

# RESEARCH FINDINGS BRIEF

MAY 2000 • STUDY AREA 4a, VOLUME 12

## Overview of RRTC's Purpose

The purpose of the Rehabilitation Research and Training Center (RRTC) is to conduct a strategic program of research, training, technical assistance, and information dissemination focused upon educational supports that increase access and improve outcomes for persons with disabilities in postsecondary education programs and subsequently, in the labor force. Addressing this priority, the primary goals of the RRTC are as follows: 1) To identify the nature and range of educational supports 2) To identify new technologies that improve postsecondary outcomes for students with disabilities; 3) To identify effective supports and models of support delivery that contribute to improved outcomes for students with disabilities; 4) To investigate methods by which the supports in postsecondary programs can be extended to the employment environment, including students with severe disabilities; and 5) To provide training, technical assistance and information to educational support personnel, public and private rehabilitation personnel, career placement specialist, and students with disabilities concerning the effectiveness of specific educational supports and models of delivery in improving postsecondary educational and career outcomes of the people with disabilities.

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## Topical Review - Trends in Distance Education: Implications for Improving Access and Outcome for Individuals with Disabilities in Postsecondary Programs

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**AUDIENCE** Postsecondary school administrators, instructors, disability support providers, admission counselors, researchers, vocational rehabilitation counselors, and individuals who are looking for an alternative to traditional methods to pursue higher education.

### ISSUE

In recent years, there has been tremendous growth in the number of distance education courses offered by postsecondary institutions. According to a 1997-98 national survey conducted by the National Center for Educational Statistics (NCES), one-third of institutions offered distance education courses, and another one-fifth projected to offer these courses in the next three years (NCES, 1999). The technological advances such as compressed video links and the Internet have played a major role in expanding the distance education course offerings. In fact, many anticipate that distance education will be a dominant form of facilitating higher education worldwide in the future. Do the increased opportunities in distance education programs and advanced technology indicate better access and better outcomes in higher education for people with disabilities?

### RESEARCH QUESTIONS

- How many studies at individual and institutional levels are in the literature?

- What are the factors (particularly learner characteristics, trends in distance education technology, support services, and outcome issues – in alignment with four areas of study in our Research Center) related to success of learners with disabilities and of distance education providers?

### METHOD

ERIC, PsychInfo, and other databases were searched for documented case examples that met the following criteria. The computer search strategy used the following terms: "distance education" plus "college" plus "disability." In all searches, the thesaurus was used, e.g., "college" was replaced with "higher education" or "postsecondary education." We also examined the tables of contents of current distance education and disability related journals and available conference proceedings.

### KEY FINDINGS

- With over 5,000 reports related to distance education, only 10 papers met our criteria, describing experiences or provisions for individuals with disabilities.
- The format of distance education has greatly increased the access to higher education for individuals with disabilities, across all types and

levels of disabilities. In Great Britain, Open University (entirely distance education) has apparently served more students with disabilities than all other higher education institutions put together. The Independent Study Program at the University of Wisconsin-Extension has also recruited a large number of students with disabilities, comparable to the percentage at Open University.

- Learners, regardless of their types and levels of disabilities, with clear career goals, academic self-discipline, and prior technology experience, particularly related to computer use, tend to seek alternative access to higher education.
- The trends in distance education technologies during the past decade appear to be: (a) a shift from slow one-way devices to faster interactive methods; (b) increased uses of multiple media to deliver lectures and learning materials and to promote communications among all participants; and (c) “real-time” availability of disability-related support such as interpreters or transcribed text through the use of translating technology.
- A range of support services to students with disabilities was provided by the programs reviewed. At the Open University established in 1969, access for students with disabilities is facilitated through such services as preparatory courses to develop study skills, remedial tutoring, taped materials, identification of special needs in computer use, arrangements for home examinations, assessment of individual functional requirements, and financial support. These services are supported by an information and resource network with specialist organizations and through links to national and regional governmental and government-funded agencies. One extraordinary support service provided by Open University was its policy to help students with severe disabilities and low income have access to home computers through financial support, equipment loans and maintenance services, and provision of assistive devices.

## IMPLICATIONS

### Implications for Higher Education Institutions

- The potential for improving the overall quality of distance education programs for individuals with disabilities is clear. Such students can have the opportunity to access and to complete postsecondary programs. Postsecondary institutions should continue to take a leadership role in providing better access to high quality programs without constraints on time and place, and at a low cost to the learner.
- Many aspects of online education, especially accommodation and accessibility, need to be improved before a realistic assessment can be made of the impact from the new education format and technology on the lives of individuals with disabilities.

### Implications for Future Studies

- As distance education programs in higher education continue to grow rapidly, research on educational outcomes for individuals with disabilities is extremely important. The implications for future studies are many. First, the study of more case examples is needed. The small number of reports identified in our search of the databases may not accurately depict representative individuals with disabilities, such that our findings are not yet generalizable. An additional search is recommended to cover more on-line, non-traditional and unpublished sources, and disability-specific databases. We also recommend direct inquiries to institutions offering distance education courses seeking information about exemplary learners with disabilities.
- Proportionally, case studies describing people with disabilities in distance education settings have been sparse. To make matters worse, the identified case examples located were based on students who took only one or two distance education courses. It is not yet possible to address the long-term outcomes of distance education. Follow up on the cases we reviewed

could contribute to answering this question. More longitudinal case studies are also needed, with documentation from pre-enrollment to post-graduation, investigating variables such as learner characteristics, general and disability-specific support services received, technology integrated, and outcomes in terms of a degree (or certificate) earned and employment secured.

- What can be done at the institutional level? Technology has advanced enough to bring a virtual classroom to everyone's home with a computer connected to a phone line. Therefore, it is vital for higher education institutions to restructure their course offerings and make them available through the Internet to meet the diverse needs of students and employers in the future labor market. To guide the restructuring efforts, it is essential to have formative and summative evaluation research of distance education programs at institutional, regional, and national levels. A database structure gathering the same information across programs nationwide is recommended to enable the investigation of factors related to effective distance education. This strategy could also standardize information technology infrastructure and facilitate further sharing of expertise and resources among institutions to implement more low-cost distance education courses.

## REFERENCE

Kim-Rupnow, W. S., Dowrick, P. W. & Burke, S. L. (Submitted for publication) Trends in Distance Education: Implications for Improving Access and Outcome for Individuals with Disabilities in Postsecondary Programs

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The RRTC on Postsecondary Educational Supports is supported by grant #H133B980043 from the National Institute on Disability and Rehabilitation Research (NIDRR) within the U.S. Department of Education. Opinions and perceptions as shared in this document are those of the researchers involved and no endorsement is implied by the funding agent.

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