Intervention Longitudinal Study, she interfaced with the research team and the practitioner community in data collection.

Mark Cornett has over 30 years of experience in the field of disability, including 22 years in the public sector as Director of a disabled student services program and as Affirmative Action Officer for a community college in Washington State. He holds a Masters degree in Educational Administration. Mr. Cornett is a founder and Board member of the New Mexico Business Leadership Network, a business lead organization whose primary purpose is to bring together employers and qualified disabled jobseekers to form long-term productive and competitive partnerships. In 2005, Mr. Cornett was appointed by Governor Bill Richardson to serve a three-year term on the State Rehabilitation Council. Mr. Cornett has also been Human Resources Manager for The Kentah Group, Inc., a computer services company headquartered in Albuquerque, NM. Mr. Cornett is currently Director of IWORK, a division of Kentah whose mission is to increase the number of skilled employees with disabilities at Kentah as well as within the information technology industry as a whole. Mr. Cornett has a unique perspective on the importance and value of inclusion of people with disabilities in a diverse workforce based on his own experience as an individual with a disability and an employer. Mr. Cornett believes strongly that hiring qualified individuals with disabilities is a sound business practice which will positively impact the return on investment by reducing turnover and recruiting and training costs and boosting productivity. Hiring qualified disabled employees also promotes their self-worth and dignity by enhancing their personal contribution to society, reducing their dependence on Social Security and other subsidy programs, and forging significant community alliances.

Debra Hart's recent experience includes working with school districts to develop the College Career Connection, an individual support model designed to help students with intellectual disabilities access inclusive postsecondary education options while still in high school. She worked with communities to create interagency teams to conduct resource mapping to identify existing services and supports to improve postschool outcomes for youth with disabilities; to build capacity of secondary teachers and college faculty to apply universal design for learning principles to develop greater access to and progress in general education curriculum and college courses; and to research students with intellectual disabilities and postsecondary education through the Office of Special Education and Rehabilitative Services and the National Center for the Study of Postsecondary Educational Supports (RRTC), University of Hawaii.

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David R. Johnson, Ph.D. is Director of the Institute on Community Integration (UCEDD) and Associate Professor in the Department of Educational Policy and Administration at the University of Minnesota. Dr. Johnson is also Director of the National Center on Secondary Education and Transition. His research interests include investigations of the postschool outcomes and status of young adults with disabilities, evaluations concerning young adults with disabilities' access to and participation in postsecondary education programs, studies on systems change, cost-benefit analysis, and other policy-related research. Dr. Johnson has also served as a consultant to several national, regional, and state organizations including NIDRR, the National School-to-Work Office, the Rehabilitation Services Administration, the National Alliance of Business, the Council for Exceptional Children, and several Congressional Committees. Dr. Johnson has published numerous journal articles, book chapters, research monographs, and technical reports and products on topics concerning secondary education, special education, rehabilitation, transition, school-to-work, and other themes related to the priorities of this research effort.

Dr. Bonnie Jones is Education Research Analyst at the Office of Special Education Programs, U.S. Department of Education. She has extensive experience with secondary transition programs and has developed multi-agency employment projects that have received national recognition from the U.S. Department of Labor. While working for the Kansas Department of Education, she conducted extensive statewide training on transition services and directed federal grants that created interagency data collection of postschool outcomes. Prior to coming to the Federal government, Dr. Jones served on the DCDT Board as treasurer, membership chair, and western regional representative. At OSEP, Dr. Jones is on the Secondary Transition Team where she is Project Officer for discretionary grants and serves as an expert on high school reform issues. Bonnie earned her doctorate at Teachers College, Columbia University and teaches as an adjunct faculty member in the Graduate School of Education at George Mason University.

Paula Kohler, Ph.D. is Associate Professor in the Department of Educational Studies at Western Michigan University and was previously Senior Research Associate with the Transition Research Institute at the University of Illinois. She is recognized for her research regarding effective transition practices for youth with disabilities, including effective transition programs, transition-related competencies, vocational education experiences, work-based education, and other aspects of transition-focused education. Her Taxonomy for Transition Programming is recognized around the country as an effective model for planning, implementing, and evaluating transition-focused education for students with disabilities, and has influenced the implementation of transition services in a number of states. In 2001, she received the Oliver P. Kolstoe award from the Council for Exceptional Children's Division on Career Development and Transition in recognition of her scholarly contributions to the field. Dr. Kohler has extensive experience in curriculum and professional development activities focused on linking this research with practice at the state, regional, and local levels. In addition, she has worked extensively with model demonstration projects of students with disabilities regarding their educational experiences and transition planning. Dr. Kohler's background includes experience in business administration, educational leadership, vocational education, and special education.

Larry Korterling, Ed.D. is Professor in the Department of Language, Reading, and Exceptionalities at Appalachian State University and Principal Investigator on a grant that helps high school algebra and biology teachers design, implement, and evaluate interventions that reflect the principles of universal design. His research focuses on helping educators better understand schooling from the perspectives of students, including students who have dropped out of school.

Deborah Leuchovius is responsible for coordinating PACER Center's provision of technical assistance on transition, vocational rehabilitation, and independent living issues to the national network of OSERS-funded parent training centers and projects. As the parent of a young adult with spina bifida, she has firsthand experience with the transition issues facing students with disabilities.

Dr. James Martin is the Zarrow Endowed Professor of Special Education and Director of the Zarrow Center for Learning Enrichment in the Department of Educational Psychology at the University of Oklahoma. He has authored eight books, more than 25 chapters for edited books, numerous journal articles, and several curriculum

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lesson packages, which include video and multimedia applications. Funding sources have provided him more than \$6,000,000 to conduct his research and writing activities. He has conducted dozens of presentations and training workshops across the U.S., Canada, and Europe. His professional interests focus upon the transition of youth with disabilities from high school into postsecondary education and the workforce and what must be done to facilitate success in high school and postsecondary environments. In particular, he is interested in the application of self-determination methodology to educational and workplace settings.

Dr. Mary E. Morningstar is Associate Professor in the Department of Special Education at the University of Kansas (KU) and Director of the Transition Coalition, a research and training center on transition and secondary special education for youth with disabilities. For the past several years, Dr. Morningstar has co-directed the KU Secondary Transition Masters Program, the Transition Interprofessional Training Project (a project designed to train related services personnel about transition), and the KU Transition Leadership Personnel Program, a four-year doctoral training program designed to promote leadership in secondary school reform and transition policy development. Most recently, Dr. Morningstar was awarded a four-year federal grant to support professionals enrolled in online transition coursework through KU. Dr. Morningstar has been involved in statewide inservice training and staff development regarding transition from school to adult life for over 20 years. She was the Training Coordinator for the Kansas Systems Change in Transition Project at KU. Prior to her position at KU, Dr. Morningstar was Director of Full Citizenship, Inc., a nonprofit organization that helps persons with disabilities and their families to lead full, rich lives with many choices for living, working, contributing, and participating in their communities. Prior to moving to Kansas, she worked as a teacher for students with moderate and severe disabilities. Mary has been an active advocate for all persons with disabilities based on her experiences as a sibling of a brother with disabilities. She received her Ph.D. in Special Education through the Beach Center on Family Studies and Disability at the University of Kansas in 1995.

For the past fifteen years, **Dr. L. Allen Phelps** has been Director of the Center on Education and Work and Professor in the Department of Educational Leadership and Policy Analysis at the University of Wisconsin-Madison. Dr. Phelps has an extensive teaching and research background in secondary special education and transition services, high school reform initiatives (school-to-work, tech prep), and teacher professional development. He co-directed the Research Institute on Secondary Education Reform (RISER) for Students with Disabilities from 1998-2003. He and his RISER colleagues examined instructional and organizational practices in significantly restructured high schools that provide authentic instruction with inclusive learning supports for students with and without disabilities. His current research interests focus on leadership development for high school reform, school improvement and accountability systems development, and improving transition and post-high school outcomes for students.

Dr. Amy M. Pleet is Associate Professor in the Department of Reading, Special Education, and Instructional Technology and Special Education Graduate Director at Towson University. She has professional experience as an English teacher, a special education teacher, and a department chair. She served as a Transition Facilitator for secondary students with disabilities in Baltimore County Public Schools for 15 years before she became the Transition Specialist for the Division of Special Education, Maryland State Department of Education. Appointed to the Maryland Interagency Transition Council by the Governor, she now serves as Co-Chair and Chair of the Interagency Website Committee. She also provides transition consulting to the Maryland Association of Nonpublic Special Education Facilities and serves on three national task forces for transition. She has a national reputation for her publications and presentations on the topic of parent involvement, inspired by her two transition-age children.

Robert Stodden, Ph.D. is Past President of the Association of University Centers on Disabilities (AUCD) Board of Directors. Professionally trained in psychology, special education, and rehabilitation, he has served for more than 25 years as a national leader in the fields of special education, school to adult transition, postsecondary education, and employment for people with disabilities. Since 1988, he has served as Founding Director of the Center on Disability Studies (a University Center for Excellence on Disabilities) and Professor in the Department of Special Education at the University of Hawaii at Manoa (UHM). He also serves as the founder and director of the National Center for

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the Study of Postsecondary Educational Supports and the National Technical Assistance Center for the Employment of Asian Americans and Pacific Islanders with Disabilities at UHM. In 1995, he was selected as a Joseph P. Kennedy Foundation Senior Policy Fellow, working in the U.S. Senate to develop and draft policy language for major pieces of disability legislation. In addition to serving as the president of the Board for AUCD, he serves on policy committees of the National Association of Rehabilitation Research and Training Centers and as a member of the Board of Directors for the Division on Developmental Disabilities, International Council for Exceptional Children.

Martha Thurlow, Ph.D. is Director of the National Center on Educational Outcomes at the University of Minnesota. In this position, she addresses the implications of contemporary U.S. policy and practice for students with disabilities, including national and statewide assessment policies and practices for standards-setting efforts and graduation requirements. For the past 35 years, Dr. Thurlow has conducted research in special education in a variety of areas, including assessment and decision making, learning disabilities, early childhood education, dropout prevention, effective classroom instruction, and integration of students with disabilities in general education settings.

Dr. Donna Wandry is Associate Professor in the Department of Early Childhood and Special Education at West Chester University. Dr. Wandry has had the privilege of working on secondary/adult issues for young adults and adults with disabilities in several different settings. As a classroom teacher, she implemented emerging transition (movement from K-12 to adult life roles) practices as part of IEP development, curriculum, and instructional methods. Her doctoral dissertation focused on the role of families in this complex process, and her professional experiences have further enhanced her knowledge and skills in the area of transition services. As a direct service provider in the Washington, DC area, she acquired experience in school-based, postsecondary, and community agency settings. As a systems-based professional, she has had the opportunity to work in higher education as a researcher and an instructor, as well as in state-level administration as a national transition systems change project director at the Kansas Department of Education. She is currently President of the Council for Exceptional Children's Division on Career Development and Transition.