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ABSTRACT

An overview of the needs of postsecondary students with learning disabilities in technical colleges is provided, based on data gathered during 12 months of on-site technical assistance provided to five Connecticut technical colleges. Data suggest that institutional planning was a high-priority need, followed by information on Section 504 of the Rehabilitation Act, inservice education for faculty/staff, and admissions and intake procedures. Across sites, there was variation in the key campus facilitator (e.g., the Dean of Students, the Dean of Instruction, Counseling Center personnel). A comparison of two-year community colleges and technical colleges on selected variables offers insight into some important differences that service providers should consider in the areas of admissions criteria, student coursework in high school, curriculum, methods of instruction, and faculty credentials and characteristics. Characteristics of learning-disabled students who meet the technical standards for admission to a technical college are listed. Includes four references. (JDD)

# PROVIDING LEARNING DISABILITIES SERVICES AT TECHNICAL COLLEGES: A NEW CHALLENGE

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## Abstract

As more students with learning disabilities pursue postsecondary education, technical colleges constitute an option which may be appropriate for qualified students who wish to pursue careers in technically related fields. Yet there are limited data sources available regarding student support services in these settings. This paper provides an overview of the needs identified in five technical colleges through twelve months of on-site technical assistance. A comparison of the typical two-year community college and the technical college on selected variables offers insight into some important differences service providers should consider. Finally, observations regarding the general characteristics of "otherwise qualified" technical college students with learning disabilities are offered.

# PROVIDING LEARNING DISABILITIES SERVICES AT TECHNICAL COLLEGES: A NEW CHALLENGE

With employment projections which suggest substantial needs in the 1990's for increasing numbers of trained technicians in electronics, computers, and other trades (American Council on Education, 1987), technical colleges are in a pivotal position to offer training for students with learning disabilities (LD) who are interested in and qualified for pursuing degree and certificate programs in technology-related fields. Yet the phenomenon of college studies for students with LD is a relatively recent one which continues to raise challenges in the more academically traditional settings of two- and four-year colleges and universities. The response of technical colleges to offering equal educational access for LD students may create unique demands for postsecondary service providers.

This article will provide an overview of several issues including the range of service needs identified in technical college settings, a comparison of the setting demands at community colleges and technical colleges, and the characteristics of students with learning disabilities who appear "otherwise qualified" for technical college studies.

## Background

In Connecticut, legislative funding since 1984 has enhanced efforts to expand support services for students with LD in the State's 41 two- and four-year public and private colleges and universities. Through a grant from the Connecticut Department of Higher Education, the Connecticut Postsecondary Technical Assistance Center was established at The University of Connecticut in 1988 with an overall goal of providing consultation to assist in expansion of support services for LD students. One priority for 1989/90 was to offer on-site consulting at the State's five regional technical colleges. Five trained consultants spent one day per week at each college working with administrative personnel and staff to systematically plan for the needs of LD students. In every site, informal efforts had been implemented on an "as needed" basis to try to meet the needs of enrolled LD students. However, no formal policies or procedures were in place on any of the campuses.

## Identified Needs on Technical College Campuses

At the conclusion of the academic year, the logs of the five consultants were analyzed to determine whether there was any clear pattern of assistance required across sites. Table 1 provides a summary of technical assistance

activities according to the number of hours allocated at each college. Although there was some variation, the data suggest clear trends in several areas (McGuire, 1989). Institutional planning constituted a priority. This is encouraging in light of evidence that administrative support is critical in establishing successful LD services and programs (Brinckerhoff, Shaw, McGuire, Norlander, & Anderson, 1988; Mangrum & Strichart, 1988). Eliciting institutional commitment is a crucial first step in assuring implementation of a plan for expanding services. Across sites, there was variation in the key campus facilitator (e.g., the Dean of Students; the Dean of Instruction; Counseling Center personnel). Awareness and inservice needs for faculty and staff represented an area of need in four of the five sites. It is also clear that there were students with LD already attending four of the schools who sought the assistance of the technical assistance consultant. This information has provided a springboard for continued assistance during 1989/90 and offers objective evidence that, in fact, technical colleges are an option being pursued by some students with learning disabilities in Connecticut.

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Insert Table 1 about here.

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## A Comparison of Setting Demands

Figure 1 displays a comparison of community colleges and two-year technical colleges according to several variables, based on experience within the State of Connecticut college system. While this information may be generalized to colleges in other states, there may be differences in some locations where technical courses are integrated into community college curricula or where vocational institutions and technical colleges offer a wider array of training programs.

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Insert Figure 1 here.

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## The "Otherwise Qualified" Student with a Learning Disability

Although there was no systematic attempt to gather diagnostic data to determine a profile for LD students in a technical college setting, informal observations suggest the following characteristics as important for consideration in determining whether a student with a learning disability meets the technical standards for admission to a technical college:

1. Highly motivated for a technical career.
2. Strengths in math, physical sciences, and/or experiential background.

3. Good visual-spatial ability.
4. Strong sequential memory.
5. More likely the "dyslexic" than the "dyscalculic" type of student.
6. Independent learner.
7. Fulfills admission criteria for coursework.

## Summary

As college becomes a realistic goal for increasing numbers of students with learning disabilities, the option of a technical school is one which may be appropriate for some. Given the dearth of information about students with disabilities in these settings, the data gathered through the technical assistance model in five technical colleges in Connecticut offer preliminary insights into some of the needs and institutional variables which should be considered by student service providers as they expand their focus to include technical college sites.

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Table 1

Rank Order of Technical Assistance Activities According to Number of Hours by College

| | TECHNICAL ASSISTANCE SITE | | | | |
|---|---|---|---|---|---|
| Technical Assistance Activities | Site 1 | Site 2 | Site 3 | Site 4 | Site 5 |
| Institutional planning . . . . . | 1 | 2 | 1 | 1 | 1 |
| Information on Section 504 . . . . . | 9 | 9 | 8 | 4 | 8 |
| Awareness and inservice for faculty/ staff . . . . . | 6 | 4 | 3 | 3 | 2 |
| Admissions and intake procedures . . | 5 | 7 | 5 | 5 | 4 |
| Diagnosis and assessment . . . . . | 7 | 3 | | | 4 |
| Implementing services . . . . . | 2 | 8 | 6 | 2 | 6 |
| Classroom observations . . . . . | 8 | 5 | 7 | | |
| Direct student contact . . . . . | 4 | 1 | 4 | | 3 |
| Record keeping procedures . . . . . | 3 | 6 | 6 | | 5 |
| Program evaluation . . . . . | 8 | 7 | | | |
| Liaison with LEAs or DRS . . . . . | 8 | | | | |
| Other . . . . . | | | 2 | 6 | 7 |

(McGuire, 1989)

| COMMUNITY COLLEGE | TECHNICAL COLLEGE |
|---|---|
| **Admissions Criteria** | |
| "Rolling" Admissions | |
| - High school diploma or GED | - High school diploma or GED<br>- Vocational high school diploma |
| - Placement tests for English and Math courses | - Some placement testing for English and Math |
| - Open door policy | - Minimum of 2 years of high school Algebra<br>- Physics, Chemistry, or Computer Science, with lab at a college preparatory level |
| **Prior Coursework in High School** | |
| - General courses may be sufficient | - Strong background in Math and Physical Sciences with high level courses |
| - LD students may have been in "special education" classes with watered down or survival skill courses | - Vocational technical high school curriculum may be helpful, depending upon focus |
| **Curriculum** | |
| - Wide variety of majors as well as general studies | - Training for "Engineering Technicians" |
| - Remedial or developmental courses available | - Pre-technical courses for those underprepared |
| - Electives included in most majors with flexibility in course selection | - Limited possibilities for electives |
| - 3-15 credit load per semester | - 16-21 credit load per semester |
| - Flexibility in sequence of many courses | - Lock-step, highly sequential curriculum |
| - Humanities courses offer array of choices | - Limited emphasis on Humanities, with focus on technical writing skills |

Figure 1. A comparison of the typical community college and technical college on selected variables.

| COMMUNITY COLLEGE | TECHNICAL COLLEGE |
|---|---|
| **Methods of Instruction** | |
| - Class size: 20-40 students | - Class size: 8-25 students |
| - More learner-centerd | - More teacher-centered |
| - Syllabus-based but flexible | - Rigid and faster paced with labs for many courses (hands-on) |
| - Lecture/discussion | - Lecture with limited discussion |
| - Use of chalkboard for vocabulary | - Chalkboard used extensively for diagrams, visual arrays |
| - Peer and professional tutors in many subjects | - Writing Lab or Learning Center with peer tutors |
| - Personal computer use encouraged | - Technical computer use emphasized |
| **Faculty Credentials and Characteristics** | |
| - Large percentage with Masters in Liberal Arts or Business | - Engineering training |
| - Male and female represented | - Mostly male |
| - Focus on thinking and reasoning | - Focus on producing sound technicians |
| - More flexible and aware of student needs | - More rigid, based on perception of mission to train for job |
| - Academic Dean more in charge | - Student Affairs Dean more responsible for student services |
| - English Department largest | - English Department smallest |

Figure 1. A comparison of the typical community college and technical college on selected variables (continued).

| COMMUNITY COLLEGE | TECHNICAL COLLEGE |
|---|---|
| **Student Characteristics** | |
| - Older, more mature | - Traditional college age |
| - Part-time > full-time | - Full-time > part-time |
| - Weaker prior educational preparation with lower skill level overall | - Strong academic background |
| - More LD students, with a wide variety of LD types; many with Math problems | - Few LD students who are more likely to be "dyslexic" type |
| - Processing speed and visual spatial difficulties | - Performance skills and visual-spatial perception strengths |
| - More even gender distribution | - Mostly male students |
| - Loosely defined career goals | - Well-defined career goals |

Figure 1. A comparison of the typical community college and technical college on selected variables (continued).