PHASE II
PROPOSAL BRIEF #4
(MS#019a(1)-H01)

University of Hawai`i at Manoa Center on Disability Studies
National Center for the Study of Postsecondary Educational Supports
A Rehabilitation Research & Training Center

Elizabeth Getzel
Virginia Commonwealth University
Rehabilitation Research & Training Center on Workplace Supports

Effective Instructional Strategies and Supports for Students with Learning Disabilities in Postsecondary Education

Nature of the Problem to be addressed

Although there has been an increase in the number of students with learning disabilities entering colleges and universities, limited numbers of students are completing their programs (Wille-Gregory, Graham, & Hughes, 1995). There are several factors that contribute to low retention and completion rates (Aune, 1991) that make it exceedingly challenging for these individuals to complete postsecondary educational programs. In many instances, students’ unique needs go unrecognized or unmet (Aune, 1991; Reiff & deFur, 1992; Brinckerhoff, 1994). In other instances, students may be hampered by varying or limited support services, large student-instructor ratios, and limited direct student-instructor contacts that result in insufficient individualized attention (Stodden, 1999). Additionally, students with learning disabilities in higher education settings often face obstacles in the form of negative or prejudicial attitudes held by faculty members, administrators, and other members of the student body (Greenbaum, Graham, & Scales, 1995; West et al., 1993).

To help students with learning disabilities participate in higher education programs, three primary considerations emerge: obtaining detailed information on the unique characteristics of the students, developing specific educational interventions based on the students’ characteristics, and providing information and support to students and teaching faculty on how to best implement effective educational strategies.

Research Questions to Answer the Problem

1. What is the range of educational supports needed by students with learning disabilities to successfully complete their postsecondary education program?
2. What impact does faculty training have on implementing educational supports needed by students?
3. What are the critical institutional structures that need to be in place in order to meet the educational needs of students with learning disabilities?
4. What are the barriers for succeeding in a postsecondary environment as perceived by students with learning disabilities, and what strategies or accommodations do they believe work in overcoming these barriers.

Method Proposed to Answer the Research Question(s)

Because of the individualized nature of this study, developing and implementing specific educational supports for students with learning disabilities, the study requires a method which captures the individualized nature of the supports provided, yet provides information on a group of students who received intense educational assistance. Focus group procedures have been selected as the primary method for collecting information (Krueger, 1994; Marshall & Rossman, 1995; Wheeler, 1996). This method was selected because focus groups allow for a detailed, more in-depth process to collect information on the experiences of students with learning disabilities (Patton, 1990). Krueger (1994) provides a number of reasons supporting effectiveness of focus groups. He reports that focus groups are not only an effective way to obtain results from a small group of individuals, but they also provide an atmosphere for collecting information which is more relaxed and natural. Focus groups are more socially oriented with a structure that allows the facilitator the flexibility to explore unanticipated issues that emerge during the discussion.

Detailed case studies will also be used to document the specific educational supports and accommodations that were provided during the study. The case studies will help to illustrate the range of supports provided and how these supports were implemented.

To obtain information on the impact of the educational supports from a faculty perspective, two methods are proposed. One is a series of focus groups overtime to document what faculty believe have been their courses on an entire class of students. The second method will be to compare objective the impact of the teaching techniques or technology they have introduced into test scores of students attending a class where modifications and innovative teaching approaches were used. The test scores will be compared with a previous class in Year 1 and after the first year with subsequent classes in Years 2 and 3.

Design of the Study

The study is designed to provide intensive educational supports to an intact cohort of students with learning disabilities during Years 1, 2 & 3. The number of students within each cohort will be 60 students. The students will be recruited within one to three months of their entering Virginia Commonwealth University. Academic Specialists, who are on staff at the RRTC on Workplace Supports, will work with these students to identify their specific educational accommodation needs and develop a Student Profile. These profiles will be updated throughout the course of the study. Students will be asked to participate during the length of the study to obtain longitudinal data on their academic career.

Once the profiles have been developed, students and the Academic Specialists will design an Academic Support Plan, which will enable students with learning disabilities to identify the supports that need to be in place. During each year of the project, a series of three focus groups will be held with the students to obtain detailed information on their academic experiences. As each focus group is conducted, research staff will be
able to identify barriers, and provide support to overcome these barriers. At each group, the barriers and supports will be discussed to determine if the students were able to successfully overcome the barriers that they previously identified.

To compare the results of the students, the cohort will be divided between students who have received intensive services from project staff during the year and those who have received minimal assistance. Information will be collected on both groups to determine the impact of the intensive educational supports that were provided.

To obtain data on the experiences of faculty members, the research staff will recruit up to eight faculty members each year who teach large introductory courses where standardized tests are used. To recruit faculty members, research staff will first meet with the Dean from the School of Humanities and Sciences and the Provost and Vice President of Academic Affairs. Staff will discuss the project and ask for assistance in recruiting faculty. Incentives for participating will be discussed which could include release time for faculty and/or consulting time. Research staff will attempt to recruit through the Dean and by presenting at faculty meetings in the School of Humanities and Sciences.

Faculty members in the study will be provided supports and resources to modify their coursework with the intent of achieving a more universal design in how their classes are structured. Faculty will be asked to participate in focus groups to discuss their successes and barriers to implementing new strategies or techniques. Research staff will provide assistance to help them overcome these barriers and document their progress over the course of the study. Additionally, comparisons over the years of standardized test scores will be used to document any changes in the performance of the students in these classes that received assistance. The intent of conducting the study in this manner is to obtain data on the effectiveness of universal design for both students with disabilities and their nondisabled peers.

**Description of Sample and Sample Selection Process**

The sample will consist of an intact group of 60 students with learning disabilities who have self-identified to the university and are interested in receiving intensive educational supports. During the course of the study it is anticipated that intact cohorts of 60 students will be recruited each year. The study is voluntary, so participants will be those students who express an interest in taking part. Students will be recruited through the Disability Services Office, the VCU Students with Disabilities Organization, and announcements posted on the university web sites and newspapers.

**Instrument or Protocol Proposed to Collect Data**

As previously described, there will be several methods used to obtain data. To capture the individualized supports and services provided, information will be collected through the students’ Profile and Academic Supports forms. A primary method for gathering data on the impact of these supports on participating students will be through the use of focus groups. Satisfaction with the services provided and identification of additional supports will be documented through these groups.

Faculty members participating in the project will also participate in focus groups. The research staff will document their success with implementing universal design techniques and their perceptions of
the impact on their teaching and their students’ performance. Comparisons of standardized testing from year to year in classes of participating faculty will provide data on any changes over time in the performance of their students.

Data collection on the differences within the cohort of students (those who received intensive supports as compared to students who received minimal supports) will focus on such variables as grades, class attendance, type of accommodations used, number of resources accessed on campus and in the community, and overall adjustment to college.

**Description of Intervention to be applied**

The interventions for students with learning disabilities will be individualized to meet their specific needs. It is anticipated that students will be supported throughout their academic experience which could include such supports as accommodations in the classroom, academic advising, personal counseling, career planning, and access to assistive technology devices. Academic Specialists will not directly provide all of the supports that students need, but will help to facilitate the services and supports students’ need.

Faculty interventions will also be individualized as a result of the type of courses being taught. It is anticipated that the classes will be large introductory sessions in the School of Humanities and Sciences since over half of the students at VCU take classes in this school. Interventions could include information on structuring the material for more effective notetaking on the part of students, the use of various technologies in the class to enhance the information being taught, and information on general teaching strategies to address the learning styles of all students.

**Data Analysis and Write-up**

Data will be analyzed using information from audiotapes, scribe notes, and transcriptions of tapes from each of the focus groups conducted (Benz, Johnson, Mikkelesen, & Lindstrom, 1995; Krueger, 1994). Summaries of each focus group will be developed including: 1) student participant information, 2) the point in time the group was conducted (beginning of the semester, etc.), 3) responses to the questions posed by the facilitator, and 4) information obtained through follow-up questions to obtain additional information during the sessions (Benz, et al., 1995). A similar procedure will be used to collect data from faculty members participating in the study in addition to comparing overall test scores of students in their classes.

Analyses comparing students within each cohort will be conducted each year. Comparison analyses will be conducted on the differences within the cohort of students (those who received intensive supports as compared to students who received minimal supports). Variables such as grades, class attendance, and type of accommodations used, number of resources accessed on campus and in the community, and overall adjustment to college will be used in the comparison studies.

Case studies will be developed from the students’ Profiles and Academic Support Plans to provide a more detailed and in-depth look at the specific educational interventions that were provided. The case studies will be developed based on composite information obtained through the study. Confidential information that would be recognizable to
References


WORK PLANNING DOCUMENT FOR PHASE II STUDY PROPOSALS
YEAR 1

<table>
<thead>
<tr>
<th>Task to be Complete</th>
<th>Person Responsible</th>
<th>Timeline</th>
<th>Product/Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development and Approval of Study Brief</td>
<td>Develop study proposal</td>
<td>Getzel/Wehman/Kregel</td>
<td>May, 2000</td>
</tr>
<tr>
<td>Set-up of Study Design &amp; Method</td>
<td>Identify students and faculty Participants</td>
<td>Getzel/Project Staff</td>
<td>June-September, 2000</td>
</tr>
<tr>
<td>Conduct of the Study (describe plan for pilot, implementation, &amp; replication)</td>
<td>Develop student profiles; Develop Academic Support Plan; Initiate educational interventions; conduct focus groups Provide resources/information to faculty; Conduct focus groups</td>
<td>Getzel/Project Staff</td>
<td>September-May, 00/01</td>
</tr>
<tr>
<td>Analysis of Data or Information</td>
<td>Compile focus group results; Results from student test scores in participating faculty courses; Develop case studies</td>
<td>Getzel/Project Staff</td>
<td>Ongoing (June 00-June 01)</td>
</tr>
<tr>
<td>Development of Products &amp; Reports</td>
<td>Satellite teleconference on students with disabilities in postsecondary education; Develop two manuscript journals; Develop draft monograph content</td>
<td>Project staff</td>
<td>Ongoing (June00-June01)</td>
</tr>
<tr>
<td>Conduct of Training, TA, &amp; Dissemination</td>
<td>Disseminate results through presentation at conferences and written materials</td>
<td>Project staff</td>
<td>Ongoing (June00-June01)</td>
</tr>
</tbody>
</table>