Tagayuna, A., Stodden, R. (2005) **A two-year comparison of support provision for persons with disabilities in postsecondary education.** *Journal of Vocational Rehabilitation, 22(1), 3-11.* NARIC Accession Number: J48753. Project Number: H133B980043.
Abstract: Article reports the findings of 2 national surveys that assessed the types and frequency of educational supports, accommodations, and services offered to students with disabilities attending 2- and 4-year postsecondary education institutions. The first survey was administered in 1999 with a follow-up in 2001. Comparison of the 2 surveys showed an increase in the provision of postsecondary services, supports, and accommodations over the 2-year period. The most frequent services offered were testing accommodation services, followed by the availability of note takers, personal counseling, and advocacy assistance.

Christ, T., Stodden, R. (2005) **Advantage of developing survey constructs when comparing educational supports offered to students with disabilities in postsecondary education.** *Journal of Vocational Rehabilitation, 22(1), 23-31.* NARIC Accession Number: J48754. Project Number: H133B980043.
Abstract: Study used data from national surveys conducted in 1999 and 2001 to identify and investigate the relationships among constructs that contribute to effective educational supports provided to students with disabilities enrolled in postsecondary education. Exploratory factor analysis was used to determine: (1) if the survey items grouped into meaningful constructs that represent services provided to students with disabilities, (2) if the constructs showed a significant difference between 2-year and 4-year institutions, and (3) if the constructs changed over time. The results revealed that the 34 survey items grouped well into 4 factors: strategies, assistive technology, accommodations, and vocation/work support. Assistive technology supports were offered more often in 2-year institutions, whereas accommodations and vocational-work supports were offered more often in 4-year institutions. Only assistive technology supports increased between 1999 and 2001; strategies, accommodations, and vocational-work supports did not change significantly over time.

Dowrick, P., Anderson, J. (2005) **Postsecondary education across the USA: Experiences of adults with disabilities.** *Journal of Vocational Rehabilitation, 22(1), 41-47.* NARIC Accession Number: J48756. Project Number: H133B980043.
Abstract: Focus groups were conducted to identify barriers to access and utilization of educational supports and subsequent employment. Students from ten community colleges and universities nationwide participated in the discussions. Analysis of the discussions indicated that students with disabilities still have difficulty obtaining basic accommodations and supports. Discriminatory attitudes and assumptions about their abilities negatively impacted these adults in college and in the workplace.

Johnson, D., Lehr, C. (2003) *Impact. , 16(3).* NARIC Accession Number: O15123. Project Number: H133B980047.
Abstract: Quarterly publication of the Institute on Community Integration and the Research and Training Center (RTC) on Residential Services and Community Living, University of Minnesota. This issue focuses on achieving secondary education and transition results for students with disabilities. Topics include: (1) culturally sensitive assumptions in transition planning; (2) challenges of secondary education and transition services for youth with disabilities; (3) universal design in education; (4) strategies for improving graduation results; (5) improving postsecondary education access and results; (6) students with disabilities attending alternative schools; and (7) success stories and resources.

(2005) **Promising practices in information technology accessibility in K-12 education in the southeast region.** NARIC Accession Number: O16524. Project Number: H133D010207.
Abstract: The Southeast Disability and Business Technical Assistance Center (DBTAC) promotes widespread use of accessible and usable electronic and information technology (IT) for students with disabilities in a variety of educational environments through the Education Leadership Initiative (ELI). The Southeast DBTAC funded 13 ELI projects over a 2-year period; 6 of these projects dealt with IT accessibility for kindergarten through twelfth-grade students. This report identifies these projects, highlights the development and implementation of each project, and reports on project outcomes. Barriers common to these projects and cross-project findings are also presented.

NIDRR Grantees on the Cutting Edge

Preparing Avenues for Competitive Employment in Information Technology (PACE-IT) Project, *University of Missouri/Columbia* (H133A011802), led by Greg Holliday, PhD. Delores Watkins, Project Officer.
Abstract: Preparing Avenues for Competitive Employment in Information Technology (PACE-IT) develops a comprehensive, person-centered system that assists local students with disabilities in their transition to professional employment in IT-related careers following graduation. The project ensures that students with disabilities at the University of Missouri-Columbia engage in experiential opportunities in IT-related work settings with appropriate support. Participants also receive individualized accommodations, electronic portfolios, and professional mentoring in their chosen fields to enable them to be competitive in the IT job market upon graduation. The partnership involves university student services; departments of state government, other agencies, and government officials; and area businesses.
Find out more at: paceit.missouri.edu

The Impact of Interventions on Self-Determination and Adult Outcomes, *University of Kansas* (H133A031727), led by Michael Wehmeyer, PhD (University of Kansas) and Laurie Powers, PhD (Portland State University). Shelley Reeves, Project Officer.
Abstract: This project conducts three semi-longitudinal, national studies examining the impact of interventions to promote the self-determination of students with high incidence and low incidence disabilities, and students who are at-risk for less desirable adult outcomes on student self-determination, adult outcomes, and quality of life. In all three studies, participants receive instruction for several years (with annual measurements) and adult outcomes are measured during the next two years, post-high school. The first study focuses on students with learning disabilities, mild intellectual disabilities, and emotional/behavioral disorders. The second study focuses on students with moderate to severe intellectual disabilities, multiple disabilities, and severe autism. The third study focuses on students with disabilities from foster systems or juvenile justice systems. For the school-based studies of students with learning disabilities and mental retardation, participating school campuses are randomly assigned to treatment conditions. An alternate treatment-control group design ensures that each site obtains training in self-determination related supports, but one level of training does not involve direct instruction with students. Research follow-up in the first and second years post-high school for all study participants will yield information about the impact of services and instruction using self-determination and student involvement during high school and in transition services on the study sample.
Find out more at: www.beachcenter.org

October 18th is Disability Mentoring Day
The American Association of People with Disabilities co-sponsors this event. Visit their site at www.dmd-aapd.org for information on job shadowing, carreer exploration, mentoring and internship opportunities, recruitment, and diversity.

Please note: These abstracts have been modified. Full, unedited abstracts, as well as any available REHABDATA citations, are available at naric.com.

Thousands of additional resources on these topics are available from NARIC's resource pages at www.naric.com/public

For September, **Rehab**Wire goes back to school with students with disabilities.

Text-to-Speech Software as a Means to Improve the Unaided Reading Comprehension and Overall Reading Skills of High School Students Identified for Special Education or 504 Services, (H133F050046) led by Kelly Drew Roberts, PhD. A. Cate Miller, PhD, Project Officer.

Abstract: This fellowship seeks to determine if text-to-speech software is an effective tool for improving unaided reading comprehension, reading rate, and reading skills. Text-to-speech software provides access to written material that is otherwise inaccessible to individuals with poor reading skills. While text-to-speech software provides this access it is hypothesized that its use may also increase the unaided reading skills of "poor" readers. For this project, targeted research subjects are 11th grade students who are identified for special education or 504 services and reading between the 1.0 and 5.0 grade levels. Outcomes data is collected and analyzed for each subject for the 1.5 years following the initial study. This data is used to determine if the use of text-to-speech software leads to overall improved educational performance in secondary school and improved transition to valued post-school outcomes such as access to postsecondary education and employment.

Resilience in Students with TBI: A Longitudinal Investigation, *Western Oregon University* (H133G030179) led by Ann E. Glang, PhD. Theresa San Agustin, MD, Project Officer.

Abstract: The project extends the work of Project PSO, a project investigating post-secondary outcomes for young adults with TBI, tracking this sample into their early 20s, a time when the subjects are making significant life adjustments in the areas of post-secondary education, employment, independent living, and interpersonal relationships. The Project's quantitative and qualitative data reveal that some of the 92 subjects appear to be resilient, achieving successful post-injury adjustments, while others are experiencing difficulty, becoming dependent on family members for instrumental and social support. The data suggest that access to specific types of educational interventions and support services account for these differences in adjustment. In addition, this project investigates factors that facilitate and impede delivery of services and support to young adults with TBI from key agencies, including VR, Social Security Administration, and state social service agencies serving individuals with disabilities.

Multimedia Literacy Software for Deaf or Hard-of-Hearing, and Visual Learners, *Vcom3D, Inc.* (H133S050137), led by Edward Sims. David W. Keer, Project Officer.

Abstract: Persons who are Deaf or hard of hearing (D/HH) have difficulty learning to read and write proficiently. Over the last decade, several software screen readers and literacy tools have been developed for persons with blindness and learning disabilities. However, to date, none of these tools has incorporated features and functions that specifically target the needs of the (D/HH) population. This project is developing a fully functional Multimedia Literacy Software (MLSW) program that addresses the needs of D/HH, as well as other students, and identifies the best uses of the MLSW in the instruction of reading skills. The creation of a multimedia module presents a highly detailed representation of an animated human that can: Speak selected words and text segments, while demonstrating correct mouth movement to form speech sounds; automatically translate English text into Signed English, which may be viewed with or without accompanying speech; and provide ASL or Signed English definitions of selected English words. The prototype MLSW and the supporting instructional materials serve as the basis for a commercial software product that may be stand-alone or licensed and bundled with currently available and evolving assistive reading and writing software.
Find out more at: www.vcom3d.com

Photo credit: Grizka Niewiandomski, Lodz, Poland

According to the National Science Foundation, science and engineering is the field of choice for undergraduate students with disabilities (37%), with one third of these students pursuing degrees in social and behavioral sciences. Source: *Women, Minorities, and Persons with Disabilities in Science and Engineering, 2004* (www.nsf.gov/statistics/wmpd/pdf/tabb-7.pdf)

ERIC.ED.GOV

The Educational Resources Information Center's database of journal and non-journal educational literature contains more than 1.2 million citations from 1966 to the present, with more than 110,000 full text documents available online. A quick search using "students with disabilities" returned almost 18,000 abstracts!

Where Can I Find More?

A quick keyword search is all you need to connect to a wealth of disability and rehabilitation research. NARIC's databases hold more than 75,000 resources. Visit www.naric.com/research to search for literature, current and past research projects, and organizations and agencies in the US and abroad.

Photo Credit: Isaac Joo, Lima Peru

Visual – Spatial Math Problem Solving Strategy Intervention on a Handheld Wireless Device for Math Disabilities in Inclusive Classrooms, *Learnimation, LLC* (H133S050167), led by Sarah Manning. Edna Johnson, Project Officer.

Abstract: This project builds and evaluates a universally designed, handheld/wireless educational software intervention that trains students with learning disabilities (LD) and their teachers to use a metacognitive strategy for translating mathematical word problems into visual-spatial schematic models. This intervention is based on the prototype created in Phase I. Phase I research suggests that a universally designed, research-based, handheld-based, visual-spatial metacognitive strategy technique offers great promise as a cost-effective mathematics intervention for students with LD. The resulting commercial software product will improve the capacity for mainstream teachers to assist students with LD in reaching their full potential in mathematics.
Find out more at: www.learnimation.com

Current Literature - *Selections from REHABDATA*

Stodden, R., Conway, M. (2003) **Supporting individuals with disabilities in postsecondary education.** *American Rehabilitation, 27(1), 19-31.* NARIC Accession Number: J46298. Project Number: H133B980043.
Abstract: Article provides an overview of issues and the latest research related to postsecondary education support provision and students with disabilities. Co-author Megan Conway, who is deaf-blind and recently earned her PhD, presents her personal perspective on the postsecondary education experience.

Kim-Rupnow, W., Burgstahle S. (2004) **Perceptions of students with disabilities regarding the value of technology-based support activities on postsecondary education and employment.** *Journal of Special Education Technology (JSET), 19(2), 43-56.* NARIC Accession Number: J48215. Project Number: H133B980043.
Abstract: Reports the findings of a survey of students participating in a technology-based transition program for college-bound youth called Disabilities, Opportunities, Internetworking, and Technology (DO-IT). Results describe how DO-IT participants perceived the impact of the program's key components, including technology-enriched summer study and year-round computer and Internet activities, on their self-determination, social, college, and career skills. Recommendations are provided for applications to other transition programs as well as for future research.

Sharpe, M., Johnson, D. (2005) **An analysis of instructional accommodations and assistive technologies used by postsecondary graduates with disabilities.** *Journal of Vocational Rehabilitation, 22(1), 3-11.* NARIC Accession Number: J48752. Project Number: H133B980043.
Abstract: Study examined the relationship between successful graduation from a 2-year or 4-year postsecondary institution by students with disabilities and the types of supports they received at the secondary and postsecondary levels. One hundred thirty-nine graduates were asked to identify instructional accommodations and assistive technologies provided to them in the high school, college, or workplace setting. Results indicated that support services were provided at much higher rates in the postsecondary education setting than in high school or the workplace. Most graduates indicated that they accessed and learned to use the technology by themselves or with the assistance of a family member. Participants were generally satisfied with the types of instructional accommodations and AT they received.