HELPING STUDENTS WITH LEARNING DISABILITIES
SUCCEED IN HIGHER EDUCATION

Carol B. Gaumnitz, Ph.D., CPA (inactive)
Associate Professor, Department of Accounting
St. Cloud State University
720 Fourth Avenue South
St. Cloud, MN 56301
Phone: (320) 308-6135
E-mail: cgaumnitz@stcloudstate.edu

Bruce R. Gaumnitz, Ph.D., CIA, CMA, CPA (inactive)
Professor, Department of Accounting
St. Cloud State University
720 Fourth Avenue South
St. Cloud, MN 56301
Phone: (320) 308-2268
E-mail: bgaumnitz@stcloudstate.edu

Sheri L. Zalar, M.A. (in special education)
159 E. North Lakeview Drive
East Peoria, IL 61611
Phone: (309) 698-0398
E-mail: szalar@aol.com

January 2007
HELPING STUDENTS WITH LEARNING DISABILITIES
SUCCEED IN HIGHER EDUCATION

INTRODUCTION

Due to the increased awareness of learning disabilities and the educational assistance being provided to children in elementary and secondary schools, increasing numbers of individuals with learning disabilities are enrolling in and pursuing degrees at colleges and universities. These students, accustomed to a variety of K-12 classroom and/or examination accommodations, frequently arrange to have these accommodations continued by their new college or university through that organization’s office of disability services. While faculty members usually understand and are comfortable with accommodations made for students with physical disabilities (e.g., provided a recorded examination to a blind student), they are frequently ill at ease or even feel intimidated when they receive paperwork for a student with no visible disabilities.

Frustrated by what seems to be mandatory special arrangements for no apparent cause, some faculty members may react by disengaging from both the process and the student. They will sign the paperwork and agree to anything since it is expedient and apparently out of their hands anyway. Other faculty members comply but feel that academic standards are being lowered. Still other faculty members may try to eliminate the accommodations in their courses, lose that battle, and have their frustration turn to anger. While each of these reactions is understandable, these reactions may result from either a lack of understanding of what learning disabilities are (or are not) or an incomplete understanding of the legal requirements regarding accommodations.

What really matters in higher education is student development. Most college and university faculty are concerned with preparing students for their careers and for the challenges and complexities they will face in the years ahead. Accomplishing this mission is easier when faculty recognize that students learn differently and at different rates. Thus, providing appropriate accommodations to students with learning disabilities and using certain teaching strategies can improve student learning. The balance of this paper is divided into three sections. First, the nature of learning disabilities and the applicable legal requirements are explained. The second section reviews accommodations and their appropriateness. The final section discusses teaching strategies that can be employed to make the educational process more accessible for all students.

Learning Disabilities and the Law

Individuals with learning disabilities often have average or above average intelligence but display a significant discrepancy between measured ability and achievement that cannot be attributed either to lack of effort or some physical, emotional, or environmental condition.

---

1 The National Center for Education Statistics (2001) reported that 428,000 students with disabilities were enrolled in postsecondary education institutions in 1996-97 or 1997-98. Of these, almost half (196,000) had learning disabilities.
Although some postsecondary students with learning disabilities have developed ways to compensate for their learning disabilities, others continue to need accommodations to successfully complete their course work.

Learning disabilities are a heterogeneous group of conditions, and consensus is lacking on how to categorize or subtype learning disabilities. Table 1 identifies and describes learning disabilities by developmental disorder (Kirk, Gallagher, and Anastasiow 1997; Lerner 1997). After reviewing these developmental disorders, it should be clear that learning disabilities relate to how information is acquired and processed. They do not result from an individual’s lack of effort, lack of ability, or mental illness.

[Insert Table 1 Here]

Although not directly applicable to postsecondary students, the Individuals with Disabilities Education Act (IDEA) of 1990, reauthorized in 1997, may be the most significant legislation for individuals with learning disabilities. IDEA is entitlement legislation that mandates a free appropriate public education (through grade 12) consisting of an individualized program in the least restrictive environment for individuals aged three to twenty-one with disabilities. This has improved the education for students with learning disabilities, increasing the likelihood that they will be able to pursue postsecondary education. The definition of a learning disability contained in IDEA is often used by colleges and universities to substantiate eligibility for services (Gregg and Scott 2000). IDEA defines a learning disability as: (1) a disorder in one or more basic psychological processes, (2) that manifests itself in imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations, and (3) is not the result of (a) visual, hearing, or motor handicaps, (b) mental retardation, (c) emotional disturbance, or (d) environmental, cultural, or economic disadvantage.

Civil rights statutes are also relevant to colleges and universities serving adults with learning disabilities. These include the Rehabilitation Act of 1973 (Section 504) and the Americans with Disabilities Act of 1990 (ADA). Section 504 prohibits discrimination on the basis of disability by (1) the Federal government, (2) entities receiving financial assistance from the Federal government, and (3) anyone who does business with the Federal government. The ADA protects individuals with disabilities across programs and employers not covered by Section 504.

The impact of these civil rights statutes, according to the American Council on Education, is that colleges and universities

---

2 Learning disabilities may also be categorized by area of academic difficulty. The American Psychiatric Association’s Diagnostic and Statistical Manual of Mental Disorders, fourth edition (1994) identifies learning disabilities mainly as disorders in academic areas, such as reading, mathematics, written expression, etc.

3 Other definitions are used by federal government agencies or learning disabilities organizations. These definitions are all similar. Most of the definitions were developed to identify children with learning disabilities and thus may not be fully applicable to the adult population.
“… must not discriminate in the recruitment, admission, or treatment of students. Students with documented disabilities may request modifications, accommodations, or auxiliary aids which will enable them to participate in and benefit from all postsecondary educational programs and activities” (American Council on Education 2000).

In other words, the emphasis of Section 504 and the ADA is on accessibility to the educational process. Providing reasonable accommodations is mandated under federal law. Thus, faculty members cannot eliminate accommodations from their courses, but they may question any accommodation they feel changes course or degree standards. This is where cooperation between the faculty and the personnel from the office of disability services is important.

**Accommodation Process**

Personnel from a college’s or university’s office of disability services normally determine the accommodations that should be made. Ideally, with the students’ permission, the personnel of the office of disability services should cooperate with faculty in choosing appropriate accommodations for specific courses. A list of typical accommodations for students with learning disabilities is presented in Table 2 (Lancaster, Mellard, and Hoffman 2001; Lerner 1997; Lowry 1990; Reiff 1997).

![Insert Table 2 Here]

Providing accommodations to students with learning disabilities should not change course standards and requirements. “While accommodations may alter the manner in which learning takes place and is assessed, the learner must be able to demonstrate learning appropriate and comparable to the scope and requirements of all learners” (Gadbow and DuBois 1998, 38). Thus, accounting faculty may need to address the appropriateness of some accommodations. Accommodations during examinations may be the most controversial. Providing additional processing time (i.e., thinking or calculating time) is a standard accommodation for all types of learning disabilities. Providing oral or tape-recorded examinations in place of typed examinations may also accommodate some students with learning disabilities such as dyslexia that makes reading difficult. In addition, giving the examination in a quiet room in the office of disability services provides the student with an environment free from distractions. Usually, these accommodations are neither controversial nor viewed as a change in course standards.

---

4 Examples of modifications, accommodations, and auxiliary aides are wheelchair ramps, additional examination time, and the use of tape recorders in the classroom. These adjustments allow individuals with physical as well as learning disabilities to participate in higher education.

5 Under the Family Educational Rights and Privacy Act, information regarding a student’s learning disabilities will be shared within the college or university only on a need-to-know basis. Only with the permission of the student will accounting faculty be provided with diagnostic information.
Suppose, however, a student requests an open-book examination as an accommodation in an accounting course with all closed-book examinations, and the personnel in the university’s office of disability services agree to this accommodation. Most accounting faculty would be likely to view this accommodation as a change in course standards. In *Wynne v. Tufts University* (923 F.2d 19, 1991; 976 F.2d 791, 1992) the court did not compel Tufts Medical School to use a particular test format. The court relied on the professional, academic judgment of the faculty in determining the appropriate testing format.

For students with learning disabilities, course substitutions or waivers as accommodations for foreign language and mathematics courses are widely debated (Downey and Synder 2001; Ganschow, Philips, and Schneider 2001; Ganschow, Sparks, and Javorsky 1998; Shaw 1999; Sparks and Javorsky 1999; Sparks et al. 1999a, 1999b). Course substitutions as accommodations are controversial because they change degree requirements. In a recent court case, a group of students with learning disabilities brought action against Boston University (BU) (*Guckenberger et al. v. Boston University et al.*, 974 F.Supp. 106, 1997; 8 F.Supp. 2d 82, 1998), in which one of the issues was whether BU could deny course substitutions (Elswit, Geetter, and Goldberg 1999; Sparks and Ganschow 1999). The court concluded that BU’s decision not to provide course substitutions did not violate its duty to provide reasonable accommodations to students with learning disabilities, since their decision was based on “professional, academic judgment.” This case confirmed that the faculty and academic administrators at colleges and universities can play a significant role in determining whether a requested accommodation lowers or changes academic standards, even after the office of disability services has approved the accommodation (Elswit, Geetter, and Goldberg 1999; Siegel 1999; Wolinsky and Whelan 1999).

---

6 This is not a hypothetical example. This accommodation was requested and approved by the university’s office of disability services for a student in one author’s accounting class.

7 The university refused to provide an orally administered final exam on an untimed basis with the assistance of a trained reader to a student with dyslexia. Other accommodations, however, had been provided. The court did, however, request that the faculty provide its justification for the multiple-choice format.

8 Although discussion of course substitutions in education literature have been limited to foreign languages and mathematics, it may be possible for substitutions in other areas to be made by the personnel in the office of disability services. Faculty involvement in course substitution decisions is necessary to ensure that student needs are met and that academic standards are maintained.

9 BU had been granting between ten and fifteen course substitutions a year out of approximately forty requests. During the 1995-1996 academic year, course substitutions were terminated by the administration. This and other changes resulted in the lawsuit against BU.

10 In both the Wynne and Guckenberger cases, the courts endorsed “professional, academic judgment” in their decisions. Thus, the courts respect the expertise of professors in making testing and curriculum decisions.
Disability services personnel often make accommodation decisions without faculty input. While they may have strong legal and/or administrative backgrounds, they do not and cannot be expected to have in-depth discipline-specific knowledge of all subjects taught at their college or university. The faculty members, on the other hand, understand the nature, motivation for, or purposes served by various course requirements. Moreover, accounting faculty members also have knowledge of career requirements and expectations specific to accounting practice. When faculty members are not involved in accommodation and course substitution decisions, this expertise is missing.

Faculty may properly monitor, discuss, and even challenge accommodations when they feel course standards are compromised. If a faculty member views an accommodation as a change in course standard, then they should discuss their concerns with the personnel in the office of disability services. The goal of and purpose for accommodations is to provide all students with access to education and to ensure that learning can take place. Course credit should not be provided where it has not been earned.

**Teaching Strategies**

Regardless of the level of direct faculty participation in the accommodation process, faculty members may adapt their classes to make course content more accessible to students with learning disabilities. Since even students without learning disabilities have different learning styles and preferences, these changes can enhance the educational experience for all students. Table 3 summarizes teaching strategies and techniques that may be helpful for students with learning disabilities (Lerner 1997; Lowry 1990; Rose and Meyer 2000; Sandock 2000). While merely beneficial to most students, the teaching strategies outlined in Table 3 can be critically important for students with learning disabilities. After a review of these strategies, accounting faculty will probably find that they are already doing many things that are flexible, inclusive, and accessible for all students, including students with learning disabilities.

[Insert Table 3 Here]

These teaching strategies share four common themes: (1) providing students with adequate time to master material, (2) providing organization of course content, (3) using multi-sensory means of presenting information, and (4) capturing and maintaining student interest.

Students with learning disabilities usually require additional time to learn material or to complete exams or long assignments. Providing extra time for examinations and quizzes may be requested as an accommodation, but students may also need extra time for completing the reading and homework assignments. A course syllabus should be available before the class begins. Students with learning disabilities often wish to begin reading the textbook before the course begins or to begin work on course assignments. Having a syllabus for next semester’s course available over breaks between semesters can provide these students with a head start. All students probably need more time to take notes from overheads or blackboard notes than the instructor needs to present the material. Stop and allow students time to complete their notes and ask questions before beginning the next topic.
Organization strategies help students identify patterns of organization necessary for learning the course material. Organized presentations can be especially important for students with learning disabilities since they may lack the ability to organize the material themselves (Lerner, 1997). A simple list of the activities to be covered in a class provided at the beginning of class provides a framework for organizing notes. Grading rubrics, chapter outlines, written exam announcements, or other organization tools can be especially helpful. Online class sites, such as WebCT, Blackboard, or D2L, are an excellent way to provide class materials to supplement class notes and help students to organize their study materials.

Using multi-sensory teaching strategies recognizes that different students learn in different ways. Students use different modalities to learn material: visual, auditory, and kinesthetic. While any student may have a preference for a particular modality, students with learning disabilities frequently have a significant deficit in one or more of these modalities that results in an information-processing deficit (Kirk, Gallagher, and Anastasiow 1997). Simple strategies like describing what is being written on the board or screen provides simultaneous auditory and visual output.\footnote{\textsuperscript{11}}

Capturing and maintaining student interest helps make a course interesting for all students. Students with learning disabilities, however, can have difficulty remaining focused during lectures. An interactive, interesting presentation can help these students stay engaged. Be sure to ask for questions, make lectures interactive, and vary delivery approach. All students will benefit from a more stimulating class.

**Conclusion**

Increasing numbers of students with learning disabilities are pursuing postsecondary education. Legal, administrative, and discipline-specific issues should be considered when evaluating the appropriateness of accommodations. Most accommodations do not change course standards and requirements, and faculty members should be willing to provide these accommodations.

The teaching strategies discussed above help promote a supportive and inclusive learning environment. Using teaching strategies that focus on multi-sensory means of presenting information, that provide organization of course material, and that offer opportunity for student interaction can be very important for students with learning disabilities. Combined with appropriate accommodations, these teaching strategies can help students with learning disabilities succeed in higher education. Most important of all, providing a flexible, supportive learning environment can enhance the learning of all students.

\footnote{\textsuperscript{11} Describe the material as if the students are blind. The authors had several blind students in accounting classes early in their careers. This experience helped them gain practice in describing as well as writing homework solutions on the board.}
### TABLE 1

<table>
<thead>
<tr>
<th>Categories</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Visual Perception</strong></td>
<td>Difficulty in receiving and processing information through sight, including dyslexia, dysgraphia, dyscalculia</td>
</tr>
<tr>
<td></td>
<td>Lack of visual discrimination and visual figure-ground discrimination</td>
</tr>
<tr>
<td></td>
<td>Difficulty with short-term and/or long-term visual memory</td>
</tr>
<tr>
<td><strong>Auditory Perception</strong></td>
<td>Difficulty in receiving and processing information through hearing</td>
</tr>
<tr>
<td></td>
<td>Difficulty with short-term and/or long-term auditory memory</td>
</tr>
<tr>
<td><strong>Spatial and Time Perception</strong></td>
<td>Difficulty in sensing relationship to other objects or time</td>
</tr>
<tr>
<td></td>
<td>Difficulty with nonverbal symbolic reasoning (may be related to visual perception)</td>
</tr>
<tr>
<td><strong>Memory</strong></td>
<td>Difficulty with short-term and/or long-term retention of stimuli</td>
</tr>
<tr>
<td><strong>Sequencing</strong></td>
<td>Difficulty in grasping successive order to solve a problem</td>
</tr>
<tr>
<td><strong>Sensory Integration</strong></td>
<td>Difficulty in combining information from different senses</td>
</tr>
<tr>
<td><strong>Communication</strong></td>
<td>Difficulty with expressive and receptive language, both verbal and nonverbal</td>
</tr>
<tr>
<td><strong>Motor Activities</strong></td>
<td>Difficulty in coordinating the body to perform fine and/or gross eye-hand activities</td>
</tr>
<tr>
<td>Area of Accommodation</td>
<td>Possible Accommodations</td>
</tr>
<tr>
<td>---------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Classroom</td>
<td>Provide note takers.</td>
</tr>
<tr>
<td></td>
<td>Permit taping of classes.</td>
</tr>
<tr>
<td></td>
<td>Provide chapter outlines or study guides.</td>
</tr>
<tr>
<td></td>
<td>Provide active learning opportunities (i.e., group projects).</td>
</tr>
<tr>
<td></td>
<td>Present material to accommodate various learning styles.</td>
</tr>
<tr>
<td>Examinations and Assignments</td>
<td>Extend time allowed for completion.</td>
</tr>
<tr>
<td></td>
<td>Permit submission in alternative formats (i.e., oral or tape recorded).</td>
</tr>
<tr>
<td></td>
<td>Permit rework or rewrite opportunities.</td>
</tr>
<tr>
<td></td>
<td>Make allowances for learning disabilities when grading (i.e., not deducting for misspelled words or poor grammar).</td>
</tr>
<tr>
<td></td>
<td>Allow use of technological assistance (i.e., calculators, word processors, etc.).</td>
</tr>
<tr>
<td></td>
<td>Allow use of selected resources (i.e., spelling dictionary).</td>
</tr>
<tr>
<td>Program</td>
<td>Provide tutoring services.</td>
</tr>
<tr>
<td></td>
<td>Provide active learning opportunities (i.e., internships).</td>
</tr>
<tr>
<td></td>
<td>Provide study skills instruction.</td>
</tr>
<tr>
<td></td>
<td>Provide counseling services.</td>
</tr>
<tr>
<td></td>
<td>Substitute alternative course for required course (of questionable appropriateness, although currently used at some colleges and universities).</td>
</tr>
</tbody>
</table>
# TABLE 3

**Teaching Strategies and Techniques that May Assist Students with Learning Disabilities**

| Classroom Environment | Provide comprehensive course syllabi. Make syllabi available early.  
|                       | Give assignments orally, as well as in writing.  
|                       | Use multi-sensory teaching strategies.  
|                       | Encourage students to ask questions during or after classes.  
|                       | Provide frequent and timely feedback.  
|                       | Make class notes available on the internet.  
|                       | Provide study guides, study questions, and review sessions.  
|                       | Provide grading rubrics for large assignments.  
|                       | Minimize distractions and interference during examinations. |

| Class Activities | Incorporate learning activities that represent a variety of learning styles.  
|                 | Incorporate group activities or projects.  
|                 | Create opportunities for experiential learning.  
|                 | Arrange for a pre-showing or second showing of videos.  
|                 | Utilize technology |

| Lecture Techniques | Begin classes by stating class objective and listing topics to be covered.  
|                    | Link previous lecture to current lecture.  
|                    | Reinforce lectures or discussions by putting major topics or outlines of the material on the blackboard, on overheads, or in PowerPoint.  
|                    | Make abstract concepts more concrete by relating new information to everyday life.  
|                    | Use blackboard or overhead to highlight key concepts and new terminology.  
|                    | Emphasize important points and key concepts orally and on overhead.  
|                    | Leave overhead on longer than you think necessary for taking notes.  
|                    | Make clear transitions from one topic to another.  
|                    | Help students identify organizational patterns.  
|                    | Make lecture interactive.  
|                    | Vary delivery approach to maintain student attention. |
References


