

**SURVEY OF ACCOMMODATIONS FOR STUDENTS
WITH IDENTIFIED LEARNING DISABILITIES
IN TEXAS COMMUNITY COLLEGES**

THESIS

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in Partial Fulfillment of
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Master of ARTS**

By

Lisa D. Greer, B.S.

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DEDICATION

I would like to dedicate my thesis to my family: Rajah, Sahara, Belinda, and Diane, for their support and encouragement; to “the kids”: Angel, Sahara, Dayton, D’Andre, Rajah II, Sheridan, Ranauldo, Shai, Jarde, Christon, Sydni, and Preston, for being there when I needed them; to my in-laws: Sandra and Charles, for being a part of my family; and to Stacey, who listened and understood. Thank you all for inspiring me to persevere toward excellence.

To Mommy and Daddy,
for all the sacrifices you made for me,
for believing in me,
for supporting me continuously,
for loving me unconditionally.
but most of all for teaching me that
“I can do all things through Christ, Who strengthens me.”

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ABSTRACT

SURVEY OF ACCOMMODATIONS FOR STUDENTS WITH IDENTIFIED LEARNING DISABILITIES IN TEXAS COMMUNITY COLLEGES

by

LISA D. GREER, B.S.
Southwest Texas State University
August 2000

SUPERVISING PROFESSOR: BARBARA G. LYMAN

The purpose of this study was to ascertain whether or not and, if so, what type of accommodations and/or programs/services were provided for identified learning disabled (ILD) students in Texas community colleges registered with the Texas Higher Education Coordinating Board (THECB). An investigator-developed a survey was pilot tested and finalized before being mailed to 70 community colleges throughout Texas. Forty-six completed surveys were returned.

All the responding campuses indicated that they had ILD students enrolled and used a variety of media to inform ILD students of accommodations and programs/

services available on and off campus. The majority of respondents offered a wide variety of accommodations, trained faculty on how to provide accommodations for ILD students, and informed faculty of individual students' needs. It was concluded that the provision of accommodations and programs/services for ILD students in Texas community colleges is a standard practice.

CHAPTER I

INTRODUCTION

The Americans with Disabilities Act of 1990 (Public Law #101-336, 1991) and Section 504 of the Rehabilitation Act of 1973 (Public Law #93-112, 1991) mandate that students with identified learning disabilities be provided reasonable accommodations to perform basic tasks. There are questions concerning the extent to which Section 504 applies to postsecondary institutions. According to Rapp (1995), programs that receive government support cannot discriminate against any individual solely based upon his or her handicap, thus identifying accommodations as the legal responsibility of any public institution, college or otherwise. In Texas, the state where the data were gathered for the present study, the Texas Rehabilitation Commission governs colleges in providing accommodations. However, the commission does not define, regulate, or monitor how these accommodations are provided. The accommodations/programs are determined on an individual basis from college to college. In the present research, Texas community colleges were surveyed to determine if Texas community colleges were providing programs/services for learning disabled students and, if so, the types of accommodations provided.

Purpose of the Study

The purpose of the study was to determine the types of accommodations/programs offered for students with learning disabilities at 70 of the 77 Texas

community colleges certified as of Fall 1996 by the Texas Higher Education Coordinating Board (THECB). The investigator obtained a list of these colleges from the THECB office in Austin. (See Chapter III for further discussion of the sample.)

Research Questions

The following research questions guided the study:

1. What accommodations are provided for students with identified learning disabilities in Texas community colleges?
2. What is the nature and the extent of a campus administration's role in the delivery and support of accommodations for students with identified learning disabilities?
3. What is the nature and the extent of faculty's roles and responsibilities in the provision of accommodations for students with identified learning disabilities?

Scope of the Study

The survey was limited to questions regarding accommodations provided by community colleges registered with the THECB as of 1996. Texas community colleges were selected as the target group for this study because, prior to this study, no data had been gathered to determine what common practices, if any, were used by these service providers. Community colleges rather than universities were selected because of the "open-door" policy of community colleges; that is, community colleges offer fewer barriers to admission and grant entrance to students with a wide range of handicaps, including students with learning disabilities. Therefore, community colleges are more

likely to have a greater number of identified learning disabled students and thus a greater need for extensive programs for these students.

Operational Definitions

Definitions of key terms used in this study are as follows:

- ***Accommodation*** refers to supplemental assistance provided to disabled students that enables them to perform basic tasks (Rapp, 1995).
- ***Attention deficit hyperactivity disorder*** is “a syndrome that is characterized by hyperactivity, distractibility, restlessness, impulsivity/short attention span” (Manganello, 1992, p. 70).
- ***Documentation*** designates a hard copy of results from a series of tests that confirms or negates the presence of a learning disability.
- ***Identified learning disability***, an invisible handicap, denotes a specific learning disability or disorder “in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations” and which has been identified as such by formal testing (O’Hearn, 1989, p. 294).
- ***Learning disability programs*** are structured and monitored instructional agenda and curricula designed to track and support students in their academic performance in courses (Rapp, 1995).

For a delineation of the different learning disabilities and their definitions, refer to Appendix A.

Delimitations

This study was delimited by the following factors:

- Only Texas community colleges were surveyed.
- Only those students considered learning disabled by the community college were included in the study.
- It was assumed that the community colleges that participated would answer the survey questions about their programs accurately. (See Chapter III for further information about data-gathering procedures.)

Significance of the Study

According to the figures available for 1998, there were 154,520 (9.4%) students with some type of disability enrolled full time as freshmen in 3,100 postsecondary institutions across the United States. In 1998, 41% of disabled postsecondary students identified their disability as a learning dysfunction (Greenberg, 2000). Students with disabilities compose one of the fastest growing populations in postsecondary education. Educators, in consonance with the Rehabilitation Act of 1973, “are required to implement practical accommodations for these students” (Hodge & Preston-Sabin, 1997c, p. xi).

As of this writing, no current research had been carried out on accommodations offered for students with learning disabilities enrolled in Texas community colleges. This study examined the types of accommodations provided for identified learning disabled (ILD) students. The present study elicited information on the programs and services offered to ILD students and to the faculty who teach them. The results of the

study should provide educators with information on different strategies being used to assist ILD students with the rigorous demands of college curricula.

Summary

This chapter presented the purpose, which was to survey Texas community colleges to determine the accommodations and services provided for students with identified learning disabilities. The study was guided by three research questions, which inquired as to (1) those accommodations provided for learning disabled students, (2) the nature and the extents of the campus administration's role in the provision of accommodations, and (3) the nature and the extent of the faculty's role in the provision of accommodations. The scope of the study was stated as being limited to 70 of the 77 Texas community colleges. Additionally, this chapter discussed operational definition of key terms applicable to the study and the delimitations of the study. The study was delimited by (1) being confined to Texas community colleges, (2) considering only those students with learning disabilities, and (3) relying on the accuracy of participants' responses. It was believed that the results of this study would be significant for postsecondary educational institutions due to the rising enrollment of learning disabled students. This significance is intensified when one considers that this research on accommodations for learning disabled students was the first of its kind. The following chapter discusses the review of literature relevant to the study.

CHAPTER II

LITERATURE REVIEW

In researching the necessity for accommodations/programs for disabled students in general, this review of literature focused primarily on support services specifically developed for identified learning disabled students in community colleges. However, studies are limited in the area of support services provided strictly in community colleges. Thus, some studies cited reflected accommodations provided in secondary and four-year institutions. This review of literature examined the following aspects of support services: laws related to learning disabled students; rights and responsibilities of institutions, faculties, and students; definition of learning disabilities; needs of ILD students; provision of accommodations and services for ILD students. and sample programs and services.

Laws Related to Learning Disabled Students

Rapp (1995) reports that Section 504 of the Rehabilitation Act (RA) of 1973 states:

No otherwise qualified handicapped individual in the United States shall, solely by reason of his handicap be excluded from the participation in, be denied the benefits of, or [be] subjected to discrimination under any program receiving federal financial assistance. (p. 10)

The Americans with Disabilities Act (ADA) of 1990 states:

The nation's proper goals regarding individuals with disabilities are to assure equality of opportunity, full participation, independent living, and economic self-sufficiency for persons with disabilities. (Lissner, 1997, p. 5)

As a result of the passage of RA Section 504 and the ADA of 1990 and pressure from advocacy groups, postsecondary institutions revised and expanded the services provided to ILD students (Norlander, Shaw, & McGuire, 1990). Now students with disabilities, including learning disabilities, have access to institutionalized support services and resources to empower them with skills that will promote success in college.

Brinckerhoff, Shaw, and McGuire (1992) state that the provisions of Section 504 cover all aspects of student life. Provisions include admissions and recruitment to academic adjustments and academic programs.

In the past, before passage of new laws concerning them, learning disabled college students were typically unsuccessful (Siperstein, 1988). However, Vogel and Adelman (1992) found that persistence is an important factor in the success of the learning disabled adult. Patterns of reapplying to college have shown that the ILD student often considers education as an investment. Additionally, new laws requiring accommodations have the potential to increase the college success of ILD students.

While the broad scope of the new law, RA Section 504, mandating provision for disabled students leaves room for interpretation of how accommodations will be provided for ILD students, it is clear that public institutions must offer support services for handicapped individuals, including students identified as learning disabled. An important issue relating to Section 504 is that a broad interpretation of this law is

necessary for institutions to cover a wide range of standards and purposes (Scott, 1990). Brinckerhoff et al. (1992) state that eligibility criteria for protection under Section 504 are as follows: (1) If the person has a physical or mental impairment that substantially limits one or more major life functions or has a history of such impairment or is regarded as having such an impairment and (2) if the person with a disability meets the academic and technical standards requisite to admission to or participation in a college or university program of activities, then the student must be ensured equal educational opportunities. According to Brinckerhoff et al., the determination of a student's right to protection under Section 504 is often difficult for college personnel, partly due to the law's failure to provide sufficient judicial clarification of substantive issues. On the other hand, Siperstein (1988) states that the rights of students with learning disabilities are clearly spelled out.

Another issue discussed by Scott (1990) is the term *otherwise qualified*.

Applying the construct "otherwise qualified" encompasses more than the question of whether or not a student with a learning disability should be admitted to higher education. Deliberation regarding merit permeates the setting of postsecondary education. Federal regulations provide guidelines for putting the construct "otherwise qualified" into practice in the complex areas of admission and student treatment. (p.398)

Rights and Responsibilities of Educational Institutions, Faculties, and Students

The new legal status of RA Section 504 brought about by the ADA caused a major shift in educational rights and responsibilities of institutions and faculties in higher education (Scott, 1991). According to Rapp (1995), the educational institution now has the responsibility to:

- Inform applicants and students of the availability and the range of accommodations/programs.
- Evaluate applicants based solely on their abilities.
- Seek reasonable alternatives if an evaluation or a method has a negative effect on an applicant with a disability.
- Ensure that all of its programs are accessible.
- Make reasonable adjustments in the instructional method and evaluation system for a course when these have a negative impact on a disability.
- Adjust, substitute, or waive any requirement/course that has a negative impact on a disability and is not fundamental to the student's academic program.

According to Crews (1995), institutions have four major responsibilities: (1) determining what is "reasonable," (2) providing reasonable accommodations; (3) establishing a good faith effort; and (4) clearly defining policies for students and faculty. An accommodation is not reasonable if it requires a substantial change in an essential area of the student's curriculum. It is the institution's responsibility to show

that the change requested is substantial and that the area affected is essential to the student's curriculum.

The institution and its faculty have the right:

- To identify and establish the abilities, skills, and knowledge necessary for success in the institution's programs and to evaluate applicants on this basis.
- To identify and establish the abilities, skills, and knowledge that are fundamental to the institution's academic programs/courses and to evaluate each student's performance on this basis. These fundamental program/course goals are not subject to accommodation.
- To request and review documentation that supports requests for accommodation. Based on this review, the institution has the right to refuse an unsupported request.
- To select among equally effective methods of accommodating a student with a disability (Rapp, 1995).

The institution's obligation to act does not arise until the student provides notice of the existence of a disability and makes a direct and specific request for accommodation. Students are obligated to follow well-established and publicized institutional procedures for obtaining an accommodation. The duty to provide an accommodation does not arise until documentation is provided that (1) establishes that the student has a disability and (2) supports the need of the accommodation(s) requested and/or includes sufficient information to permit determination regarding the appropriate accommodation(s). Ultimately, the choice of accommodation is within the discretion of

the institution. While individual preference should be respected if possible, the institution may choose an alternative that is equally effective (Crews, 1995).

An individual assessment of the skills, abilities, and needs of the student must be conducted and consideration be given to both the accommodation requested and any possible alternatives. All steps necessary to provide the student with meaningful access to an opportunity to participate must be taken. Detailed written documentation must be provided to support decisions that result in a student being denied access, opportunities, or benefits. This documentation should include proof of any asserted adverse programmatic impact. The student's ultimate success or failure in his/her endeavors is not the primary determinant in assessing whether the institution has made a good faith effort (Crews, 1995).

In reviewing all the rights and responsibilities given to both the ILD students and the educational institutions, it is clear that the legal responsibility of providing reasonable accommodations for ILD students lies with the educational institution (Scott, 1991). The compliance process must involve top-level administration, and administrators should foster a climate of cooperation among faculty, service providers, and students. The faculty should be provided with substantive training as well as written guidelines that clearly advise both faculty and students of their rights and responsibilities under the laws regarding ILD students. Unilateral decision-making regarding the delivery of services to students should be eliminated. An effective monitoring system must be developed (Crews, 1995).

It is the student's responsibility to seek assistance when needed. Typically, students are encouraged to seek accommodation(s) early in the semester (Scott, 1991). Siperstein (1988) states that, while it is appropriate for students to have the major responsibility for locating resources and opportunities for academic assistance, the college staff should have the major responsibility for disseminating this information and coordinating these resources. Attaining an accommodation is a two-way street (Scott, 1991).

Definition of Learning Disabilities

According to Manganello (1992), *learning disabilities* is a general term that refers to a heterogeneous group of disorders manifested by significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning, or mathematical abilities. Often, when learning disorders appear, behavioral problems also surface. These difficulties can affect academic performance, interpersonal relationships, and self-esteem. According to McEven (1990), a *learning disability* is an invisible handicap that affects approximately 10% to 15% of the United States population. Further, learning disabilities are often misdiagnosed or misinterpreted. Many of these disabilities were not recognized by the medical and the educational profession until recent years (Kerka, 1998). In contrast to the definition of the term *learning disabled*, the term *invisible handicap* is much more accurate in describing the inability of a student to learn in an academically standardized environment (McEven, 1990).

Recent reports from the Higher Education Research Institute show that 15% of freshmen enter college as self-identified learning disabled (Greenberg, 2000). Evidence

suggests that many ILD students have problems with self-esteem and general emotional-social functioning (Saracoglu, Minden, & Wilchesky, 1989). Years ago, researchers thought that many psychosocial problems were the result of learning disabilities. More recent research indicates that many ILD students suffer from social and psychological problems, confirming this speculation (Manganello, 1992).

There are several reasons why many ILD students suffer with psychological disorders, such as pragmatic language disorder, social skills deficit, and/or nonverbal learning disability. *Pragmatic language disorder* refers to the way in which language changes with the situation or the communication partner. Signs of a student with this type of disorder may be abrupt shifting in topic when talking, difficulty with turn-taking during conversation, provision of inappropriate responses, and use of inappropriate speech and style. *Social skills deficit* has not been recognized as a learning disability because the nature of this problem would create an immeasurable increase in the number of those diagnosed as learning disabled. ILD students with social skills deficit exhibit problems such as failure to read and interpret nonverbal cues, proxemics, artifacts, and prosody; difficulty with the interpretation of figurative and idiomatic language; trouble with interpreting jokes, puns, and double entendres; and difficulty with facial expressions. *Nonverbal learning disabilities* are language-based learning disabilities that affect the ILD student's spoken language, reading, and written expressive abilities. They often impose "the greatest tragedy of all human experience--social isolation" (Manganello, 1992, p. 70).

There are approximately 19 known learning disabilities and 4 related disabilities (refer to Appendix A). The known learning disabilities are: Abstract Reasoning, Arithmetic Deficit, Auditory Processing, Constructional Dyspraxia, Dyscalculia (math), Dysgraphia/Visuo-Graphic Disorder (writing), Dyslexia (reading), Language Comprehension, Long-Term Memory Deficit, Long-Term Retrieval, Processing Speed, Reading Deficit, Reasoning Deficit, Short-Term Memory Deficit, Short-Term Retrieval, Spatial Organization, Spelling Dyspraxia, Visual Processing, and Writing Deficit. The related deficits are: Attention Deficit, Hyperactivity, Hypoactivity, and Social and Study Skills. The ADA requires that all students diagnosed with a learning disorder be given accommodation to assist them in performing basic academic tasks (Rapp, 1995).

Needs of Identified Learning Disabled Students

Studies have shown that the enrollment of ILD students has grown consistently with the implementation of Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 (Arries, 1994; Morris & Leuenberger, 1990; Rogan, 1987; Scott, 1991; Siperstein, 1988; Slate, Frost, & Cross, 1991). Therefore, college officials have developed an increasing number of support programs in response to this influx (Nelson, Dodd, & Smith, 1990). Learning disabilities vary from person to person (Manganello, 1992). However,

with greater numbers of students with learning disabilities enrolling in postsecondary institutions and the growing concerns for their academic success, very few institutions are systematically monitoring these students' academic performance or graduation and attrition rates. (Vogel & Adelman, 1992, p.430)

Vogel and Adelman (1992) state that ILD students enter college with significantly poorer academic preparation and grade-point averages. To provide services to college students with learning disabilities in a reliable and valid manner requires proper identification of such persons (Slate et al., 1991). Thus, each case should be reviewed on an individual basis. Case-by-case decisions ensure that each student will be handled based on individual need (Crews, 1995).

Low school achievement among students with learning disabilities represents a major focus of learning disability research (Gettinger, 1992). With the enrollment of ILD students continually growing, this population is now facing transition issues inherent in the responsibilities of college life (Scott, 1991). This means that, if ILD students are going to be successful in making the transition from high school to college and eventually from college to career, they are going to need assistance with adapting to each new educational environment (Siperstein, 1988). Vogel and Adelman (1992) suggest that students planning to attend college visit college campuses in advance and talk firsthand with first-year ILD students about the rigorous demands of college. Issues surrounding this transition concern the premise that many ILD students lack the social and the study skills needed for such a change.

Study strategies or methods are self-directed procedures (Hoover, 1989). Skinner and Schenck (1992) contend that students who experience success in postsecondary education tend to organize for learning. According to Wren, Williams, and Kovitz (1987), ILD students often suffer from poor organizational skills. Dexter (1982) purports that ILD students who receive services of resource programs most

likely have been given help in developing good study skills, such as organizing their time, setting priorities, and finding an environment conducive to studying. ILD students may need to practice these skills in a variety of settings. Rogan (1987) states that it is imperative that ILD students identify or have their disability diagnosed and determine what the best strategy is based on individuality since disabilities vary from person to person. Some individuals may evidence a combination of learning disabilities, a situation which requires careful assessment and appropriate accommodations.

Individual needs and abilities must be considered as disability-specific strategies are selected and used by an ILD student (Hoover, 1989; Rogan, 1987). It is understandable that college programs serving the growing number of college students identified as having a learning disability have emphasized note-taking as a means to enhance these students' ability to obtain information presented through lecture (Ruhl & Suritsky, 1995). Roth, Spekman, and Fye (1995) state that, in the extensive use of narrative form in educational settings, it is important that students be able to comprehend extended units of text as well as to produce them.

Provision of Accommodations and Services for

Identified Learning Disabled Students

Gettinger (1992) states that learning is a function of the ratio of two time variables: (1) the amount of time a learner is engaged in learning a task, determined by both allocated learning time and learning perseverance, and (2) the amount of time the student actually needs to learn the task. By assessing language-based academic skills at

the postsecondary level and providing appropriate academic support as a follow-up, service providers can better equip young adults for transitioning into settings outside the educational realm (Morris & Leuenberger, 1990).

Wren et al. (1987) examined organizational accommodations for individuals based on a study of three students with learning disabilities. One strategy, used for a student whose learning disability primarily involved nonverbal areas of time, was management. The faculty involvement allowed the student to make up an exam missed because of confusion about the room and the test date. Wren et al. promoted self-monitoring skills through repetitive task performance for one ILD student's perceptual deficits, which proved to be successful. Correspondingly, repetitive task performance was confirmed to be successful with an ILD student who had trouble recognizing complex relationships of ideas and philosophical structures. Vogel and Adelman (1992) contend that learning strategies for students with learning disabilities can also be beneficial to other at-risk students.

To be in compliance with federal statutes, Nelson et al. (1990) suggest that postsecondary programs for ILD students include

- (a) personal or social, academic or program, or career or vocational counseling;
- (b) instructional accommodations provided by the institution or by individual facility; and (c) administrative accommodations. (p. 185)

Personal or social accommodations would include allowing the student to use a manipulative tool (e.g., calculator) to better understand a given concept. An example of instructional accommodations would be providing a student with a list of instructions.

Administrative accommodations could include allowing a student to bring fact sheets or so-called “cheat sheets” to use on a test or giving an oral as opposed to a written test.

Nelson et al. state that a comprehensive program to accommodate students with learning disabilities should include assessment procedures to identify and evaluate the individual needs of the student, special admission policies, a variety of support services, and faculty who are trained and informed about the needs of students.

Faculty roles in the delivery of accommodations are critical (Nelson et al., 1990). The willingness of faculty to provide instructional accommodations is a crucial factor. Crews (1995) states that faculty resistance to providing accommodations can be eliminated by clearly defining faculty responsibility to provide reasonable accommodations as defined by the institution in faculty handbooks and by effective training regarding accommodations for disabled students. According to Nelson et al. (1990), most faculty members are willing to provide ILD students with instructional accommodations (e.g., tape-recorded lectures, copies of lecture notes, alternative assignments, and special testing procedures).

Individual college faculty members rarely have adequate information about how to assist the learning disabled student. Informational brochures, departmental seminars, and faculty orientation sessions are excellent opportunities for educating faculty members about appropriate accommodations. (Haehl, 1989, p. 147)

Postsecondary institutions have the responsibility to provide structured services (Crews, 1995). These should include, but not be limited to, study skills programs (Hoover,

1989) and competent educational personnel (Norlander et al., 1990). Further, researchers have noted the importance of providing programs and not “totally barrier-free” environments for ILD students (West et al., 1993). West et al. (1993) suggest that ILD students be provided with the opportunity to participate in programs that do not hinder the students from significant performance. While stating that blanket accommodations should always be avoided, Rapp (1995) gives examples of instructional note-taking, testing, and technological accommodations. Instructional accommodations include teaching additional strategies for relating new information to already existing knowledge. Note-taking accommodations include allowing a student to tape-record a lecture. Testing accommodations include providing the student extended time for testing or assignments. Technological accommodations include allowing the student access to a word processor or a computer equipped with adaptive technology such as software that provides audio as well as written instructions.

Over the years, students with severe learning disabilities and physical challenges have been protected from the reality of living as independent and productive citizens in the real world and have often been victimized in society. In recent years, educators have searched for new ways to teach these students basic academic and survival skills (Holzberg, 1994). Saks (1992) points out that technology has the potential to play a beneficial role in the education of ILD students. For example, computerization can simplify many tasks for ILD students by providing reiterative structure and design related to learning tasks. Holzberg (1994) states that computer applications should include antivictimization training (critical thinking and problem-solving), writing, self-

expression, and improvement of communication skills. Audio and/or video information transmission may be more adept than the printed word in conveying ideas to ILD students. Faculty, for instance, may find that they must use two or more approaches in presenting their subject to accommodate ILD students (Saks, 1992).

[T]aping tests, dictating written reports, and using other technical equipment such as electronic calculators, word processors, and so forth . . . can help the [ILD] student gain access to information and solve problems at a level that is competitive with students without learning disabilities in similar learning situations. (Siperstein, 1988, p. 434)

Integrated services to include the handicapped in technological advancement are growing (Saks, 1992).

Representative Sample Programs and Services

In reviewing the literature, several examples of current programs and/or services were found. For example, in an effort to establish a support program for ILD students, a course was designed to teach self-advocacy and study strategies to incoming students with learning disabilities at Onondaga Community College in Syracuse, New York. The course was a three-day workshop conducted before the fall semester began. The ILD students met individually throughout the semester with a learning specialist. Funds from the state paid the instructors, and the students received credit for the course. Though concerns regarding mainstreaming arose, the course's initial intention was to facilitate mainstreaming and not separation. The course also gave the instructors an

opportunity to observe the ILD students in an academic environment faced with tasks found in regular academic courses (Bellen, Knight, & Starkweather, 1993).

Practical considerations were given to getting the students enrolled. During the registration process, the students were seen several times and interviewed by service providers. The parents were allowed to attend the initial meeting. Many of the ILD students chose to take placement tests with accommodations such as extended test time. The students were given an overview of the course and assignments and the dates and times. It was illegal to mandate enrollment in the course. However, students were strongly urged to enroll. Students currently enrolled in the college were also invited to join the class. The class limits were set at 20 students per session. Three instructors taught the class using team-teaching methods. Reading, writing, and learning disability instruction experience was desired of the instructors. It was vital for the three instructors to have detailed knowledge of the course. All the ILD students' work was collected and used for assessing how well the students could perform academically. After taking the course, the ILD students better understood learning disabilities, self-advocacy, and study strategies. The three learning specialists working with the students better understood the special needs of the individual students in the class (Bellen et al., 1993).

At Dowling College in Oakdale, New York, a program was established to serve two purposes. One was to give accommodations to "potentially gifted" ILD students and the other was to give graduate students majoring in education an indepth experience with ILD students. In establishing the program, tests were given to ILD students to

determine the extent of their disability. Defining whether or not the ILD students were potentially gifted, however, was a little more difficult. Committees of faculty were established to examine the applications of the students and review pertinent information in their decisions. Since the intelligence quotient of ILD students is often depressed because of processing problems and/or language deficits, a battery of tests was given to the students. Other things considered by the committee were psycho-educational testing results, high-school transcripts, letters of recommendation, student/parent information, and interviews with the ILD students and their parents. Acceptance into the program was limited (Stracher, 1993).

Upon acceptance for the Dowling program, an ILD student was assigned a tutor (graduate student). The student and the tutor met twice weekly for one hour under the supervision of the director of the ILD program. After each tutorial, the graduate tutor and the student reviewed the success and/or the problems associated with specific strategies the ILD student used that week. The ILD student was also given various tests as a baseline from which to measure each succeeding semester's progress. As the students progressed in the program, they increased their ability to organize, read, and study more effectively and more efficiently; expanded their knowledge base; enriched their vocabulary; and became more fluent writers. The ILD students also matured to greater use of higher level reasoning by translating thought into lucid prose and were able to identify major themes and their subordinate concepts (Stracher, 1993).

The graduate tutors used a list of academic tasks as a guide. The tutors and the tutees decided which were to be emphasized and when. The list had six major areas

outlined: (1) organization, (2) reading and writing, (3) identification of paragraph structure, (4) identification of syntactic uses, (5) learning multi-meanings of words, and (6) revising, editing, and proofreading written material. Each of these topics was divided into specialized areas (Stracher, 1993).

Understanding that most ILD students enter college as concrete thinkers, the Dowling program initially delineated specific steps to help the students develop metacognitively. The first step in writing was to encourage the ILD students to think before they wrote. To help the students' comprehension of this concept, the students spent four-fifths of their time in the pre-writing mode. This provided the students with a concrete model for organizing writing time. The pre-writing stage included selection of the theme; brainstorming for thoughts that, on first glance, appeared related to the topic; categorizing and chunking these diverse aspects into larger, related units; outlining the intended text; and writing the first sentence for each paragraph. Overall, the program provided the ILD students with strategies to achieve their cognitive potential. The graduate level education students (tutors) were given the opportunity to continuously assess the metacognitive growth of the students with learning disabilities. In addition, the tutors and the ILD students developed refined learning strategies structured for the individual student. At the end of each semester, the tutors formally assessed the progress of their ILD students. It was the long-term goal of the program to encourage both populations served by the program to become disseminators of the delivery system (Stracher, 1993).

Collaborative learning involves organizing students into small groups that study together and assist one another. The less capable students are helped by the more capable ones. The instructor acts as facilitator and coordinator of the group. The five essential elements of small-group learning which must be present are: (1) clear, positive interdependence among students, (2) regular group self-evaluation, (3) interpersonal behaviors that promote each member's learning and success, (4) individual accountability and personal responsibility, and (5) frequent use of appropriate interpersonal and small group social skills (Foote, 1997).

In their study, McGuire and O'Donnell (1989) focused on a small diverse junior college that prepared students to transfer to a four-year college. The college had developed collaboration between faculty and support services. The support services department was funded by a federal grant from the Office of Special Education and Rehabilitation Services of the Department of Education and eventually became institutionalized. An ad hoc committee was formed to examine the demanding curriculum of college and the seriousness of the setting for ILD students. The committee found that most college courses require concentrated listening, note-taking, long-range planning, and time-management skills. Students are often asked to use outside materials and references as assigned. Testing is less frequent than in high school and memorizing material is a must. Given the difficult situation for ILD students, efforts were made to address three areas: (1) organizational strategies, (2) note-taking skills, and (3) test-taking strategies.

Under organizational strategies, the faculty gave ILD students detailed outlines in their respective courses that gave the students instant information. The outline included the course title, the instructor's name, the text(s), the general objectives, the focus points, and the evaluation criteria. The layout of the syllabus was also very important. Focusing on the key elements of the course was imperative. Office hours, location, and telephone number and faculty and teaching assignments were included. The faculty gave supportive class handouts (seminars and tutoring information) periodically throughout the semester. This detailed information was reinforced by support services. Cooperation between faculty and support services staff significantly enhanced the process for ILD students (McGuire & O'Donnell, 1989).

Addressing note-taking skills was slightly different from addressing faculty support services.. RA Section 504 specifies that adjustments must be made to assist students with handicaps and learning disabilities. This section was applicable to the many ILD students who found it difficult to take notes because of memory deficits. To meet this need, many of these students were permitted to use tape recorders in class and make notes while reviewing the tapes. Printed materials were offered to the students both in class and via support services, which provided a hard copy summary of lectures. Providing the students with these handouts also opened the door for students to ask questions and gave instructors the opportunity for feedback (McGuire & O'Donnell, 1989).

Finally, test-taking strategies were addressed. ILD students were allowed additional time to achieve comprehension of materials without being penalized. Along

with extended time, the students were provided with readers or oral tests as needed. Arrangements for these services were made several days in advance, thus allowing the ILD students time to prepare for tests. Test formats included multiple choice, true/false, short-answer, and essay questions (McGuire & O'Donnell, 1989).

While the scope of this investigator's study precluded investigation of team-teaching and collaborative teaching efforts, these methods are nevertheless interesting interventions to consider in the education of ILD students. Deming, Olson, and Valeri-Gold (1992) found that a cooperative relationship between faculty and support services through team-teaching offers numerous advantages. Students with disabilities are given an opportunity to succeed and faculty become strong facilitators of learning to ILD students by interacting with each other on behalf of the ILD students. Further, team-teaching courses combining reading and writing can reduce the repetition of similar concepts found in reading, writing, and study skills courses. According to Deming et al., studies have shown that courses in communicative arts and content area subjects combined with study skills courses are effective at the college level. These studies have also shown that combining courses and team-teaching can improve and strengthen reading and writing skills and enhance the use of textbooks and other materials. Combining courses and team-teaching can establish a holistic approach to learning.

Deming et al. (1992) recommend that instruments such as surveys, interviews, analysis of writing samples, and audio- and videotaping be used to gather information and to enhance the team-teaching approach. The authors found that, in one instance of applying these instruments, the students' reading scores improved only slightly but a

significant improvement was reflected in the writing and the composition scores of the students after one semester. Another advantage of team teaching is individualization of instruction with the collaboration of academic support services. Team-teaching can also affect intellectual, social, and personal development of the high-risk learner. "Students who are successfully negotiating the challenges of college are themselves the best originators of ideas to assist staff, faculty, and their fellow disabled students" (Siperstein, 1988, p. 433).

Deming et al. (1992) believe that through team-teaching instructors can create a course combining content area and study skills. Assignments can be adapted to each specific study skill. Students can use a combination of study skills and techniques to enhance their knowledge of content material. Looking to the future, Deming et al. contend that developmental writing and reading courses could be combined to create a whole language program. In this type of program, the focus of the course might be reading, writing, and thinking skills using literary genres such as essays, short stories, poetry, and samples of students' writing. The course could be organized on several different themes. Collaboration could also be encouraged through the use of peer writing groups in which students helped to evaluate each other. Finally, a team-teaching course could help students see the relationship between and the similarities of writing and reading.

There is still much research to be done on team and collaborative teaching. Current evidence from recent studies shows overwhelmingly positive results with team-teaching (Foote, 1997). Developmental educators could use these studies to analyze the

Summary

This chapter provided a general idea of accommodations and programs for students with learning disabilities in the postsecondary educational environment. The primary focus of the literature was on accommodations provided in community colleges. While documentation specifically focused on community colleges was limited, six aspects of support services were examined: (1) laws; (2) rights and responsibilities of institutions, faculties, and students; (3) definition of learning disabilities; (4) various needs of ILD students; (5) accommodations and services provided for identified ILD students, and (6) sample programs and services. Chapter III presents the methodology used in carrying out the study and the design and analysis of study findings.

CHAPTER III

METHODS

The purpose of this study was to determine the types of accommodations Texas community colleges offer students with learning disabilities. The research questions used for the study were chosen to provide teachers, students with learning disabilities, and others affiliated with the provision of accommodations with information as to what Texas community colleges provide for these students. A pilot survey was sent to five community colleges and two universities in Texas to determine the clarity and the validity of questions and the appropriateness of the survey format.

Subjects

At the time this study was conducted, there were 77 community colleges registered with the Texas Higher Education Coordinating Board, a list of which was obtained by the investigator from the THECB office in Austin. Two of these institutions were technical extension campuses within districts and were thus ineligible for use in this survey project. Five of these campuses along with two universities were used as part of the pilot study. The remaining 70 community college campuses were surveyed in the study to determine the type of accommodations/programs available for students with learning disabilities.

Instrument

Since there was no survey available for adaptation, the instrument used to survey the campuses was developed by the investigator (see Appendix B). Composition of the instrument was based on an extensive literature search and interviews with learning specialists and service providers to determine which questions would yield the most relevant information. The literature search included examination of reports on accommodations used and support programs provided (Barrett, 1977; Cordoni, 1982; Elmont, 1977; Hodge & Preston-Sabin, 1997a, 1977b; Ostertag, Baker, Howard, & Best, 1982; Rapp, 1995), such as organization, time management, and study skills courses.

Following directions offered by Salant and Dillman (1994), the survey was divided into four sections: (1) General Information, (2) Administrative Support and Services, (3) Faculty Support, and (4) two checklists, one for accommodations and the other for programs. The first three sections were designed to elicit information in answer to the research questions. The fourth section was designed to learn what specific programs and services were offered. Following completion of the survey, it was submitted for peer review and utilized in a pilot study, as stated above.

To verify reliability, the researcher administered a second survey to four of the initial seven pilot campuses (community colleges only) and interviewed three trained personnel from each of these community college campuses. The personnel included directors of student services and faculty members. Two of the directors held doctorate degrees, one was in the process of obtaining a doctoral degree, and the fourth held a

master's degree. Of the faculty, four held master's degrees and two held doctoral degrees and one had published articles on providing accommodations for students with learning disabilities. Faculty members from each campus were chosen from two content area fields, one from math and one from English. The researcher also considered longevity of employment with the college when the faculty members were chosen.

The survey was simultaneously coded by the researcher and rated for reliability. Each respondent had to demonstrate average reliability scores of 95% (correlation of first response to second response). The average response was 96%. Reliability for each response was checked twice after the initial reliability assessment. The averages were 97% on the second reliability assessment and 98% on the third.

To determine construct validity, the interviews were first compared with responses from directors from each campus. Secondly, faculty-to-faculty responses were compared, and, finally, director to director responses were compared.

Each faculty member was aware of the presence of students with learning disabilities on his or her campus, and each had a basic working knowledge of the rights and responsibilities of both faculty and students. While some of the faculty did not have students with learning disabilities enrolled in their current courses, the majority of the faculty did display a working knowledge of laws, rights, and responsibilities from the institutional perspective.

Correspondingly, the directors' responses revealed that all of the directors had a working knowledge of the laws, rights, and responsibilities of students, faculty, and

institution. All four directors supported the validity of the questions, excluding concern with redundancy in two questions and minor word changes in seven others. Both faculty and directors shared the same responses as to how faculty was informed of the presence of students with learning disabilities and the rights of both faculty and students.

All of the respondents acknowledged that the questions and checklist should evoke valuable information for the study. They offered suggestions for future research and expansion in the acquisition of information in the areas of faculty involvement and evaluation methods, such as student responses to services provided and student feedback on ways to improve services.

Procedures

The procedures utilized in carrying out this study consisted of the following:

- A review of the literature available was conducted to determine what types of questions would be most content-relevant, as discussed in Chapter II.
- A pilot survey was mailed to five local community college campuses and two local university campuses with populations similar to the study subjects to determine the clarity and the validity of the survey questions. The pilot was successful, confirming the appropriateness of the survey; thus only minor nonsubstantive changes were required.
- A qualified contact person, such as the learning specialist or a counselor, was established for each campus via telephone to request permission to survey and to verify verbal communication.

- A letter of notification (see Appendix C) was then sent to that contact person as a written formal request for consent to participate in being surveyed.
- A second letter of notification (see Appendix D) was sent, accompanied by the actual survey, along with a reminder of a 20-day deadline to complete the survey.
- A follow-up telephone call was made approximately 10 days after the survey was mailed to answer any questions and concerns regarding the survey.
- The surveys were collected and the results analyzed based upon receipt of the completed surveys.
- The results were documented via descriptive analysis.

Design and Analysis

Survey items were reported using descriptive statistics. Each question was analyzed and the results reported based on number and percentage of responses to each particular item. Sixteen multiple-answer questions offered Other as a choice, but the respondents were not asked to specify what Other was. As a consequence, the Other responses were reported and analyzed by giving the total responses and then designating the number of those responses that did or did not specify the other means used: All responses are reported in tabular form giving number and percentage as they related to the total number of respondents.

Summary

This chapter discussed the respondents included in the study, the creation of an instrument, and the design and analysis of the study. Seventy Texas community

colleges were surveyed using an investigator-designed questionnaire. Procedures involved establishing a contact person in each community college to whom the questionnaire could be mailed. Data were analyzed using descriptive statistics. The following chapter presents the results obtained through the methods described in this chapter.

CHAPTER IV

FINDINGS

Of the 70 surveys mailed out, 46 were returned. The surveys for the study were analyzed in an attempt to examine what accommodations and/or services were being provided for identified learning disabled students in the Texas junior and community colleges responding. The responses are reported in tabular and text format below based on the four sections of the survey: (1) General Information; (2) Administrative Support and Services; (3) Faculty Support; and (4) Accommodations Checklist and Programs Checklist.

General Information

The General Information section of the survey contained 16 questions that primarily asked the designated respondent on each campus to report general information pertaining to the provision of accommodations and/or services for students with identified learning disabilities. The first question of the survey asked respondents to report whether or not their campus had students with identified learning disabilities enrolled. All six respondents, or 100%, reported the enrollment of students with learning disabilities. See Table 1.

Questions 2 and 3 asked for all applicable responses; thus percentages do not equal 100%.. Question 2 asked how students with learning disabilities were identified. Thirty-six, or nearly 80%, of the 46 respondents reported the use of self-referral,

Table 1**Campus Enrollment of Students with Learning Disabilities, 1996-1997**

<u>N</u> = 46	<u>n</u>	<u>%</u>
No	0	0
Yes	46	100

meaning that students came into the appropriate office and sought accommodations independently. The second most frequent method of identifying students with learning disabilities, with 27 (almost 60%) of the responses, was faculty referral. Thirty-six percent ($n = 17$) reported the use of testing to identify students with learning disabilities. Nine (19.6%) respondents selected Other; 6 specified the other means used. See Table 2.

Question 3 asked respondents to report how gifted and talented students with learning disabilities were identified. Approximately half of the 33 respondents to this item, that is, 17 (37.0%), reported the use of self-referral by students. This was followed by 12 (36.3%) respondents reporting the use of faculty referrals and 10 (30.3%) reporting the use of testing. Five respondents responded Other, with 3 designating other methods used. See Table 3.

Question 4 asked respondents with identified gifted and talented ILD students to report whether or not they offered special programs for these students. Seven (17.5%) respondents stated that special programs were available while 33 (82.7%) respondents replied that they did not have special programs. See Table 4.

Question 5 asked respondents to report whether or not they provided accommodations for ILD students enrolled in technical and/or allied health programs. Nearly all respondents, that is, 45 (97.8%), reported the provision of accommodations for ILD students in technical and/or allied health programs. See Table 5.

Table 2**Methods Used to Identify Students with Learning Disabilities**

	<u>N</u> = 46	<u>n</u>	<u>%</u>
Self-referral		36	78.3
Faculty referral		27	58.7
Testing		17	36.0
Other		9	19.6 [100.0]
Unspecified		3	[33.3]
Specified		6	[66.7]
TRC		2	
High school information		2	
Special admissions		1	
TRC, MHMRA, and TCBHH		1	
Public school information		1	

TRC = Texas Rehabilitation Commission

MHMRA = Mental Health/Mental Retardation Authority

TCBHH = This is evidently a personal acronym used by the respondent, who is no longer available, and could not be identified by the investigator.

Table 3**Methods Used to Identify Gifted ILD Students**

<u>N</u> = 33	<u>n</u>	<u>%</u>
Self-Referral	17	37.0
Faculty Referral	12	36.3
Testing	10	30.3
Other	5	15.2 [100.0]
Unspecified	2	[40.0]
Specified	3	[60.0]
High school information	2	
Referral agency	1	

ILD = Identified learning disabled

Table 4**Programs Provided for ILD Students**

<u>N</u> = 40	<u>n</u>	<u>%</u>
No	33	82.7
Yes	7	17.5

ILD = Identified learning disabled

Table 5**Accommodations Provided for ILD Students Enrolled in Technical Programs**

<u>N</u> = 46	<u>n</u>	<u>%</u>
Yes	45	97.8
No	1	2.2

ILD = Identified learning disabled

Question 6 asked if respondents provided counseling or access to support groups for ILD students with social problems. The vast majority, 39 (84.8%) respondents, reported that they provided counseling. See Table 6.

Question 7 asked if campuses provided counseling or support for ILD students with drug or alcohol abuse problems. While the majority, 36 (78.3%), did provide counseling, 10 (21.7%) did not. See Table 7.

It should be noted that questions 8, 10, 12, and 13 requested all applicable responses. Therefore, since respondents checked more than one item, percentages did not equal 100. Question 8 asked respondents to report how students with learning disabilities were informed about the programs and accommodations available for student use. To inform students of available programs and services, 37 institutions (80.4%) provided information in the school catalog, 32 (69.6%) gave information during student orientation, 28 (60.9%) used on-campus notices, 23 (50.0%) gave out this information at the time of admission, 23 (50.0%) provided information on the school Web page, 21 (45.7%) offered outreach programs, 10 (21.7%) used other means such as learning disabilities counsel or special recruiter, and 3 (6.5%) utilized a survey. See Table 8.

Question 9 asked respondents to report when students with learning disabilities could seek the services offered. Forty respondents answered this question. Twenty-five (62.5%) respondents reported that students were able to seek services both before and after admission, 12 (30.0%) specified other time frames than those listed on the survey, 8 (20.0%) reported that students were expected to seek information prior to admission,

Table 6

Counseling or Access to Support Groups Provided for ILD Students with Social Problems

<u>N</u> = 46	<u>N</u>	<u>%</u>
Yes	39	84.8
No	7	15.2

ILD = Identified learning disabled

Table 7

Counseling or Access to Support Groups Provided for ILD Students with Substance Abuse Problems

<u>N</u> = 46	<u>n</u>	<u>%</u>
Yes	36	78.3
No	10	21.7

ILD = Identified learning disabled

Table 8**Methods Used to Inform ILD Students of Available Accommodations**

<u>N</u> = 46	<u>n</u>	<u>%</u>
Catalog	37	80.4
Orientation	32	69.6
On-campus notices	28	60.9
Admission	23	50.0
Web page	23	50.0
Outreach programs	21	45.7
Other	10	21.7
Learning disabilities counselor	1	
Special recruiter	1	
High school	1	
Individual Teacher Plan meeting	1	
Continuing education schedule	1	
Individual counseling	1	
Brochures	1	
Registration information form	1	
Testing referral	1	
Students of organization	1	
Survey	3	6.5

ILD = Identified learning disabled

and 5 (12.5%) reported that students were to seek information after admission. See Table 9.

Question 10 asked respondents to designate the initiator of the provision of accommodations for ILD students. The most frequently reported method of initiating the provision of accommodations was student requests (73.9%, $n = 34$). Nineteen (41.3%) respondents named Other when designating the initiator of the provision of accommodations for ILD student, of which 2 means were unspecified and 17 were specified. High-school counselors and learning specialists initiated services about equally, 28.3% ($n = 13$) and 26.1% ($n = 12$), respectively. See Table 10.

Question 11 asked respondents to report whether or not students with learning disabilities were required to be tested by the college. Twenty-four (53.3%) respondents reported that students with learning disabilities were tested, and 21 (46.7%) reported that students with learning disabilities were not tested. See Table 11.

Question 12 asked respondents where testing to identify learning disabilities was conducted. Thirty-three (73.3%) reported that students were sent to the Texas Rehabilitation Commission for testing. Sixteen (35.6%) reported on-campus testing. and 16 (35.6%) reported that students were tested in other places, including in high schools and by private physicians (psychologists, pediatricians). See Table 12.

Question 13 asked respondents to report where on-campus testing was conducted. Six (50.0%) respondents reported testing was conducted in the office for ILD students. Five (41.7%) stated that testing was conducted in the office for students

Table 9**Time Frame Specified for ILD Students to Seek Services**

	<u>N</u> = 40	<u>n</u>	<u>%</u>
Both prior to and after admission		25	62.5
Other		12	30.0
Not required		5	
Anytime		3	
Prior to provision of services		1	
When problems occur		1	
Within the first two weeks of class		1	
Faculty referral		1	
Prior to admission		8	20.0
After admission		5	12.5

ILD = Identified learning disabled

Table 10

Individual Initiating Provision of Accommodations for ILD Students

	<u>N=46</u>	<u>n</u>	<u>%</u>
Student request		34	73.9
Other		19	41.3 [100.0]
Unspecified		2	[10.5]
Specified		17	[89.5]
Counselor		7	
TRC		3	
Parents		2	
Faculty or counselor		2	
Referral agency		1	
Special population counselor		1	
Coordinator of Special Services		1	
Administrative referral		1	
TCB and JTPA		1	
High school counselor		13	28.3
Learning specialist		12	26.1

ILD = Identified learning disabled

TRC = Texas Rehabilitation Commission

TCB = The College Board

JTPA = Job Training Partnership Act

Table 11**Testing for ILD Students**

<u>N</u> = 45	<u>n</u>	<u>%</u>
Yes	24	53.3
No	21	46.7

ILD = Identified learning disabled

Table 12**Location of Testing**

<u>N</u> = 45	<u>N</u>	<u>%</u>
Texas Rehabilitation Commission	33	73.3
On campus	16	35.6
Other	16	35.6 [100.0]
Unspecified	4	[18.7]
Specified	12	[81.3]
Referral	4	
High school diagnostician	2	
Private diagnostician	2	
High school documentation	1	
Student psychologist	1	
Private agency	1	
Private	1	

with disabilities or its equivalent; 4 (26.7%) designated a testing site other than those listed on the survey, and 2 (8.3%) conducted testing in the general academic support services office. See Table 13.

Question 14 asked respondents to report whether or not ILD students were required to present appropriate professional documentation of their learning disabilities. Forty-five (97.8%) respondents reported that students were required to present documentation identifying their learning disabilities while only 1 (2.2%) respondent reported that the college did not require such documentation. See Table 14.

Question 15 asked respondents if detailed campus-generated documentation was required if a student was denied accommodations and/or services. Of the 38 respondents answering this question, 26 (68.4%) stated that they required or provided detailed documentation when a student was denied accommodations and/or services. By contrast, 12 (31.6%) colleges did not require or provide detailed documentation. See Table 15.

Question 16 asked respondents to report how current professional-generated documentation of learning disabilities should be. Thirty (65.2%) reported that it should be three to five years old, 9 (19.6%) reported that documentation could be five or more years old, 5 (10.9%) reported that documentation should be one to two years old, and 1 specified less than one year. See Table 16.

Administrative Support and Services

This section of the survey contained 16 questions that asked each campus to report information on the responsibility of campus administration in the provision of

Table 13

On-Campus Location for Testing

<u>N</u> =15	<u>n</u>	<u>%</u>
Disabled student services	6	50.0
Counseling office	5	41.7
Other	6	26.7 [100.0]
Unspecified	2	[40.0]
Specified	4	[60.0]
Off campus	2	
Test center	2	
General academic support services	2	8.3

Table 14

Mandatory Documentation Identifying Learning Disabilities

<u>N</u> = 46	<u>n</u>	<u>%</u>
Yes	45	97.8
No	1	2.2

Table 15**Mandatory Documentation for Denial of Services**

<u>N</u> = 38	<u>n</u>	<u>%</u>
Yes	26	68.4
No	12	31.6

Table 16**Validation Time Limit of Documentation**

<u>N</u> = 45	<u>N</u>	<u>%</u>
Less than one year	1	2.2
One–two years	5	10.9
Three–five years	30	65.2
Five years or more	9	19.6

accommodations and/or services for students with identified learning disabilities. This section can be divided into three parts: (1) information on offices designated for disabled student use; (2) campus/committee involvement; and (3) regulations on accommodations and policies. It should be noted that four of the questions in this section were open-ended and five questions asked for all applicable responses. Therefore, the number (n) varies and the total percentages do not equal 100%.

Information on Offices Designated for ILD Student Assistance

Questions 17 to 20 deal with information regarding the identity, the structure, and the functions of offices designated for disabled students, staff, and service providers. Question 17 asked respondents to report whether or not there was a designated office or its equivalent for students with disabilities. Forty-one (89.1%) respondents reported a specific office for students with disabilities. Five (10.9%) reported no presence of an office designated for students with learning disabilities. See Table 17.

Questions 18 and 19 asked respondents for the specific title and number of full-time and part-time employees of the office responsible for providing services to ILD students. The answers varied. See Table 18. The number of full-time employees reported for question 19 ranged from 1 to 12 and the number of part-time employees ranged from 1 to 2. See Table 19.

Question 20 asked respondents to report which campus entity governed the office for students with disabilities at their campus. Of the offices serving ILD students,

Table 17**Office Dedicated to Providing Services for ILD Students**

<u>N</u> = 46	<u>n</u>	<u>%</u>
Yes	41	89.1
No	5	10.9

ILD = Identified learning disabled

Table 18**Special Services Office Titles and/or Equivalents (N = 41)**

Office Title/Equivalent	Number of Campuses Using Title
Accommodations at Collin County for Equal Support Services	1
Advisement Center	1
Assistant Dean of Student Development	1
Career Center	1
Coordinator of Support Services	1
Counseling	3
Counseling Office	1
Department of Special Support Services	1
Developmental Studies	2
Disabilities Services Office	1
Disability Accommodation Services	1
Disability Services	3
Disability Support Services	2
Disabled Student Services Counselor	1
Model Programs and Services to Students with Disabilities	1
Office of Disability Services	1
Office of Support	1
Offices for Special Services	1
Special Populations Counselor	1
Special Populations Office	4
Special Services	7
Student Center for Opportunities to Overcome Problems	3
Student Development	2
Student Services	1
Student Support Services	2

Table 19

Number, Range, and Average Full- and Part-Time Employees in Office**Responsible for Providing Services to ILD Students**

<u>N</u> = 37	Full Time		Part Time	
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
Eleven	1	29.7		
Ten	2	27.0		
Four	4	10.8		
Four	3	10.8		
Three	5	8.1		
Three			1	60.0
Two	7	5.4		
Two			2	40.0
One	12	2.7		
Range	1-12 employees		1-2 employees	
Average	6.5 employees		1.5 employees	

ILD = Identified learning disabled

17 (42.5%) reported to offices/officers other than those listed, such as the director of counseling; 16 (40.0%) reported to the vice-president of student affairs; 4 (10.0%) reported to an Americans with Disabilities Act coordinator; 3, to an outside agency; and 1, to the president of the college. Some respondents gave multiple answers and thus percentages do not equal 100. Of those responses designating Other, 2 did not specify the agent they utilized. See Table 20.

Campus Staff/Committee Involvement

Questions 21 to 24 addressed information in regard to staff members and advisory committees to assist the delivery of accommodations. Questions 21 and 24 received multiple answers so percentages do not equal 100. Question 21 asked respondents to identify the major role of the staff designated to work with ILD students. Twenty-two (53.7%) reported that director of services for ILD students was the office staff's major role. Sixteen (39.0%) responded that learning specialist/coordinator was the major role of the office staff, and 16 (39.0%) reported a function other than those listed as the major role of the office staff, including counselor, ADA coordinator, tutoring coordinator, and rehabilitation specialist. Again, multiple answers were given by some respondents. See Table 21.

Question 22 asked respondents to report how many staff members worked campus-wide with ILD students. The answers varied from 1 to 35. Twelve (26.1%) respondents reported that 1 person worked with ILD students campus-wide, 9 (19.6%) reported 2 workers campus-wide, 6 (13.0%) reported 4, and 5 (10.9%) reported that no campus-wide personnel worked specifically with ILD students. Four (10.8%)

Table 20

Office to Which Service Providers Report

	<u>N</u> = 40	<u>n</u>	<u>%</u>
Other		17	42.5 [100.0]
Unspecified		2	[11.8]
Specified		15	[88.2]
Director of counseling		4	
Dean		4	
Dean of students		3	
Counselor		2	
Dean of student employment		2	
Coordinator of contracts and grants		1	
Vice-president of student affairs		16	40.0
ADA coordinator		4	10.0
Outside agency		3	7.5
President		1	2.5

ADA = Americans with Disabilities Act

Table 21

Major Role of Service Providers

<u>N</u> = 41	<u>n</u>	<u>%</u>
Director	22	53.7
Learning specialist/coordinator	16	39.0
Other	16	39.0 [100.0]
Unspecified	4	[25.0]
Specified	12	[75.0]
Counselor	2	
Special needs counselor	1	
ADA coordinator	1	
Person who sets up accommodations	1	
Rehabilitation specialist/tutor	1	
Section for disabled student	1	
Tutoring coordinator	1	
Career department	1	
Accommodations specialist	1	
Lead counselor	1	
Assistant	1	

ADA = Americans with Disabilities Act

respondents stated that the number of campus-wide workers was unknown. Three (6.5%) campuses had 3 campus-wide workers, and 2 (4.3%) had 6 campus-wide workers. Four (2.2% each) respondents reported 35, 25, 12, and 9 campus-wide workers, respectively. See Table 22.

Question 23 asked the respondents to report whether or not there was an advisory committee overseeing the provision of accommodations for ILD students. Out of 41 responses to this question, 24 respondents (58.5%) did not report an existing advisory committee while 17 (41.5%) did report an existing advisory committee. See Table 23.

Question 24 asked respondents to report who was represented on the advisory committee. Nineteen respondents (41.3%) reported counselor; 15 (32.6%) reported administrator; 8 (17.4%) reported ILD student; 8 (17.4%) reported a functionary other than those listed, such as local agency or parents; 7 (15.2%) reported faculty member; and 4 (8.7%) reported learning disabilities specialist. See Table 24.

Regulations on Accommodations and Policies

Questions 25-32 dealt with information pertaining to the duration for which accommodations were provided and the presence/nonpresence of a published philosophy/policy on accommodations for disabled students. Questions 25, 26, and 31 asked for all applicable responses. Therefore, percentages for these questions did not equal 100.

Question 25 asked respondents to report how long accommodations and services were provided for ILD students. A majority of respondents, 33 (71.7%), reported

Table 22**Number of Personnel Designated to Work with ILD Students Campus-wide**

<u>N</u> = 46	<u>N</u>	<u>%</u>
One	12	26.1
Two	9	19.6
Four	6	13.0
None	5	10.9
Unknown	4	10.8
Three	3	6.5
Six	2	4.3
Thirty-five	1	2.2
Twenty-five	1	2.2
Twelve	1	2.2
Nine	1	2.2

ILD = Identified learning disabled

Table 23

Program Advisory Committee

<u>N</u> = 41	<u>n</u>	<u>%</u>
No	24	58.5
Yes	17	41.5

Table 24**Representation on Advisory Committee**

<u>N</u> = 46	<u>n</u>	<u>%</u>
Counselor	19	41.3
Administrator	15	32.6
Student with learning disability	8	17.4
Other	8	17.4
Local agency	1	
Special services for each district campus	1	
Counselor/TRC	1	
Advisor	1	
Parents	1	
Special needs student	1	
Area service provider	1	
Honorary members	1	
President, dean of humanities, and director of student services	1	
Faculty	7	15.2
Learning disabilities specialist	4	8.7

TRC = Texas Rehabilitation Commission

providing accommodations and/or services for periods other than those cited on the survey, to include the duration of ILD students' enrollment. Ten respondents (21.7%) reported that they provided accommodations and/or services for one semester while only three (6.5%) reported the provision of accommodations and/or services for one year. See Table 25.

Question 26 asked respondents to report how accommodations were monitored for effectiveness. Twenty-eight (65.1%) respondents reported the use of grade point averages, 22 (56.2%) reported that accommodations were monitored for effectiveness by student questionnaire, 21 (48.8%) reported using the frequency of use of services provided, 17 (39.5%) reported using graduation rates, 13 (30.2%) reported using attrition rates, and 8 (18.6%) reported using other methods, such as feedback from faculty and students and counseling sessions. See Table 26.

Question 27 asked respondents to report what percentages (based on 100% of ILD students enrolled) of ILD students transferred to four-year institutions. Twenty-eight (60.9%) reported that 36% or more of ILD students transferred to four-year institutions, 7 (15.2%) reported 0-10% of ILD students transferred, 5 (10.9%) reported 11%-25%, three (6.5%) reported 26%-35%, and three (6.5%) reported that ILD students were not tracked. See Table 27.

Question 28 asked respondents to report the number of ILD students served each academic year from 1992 to 1997. The answers varied with each respondent. For the academic year of 1992-1993, the number of students ranged from 3 to 200; for 1993-1994, the number ranged from 2 to 1,417; for 1994-1995, the number ranged from 3 to

Table 25

Length of Time Accommodations and/or Services Provided

	<u>N</u> = 46	<u>n</u>	<u>%</u>
Other		33	71.7 [100.0]
Unspecified		1	[3.6]
Specified		32	[96.4]
As long as needed		19	
All semesters enrolled		8	
Semester by semester		2	
By request		2	
Indefinitely		1	
One semester		10	21.7
One year		3	6.5

Table 26**Method for Monitoring Effectiveness of Accommodations and/or Services**

<u>N</u> = 43	<u>n</u>	<u>%</u>
Academic performance (GPA)	28	65.1
Student questionnaires	22	56.2
Frequency of use	21	48.8
Graduation	17	39.5
Attrition rate	13	30.2
Other	8	18.6
Student feedback	5	
Counseling session	1	
Midterm report	1	
Student/faculty feedback	1	

GPA = Grade point average

Table 27**Percentage of ILD Students Transferring to Four-Year Colleges/Universities**

<u>N</u> = 46	<u>n</u>	<u>%</u>
0-10%	7	15.2
11-25%	5	10.9
26-35%	3	6.5
36% or more	28	60.9
Not tracked	3	6.5

ILD = Identified learning disabled

1,677; for 1995-1996, the number ranged from 3 to 1,499; and, for 1996-1997, the number ranged from 3 to 1,796. See Table 28.

Question 29 asked respondents to report whether or not there was a published philosophy on the provision of accommodations for ILD students. Thirty-two (76.2%) respondents reported a published philosophy on the provision of accommodations. Ten (23.8%) campuses did not have a published philosophy. See Table 29.

Question 30 asked respondents to report whether or not there was a published set of policies on the provision of accommodations and/or services for ILD students. Thirty-six respondents (81.8%) affirmed the existence of published policies and 8 (18.2%) stated that there was no existing published set of policies. See Table 30.

Question 31 asked respondents who answered affirmatively to question 30 to report the source of published policies. Twenty-five (56.8%) respondents reported that their policies were outlined in the student handbook; 22 (50.0%) stated that their policies were published in the school catalog; 11 (25.0%) reported that their policies were outlined in the faculty handbook; 6 (16.7%) replied that their policies were published in other forms, such as a policy and procedures manual; 3 (8.3%) responded that their policies were posted on the school bulletin board; and 3 (8.3%) stated that their policies were publicized on the school's Web page. See Table 31.

Question 32 asked respondents if campus administration fostered a climate of cooperation among faculty, service providers, and students in the provision of services for ILD students. Forty-two (93.3%) reported affirmatively while only 3 (6.7%) reported negatively. See Table 32.

Table 28**Numerical Range of ILD Students Served within Last Five Academic Years**

Academic Year of Enrollment	Numerical Range of Students Served
1992-1993	3-200
1993-1994	2-1,417
1994-1995	3-1,677
1995-1996	3-1,499
1996-1997	3-1,796

ILD = Identified learning disabled

Table 29

Published Mission/Philosophy Statement

<u>N</u> = 42	<u>n</u>	<u>%</u>
Yes	32	76.2
No	10	23.8

Table 30

Program Guidelines of Published Set of Policies Followed

<u>N</u> =44	<u>n</u>	<u>%</u>
Yes	36	81.8
No	8	18.2

Table 31**Source of Policies**

	<u>N</u> = 36	<u>n</u>	<u>%</u>
Student handbook		25	69.4
School catalog		22	61.1
Faculty handbook		11	30.5
Other		6	16.7
Brochure		5	
Compliance with ADA		1	
Disabled student services guidebook		1	
Bulletin board		3	8.3
Web page		3	8.3

ADA = Americans with Disabilities Act

Table 32**Climate of Cooperation among Faculty, Service-Providers, and ILD Students****Fostered by Administration**

<u>N</u> = 45	<u>n</u>	<u>%</u>
Yes	42	93.3
No	3	6.7

ILD = Identified learning disabled

Faculty Support

This section of the survey contained three questions that asked each campus to report on methods used to inform and train faculty regarding their provision of accommodations and/or services for IDL students. These three questions asked for all applicable answers; thus, the percentages did not equal 100%.

Question 33 asked respondents to report the method used to inform faculty of their responsibilities in providing accommodations for ILD students. Twenty-five (54.3%) campus administrations provided information to the faculty during general in-services; 24 (52.2%) utilized other methods, such as memoranda concerning individual needs of students, to inform faculty of their responsibilities to provide accommodations to ILD students. Nineteen (41.3%) respondents reported using faculty handbooks, and 19 (41.3%) reported using special training sessions. See Table 33.

Question 34 asked respondents to report how faculty members were notified of individual ILD student needs. Thirty-one (67.4%) replied that they used notices hand-carried by the students, 19 (41.3%) reported using the mail, 16 (34.8%) stated that they made phone calls, and 11 indicated using other means, such as personal contact and student delivery. See Table 34.

Question 35 asked respondents to report how faculty members were trained regarding accommodating ILD students. Nineteen (41.3%) respondents provided information during departmental meetings, 16 (34.8%) reported using methods other than those listed on the survey, 14 (30.4%) reported the use of handbooks to inform faculty regarding how to provide accommodations for ILD students, and 12 (26.1%)

Table 33**Method Used to Notify Faculty of Responsibilities Regarding ILD Students**

<u>N</u> = 46	<u>n</u>	<u>%</u>
Faculty in-service	25	54.3
Other	24	52.2 [100.0]
Unspecified	5	[20.8]
Specified	19] 79.2]
Session after letter is issued	6	
Memorandum	4	
Accommodations form	4	
Faculty notification	2	
Referral	1	
Brochure	1	
ADA form	1	
Counselor	1	
Handbooks	19	41.3
Training sessions	19	41.3

ILD = Identified learning disabled

ADA = Americans with Disabilities Act

Table 34**Methods Used to Notify Faculty of Individual ILD Student Needs**

<u>N</u> = 46	<u>n</u>	<u>%</u>
Notice hand-carried by students	31	67.4
Mail	19	41.3
Telephone	16	34.8
Other	11	23.9 [100.0]
Unspecified	1	[9.1]
Specified	10	[90.9]
Personal contact	4	
Student delivery	1	
Accommodations form	1	
Student decides form of delivery	1	
Memorandum	1	
Faculty meeting	1	
E-mail	1	

ILD = Identified learning disabled

had faculty attend workshops. Of the 16 respondents who reported using training methods other than those listed on the survey, 7 (43.8%) did not specify what those other methods were. Of the 9 (56.3%) who specified the other training methods used, 2 (22.2%) reported using in-services; 2 (22.2%), personal contact; and 1 (11.1%) each, notices, special services counselor, high school, and campus guidelines. One (11.1%) reported that no training was required. See Table 35.

Accommodations and Programs Checklists

This section was composed of two parts. The first part, the Accommodations Checklist, asked the respondents to identify all the accommodations offered to ILD students. The second section, the Program Checklist, asked the respondents to identify all the programs offered to ILD students. For the purposes of this study, as stated above, *accommodations* was defined as supplemental assistance to ILD students to aid them in performing basic tasks, such as early registration, training of faculty, and provision of study aids such as tape-recorded lectures and note-takers. *Programs* was defined as structured and monitored instructional agenda/curricula such as study skills courses and tutoring services to support and track ILD students' academic performance (Rapp, 1995). It should be noted that this section asked for all applicable answers. Therefore, the percentages did not equal 100%.

For the Accommodations Checklist, all 46 respondents exhibited a 100% rate for the provision of academic counseling, career counseling, extended test times, and use of tape recorders. High percentages were shown for provision of the accommodations of note-takers ($\underline{n} = 44$; 95.7%); letters to faculty and personal counseling (both with $\underline{n} = 41$;

Table 35**Methods Used to Train Faculty on Providing Accommodation for ILD Students**

<u>N</u> = 46	<u>n</u>	<u>%</u>
Departmental meetings	19	41.3
Other	16	34.8 [100.0]
Unspecified	7	[43.8]
Specified:	9	[56.3]
Inservice	2	
Personal contact	2	
Notice	1	
Special services counselor	1	
High School	1	
Campus guidelines	1	
No training required	1	
Departmental meetings	19	41.3
Handbooks	14	30.4
Workshops	12	26.1

ILD = Identified learning disabled

89.1%); readers ($\underline{n} = 40$; 87.0%); copies of lecture notes ($\underline{n} = 33$; 71.7%); and early registration/priority scheduling, special/adaptive software, and training for faculty (all with $\underline{n} = 32$; 69.6%). Low rates were demonstrated for the accommodations of detailed syllabi/course outlines ($\underline{n} = 22$; 47.8%), personal support groups ($\underline{n} = 17$; 37.0%), career support groups ($\underline{n} = 18$; 28.3%), and academic support groups ($\underline{n} = 8$; 17.4%). Finally, six (13.0%) respondents noted the use of other accommodations, such as referral to outside agencies. See Table 36.

Results from the Program Checklist portion of the survey showed that 43 (93.5%) institutions offered tutoring services, 37 (80.4%) offered time management courses, 35 (76.1%) offered peer tutoring, 34 (73.9%) offered courses in note making, 32 (69.6%) offered self-monitoring courses, 23 (50.0%) provided access to study groups, and 15 (19.6%) offered other courses, such as math anxiety and organizational skills. See Table 37.

Summary

Data from a 35-question survey along with two checklists were collected, collated, and analyzed to examine the nature of and the extent to which Texas community colleges provide accommodations and/or programs/services for identified learning disabled students. The first section of the survey, General Information, pertaining to Research Question #1, asked 16 questions that examined the basic structures and functions of college programs for provision of accommodations and programs/services to ILD students. The responses to these questions demonstrated that ILD students were presently enrolled in all 46 institutions surveyed; that programs were

Table 36

Accommodations Checklist

<u>N</u> = 46	<u>n</u>	<u>%</u>
Academic counseling	46	100.0
Career counseling	46	100.0
Extended test time	46	100.0
Tape recorders	46	100.0
Note-takers	44	95.7
Letters to faculty	41	89.1
Personal counseling	41	89.1
Readers	40	87.0
Copies of lecture notes	33	71.7
Early registration/priority scheduling	32	69.6
Special software/adaptive software	32	69.6
Training for faculty members	32	69.6
Detailed syllabi/course outlines	22	47.8
Personal support groups	17	37.0
Career support groups	13	28.3
Academic support groups	8	17.4
Other	6	13.0
Organization for Human Awareness	1	
Referrals to outside agencies	1	
Group tutoring	1	
Registration assistance, calculators	1	
Spell-checkers, writers, and preferential seats	1	
Special sections of courses for ILD students	1	

ILD = Identified learning disabled

Table 37**Programs Checklist**

	<u>N</u> = 46	<u>n</u>	<u>%</u>
Tutoring services		43	93.5
Time management courses		37	80.4
Peer tutoring		35	76.1
Note-making courses		34	73.9
Self-monitoring courses		32	69.6
Study groups		23	50.0
Other		15	19.6
Testing techniques		2	
Study skills		1	
Test anxiety		1	
Stress management		1	
Individual help		1	
Learning style		1	
Career counseling/college survival		1	
Leadership and personal development		1	
Mnemonics		1	
Memory techniques		1	
Outlining		1	
Pre-reading		1	
Q3R		1	
Seminars		1	

in place to identify these students and to provide them accommodations and services; and that these institutions regulated the provision of accommodations and services by such means as testing of students and training of faculty to assist these students.

The second section of the survey, Administrative Support and Services, pertaining to Research Question #2, asked 16 questions regarding administrative responsibility and supervision of ILD student programs/services. According to the responses, the majority ($n = 41$) of campuses had a dedicated office for handling services to ILD students that reported to a designated administrative officer. An important finding was that enrollment of ILD students rose at a respectable rate over 1992-1997, rising from a range of 3-200 to a range of 3-1,796 for that time frame. Only 17 campuses had a program advisory committee, two-thirds had a published mission/philosophy statement, and 36 (91.8%) programs were guided by published policies. Additionally, it was found that effectiveness of programs was monitored by a variety of methods and that a respectable number of ILD students transferred to four-year universities.

Section Three of the survey, Faculty Support, pertaining to Research Question #3, asked three questions regarding the provision of information and training to faculty members. Various methods of informing and training faculty members were used. Information and instruction were disseminated by means of general in-services (54.3%) and faculty handbooks (45.7%). Information regarding individual students' needs was provided by means of memoranda (45.7%), hand-carried notices (67.4%), mail (41.3%), and telephone (34.8%). Training was provided by 19 (41.3%) institutions by means of

special training sessions such as departmental meetings (41.3%), handbooks (30.4%), and workshops (26.1%).

Section Four, the two checklists, found that a variety of programs for a variety of learning disabilities were being provided for ILD students enrolled in community colleges. Under accommodations, all of the surveyed community colleges provided academic and career counseling, extended test time, and tape recorders. Ninety-five point seven percent permitted use of note-takers. letters to faculty, personal counseling, and readers were utilized in a majority of the institutions (87.0%-89.1%). Less prevalent accommodations included copies of lecture notes (71.7%); early registration/priority scheduling, special/adaptive software, and training for faculty members (69.6%); and detailed syllabi/course outlines (47.8%). Additionally, personal (27.0%), career (28.3%), and academic (17.4%) support groups were available in some institutions.

The Programs Checklist revealed that a majority of the institutions surveyed provided tutoring services (93.5%), time management courses (80.4%), and peer tutoring (76.1%). Note-making (73.9%) and self-monitoring (69.6%) courses were also available, as were study groups (50.0%) and courses such as math anxiety and organizational skills (19.6%).

Chapter V will discuss these findings compared to the literature on ILD students. Additionally, conclusions will be stated and recommendations made.

CHAPTER V

DISCUSSION

The purpose of the study was to determine the types of accommodations/programs offered for students with learning disabilities at 70 of the 77 Texas community colleges certified as of Fall 1996 by the Texas Higher Education Coordinating Board. The preceding chapters provided the significance of the study, a statement of the problem, a review of the literature, an overview of the research methods used in examining the problem, an analysis of the data, and the presentation of the findings. This chapter will provide a discussion of the limitations of the study, the findings and the conclusions derived from the findings, the implications of the findings, and the recommendations for future research.

Limitations of the Study

Although some survey items did not elicit the responses sought by the researcher, the majority of the responses appear to have yielded reliable data. Many questions pertaining to similar program components were not answered by all the respondents. In other instances, survey questions may not have been answered in the manner intended by the researcher. The following examples illustrate possible limitations related to the questions.

The survey requested information in two separate questions regarding gifted students with learning disabilities. Question 3 asked how gifted ILD students were

identified. Of those responding, 17 campuses reported using self-referrals from students, 12 reported using faculty referrals, and 10 reported using testing. Six campuses did not respond to this question. Question 4 asked whether special programs were provided for gifted ILD students. Of those responding, 33 campuses reported that they did not have special programs while 7 noted that special programs were available. Thirteen campuses did not respond to Question 4.

These data may be explained in one of several ways. The survey did not ask whether or not respondents identified gifted ILD students. Some campuses may make no distinctions between gifted ILD students and general ILD students. In some instances, the distinction between gifted and average students with learning disabilities may not be seen as vast enough to warrant additional and/or specialized programs. Therefore, campuses may not have answered Question 3--how gifted and talented ILD students were identified--and Question 4--whether or not there were special programs provided for gifted and talented students with learning disabilities--because they do not distinguish between the two different types of students.

Similarly, potential discrepancies were found in the data regarding counseling for ILD students. Questions 6 and 7 asked about counseling for social problems and drug and/or alcohol abuse, respectively. Thirty-nine institutions reported the provision of counseling for social problems and 36 reported the provision of counseling for drug and/or alcohol abuse. Again, respondents may have misunderstood the questions. Respondents may not have responded or left an item blank because these questions did

not clearly distinguish between services for ILD students and services for the entire or general student population.

Questions 14, 15, and 16 requested data on whether or not documentation identifying specific individual learning disabilities was required, whether or not documentation was required if a student was denied accommodations, and how current the documentation had to be, respectively. For Question 14, 45 respondents reported that students were required to present documentation identifying their learning disabilities. For Question 15, 26 noted the requirement for provision of detailed documentation when a student was denied accommodations and/or services. For Question 16, 30 reported documentation had to be between 3 and 5 years old.

It is possible the interpretation of the term *documentation* differed with some respondents. For the purposes of this study, *documentation* was defined as a hard copy of results from a series of tests that confirms or negates the presence of a learning disability. The term *documentation* may be interpreted as an individual education plan used to notify faculty and/or service providers of students' individual needs or it may be interpreted as test results used to determine the most effective accommodations for a particular learning disability. Therefore, the timeline for acceptance of documentation by the service provider would vary depending on how the respondent interpreted the term *documentation*.

Questions 18, 20, 21, and 22 asked respondents for information on specialized offices devoted to serving ILD students. Question 18 asked respondents to report the specific name of the office or equivalent designated to provide services to disabled

students. Question 20 asked respondents to indicate to whom this office reported. Question 21 asked the respondents to report the major roles of staff in this office, and Question 22 asked respondents to report the total number of staff members working in this office. Although 41 campuses reported the existence of such an office and/or equivalent, a distinction may not have been made between physically disabled students and ILD students, even though the survey focused on ILD students. Therefore, respondents may have inadvertently given unsolicited responses and/or inaccurate figures on questions 18, 20, 21, and 22.

Question 35 asked respondents to report the methods used to train faculty on providing accommodations. Sixteen respondents reported using methods other than handbooks, workshops, special courses, and departmental meetings, the items listed on the survey. However, more than 40% of these respondents failed to report the other method(s). This failure to specify other methods was most likely due to the fact that the survey did not ask the respondents to specify other methods utilized.

Discussion of Findings and Conclusions

Results obtained from the survey of Texas community colleges regarding accommodations and programs/services provided for ILD students are consistent in several areas with previous research findings. Since a survey of this nature had never been conducted in the state of Texas prior to the author's survey, a practical consideration of findings based on the limited literature available is warranted due to the lack of more current research. Results from the three areas of the findings corresponding to the three research questions for the study--(1) provision and types of

accommodations and services, (2) administrative involvement, and (3) faculty roles--will be compared with the delivery of accommodations and services. The discussion of these findings and the conclusions derived therefrom will be guided by the research questions:

1. What accommodations are provided for students with identified learning disabilities in Texas community colleges?
2. What is the nature and the extent of a campus administration's role in the delivery and support of accommodations for students with identified learning disabilities?
3. What is the nature and the extent of faculty's roles and responsibilities in the provision of accommodations for students with identified learning disabilities?

Findings Regarding Research Question 1: What Accommodations Are Provided for Students with Identified Learning Disabilities in Texas Community Colleges?

Enrollment of ILD Students. The responses to Question 1 revealed that all the Texas community colleges responding to the survey had ILD students enrolled. Question 28 asked campuses to report the number of ILD students enrolled each year from 1992 to 1997. More than 70% of the campuses surveyed reported an increase in the number of students identified and served through campus offices over a period of five years. However, each reflected an increase in enrollment on average with the exception of the fourth year, which reflected a decrease.

This study's findings are consistent with those reported by other investigators. Arries (1994), Morris and Leuenberger (1990), Rogan (1987), Scott (1991), Siperstein

(1988), and Slate et al. (1991) report that the enrollment of ILD students has grown consistently with the implementation of the Americans with Disabilities Act of 1990 and Section 504 of the Rehabilitation Act of 1973. Patton and Polloway (1987) report that it was estimated that 1% of incoming postsecondary freshman students for the 1985-1986 academic year were learning disabled. Norlander et al. (1990) report that, in 1987, 1.2% of the freshman population of postsecondary education were learning disabled. Therefore, college officials have developed an increasing number of support programs in response to this influx (Nelson et al., 1990).

Identification of ILD Students. According to the responses to Question 2, all the responding campuses had developed means of identifying learning disabled students enrolled in their school. ILD students were identified by a variety of methods, primarily by self-referral (78.3%). The next most used means of identifying ILD students was faculty referral (58.7%), followed by testing (36.0%) and other (unspecified) means (19.6%).

Nelson et al. (1990) suggest that a comprehensive program to accommodate students with learning disabilities should include assessment procedures to identify and evaluate the individual needs of each student. Slate et al. (1991) contend that “to provide services to college students with learning disabilities in a reliable and valid manner requires proper identification of such persons” (p 3). Skinner and Schenck (1992) point out the importance of identifying students with learning disabilities when they state that “these students should be provided with a realistic indication of their

strengths and weaknesses and how these might impinge on academic success, choice of career, and selection of an academic major” (p. 371).

Documentation of ILD Students’ Needs. Question 14 asked if ILD students were required to present documentation of their disability. Forty-five of the institutions surveyed indicated that they required documentation while only 1 indicated that it did not. Question 15 inquired if the surveyed campuses mandated documentation of the denial of accommodations and/or services to ILD students. Only 38 institutions replied to this question. Of these, 26 reported that they mandated documentation of the denial of accommodations/services to ILD students and 12 reported that they did not. The respondents were also asked how current they required documentation to be (Question 16). The majority, 30, stated three to five years. Nine institutions responded five years or more; 5, one to two years; and 1, less than one year.

As pointed out by Skinner & Schenck (1992), the vast majority of learning disabled students are identified in the elementary and secondary grades. Documentation should be available to the learning disabled student, though, once he/she leaves high school and enters postsecondary education, he/she must assume the responsibility of keeping such documentation current (Scott, 1991). Scott (1991) comments that the regulations of Section 504 of RA 1973 require, in general, “individual interpretation of the law by institutions” regarding the provision of accommodations and services (p. 460). While not mandated by the federal civil rights regulations involved, both institutions and ILD students would be well advised to document all requests for and provision or denial of accommodations and services in case legal action should ensue.

Testing of ILD Students. The Texas community colleges surveyed reported the use of methods such as testing (Question 11) to determine the individual needs of learning disabled students. Over 50% of the respondents did provide for testing of ILD students. Question 12 asked where such testing was conducted. The majority, 33, sent students to the Texas Rehabilitation Commission for testing; 17 had students tested in other places, including in high schools and by private physicians (psychologists, pediatricians); and 16 provided for on-campus testing. Campuses may have used more than one site. Question 13 then asked respondents to report where on-campus testing was conducted. Of those testing on campus, 50.0% tested students in the office for ILD students. Approximately 42% used the office for students with disabilities or its equivalent. The remainder utilized the general academic support services office or other locations, such off-campus or test centers.

The ADA of 1990 requires a “comprehensive evaluation” of handicapped learners, to include students with learning disabilities, from the age of 3 through 21 (Henderson, 1995). However, after leaving high school, the responsibility for assuring appropriate services for ILD individuals is subsumed under Section 504 of the RA of 1973, which also requires an appropriate needs assessment of the learning disabled individual (Scott, 1991). While Slate et al. (1991) state that assessment procedures such as intelligence tests are “an integral part” of determining the needs of ILD students (p. 2), the literature offers little on the specifics of such testing. Both the ADA and the RA provide no further guidance on assessment testing than to state that the evaluation process should reflect student achievement, not the person’s disability (Scott, 1991). It

was beyond the scope of this project to evaluate the testing procedures in the colleges surveyed.

Programs Available for ILD Students. The Accommodations Checklist asked responding campuses if they offered various types of counseling (personal, career, etc.); study skills aids such as tape recorders, note-takers, and readers; special/adaptive software; various types of support groups; and other forms of assistance, such as extended test times and training for faculty members. The Programs Checklist asked respondents if they provided tutoring services; study groups; and time management, note-making, self-monitoring, and other courses that might be of aid to ILD students. All 46 respondents to the survey provided academic and career counseling, extended test times, and use of tape recorders for ILD students. Note-takers, personal counseling, readers, copies of lecture notes, early registration/priority scheduling, special/adaptive software, and training of faculty were offered by over half of the responding campuses. Less than half the respondents provided accommodations such as detailed syllabi/course outlines and support groups.

Programs and services offered by the respondents were consistent with those listed in Cordoni's (1982) directory of ILD programs and services. Haehl (1989) reports that the effective delivery of support services and of compensatory and social functioning skills workshops along with increased faculty awareness enables institutions of higher learning to meet the needs of ILD students. Nelson et al. (1990) suggest that postsecondary programs for ILD students should include "(a) personal or social, academic or program, or career or vocational counseling; (b) instructional

accommodations provided by the institution or by individual faculty; and (c) administrative accommodations” (p. 185). The survey results show through the responses to the checklists that all four components suggested by Nelson et al. were present in most of the Texas community colleges responding to the survey. Nelson et al. also suggest that a comprehensive program to accommodate students with learning disabilities should include assessment procedures to identify and evaluate the individual needs of each student; special admission policies; a variety of support services; and faculty who are trained and informed about the needs of ILD students. Again, the results of the survey revealed that most campuses provided all of the aforementioned components of a comprehensive program.

Initiation and Length of Services. Initiation of services begins with a request for services. Question 9 asked the surveyed campuses when ILD students could apply for accommodations. Forty respondents answered this question. Of these 40, 25 replied that ILD students could apply for accommodations and services both prior to and after admission, 8 specified prior to admission, 5 stated after admission, and 2 responded Other, stating that no specific time was required (4 respondents), any time (3 respondents), and prior to provision of services (1 respondent). Question 25 inquired about the length of time requested services were provided—whether one semester or one year. The majority (33, 71.7%) of respondents answered that services were provided for other lengths of time, indicating various time periods, up to and including the duration of an ILD student’s enrollment. Ten campuses responded one semester and 3 replied one year.

Skinner and Schenck (1992) stress the importance of identifying learning disabled students early and planning with them for their entry into postsecondary education. This would probably simplify the transfer from one educational level to another and ease the adjustment process for ILD students. Dexter (1982) suggests that “a series of preentrance activities take place during the final months before college-bound students enter a postsecondary program” (p.344). She further suggests that ILD students make contact with the dean of students and campus resource personnel prior to the beginning of classes to investigate the appropriateness of the resources available for their particular needs. Early initiation of accommodations and services can thus be seen as an important factor in the success of ILD students in postsecondary education. Further, such accommodations and services will be needed for the extent of ILD students’ enrollment in college. As Skinner and Schenck (1992) point out, educational and medical professionals have yet to achieve a “cure” for learning disabilities, which usually persist into adulthood and often become even more complex.

Conclusions Regarding Research Question 1

At the time this survey was issued in the Spring of 1998, nearly 5,600 ILD students were reported by the respondents to be enrolled in their community colleges. Responding community college campuses addressed ILD students’ academic and social services needs. Campuses offered access to various counseling services (academic, social, and/or substance abuse) and a variety of accommodations, programs, and support services. Most of the campuses provided similar accommodations and services. Also, accommodations and support services provided for ILD students were supported by

administration. According to the responses to Question 31 (Table 32), the vast majority of campus administrators (93.3%) foster open communication and collaboration among students, service providers, faculty members, and administrators.

Findings Regarding Research Question 2: What Is the Nature and the Extent of a Campus Administration's Role in the Delivery and Support of Accommodations for Students with Identified Learning Disabilities?

Designated Office and Staffing. As determined by Question 17, nearly 90% (n=41) of the campuses surveyed reported the existence of an office designated to supervise and provide accommodations and/or services for students with learning disabilities. Responses to Question 19 found that these offices were staffed by a range of 1 to 12 full-time employees and a range of 1 to 4 part-time employees. In response to Question 22, nearly 79% of the surveyed colleges reported the existence of at least one specialist on campus designated to work with ILD students. The range of number of on-campus employees to work with ILD students was 1 to 35. When asked which office governed the office for disabled students (Table 20), nearly 53% of the respondents with designated offices reported that other departments, such as counseling, supervised their specialized service. Forty percent reported that the designated office was supervised by the vice-president of student affairs. The remaining designated offices were supervised by other services/staff, such as the ADA coordinator; an outside agency; or the college president.

The increase in learning disabled students on college campuses has necessitated the creation of special offices and programs/services to accommodate them (Nelson et

al., 1990; Skinner & Schenck, 1992). The organization of offices to deal with ILD students has required policy changes, to include “changes in admission procedures, academic advising which focuses on individualized programming, adaptations and modifications within courses . . . , semester load reductions . . . , and extensions of semester timelines” (Patton & Polloway, 1987, pp. 274-275). Additionally, “professionals who are skilled in working with students with learning disabilities are critical to postsecondary program development” (Norlander et al., 1990, p. 427). These changes are still in process, but the responding community colleges are accepting the responsibility and attempting to serve ILD students well.

Satellite Support. Satellite support was present to some degree among the surveyed campuses. Question 6 asked if counseling and/or support groups were available for ILD students with social problems. Of the campuses surveyed, nearly 85% provided counseling. Question 7 inquired about the availability of counseling and/or support groups on the surveyed campuses for ILD students with substance abuse problems. Nearly 80% of respondents stated that they had such counseling available. Additionally, as shown by the responses to Question 12, the majority of surveyed colleges utilized the Texas Rehabilitation Commission for testing ILD students’ needs.

Manganello (1992) points out that ILD students in postsecondary education are best served by a multidisciplinary approach that will require collaboration and flexibility. Norlander et al. (1990), Patton and Polloway (1987), Scott (1991), and Skinner and Schenck (1992) discuss the importance of collaboration between high-school special education specialists and postsecondary education personnel working

with ILD students. While accommodation programs for ILD students in postsecondary education are still in the developmental stage, the surveyed institutions had attempted to assure the effectiveness of their programs through the use of satellite support efforts.

Advisory Committee. Question 23 asked if the respondents had an advisory committee to oversee the programs/services provided for ILD students. Of the 41 colleges responding to this question, approximately 42% reported the existence of an advisory committee. Responses to Question 24 indicated that the advisory committees were comprised of ILD specialists, faculty members, administrators, counselors, ILD students, and/or others, such as service area providers. In response to Question 29, 32 of 42 institutions answering this query reported that they had a published mission/philosophy statement concerning the provision of accommodations for disabled students, and, in response to Question 30, 36 of 44 respondents reported that their program followed published guidelines/policies in providing accommodations for ILD students.

Since the implementation and maintenance of programs for ILD students in postsecondary education involve changes in school policy (Patton & Polloway, 1987) and professional qualifications of those working with ILD students (Norlander et al., 1990) as well as familiarity with the federal regulations governing such programs (Scott, 1991), an advisory committee would be effective and practical in overseeing these responsibilities. Further, McGuire and Bieber (1989) report that, based on data gathered on ILD programs in technical colleges over a 12-month period, they found that the greatest need was for planning followed by information on Section 504 of the RA,

tasks for which an overview committee would be highly suitable. As demonstrated by the survey answers, over a third of the surveyed colleges have established such a committee.

Evaluation and Monitoring for Program Effectiveness. As reflected in responses to Question 26, the 43 campuses responding to this query utilized methods such as academic performance or grade point average, student questionnaires, frequency of use of services, graduation rate, attrition rate, and other methods, such as feedback from ILD students, to assess services and programs provided for ILD students. Academic performance/GPA was utilized by 65% of respondents; questionnaires, by 56% of respondents; frequency of use of services, by approximately 49% of respondents; graduation rate; by approximately 40% of respondents; attrition rate, by 30% of respondents; and other means, by nearly 19% of respondents.

In their study, Vogel and Adelman (1992) assessed the success of college students with learning disabilities. They utilized 62 ILD students enrolled in a small Midwestern college as degree candidates. Measurements included (but were not limited to) college grades, GPA at end of each year of study, and graduation and academic failure rate. This would seem to support the use of such measures by the surveyed institutions. However, Norlander et al. (1990) found in their study that faculty working with ILD students were, in general, insufficiently knowledgeable in assessment skills, to include program evaluation. They believe that there is a need for greater awareness of the appropriate routes to the evaluation of ILD learners.

Conclusions Regarding Research Question 2

Special admission policies as well as a variety of support services were utilized by Texas community colleges as noted in the responses to the checklist section of the survey. One must bear in mind that programs for special education at the postsecondary level are relatively new and are still in the process of development and refinement (Morris & Leuenberger, 1990; Saracoglu et al. 1989; Scott, 1991; Skinner & Schenck, 1992; Slate et al., 1991). Considering the many factors involved and the complexities of learning disabilities (Manganello, 1992), the community colleges surveyed appear to be making reasonable efforts to cope with the situation. The goals of most campuses included providing ILD students with accommodations and support services; joint efforts from service providers, faculty members, and administrators in the provision of accommodation; and an environment that fostered a climate conducive to educational success. More than 90% of the respondents reported that campus administration fostered a climate of cooperation among faculty members, service providers, and students regarding the provision of accommodations for students with learning disabilities.

Findings Regarding Research Question 3: What Is the Nature and the Extent of Faculty's Roles and Responsibilities in the Provision of Accommodations for Students with Identified Learning Disabilities?

Methods Used to Inform Faculty of Their Responsibilities. Question 33 sought to learn how faculty were informed of their responsibilities regarding ILD students. The majority, nearly 55% of respondents, reported that faculty were informed

of their responsibilities to provide accommodations for ILD students during in-services. Approximately 45% reported the use of means such as memoranda; slightly over 41% utilized faculty handbooks or special training sessions. Campuses did use a combination of these means.

Handbooks such as those of Cordoni (1982) and Rapp (1995) are available in many schools, as shown by survey answers, and are useful information sources for faculty. Haehl (1989) discusses the use of skills workshops to inform faculty regarding the needs of their ILD students. To date, professional standards for educators at the postsecondary level who work with ILD students have not been developed. The Association on Handicapped Student Service Programs in Postsecondary Education has been working on this project (Norlander et al., 1990). Publication of such standards would be invaluable in informing college instructors/professors on provision of services and programs for ILD students.

Methods Used to Inform Faculty of Individual ILD Student Needs.

Question 34 inquired as to how faculty were notified of individual ILD student needs. A combination of means was reported by the respondents. Nearly 70% of respondents reported using notices hand-carried by students to inform faculty members of individual ILD student needs, more than 40% reported the use of mail to notify faculty, and nearly 35% used the telephone.

According to Dexter (1982):

The dean of students, academic advisors, classroom instructors and professors, the chairman of the special education department, and possibly the campus

reading center or reading clinic all should be considered as primary resources and support systems to LD [learning disabled] students. (p. 344)

When, and if, these individuals become involved with individual ILD students, they need to be informed of each student's particular needs. Skinner and Schenck (1992) suggest that the coordinator of the learning disability program notify and collaborate with individual faculty members to assist in making course modifications to fit individual needs. The community colleges surveyed, as shown above, primarily used notices hand-carried by students, but on-campus mail systems and telephones were also utilized. All the campuses had developed means of notifying individual instructors/professors of the individual needs of ILD students in their classes.

Methods Used to Train Faculty on Providing Accommodations for ILD

Students. Question 35 sought information on training of faculty to provide accommodations for ILD students. More than 45% of respondents reported the use of special meetings and in-services to train faculty on how to provide accommodations. Over 41% utilized departmental meetings, nearly 31% provided handbooks, and approximately 26% offered workshops.

A major difficulty in dealing with ILD students is the individualized nature of their disabilities (Swan, 1982). This makes the training of faculty a necessity. Hoover and Reetz (1989) have produced a module for use in preservice or in-service training of regular secondary educators. In their study, McGuire and Bieber (1989) found that in-service education for faculty/staff was a high need in postsecondary institutions. Swan (1982) recommends "sensitizing faculty through informal talks, workshops, films, etc.,

to common traits of learning disabled students” (p. 66). Whatever form training takes, studies such as that of Norlander et al. (1990) indicate a need for increased knowledge of and competency in instructional skills of those providing accommodations and services for ILD students.

Conclusions Regarding Research Question 3

Effort had been made by the community colleges surveyed to establish the roles and the responsibilities of faculty members involved with ILD students. Systems had been established to inform faculty of their responsibilities for the provision of accommodations and services and to train faculty to fulfill those responsibilities. It was not within the scope of this paper to assess the adequacy of those systems, but the literature indicates a need in general to establish professional standards for the roles of learning disability counselors, specialists, and educators at the postsecondary level (Norlander et al., 1990; Skinner & Schenck, 1992).

Summary of Findings and Conclusions

The Americans with Disabilities Act of 1990 (193) and Section 504 of the Rehabilitation Act of 1973 (193) mandate that people with disabilities be provided reasonable accommodations to perform basic tasks. Given that most Texas community colleges enjoy the luxury of autonomy and determining what is “reasonable,” most of the survey respondents’ replies indicated that each campus is functioning well within the boundaries and guidelines set by law. The survey results showed that Texas community colleges provide an abundance and a variety of accommodations and services/programs for ILD students that are supported by the administration and faculty.

Forty-two (93.3%) campuses reported that the administration fostered a climate of support for students with learning disabilities. The survey also revealed that faculty are informed and trained on how to provide accommodations for ILD students and are informed of individual students' needs.

Implications for Postsecondary Education

Because scant research has been conducted in the area of learning disabilities and accommodations since the enactment of the Americans with Disabilities Act in 1990 and its interlinking with Section 504 of the Rehabilitation Act of 1973, this study provides baseline data with which future comparisons can be made. The survey responses reflected a continuing rise in college enrollment of ILD students for the academic years of 1992-1993 through 1996-1997. Respondents indicated a range of 3-200 for 1992-1993 to 3-1,796 for 1996-1997, with a small decrease in 1995-1996. Considering this overall increase, an examination of the impact of accommodations and support services for ILD students is indicated. Additionally, a review by state education agencies as well as colleges of the types of accommodations provided and a continuing increase and/or modification of accommodations as the needs of ILD students change are indicated.

The ADA and Section 504 of the RA require all entities receiving federal money to provide disabled students with the reasonable accommodations necessary to perform basic tasks relative to academic achievement (Rapp, 1995; Scott, 1991). However, the term *reasonable* is a very broad term and can be interpreted in several different ways. Accommodations/programs are determined on an individual basis from college to

college (Rapp, 1995; Scott, 1990). The study survey indicated that most Texas community colleges offer the same or similar accommodations, services, and/or programs. Nevertheless, there was little reflection of uniformity or standardization in the responses. For example, not all campuses surveyed provided early registration/priority scheduling, special/adaptive software, detailed syllabi/course outlines, and, most important, training for faculty members. Further, length of time for provision of services varied widely. Therefore, it would benefit this movement if a statewide governing agency such as the Texas Rehabilitation Commission or the Texas Higher Education Coordinating Board devised a basic set of guidelines establishing statewide standards regarding the types of accommodations, services, and programs offered to ILD students.

Communications need to be established between Texas community colleges and four-year colleges and/or universities. Students who choose to transfer to universities are likely to require accommodations as well. Four-year colleges and universities are, in all likelihood, serving many of the same students. Universities and community colleges would both benefit from the development of communication and cooperation between the two groups. Recruitment efforts of support services in the university setting would provide motivation for students to pursue four-year degrees. Perhaps more importantly, ILD students in community colleges would gain information about four-year degree programs and university expectations, resulting in a more realistic goal concerning future college experience. Information should be shared regarding the ways students have been required to demonstrate competency. This information could be

instrumental in the development of curricula and support services that met student needs at their ability level at college entrance. Since approximately 61% of the Texas community colleges surveyed reported that 36% or more of ILD students transfer to four-year colleges, it seems reasonable and desirable for educational entities serving them to coordinate their efforts to help them succeed.

This study was a simple survey to determine whether or not ILD students were present in community colleges and, if so, if and what type of provisions were being provided for them. Thus, in-depth assessment of practices prevailing in community colleges for ILD students was not within the scope of this project. Nevertheless, the lack of uniformity in the responses to some questions does suggest areas in the current programs which may be in need of refinement. Dexter (1982), Rogan (1987), Saracoglu et al. (1989), Siperstein (1988), and Skinner and Schenck (1992) all express the need to perfect the transition process of ILD students into postsecondary educational institutions. ILD students, who often lack self-esteem and self-confidence (Saracoglu et al., 1989), cannot compete educationally on the same level as nonlearning disabled students (Gettinger, 1991; Skinner & Schenck, 1992) and are prone to depression and other psychosocial effects that deplete their energy and retard their learning effort (Manganello, 1992). Dexter (1982), Rogan (1987), and Siperstein (1988) believe that the transition process itself may be crucial to ILD students' success in postsecondary education. This indicates a critical need for cooperation and collaboration between secondary and postsecondary educators and learning specialists to devise means and pathways to assist these students in their educational aspirations.

Two other aspects at which the lack of uniformity in responses to the survey hinted were faculty willingness and faculty competence to work with ILD students. Unwillingness to work with ILD students may be due simply to lack of understanding of the problems faced by these students and lack of competence to truly assist them. Nelson et al. (1990) found in their study that faculty in general were willing to provide accommodations and services for the student population but that the degree of willingness varied according to the academic specialty of the faculty members. The fact that Nelson et al. found that the education faculty was more willing than other faculties and that the business administration faculty, for example, was hesitantly willing points to the latter's lack of knowledge in this area. Norlander et al. (1990), in their study, found a great many shortcomings in teacher competency among those providing accommodations and services to ILD students. These factors definitely indicated a need to emphasize and provide indepth faculty orientation and training for those dealing with ILD students.

Recommendations for Future Research

Because the survey was limited to Texas, the results in this study are generalizable only to other campuses within the state. Future research efforts should be expanded to the national level in order to provide a clearer picture of the present condition of accommodations, services, and/or programs provided for postsecondary ILD students.

Future surveys of this nature or replications of this study should make the distinction between programs for general population students, specifically counseling,

so that a distinction would be made between counseling (academic, career, and/or personal) for general students and that for ILD students. Such clarification would help to eliminate possible confusion on the part of the respondents. Future surveys should also clarify the term *documentation*. Careful wording of questions with these distinctions in mind should yield more accurate information.

Grouping survey responses according to certain variables in order to find the differences between and among groups should produce more comprehensive data.

Possible groupings could include:

- Community college campus size and location. Grouping by size and location of institutions would illustrate differences induced by number of ILD students enrolled, by local guidelines, by monies available, and by number of faculty members, among other factors.
- Types of students served by the community college campuses. For example, data from campuses serving students enrolled in specialized programs, such as allied health, could be analyzed to describe in more detail how these students are being served.
- Age of students served. This would enable the investigator to analyze data for groups distinguished by age ranges.
- Specific variables. Examples include total campus enrollment, years in existence of college and/or learning disability services program; number of graduate and transfer students, and ways in which accommodations and support services differ between universities and/or four-year colleges.

Greater insight into the inner workings of accommodation and support services of community colleges could be gained through qualitative campus studies. Interviews with service providers, ILD students, faculty, and administrators would reveal the unique characteristics of individual programs. Personal histories acquired through interviews could demonstrate the impact of accommodations on the lives of ILD students. Case studies of individual students could further illustrate the impact of accommodations on ILD students.

One of the most important and least asked questions with regard to ILD students is: “What happens to the student after he/she leaves the community college campus?” ILD students should be tracked over extended periods in order to determine the long-term impact and effectiveness of accommodations and support services efforts. Cohorts of students should be followed through college and beyond. Since learning disabilities persist, in most cases, throughout the individual’s life span (Skinner & Schenck, 1992), the experience of higher education could have critical influence on the individual’s whole life. Questions which merit further examination include the following:

- Do ILD students who are successful at the community college level go on to earn four-year and/or postgraduate degrees?
- What proportion of ILD students drop out of college?
- How many of these students received accommodations/modifications in high school?
- How long were these students out of high school before entering postsecondary education?

- What percent of ILD students are working?
- How many of these students joined the military?
- How many of these student became involved with the criminal justice system through incarceration, probation, and/or parole?
- How do patterns for ILD and non-ILD enrollment students fluctuate?

Until answers are found to questions such as these, the long-term effectiveness of accommodations and support services for ILD students cannot be determined.

Summary

This chapter reviewed the limitations of the study, discussed the findings as related to past research, examined the implications for postsecondary education, and offered recommendations for future research. It was determined that this study could have been improved by the rewording of questions so as to address specific uses of terms such as counseling and documentation. More careful wording would probably have eliminated discrepancies among the data in the areas investigated.

The findings of the survey showed that Texas community colleges use a variety of media such as outreach programs, on-campus notices, school catalogs, and school Web pages to inform ILD students of accommodations and services available on and off campus. As noted in the responses from the checklist section of the survey, the majority of respondents offered accommodations such as tutoring, note-takers, and lecture notes and services such as counseling, early registration, and study skills courses, which implies that services such as these are standard in the Texas community colleges surveyed.

Future research efforts in the area should focus on obtaining information from more community colleges in Texas and other states, more detailed analysis of specific variables, and more indepth and long-term inquiries. Longitudinal studies that tracked ILD student into their career and future endeavors might yield the most valuable data regarding the effectiveness of accommodations for ILD students.

Conclusion

Throughout history, support programs have struggled to meet the educational needs of students who have difficulty coping with traditional curricula and teaching methods. Given the relatively increasing rates at which ILD students are enrolling in postsecondary schools, community colleges are faced with an opportunity to solidify their place in the educational continuum. By standardizing important program elements, building connections with four-year colleges and universities, and conducting rigorous program evaluations, Texas community colleges could improve their systems for the provision of accommodations and support services to ILD students. This would enable their support systems to demonstrate their impact on student success and significance in the sphere of education.

APPENDIX A

LEARNING DISABILITIES AND DEFINITIONS

Disability	Definition
Math Related	
Arithmetic Deficit	Difficult with mathematical reasoning
Dyscalculia	Lack of any "inherent" ability for math
Spatial Organization	Problem perceiving dimensions of space
Reading and Writing Related	
Dysgraphia	Extremely poor hand writing
Dyslexia (Reading)	A visual or auditory processing disorder
Language Comprehension	Difficulty with vocabulary
Reading Deficit	Slow or uneven reading rate
Spelling Dyspraxia	Difficulty in spelling words consistently
Writing Deficit	Difficulty in getting thoughts on paper
Information Processing Related	
Abstract Reasoning	Difficulty in making inferences
Auditory Processing	Inability to take in information through hearing
Constructional Dyspraxia	Inability to sequence information
Processing Speed	Slow or uneven automatic processing speed
Reasoning Deficit	Trouble thinking in an orderly, logical way
Visual Processing	Difficulty taking in visual information
Memory and Retrieval Related	
Long-Term Memory Deficit	Inconsistent when learning new information
Long-Term Retrieval	Difficulty recalling information
Short-Term Retrieval	Difficulty repeating auditory information
Physical/Related Deficits	
Attention Deficit	Difficulty concentrating for extended time
Hyperactivity	Constantly in motion
Hypoactivity	Consistently underactive, listless, apathetic
Study/Social Skills	Ineffective study/social skills

Note. Taken from Handbook for Students with Learning Disabilities (Rev. ed.) by R. H. Rapp, 1995, San Antonio, TX: Clearinghouse.

APPENDIX B

SURVEY ON ACCOMMODATIONS FOR LEARNING DISABLED STUDENTS IN TEXAS COMMUNITY COLLEGES

Institution #: _____

Directions: Please read the following questions carefully and mark the answer(s) that apply to your institution.

Please return this survey by March 27, 1998.

Section I: General Information

1. **Are there students with learning disabilities enrolled in your college?**
Yes _____ No _____
2. **How are students with learning disabilities identified? (Please check all that apply)**
Testing _____ Referral from faculty _____ Self-referral _____
Other (e.g., special admissions) _____
3. **How are gifted learning disabled students identified? (Please check all that apply)**
Testing _____ Referral from faculty _____ Self-referral _____
Other _____
4. **Do you provide any programs for gifted learning disabled students?**
Yes _____ No _____
5. **Do you provide accommodations for students enrolled in technical programs such as Allied Health programs?**
Yes _____ No _____
6. **Do you provide counseling or access to support groups for LD students who suffer from social problems?**
Yes _____ No _____
7. **Do you provide counseling or access to support groups for LD students who suffer from drug and alcohol problems?**
Yes _____ No _____
8. **How are learning disabled students informed about the programs and accommodations offered? (Please check all that apply)**
Outreach programs _____ Admission _____ On-campus notices _____ Catalog _____
Orientation _____ Web page _____ Survey _____ Other _____

9. When are students with Learning Disabilities required to seek services? (Please check all that apply)

Prior to admission _____ After admission _____

Other _____ Other _____

10. Who initiates provision of accommodations for eligible students? (Please check all that apply)

Learning specialist _____ Student request _____

High school counselor _____ Other _____

11. Are LD students tested? Yes _____ No _____

12. Is testing done on campus or by referral to another agency? (Please check all that apply)

On-campus _____ Texas Rehabilitation Commission _____ Other _____

13. If testing is done on campus, where is it administered? (Please check all that apply)

General academic support services _____ Counseling office _____

Disabled student services _____ Other _____

14. Are students required to have documentation identifying their learning disabilities?

Yes _____ No _____

15. Is detailed documentation required when a student is denied access, opportunities, or benefits?

Yes _____ No _____

16. How current do documents of learning disability identification have to be?

Less than a year _____ 1-2 years _____ 3-5 years _____ 5 or more years _____

Section II: Administrative Support and Services

17. Is there an office or its equivalent dedicated to services for disabled students?

Yes _____ No _____

18. Name of office/equivalent _____

19. What is the current total number of full-time equivalent staff members in this office? _____

20. To whom does the office for LD students report? (Please check all that apply)

President _____ Vice-president of student affairs _____ ADA coordinator _____

Outside agency _____ Other _____

21. What are the major roles of the office staff designated to work with LD students? (Please check all that apply)

Director _____ Learning Specialist/Coordinator _____ Other _____

22. What is the current total number of staff members campus-wide designated to work with LD students?

23. Is there a program advisory committee?

Yes _____ No _____

24. If yes, which of the following are represented? (Please check all that apply)

LD specialist _____ Faculty _____ Administrator _____ Counselor _____
 LD student _____ Other _____

25. How long are accommodations provided?

One semester _____ One year _____ Other _____

26. How are accommodations for LD students monitored for effectiveness? (Please check all that apply)

Student questionnaires _____ Academic performance (GPA) _____ Graduation _____
 Attrition rates _____ Services provided _____ Other _____

27. What percentage of LD students transfer to four-year institutions?

0-10% _____ 11-25% _____ 26-35% _____ 36% or more _____ (number)
 Not tracked _____

28. What was the total number of LD students served by your office/program for each of the last five years?

1992-93 _____ 1993-94 _____ 1994-95 _____ 1995-96 _____ 1996-97 _____

29. Does your program have a published mission/philosophy statement?

Yes _____ No _____

30. Does your program follow a published set of policies?

Yes _____ No _____

31. If Yes, source of policies? (Please check all that apply)

Faculty handbook _____ Student handbook _____ School catalog _____
 Bulletin boards _____ Web page _____ Other _____

32. Does administration foster a climate of cooperation among faculty, service providers, and students?

Yes _____ No _____

Section III: Faculty Support**33. How are faculty notified of responsibilities regarding accommodating LD students? (Please check all that apply)**

Handbooks _____ Faculty in-service _____ Training sessions _____
 Other _____

34. How are faculty members notified of individual students' disabilities and of types of accommodations to be provided? (Please check all that apply)

Phone _____ Mail _____ Hand carried notice _____ Other _____

35. How are faculty informed and/or trained on accommodating students with learning disabilities?

Handbooks _____ Workshops _____ Special courses _____
 Departmental meetings _____ Other _____

Section IV: Accommodations and Programs

Accommodations Checklist

(Please check Yes or No to all that apply.)

Early registration / Priority scheduling	_____ yes	_____ no
Letters to faculty	_____ yes	_____ no
Training for faculty members	_____ yes	_____ no
Detailed syllabi / course outlines	_____ yes	_____ no
Copies of lecture notes	_____ yes	_____ no
Tape recorded lectures	_____ yes	_____ no
Note-takers	_____ yes	_____ no
Readers	_____ yes	_____ no
Extended test-time	_____ yes	_____ no
Special software/Adaptive technology (Sound Proof, IntelliTalk etc.)	_____ yes	_____ no
Counseling:		
Personal	_____ yes	_____ no
Academic	_____ yes	_____ no
Career	_____ yes	_____ no
Support Groups:		
Personal	_____ yes	_____ no
Academic	_____ yes	_____ no
Career	_____ yes	_____ no
Other: _____		
Other: _____		
Other: _____		

Programs Checklist

Please check YES or NO to all that apply.

Study skills courses:

Time management _____ yes _____ no

Self-monitoring _____ yes _____ no

Note-making _____ yes _____ no

Other _____

Other _____

Other _____

Tutoring Services _____ yes _____ no

Peer Tutoring _____ yes _____ no

Study Groups _____ yes _____ no

Additional Comments:

Would you like a copy of the results of this survey? If Yes, please write your complete address below.

E-mail Address:

THANK YOU FOR YOUR PARTICIPATION!

APPENDIX C
INITIAL LETTER AFTER
TELEPHONE CONTACT

February 23, 1998

Dear Service Provider,

As a [title], you may be interested in what accommodations are being provided in Texas community colleges for learning disabled (LD) students. Knowing the nature and the scope of programs and accommodations being offered to LD students is vital to educators and others concerned with the success of LD students. As of this writing, there have been no systematic surveys conducted in Texas junior and community colleges concerning accommodations for LD students.

Your institution is one of the approximately 70 Texas community/two-year colleges being surveyed as a part of my thesis. Your input is valuable to this study, and it is important that each questionnaire be completed and returned in the envelope provided.

Within the next few days, you will receive a brief questionnaire. I am mailing it to you in an effort to determine what accommodations your institution provides to students identified as learning disabled.

The survey is a part of my thesis project. It is being conducted to better inform high schools, community colleges, universities, and others who seek information on accommodations provided for students at the community college level.

You may be assured of complete confidentiality.

I would greatly appreciate your taking the few minutes necessary to complete and return your questionnaire when you receive it. I would be happy to answer any questions you may have about this study. Please call me at (210) 433-9395 or (210) 520-7984.

Thank you very much for your assistance.

Sincerely,

Lisa D. Greer, Graduate Student
Southwest Texas State University

APPENDIX D
ONE-WEEK REMINDER AFTER
INITIAL LETTER

March 1, 1998

Dear Service Provider,

Here is the survey of which we spoke a few days ago. Please take some time to read it and answer the questions. I have enclosed a self-stamped and self-addressed envelope, and I would appreciate it if you would use it to return the completed survey by March 27, 1998.

Thank you for your participation. I look forward to hearing from you soon.

Sincerely,

Lisa D. Greer, Graduate Student
Southwest Texas State University

REFERENCES

- Arries, J. N. (1994). An experimental Spanish course for learning disabled students. Hispania, 77, 110-117.
- Barrett, B. (1977). Explaining learning disabilities to colleagues: Treatment and accommodation. In B. M. Hodge & J. Preston-Sabin (Eds.), Accommodations—Or just good teaching? Strategies for teaching college students with disabilities (pp. 2-4). Westport, CT: Praeger.
- Bellen, E. J., Knight, D. F., & Starkweather, J. E. (1993). College survival skills for ILD students. Research & Teaching in Developmental Education, 10, 123-128.
- Brinckerhoff, L. C., Shaw, S. F., & McGuire, J. M. (1992). Promoting access, accommodations, and independence for college students with learning disabilities. Journal of Learning Disabilities, 25, 417-429.
- Cordoni, B. (1982). A directory of college ILD services. Journal of Learning Disabilities, 15, 529-534.
- Crews, J. (Moderator). (1995). Accommodating students with learning disabilities in colleges and universities [Videotape]. Norfolk, VA: Old Dominion University.

Deming, M., Olson, J. R., & Valeri-Gold, M. (1992). Research review on team teaching in college developmental settings. Journal of College Reading and Learning, 24, 48-53.

Dexter, B. L. (1982). Helping students with learning disabilities prepare for college. Journal of Learning Disabilities, 15, 344-346.

Elmont, M. (1977). Don't overlook the obvious. In B. M. Hodge & J. Preston-Sabin (Eds.), Accommodations—Or just good teaching? Strategies for teaching college students with disabilities (pp. 27-30). Westport, CT: Praeger.

Foote, E. (1997). Collaborative learning in community colleges. ERIC Digest [On-line], ED 411 023. Available: http://www.ed.gov/databases/ERIC_Digest/ed411023.html

Gettinger, M. (1992). Learning time and retention differences between nondisabled students and students with learning disabilities. Learning Disability Quarterly, 14, 179-188.

Greenberg, B. (2000, February 12). Study: More in college have learning disabilities. Austin American Statesman, pp. A21, A24.

Haehl, S. (1989). Meeting the needs of the learning disabled college student. Journal of Reading, 33(2), 146-147

Henderson, K. (1995). Overview of ADA, IDEA, and Section 504. ERIC Digest [On-line], ED 389 142. Available: http://www.ed.gov/databases/ERIC_Digests/ed.389142.html

Hodge, B. M., & Preston-Sabin, J. (1997a). Integrating reasonable accommodations as a part of good teaching. In B. M. Hodge & J. Preston-Sabin (Eds.), Accommodations—Or just good teaching? Strategies for teaching college students with disabilities (pp. 23-27). Westport, CT: Praeger.

Hodge, B. M., & Preston-Sabin, J. (1997b). Making an accommodation. In B. M. Hodge & J. Preston-Sabin (Eds.), Accommodations—Or just good teaching? Strategies for teaching college students with disabilities (p. 1). Westport, CT: Praeger.

Hodge, B. M., & Preston-Sabin, J. (1997c). Preface. In B. M. Hodge & J. Preston-Sabin (Eds.), Accommodations—Or just good teaching? Strategies for teaching college students with disabilities (pp. xi-xii). Westport, CT: Praeger.

Holzberg, C. A. (1994). Technology in special education. Technology & Learning, 14, 18-21.

Hoover, J. H. (1989). Study skills and the education of students with learning disabilities. Journal of Learning Disabilities, 22, 452-461.

Hoover, J. H., & Reetz, L. J. (1989). Characteristics of secondary LD students.: Instructional module. (Available from the University of South Dakota, Vermillion, SD 57069)

Kerka, S. (1998). Adults with learning disabilities. ERIC Digest [On-line], ED 414 434. Available: http://www.ed.gov/databases/ERIC_Digests/ed414434.html

Lissner, L. S. (1997). Legal issues concerning all faculty in higher education. In B. M. Hodge & J. Preston-Sabin (Eds.), Accommodations—Or just good teaching? Strategies for teaching college students with disabilities (pp. 5-22). Westport, CT: Praeger.

Manganello, R. E. (1992). Psychological problems among learning disabled college student. Research & Teaching in Developmental Education, 9, 67-74.

McEven, C. (1990, May 6). Learning disabilities. Forum, pp. 13-16.

McGuire, J. M., & Bieber, N. (1989, April). Providing learning disabilities services at technical colleges: A new challenge. Paper presented at the Annual Conference of the Association on Handicapped Student Service Programs in Postsecondary Education, Seattle, WA.

McGuire, J. M., & O'Donnell, J. M. (1989). Helping learning-disabled students achieve. College Teaching, 37, 29-32.

Morris, M., & Leuenberger, J. (1990). A report of cognitive, academic, and linguistic profiles for college students with and without learning disabilities. Journal of Learning Disabilities, 23, 355-360.

Nelson, J. R., Dodd, J. M., & Smith, D. J. (1990). Faculty willingness to accommodate students with learning disabilities: A comparison among academic divisions. Journal of Learning Disabilities, 23, 185-189.

Norlander, K. A., Shaw, S. F., & McGuire, J. M. (1990). Competencies of postsecondary education personnel serving students with learning disabilities. Journal of Learning Disabilities, 23, 426-432.

- O'Hearn, C. (1989). Recognizing the learning disabled college student. College English, 41(3), 294-302.
- Ostertag, B. A., Baker, R. E., Howard, R. F., & Best, L. (1982). Learning disabled programs in California community colleges. Journal of Learning Disabilities, 15(9), 535-538.
- Patton, J. R., & Polloway, E. A. (1987). Analyzing college courses. Academic Therapy, 22(3), 274-280.
- P.L. #93-112, The Rehabilitation Act of 1973, 29 U.S.C. 791, 1991.
- P.L. #101-336, The Americans with Disabilities Act Of 1990, 42 U.S.C. 12101 et seq., 1991.
- Rapp, R. H. (1995). Handbook for students with learning disabilities (Rev. ed.). San Antonio, TX: Clearinghouse.
- Rogan, J. P. (1987). College programs for students with learning disabilities: What high school counselors should look for. School Counselor, 34, 178-181.
- Roth, F. P., Spekman, N. J., & Fye, E. C. (1995). Reference cohesion in the oral narratives of students with learning disabilities and normally achieving students. Learning Disability Quarterly, 18, 25-39.
- Ruhl, K. L., & Suritsky, S. (1995). The pause procedure and/or an outline: Effect on immediate free recall and lecture on notes taken by college students with learning disabilities. Learning Disability Quarterly, 18, 2-10.
- Saks, J. B. (1992). Meeting students' special needs. Electronic School, A16-A19.

- Salant, P., & Dillman, D. A. (1994). How to conduct your own survey. New York: John Wiley & Sons.
- Saracoglu, B., Minden, H., & Wilchesky, M. (1989). The adjustment of students with learning disabilities to university and its relationship to self-esteem and self-efficacy. Journal of Learning Disabilities, 22, 590-592.
- Scott, S. S. (1990). Coming to terms with the “otherwise qualified” student with a learning disability. Journal of Learning Disabilities, 23, 398-405.
- Scott, S. S. (1991). A change in legal status: An overlooked dimension in the transition to higher education. Journal of Learning Disabilities, 24, 459-466.
- Siperstein, G. N. (1988). Students with learning disabilities in college: The need for a programmatic approach to critical transitions. Journal of Learning Disabilities, 21, 431-436.
- Skinner, M. E., & Schenck, S. J. (1992). Counseling the college-bound student with a learning disability. School Counselor, 39, 369-376.
- Slate, J. R., Frost, J., & Cross, B. (1991). Wais-R stability for college students with learning disabilities. Learning Disability Quarterly, 14, 2-6.
- Stracher, D. A. (1993). Providing strategies for learning disabled college students. Research & Teaching in Developmental Education, 10, 65-75.
- Swan, R. J. (1982). Reflections on a first year of a pilot program for learning disabled adults. Journal for Special Educators, 18(3), 64-68.

Vogel, S. A., & Adelman, P. B. (1992). The success of college students with learning disabilities: Factors related to educational attainment. Journal of Learning Disabilities, 25, 430-441.

West, M., Kregel, J., Getzel, E. E., Zhu, M., Ipsen, S. M., & Martin, E. E. (1993). Beyond Section 504: Satisfaction and empowerment of students with disabilities in higher education. Exceptional Children, 59(5), 456-467.

Wren, C., Williams, N., & Kovitz, V. (1987). Organizational problems at the college level. Academic Therapy, 23(2), 157-161.

VITA

Lisa DeAnn Greer was born in Lawton, Oklahoma, on January 2, 1970, the eldest twin daughter of Willie Ethel Winfrey-Greer and Orece Greer. After completing her work at Tom C. Clark High School, San Antonio, Texas, in 1987, she entered San Antonio College, San Antonio, Texas. She left San Antonio College and entered St. Philip's College, San Antonio, Texas, in 1989. Upon receiving an Associate's Degree in Business Technology from St. Philip's College, she entered Wayland Baptist University, Plainview, Texas, and received her Bachelor of Science Degree in November 1993. During the following years, she was employed as a Computer Laboratory Technician with St. Philip's College in San Antonio, Texas. In January 1995, she entered the Graduate School of Southwest Texas State University, San Marcos, Texas.

Permanent Address: 11902 Autumn Vista Drive
 San Antonio, Texas 78249

This thesis was typed by Lisa D. Greer.