SATISFACTION LEVELS OF THE SERVICES PROVIDED TO STUDENTS WITH LEARNING DISABILITIES AT A LOCAL VOCATIONAL/TECHNICAL AND COMMUNITY COLLEGE DURING A PERIOD OF CONSOLIDATION

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A Research Paper
Submitted in Partial Fulfillment of the
Requirements for the
Master of Science Degree
With a Major in

Vocational Rehabilitation Counseling

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The Graduate College University of Wisconsin-Stout December 2000

The Graduate College University of Wisconsin-Stout Menomonie, Wisconsin 54751

ABSTRACT

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<u>Vocational Rehabilitation Counseling</u> (Graduate Major)

Robert Peters PhD December, 2000 45
(Research Advisor) (Month/Year) (No. of Pages)

Descriptors:

- 1. Learning Disabilities
- 3. Remedial Classes
- 5. Level of Assistance

- 2. Accommodations
- 4. Support Services

Statement of the Problem:

In July of 1995, the Duluth Technical College and the Duluth Community College were merged into a single post-secondary institution called Lake Superior College. Although the merger took place in 1995, the schools did not physically join until September of 1996. The purpose of the study was to compare the pre-merger level of satisfaction and the accessibility of the Office of Students with Disabilities staff for students with learning disabilities with the

greatly expanded student population.

Research Design

The research was a causal-comparative study using telephone interviews to assess various parts of the college experience for learning disabled students enrolled at Lake Superior College in 1995 and for a second group of learning disabled students enrolled in 1999. All students were determined eligible for the services of the Division of Rehabilitation Services in Duluth and coded as learning disabled as either the primary or secondary disability.

Findings

The 1995 group of learning disabled students and the 1999 group of students had similar levels of satisfaction with the Office of Students with Disabilities. The means and standard deviations of the three satisfaction questions were very similar and the T-scores for the three questions were .89 for the awareness question, .74 for the level of assistance question, and .85 for the overall college experience question. All students in the first group passed the remedial classes they were required to take and subsequently took classes in their major areas. One third of the students in the 1999 group were unable to pass the remedial classes. There was a greater number of students changing plans in the 1999 group.

ACKNOWLEDGEMENTS

There are three acknowledgements that need to be made for the success of this project. The first group that needs to know that their assistance was greatly appreciated are my peers at the Duluth Workforce Center. Not only did my co-workers give me the time and space to do the things that this project required, but whenever I needed assistance with the nuts and bolts on reporting and actually writing this paper, everyone in the office was willing to provide the assistance that was needed. Secondly, thanks needs to go to my advisor, Dr. Robert Peters, who kept telling me that this project was doable when there were doubts in all of my thoughts. He was willing to take the time from his busy schedule to review the results of my efforts, to correct my work and to assist me whenever I felt that I had lost my way. This seemed to sometimes be a weekly experience. In my contact with other graduate students, I have come to realize how much support I received from Bob that other students don't get from their advisors. Finally, and most importantly, my wife Judy has to get the most thanks. She has put up with me being only half there for the last three months. She has been there during the class work of the last sixteen months and kept me going when it would have been easy to stop the whole process. Life would have been much easier for her if I had not returned to school. Now that the whole process is coming to an end, I realize how much I have needed the support of all of theses people in order to be successful in my program.

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Chapter 1

INTRODUCTION

Persons with Learning Disabilities are one of the fastest growing groups of disabilities served by counselors in the rehabilitation discipline. These students come out of high school where they have received a great deal of assistance and encouragement and make plans to attend college or technical school. These students, growing up in an era when section 504 of the Rehabilitation Act of 1973 mandated that they receive services, the ADA implementation is not a new idea and the Individuals with Disabilities Education Act has meant that they have received a great deal of support. While there are supports in place at the post-secondary institutions they would like to attend, there is a real wonder about whether these supports will meet their needs and expectations. In Minnesota, since July of 1995, the technical colleges and the community colleges have merged to form a combined larger and more streamlined post-secondary training entity. This is designed to decrease costs and improve services to students. While the new campuses look great and the number of students served in one location has increased dramatically, the question is whether the merger of the Duluth Technical College and the Duluth Community College into the single entity called Lake Superior College has improved services to students with Learning Disabilities. Student numbers have gone from 875 at the technical

college and 1989 at the community college to 2597 in 1996 the first year that the two schools were physically at the same location. The new merged school was mandated to change the placement test by the state level administration. Finally the number of remedial classes being taught at the school has increased every year to a total of 54 classes being taught during the Fall

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of 2000 designed to improve a students ability to read, write, do math and improve the basic study skills. As many of the students with learning disabilities do not test well on standardized tests, these classes are the starting point for many of the students that the rehabilitation counseling staff work with.

Students with learning disabilities are in increasing numbers seeking assistance from Rehabilitation staff to admission to and support in college. Students and those individuals that make up their support systems, correctly see college as a way of increasing their job satisfaction and improving their potential for earnings and advancement in the world of work and careers. They are seeking admission to and services to accommodate their deficits at the collegiate level in increasing numbers. Has the increase in size at Lake Superior College led to an improvement in the services to students with learning disabilities as compared to the previously smaller school? Do these students get the individual support that they have become accustomed to at the high school level? Has the change in the placement test led to more or fewer students being required to take the remedial classes at the new combined school? And finally, do the remedial classes give the students the skills they need to get into the career focused classes that the students are seeking? The questions being asked in this study pertain to whether or not the smaller school with its more individual but divided attention was better able to serve the students

with learning disabilities or whether the larger school with a different placement test and more dedicated services to students with disabilities and additional remedial classes is better able to prepare students for entry into the classes they are seeking and to better prepare them for entry into the desired fields that students are pursuing.

When the Duluth Technical College was in existence, there were times when students

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were slotted into classes even when they did not meet the basic requirements for academic achievement that was required by the instructors of the various classes. This is a practice that has ceased in the new merged school. Because of the number of students that are seeking entry into the various majors, academic requirements are much more strictly adhered to, with very little latitude allowed by the school administration for moving students into their chosen vocational field without meeting the level of academic achievement as set by the instructor or coordinator of the course.

Statement of the Problem

The purpose of this study is to assess the level of satisfaction of students with the amount and quality of supports they received from the Lake Superior College staff, whether they were required to take remedial classes prior to entry into their major fields, and finally whether these students were admitted to the classes they were seeking to enroll in or were required to plan for a new major and occupational area.

The objectives of the study include:

1. To compare the pre-merger accessability of vocational/technical classes with the post-merger availability of the students desired field of study

- 2. To compare the level of awareness of students with a smaller school and a larger school with the source of the supports they are eligible for, the Office of Students with disabilities.
- 3. To identify the numbers of students referred to remedial classes both before and after the merger and to assess the effectiveness of these classes in preparing students for entry into their desired field of study.

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4. To assess the level of satisfaction with the support services provided to students both before and after the merger of the schools.

Definition of Terms

For the purposes of this study, the following definitions will be used for the terms listed below:

Learning disabled students. Those students who have academic limitations in the areas of reading, math or written communications, who have been diagnosed as learning disabled by a school district or a psychologist and who are eligible for the services of the Division of Rehabilitation Services. These student would be coded as having a learning disability listed as either the primary or secondary disability on the caseload documenting data.

Placement Test. Both the Lake Superior College and before the merger, the Duluth Technical College have an open door policy for admission. Both schools have used a placement test that indicates whether students seeking admission have sufficient academic skills to benefit from the level of course work of the various majors or vocational areas of the school. This test was the ASSET prior to the merger of the two schools. After the Lake Superior College was

formed the test has been the Computer Placement Test (CPT) or for students who requested it, the Assessment and Placement Program(ASAP) which is the slightly longer paper and pencil version of the CPT.

Remedial Classes. These are classes that students are required to take if they do not score high enough on the placement test to be admitted into the classes in their desired field of study.

<u>Compulsory Education</u>. This is the type of education that secondary schools are required to provide to all age appropriate students up to the age of 16. At that time, students are able to

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chose whether they want to attend school. As a result, schools are mandated to serve any student up to the age of 21 regardless of disability or ability to learn. Secondary schools are required to provide an Individual Education Plan designed to meet all of the needs of students who have a disability. These plans must be updated annually and are required to address transition issues after the age of 14.

<u>Voluntary Education</u>. This is the type of education offered at Lake Superior College and other institutions of higher learning. Students are expected to pay tuition and attend the school because it is a choice that they are making to further their education past the secondary level.

<u>Transition</u>. The act of moving from the secondary educational institution such as the high school to work and educational activities of an adult nature.

While there are many questions which arise as a result of the merger of the two schools with regard to improved services to students and improved instructional capacity, this study will limit itself to assessing the satisfaction of two groups of students with learning disabilities. The first group of students to be surveyed are a group of learning disabled students who were enrolled

at the Duluth Technical College in 1994, prior to the merger. The second group is composed of a group of learning disabled students enrolled at Lake Superior College in 1999. Are the services that are designed to assist them in accessing a college level education or training meeting their needs and preparing them for entry into the major areas that they have chosen? The assumption is that if they can get into the classes they are seeking, they will have better access to jobs after they successfully complete their course work. While there may be an area for further study, this is beyond the focus of the current study. This examiner will be utilizing a satisfaction survey of two groups of learning disabled students. One group will be the students that were at the Duluth

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Technical College in the 1994-1995 school year, the year before the merger. The other group will be the students with learning disabilities that were enrolled at Lake Superior College during the 1999-2000 school year. The second group was chosen to allow time for the school to work out the merger problems and improve their services to the current levels.

Chapter II

LITERATURE REVIEW

In the literature review, the areas to be discussed will include legislation that has an impact on changing attitudes and educational opportunities for persons with learning disabilities. The second area to be discussed is the impact these rising expectations have on the services available from secondary institutions and the rationale for why parents and students are demanding more from both secondary and post-secondary institutions. The third area to be discussed are the level of demands for services and accommodation from post-secondary institutions.

Legislation

The changes in attitudes of parents and students with learning disabilities really begins in 1964 with the passage of the civil rights act. This started many groups of parents and persons

with disabilities thinking about the rights that they have to quality services that would improve their lives both for living and for working. The federal government changed many attitudes and expectations in 1973 with the implementation of section 504 of the Rehabilitation Act of 1973. This act held that students with disabilities had to be served by post-secondary institutions receiving federal funds. The mid-seventies saw the enactment of Public Law 94-142 in which Specific Learning Disabilities began to receive increasing attention and resources (Koller,1994). The World Health Organization and the American Psychiatric Association both recognized that there was a group of persons with a different type of learning disability. In addition, the Rehabilitation Services Administration establishing a discrete disability code for learning disabled persons (Cato, 1982). In 1987 with the change in the Diagnostic and Statistical

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Manual, third edition, students with below average scores on the standardized intelligence tests were no longer considered mentally retarded, but were placed into a new category called borderline intellectual functioning. These legislative changes not only assisted parents and support groups in pressing for the rights of many different types of disability groups, society as a whole with the push from this type of legislation began to view the disabled person as a person foremost with the same legal rights of any citizen, rather than as a person who could not act on their own behalf. In the same time frame, teachers and administrators became aware of a group of students who were considered to have good potential to learn, appeared to expend good effort to learn, but were unable to gain the academic skills as readily as their tested potential and efforts would have predicted. Educators and rehabilitation practitioners began to take a new look at these people who did not fit their expectations. The students were exerting great effort into the

learning process, but their academic progress did not match this effort (Dudley-Marling, Dippo 1995). Previously held beliefs about a number of disability areas were questioned as parents were no longer satisfied with the status quo of services provided by public schools and with what was available to their children after school was completed. These disabled adults were moving with increasing frequency into the world of post-secondary training and eventual employment. The implementation of the Americans with Disabilities Act in 1990 simply added momentum and backing in law to demands that parents and students were already making of systems that had been making some concessions to their needs prior to this time. The concept of Transition began to become an increasingly important focus of attention for educators and rehabilitation personnel as it became apparent that students with learning disabilities needed a structured change to make the most of post-secondary learning and training opportunities (Koller, 1994).

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<u>Impact of and Rationale for Rising Expectations</u>

A widely held belief among parents and consequently their children is that there is a strong correlation between ones level of education and ones ability to access acceptable levels of employment and subsequently, ones job satisfaction. These beliefs are confirmed and supported by twelve longitudinal studies documented prior to 1992 showing that the level of education a person with learning disabilities has been able to attain has a direct impact on the jobs that disabled people can access. Many of these studies have shown that persons with learning disabilities are unemployed or underemployed (Gajar, 1992). This is supported by an additional more current study that found that persons with Learning Disabilities felt that they were underemployed and did not get consideration for promotions in the same amounts as persons

without learning disabilities (Witte and Philips, 1998). However, Greenbaum and Graham in 1996 reported that there is a group of people with learning disabilities that have made a good adjustment to adulthood and who have been able to access higher education. As a result of this higher level of education, they have been able to get into managerial and professional jobs at a higher rate than some of their disabled peers. Their levels of achievement and job satisfaction have increased as their level of education has risen. So, education which is seen as the single greatest leveler of economic opportunities for students without disabilities, is also the prime mover in leveling the playing field for students with learning disabilities.

Raskind and Higgins in 1998 report that students with learning disabilities are the fastest growing disability group entering post-secondary institutions. They had problems finding exact numbers, but report that in 1987 there were between 160,000 and 300,000 students who had learning disabilities and were enrolled in the nations colleges and universities. According to the

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executive director of the Association of Higher Education and Disability (AHEAD), learning disabled students were the largest single disability group being served on American campuses (Jarrow, 1987). These students have been accustomed to supports and accommodations at the high school level and with the support of legislation are demanding the same of post-secondary institutions (Hicks-Coolick and Kurtz, 1996). Factors that have contributed to the increased numbers of learning disabled students in post-secondary institutions include but are not limited to the following. An increase in the aspirations, expectations and preparation of students with learning disabilities for educational opportunities after high school. The legal strengthening of opportunities through the Americans with Disabilities Act and the Individual with Disabilities

Education Act. An increase in outreach by the post-secondary institutions who are trying to increase the number of students that are enrolled at their institutions. The willingness of not only public institutions of higher learning, but also the smaller private institutions to provide services to students with learning disabilities. The greater levels of self advocacy skills by students with learning disabilities. And finally, an increase in awareness of LD professionals in the post-secondary setting of the needs of students with learning disabilities (Vogel and Leonard, 1998).

Demands for Accommodation

As the number of students with learning disabilities have increased, the popularity of the accommodations for these students have also increased, leading to a number of students who are claiming a learning disability without evidence of any previous problem (Stewart, 1995). This increase in requests for accommodations and support has given rise to an increase in the need for evaluation of the eligibility for learning disabled services. There has been a corresponding increase in the level of psycho-educational testing at both the secondary level in preparation for

transition to the post-secondary institution and at the college level as LD professionals attempt not only to find out who qualifies for the LD services, but also attempts to tailor the services to the needs of the student (McAfee, 2000). One of the areas that students with learning disabilities and their parents are beginning to be more concerned about is the level of support services available at different post-secondary institutions (Levinson and Ohler, 1998).

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As the number of students with learning disabilities have increased, the demands for accommodations and modifications has increased. In high school, students were able to test in different rooms. Teachers and LD staff were willing to provide readers, scribes and alternate

testing materials. Additional time on tests was a given in many high school testing situations.

Problem Areas for Faculty and Staff of Post-Secondary Institutions

Surveys of faculty have revealed that college level instructors with an eye toward what is fair for the regular students may have problems with the level of assistance requested and in some cases demanded by the students with learning disabilities. The instructors may not be as willing to change how they do things if they see the accommodations as watering down the academic content or dumbing down the academic levels of the course work they are teaching (Norton, 1997). There are felt to be ethical concerns in how the rights of students with learning disabilities may impact the integrity of academic courses, programs of study and of the institution itself (Bourke, Strehorn and Silver, 2000).

Admissions staff of post-secondary institutions may be in the front lines of dealing with a changing set of values and expectations. More and more, students and the courts are taking a different look at the effectiveness of standardized admissions tests. In some institutions, more weight is being given to class rank and high school grades. This is a challenge since many

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learning disabled students have been given a high school diploma after completing a modified curriculum (Spillane, McGuire and Norlander, 1992).

On a larger scale, the staff of Post-secondary institutions may have concerns about the cost of and effectiveness of accommodations to students with learning disabilities. One of the more well known cases involves Boston University president Jon Westling. Because of his concerns about the cost of providing services to a large and expanding population of learning disabled students, he attempted to change the way that students were given access to the services

of the Office of Learning Disabilities Support. This was challenged and subsequently, Boston University was forced to return to many of the previous policies (Academe, 1997).

Both faculty and staff are in the midst of a learning process that may be modified by the courts over the next several years. Determinations of what is "reasonable accommodation" and "otherwise qualified" will have an impact on who is served and how they are served in post secondary institutions (Zuriff, 1996).

Challenges for Support Services Staff

At the present time the staff that is charged with assisting students with learning disabilities must serve two masters. On the one hand they are legally responsible for making the services of the institutions of higher learning available to individuals with learning disabilities. On the other hand, they must work with instructors and professors of many different classes for a variety of individuals, a number of different disabilities, and find themselves mediating between two competing expectations (Finn, 1999). There are problems dealing with students with learning disabilities who first identify themselves when they ask for accommodation. These students are required by section 504 of the Rehabilitation acts of 1972 to self-identify in order to

receive services. This is often difficult for students. The dilemma for support services staff is that these students, who don't want to be identified do want the support services. Thus, support staff not only must deal with educating and acting as a resource for faculty and staff, provide support services and accommodations to students, and finally educate students about their rights and responsibilities to attempting to educate them to negotiate with persons in authority on an independent basis (Carroll and Johnson-Brown, 1996). This brings us back to the basic question

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of the research being proposed here. Does an increase in size of the institution give more opportunities to students with learning disabilities? Does a change in the placement test result in better preparation prior to the start of academic work in the major field? Are the students able to access the major study areas or vocational preparation classes that they want to pursue? And finally, what is the satisfaction level of students with both the office that is charged with serving them and the post-secondary institution as a whole?

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Chapter III

RESEARCH METHODS

Subjects

The subjects for this study are current and former students of the Duluth Technical

College and its successor, the Lake Superior College who have been diagnosed by a secondary

school psychologist or a psychologist in private practice as having a learning disability and who qualify for the services of the Division of Rehabilitation Services and met the following criteria:

- 1.) enrolled in the school in either the 1995 or 1999 school year. Students who were enrolled in both years were considered to have been in school in the 1995 school year.
 - 2.) had a disability code of 632 as either their primary or secondary disability.
- 3.) were on the caseloads of the counselors in the Duluth Field Office of the Division of Rehabilitation Services.

The names, addresses, and phone numbers of the students were obtained from the main offices of the Division of Rehabilitation Services in St. Paul. While background data was available from the rehabilitation offices, the subjects were asked for this information to get a cross section of the respondents to the survey.

Method

A survey (Appendix A) was designed by this author to assess the level of satisfaction with the services to students with learning disabilities at the Duluth Technical College and its successor, the Lake Superior College and to identify how the merger may have had an impact on these services.

The survey form was developed with the target population in mind. The subjects were all

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persons with reading and writing problems, so simplicity and level of vocabulary were taken into account as the questions were developed. Whenever possible simpler, two choice options were given as a response to the survey item. All items requiring a level of satisfaction response were accompanied by numbers and always went from lowest satisfaction and number to the highest

level of satisfaction and number to avoid confusion.

The survey items were developed as specifically as possible to allow the quick completion of the form and to gather the information with the least amount of difficulty and confusion for the subjects.

Surveys were coded to assure confidentiality of respondents, but also to allow this investigator to track which subjects had been reached and which subjects needed further additional phone follow-up.

Procedure

The survey was conducted by phone beginning on 10-23-00. Subjects were contacted and asked if they were willing to be part of a satisfaction survey about the Duluth Technical College/Lake Superior College. Subjects who agreed to participate in the study were then read a script (appendix A) that outlined the confidentiality conditions and the fact that participating in the study was strictly voluntary. Subjects were asked eleven questions. The first two were demographic questions on age and racial or ethnic grouping. The remaining nine questions were questions of the subjects experience at the Duluth Technical College/Lake Superior College.

The final phone surveys were completed on 11-13-00. Twenty seven of a possible thirty three research subjects were contacted. Three additional subject families were contacted, but the subjects did not respond to the opportunity to participate in the study. Three of the possible

subjects had moved without leaving a new phone number and could not be contacted.

Limitations

The limitations of this research project must be considered before drawing any

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conclusions about the efforts and effectiveness of the Office of Students with Disabilities and Lake Superior College to serve students with Learning Disabilities. First, this is a one time, short term study. A longitudinal study that followed students from entrance into the school, through training, placement and finally doing follow-up to assess job retention and job promotion would be a much more effective way to show how the services improved the students ability to both learn job skills and be able to use them effectively on the job.

Secondly, although the population drawn for the study was 100% of the Learning Disabled students who were eligible for the services of the Division of Rehabilitation Services, this was a quite small sample. There were fourteen total Learning Disabled students that registered for classes in 1995 and nineteen learning disabled students that registered for classes in 1999.

The honesty of responses is another limitation of the research. Although the researcher tried to avoid leading questions which would cause subjects to respond in the method they felt was wanted, it is difficult to get entirely honest answers.

The rate of response for the two sections of the study was approximately equal, with 71.4% of the students registered in 1995 responding to the questions and 73.6% of the students registered in 1999 responding.

Analysis

The responses to the questions were tabulated by this researcher. The three satisfaction

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questions were analyzed using the two tailed T-test statistical method. The other questions requiring two responses were analyzed by doing a percentage of responses to each question for

the two groups and comparisons between the group registered in 1995 and the group registered in 1999. The results are displayed in tables. Written discussion is used to draw conclusions about whether students were able to pass the remedial classes they were required to take and whether they were able to access the classes they wanted or if they changed majors.

RESULTS AND DISCUSSION

The purpose of this study was to assess the level of satisfaction of students with learning disabilities who were enrolled at Lake Superior College prior to the physical merger with the Duluth Community College and the level of satisfaction of students with learning disabilities who enrolled at Lake Superior College after the two previously independent schools were merged into one entity.

A survey instrument was developed by this experimenter to obtain information from learning disabled students enrolled at Lake Superior College who were also eligible for and using the services of the Division of Rehabilitation Services office in Duluth. The survey asked personal data about age and ethnicity. Questions were asked about types of majors, requirements to take remedial classes and which academic areas required remedial assistance. Satisfaction questions were asked about information received about the Office of Students with Disabilities, the level of assistance that they received and the overall satisfaction with Lake Superior College.

Age Groupings

The phone survey of subjects asked for an age grouping that best fit the current status of the person. Of the subjects that agreed to participate in the survey, 16 of 24 subjects were in the age range of 18 to 24. The second grouping, 25 to 34 had 6 of 24 respondents. The last two age groupings, 35 to 44 and 45 to 54 had one respondent in each group. In the overall student population at Lake Superior College, this is a population that is younger than the general population. This is especially true in the 1995 group when the college listed 30 to 40 percent of

non-traditional students, meaning those students who were not attending the school immediately following high school graduation. The information received from the Rehabilitation Services

Office in St Paul provided the last known address and phone number of all of the subjects.

The second area of information requested of all subjects was their racial or ethnic group. This was requested to compare this grouping with the population as a whole. Of the people who participated in the study, only one of the twenty four subjects was a minority person. This may seem somewhat low, but in reality is a fairly accurate representation of the Duluth Community where four percent of the population is a member of an ethnic or racial minority. The one surprise is that the one minority representative was an African-American. The reason this is somewhat a surprise is that the Native American population is the largest minority group in the community.

Table 1

Age grouping of Respondents

	18 to 24	25 to 34	35 to 44	45 to 54	55 and older
1995 group	5	4	0	0	0
1999 group	11	2	1	1	0

Major at the Time of Enrollment

The third question asked of survey participants was whether the area that they wanted to

study at the time of enrollment was a vocational-technical major or a regular college major. Of the people who responded in the 1995 grouping of subjects, all (100%) of the people wanted vocational-technical majors at the time of enrollment. This is not a surprising finding as this was the last year that the merged schools were physically separate. In the 1999 grouping of subjects, nine of fifteen(60%) of this population wanted vocational-technical majors at the time of enrollment. Six of the fifteen (40 %) wanted regular college majors when they enrolled at Lake Superior College. Table 2 shows the breakdown of the data between the two study groups.

Table 2

Major at time of Enrollment

	Vocational/Technical	College	
1995 group	9 (100%)	0 (0%)	
1999 group	9 (60%)	6 (40%)	

Awareness of the Office of Students with Disabilities

This is the first of three questions in the survey about the level of satisfaction with the services provided to students with disabilities at the Lake Superior College. The question asked about the level of awareness of students at the time that they enrolled at Lake Superior College. There were five levels of response from no awareness to having met with the office or its coordinator prior to enrollment. The satisfaction questions were treated differently that the two

groups, one group being the students who enrolled in 1995 and the other group being students who enrolled in 1999. The a mean level of satisfaction was established for each group and a standard deviation was done on each group. The groups were then compared using a two tailed T-test. There was very little difference between the two groups with regard to the level of satisfaction. The mean for the 1995 group was 3.44 of 5 possible points. The mean for the 1999 group was 3.53 of 5 possible points. The standard deviation for the 1995 group was 1.59 and the standard deviation for the 1999 group was 1.51. The T-score comparing the two groups was 0.89. There is very little variability between the two groups in the level of knowledge about the Office of Students with Disabilities at the time of enrollment in the college. The results are displayed in table 3.

Table 3

Level of Awareness of the OSD

	Mean	Standard Deviation
1995 group	3.44	1.59
1999 group	3.53	1.51

Amount of Assistance to Students

The question about the level of satisfaction with the services of the Office of Students

with Disabilities was also a question with five levels of response. The range on this question was from no help at the first level to really great help at the fifth level of response. The mean and

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standard deviation was again determined for both the 1995 group of subjects and the 1999 group of subjects. The 1995 group had a mean of 2.78 of 5 possible points. The standard deviation for this group was 1.20. The 1999 group had a mean of 2.6 with a standard deviation of 1.35. A two tailed T-test was again run to compare the two groups with a T-score determined to be 0.74. There was again very little variability between the two groups. The results of this question are displayed in Table 4.

Table 4
Perceived level of Assistance

	Mean	Standard Deviation
1995 group	2.78	1.20
1999 group	2.6	1.35

Remedial Classes Required of Students

Most of the students who enrolled at Lake Superior College were required to take classes to improve their abilities in the areas of reading, writing, math skills and study skills. Subjects were asked to recall which classes they were required to take at the college. In each group there was one student who was not required to take remedial classes. Of the remaining students, each

student took an average of 2.4 remedial classes. In the 1995 group, eight students were required to take 20 remedial classes. In the 1999 group, fourteen students were required to take 32 remedial classes. The 1995 group was most often lacking skills in writing and English, with six

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of the eight (75%) required to take classes in this area. Reading was the next highest area of concern. Five of the eight (63%) of the students in this group were required to take remedial classes in reading. The figures for math are identical with five of the eight (63%) students being required to take a course to improve their math skills. Four of the eight (50%) students were required to take a course to improve their study skills in the 1995 group.

The 1999 group again had one student that was not required to take remedial classes. The remaining students in the 1999 group were again most heavily required to take a course to improve their skills in writing and English. Twelve of fourteen (86%) were required to take classes to improve these skills. This was followed by ten of fourteen (71%) students who were required to take classes to improve their reading skills. The third most frequent requirement for remediation was the area of math skills, with seven of fourteen (50%) students needing to successfully complete these courses. All students who were assigned to remediation were required to pass these courses with a grade of C or better in order to be able to take classes in their major. The results from this question are displayed in Table 5.

Table 5

Remedial Classes Required

	Writing/English	Reading	Math	Study Skills
1995 group	6 (75%)	5 (63%)	4 (50%)	4 (50%)
1999 group	12 (86%)	10 (71%)	7 (50%)	3 (21%)

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Number of Subjects Passing Remedial Classes

As reported earlier, all students assigned to remedial classes due to academic problems as reported on the college placement test must take and pass recommended remedial classes with a grade of a C or higher before they are allowed to enroll in further classes. Because this is such an important area for a students college career at Lake Superior College, subjects were asked whether they were able to pass the remedial classes. The 1995 group had good success in these classes with all eight (100%) subjects that were required to take remedial classes report that they were able to pass these classes. The 1999 group was not as successful with nine (64%) of the fourteen subjects reporting that they passed the remedial classes and five (36%) reporting that they were unable to pass the remedial classes that they were required to take. These results are shown in Table 6.

Table 6
Subject Results of Remedial Classes

	Number of Students Passing	Number of Students Failing
1995 group	8 (100%)	0 (0%)

1999 group 9 (64%) 5 (36%)

Number of Students Allowed to take Classes in Major Area

All subjects were asked if they were allowed to take classes in the major area after completing the remedial classes. In the 1995 group, all nine of the subjects report that they were

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able to register for and take classes in their major areas. Previous reports show that these students all passed the remedial classes that they were required to take. In the 1999 group, nine (60%) of fifteen subjects reported that they were unable to take classes in their original major area. Six (40%) of fifteen subjects reported that they were allowed to take classes in the major area that they had registered in. These results are shown in Table 7.

Table 7

Number of Students Taking Classes in Major

	Subjects Taking Classes	Subjects Unable to Take Classes
1995 group	9 (100%)	0 (0%)
1999 group	6 (40%)	9 (60%)

Changing Majors

Subjects were then asked if they changed their majors and also asked a follow-up question about whether the new major was Vocational/Technical or a regular college major.

Because all of the survey questions were asked of all persons willing to be a part of the study, even subjects who had successfully passed their remedial classes were asked if they changed their major. Many of these people reported in the affirmative, that indeed they had changed their majors even though they had passed their remedial classes and were allowed into the area that they had originally requested when they enrolled at Lake Superior College. Because these questions are so closely related, they will be reported in the same section. Six (67%) of nine

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subjects in the 1995 group report that they changed majors with three (33%) reporting that they changed to a different Vocational/Technical major and three (33%) reporting that they had changed from a Vocational/Technical major to a regular college major. Of the 1995 group of subjects only three (33%) stayed with the major that they said they wanted when they first enrolled at Lake Superior College.

The 1999 group of subjects reported that six (40%) of fifteen subjects reported that they changed majors after completing their remedial work. Nine (60%) of fifteen subjects report that they did not change majors. However, this number includes five subjects who were unable to pass their remedial classes. These subjects did not change their major, but did leave school at this point. Future plans were not discussed. Of the subjects who changed majors and stayed in school, the numbers are evenly divided. Two of the six subjects changed majors from a college major to another college major. Two of the six subjects change from a vocational/technical major to another vocational/technical major. These results are reported in Table 8.

Table 8
Subjects who Adjusted Plans

	Same Major	New Voc/Tech Major	New College Major
1995 Group	3 (33%)	3 (33%)	3 (33%)
1999 Group	9 (60%)	2 (13%)	4 (27%)

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Satisfaction with the College Experience

The final standard question asked of all subjects was to rate their experience at Lake Superior College. Subjects were asked to rate their experience by choosing a level of satisfaction. The range of choices was from not satisfied at the lowest level to a really great experience at the fifth and highest level. For this question a mean and standard deviation was again determined for each of the groups. A two tailed T-test was also done to show the amount of variability between the two groups. Once again, the data shows very little variability between the two groups of subjects. The 1995 group had a mean score of 3.44 out of 5 possible. The standard deviation is 1.13. The 1999 group had a mean score of 3.53 with a standard deviation of 0.99. The T-score for this question was 0.85. The statistical results for this question are shown in table 9.

Table 9

Level of Satisfaction with the College Experience

	Mean	Standard Deviation	
1995 group	3.44	1.13	
1999 group	3.53	0.85	

Comments from Respondents

The final area of the survey form allowed subjects to make comments about their experiences at Lake Superior College. These comments are listed as agreed to by the respondent

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and the researcher. Some consideration was given to editing remarks, but any changes made were made with the agreement of the responder. Comments are listed by group with the 1995 group listed first.

- 1. I enjoyed the classes that I had. I had fun going, I had fun learning. Some of the general classes weren't very helpful, such as the resume class.
 - 2. Overall, I liked the smaller setting for some of the classes.
 - 3. I would go there again.
- 4. It was hard for me to find out about the Office for Students with Disabilities and to get help from them.
 - 5. They did a good job.
- 6. It's a real good college to go to and they help you out a lot. I didn't use their services as much as I could have.
 - 7. I have recommended Lake Superior College to other people.

- 8. The Office of Students with Disabilities was really helpful, but I didn't use them that much.
- 9. They have been extremely helpful. One woman in particular was very helpful. When she moved on, her successor was just as helpful. They introduced me to Dragon Dictate. They reached out to me more than I sought their help.
- 10. I think that my advisor was really good and supportive. I liked the current coordinator of disability services better than the previous coordinator. Better and more personal service, much more approachable. They listen about both school and personal problems. Like they are your friend.

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- 11. The school needs to provide a better understanding of the rules for students who use their services.
- 12. They don't do anything to help you. They will help you to a point then won't do anything more for you., even if you need the assistance. I didn't think I got a lot of help from the learning center.
- 13. Their support service is great if you ask for the assistance. They'll bend over backwards to help you become a successful student.
 - 14. It was O.K.
 - 15. I was really satisfied, if I needed help I could go to them and get the help I needed.
 - 16. I never really even met the people at the Center for Students with Disabilities.
- 17. I really liked the teachers. The second year of the program was not as in depth as I wanted.

Chapter V

Summary and Conclusions

Statement of the Problem

This Causal-Comparative study examined the level of satisfaction of two groups of learning disabled students who were eligible for the services of the Division of Rehabilitation Services office in Duluth, MN. One group attended Lake Superior College in the last year prior to the physical merger of the Duluth Technical College and the Duluth Community College. The other group of learning disabled students enrolled in the Fall of 1999. Subjects were assessed for their level of satisfaction with the services of the Office of Students with Disabilities, with their overall satisfaction with the Lake Superior College experience, whether they were required to

take remedial classes, if they were able to pass remedial classes and finally whether they were able to stay in their major field or if they changed majors.

Methods and Procedures

The two groups of subjects, identified by the Division of Rehabilitation Services, were telephoned and asked questions about their experiences at Lake Superior College. All interviews were conducted according to a script prepared in advance. Results of the survey were tabulated and a T-test was done on the three questions asking the level of knowledge of the subject about the Office of Students with Disabilities prior to enrollment, the level of satisfaction with the Office of Students with Disabilities and the overall level of satisfaction with the Lake Superior College experience. The remaining questions, primarily two response questions were separated and percentages were done. All of the results were listed in tables. The survey and questions

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used were developed by the evaluator.

Conclusions

Population make up

The make-up of the study groups with regard to age make up and racial or ethnic groupings was as expected. Because of the more recent determination by the congress, secondary schools and the Rehabilitation Services Administration that Learning Disabilities was a recognized disability, the population was over represented in the younger age groups. This is somewhat abnormal for Lake Superior College. Staff at the school have reported a larger number of non-traditional students among their enrolled student population than have the more traditional local four year post-secondary institutions. The racial-ethnic make up is about what

one would expect from this population. Lake Superior College in the accreditation document reports a local minority population of about 4%. This study had a minority representation of slightly over 4%. The one minority person responding to the study was an African-American. With the make up of the local population, the largest minority group is the Native American population and it would normally have been expected that at least one of the respondents would have been a Native American. However, there is a local two year tribal and community college and many of these students are enrolled at that institution.

Ability to Access the Office of Students with Disabilities

The responses to question four about the awareness of the Office of Students with Disabilities and to question five about the level of assistance received from the office were very closely grouped with little variability between the two study groups. There did not seem to be any perceived difference between the prior knowledge of the subjects about the office. The

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numbers are quite close for the level of assistance question, with the mean of the responses only 0.18 apart on a scale of five. Three of nine students in the 1995 group met with the Office of Students with Disabilities prior to enrollment and six of fifteen (33% compared to 40% respectively) of the 1999 group met with the office prior to enrollment. The ability to access the services was not affected by the merger of the two schools and the subsequent increase in student population on campus. Similarly, subjects did not seems to feel that there was any difference in the level of assistance prior to the merger as compared to after the merger (T-score of .74).

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Numbers of Subjects Required to take Remedial Classes

Of the subjects who participated in the study, eight of nine students in the 1995 group

were required to take remedial classes (89%). In the 1999 group, fourteen of fifteen subjects responding were required to take remedial classes (93%). This does not appear to be a significant difference between the two groups. What is remarkable is that all of the subjects in the 1995 group passed the remedial classes while five (33%) of the 1999 group failed the remedial classes that they were required to take. This is a significant difference and may be an area that requires further study. Have the remedial classes themselves changed or has the level of personal instruction been affected by the increase in student population and the subsequent increase in the number of sections of remedial classes offered? Or was one of the two years of study simply an anomaly? Were the subjects over-reaching their capabilities? All possible areas that may require further study to determine possible reasons.

Subjects in both study groups appeared to change majors in equal amounts. The age of the subjects and the lack of experience in post-secondary institutions could have contributed to the degree of willingness to change major fields of study. Two of the subjects in the 1999 study

group changed majors in response to failing the remedial classes. All of the rest of the changes came as a result of other issues. Five of fifteen (33%) subjects in the 1999 group either changed majors or left school as a result of the failure to pass remedial classes. Again, this appears to be a significant number of subjects affected by the merger of the two schools.

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Level of Satisfaction with the School

The final satisfaction question again shows little variability between the two study groups. The means of the response question are separated by .09 on a scale of 1 to 5 points. The subjects feel that their experiences at Lake Superior College are similar and are positive. This

appears to be supported by the responses that are recorded in the anecdotal data recorded at the end of chapter four. Twelve of the seventeen subjects making comments about the school and/or the Office of Students with Disabilities were positive to very positive.

Overall, it appears that Lake Superior College has been able to deal with the problems of forming one campus and student body out of two distinct and diverse student populations in a positive and effective way. That there have been serious problems, there is no doubt. What can be said is that a group of subjects who require a great deal of support and accommodation in order to be successful do not perceive any difference in the level of support from the institution and the Office of Students with Disabilities.

Recommendations for Further Research

Having one third of the subjects who responded to the survey fail the remedial classes is certainly an area that possibly merits further study. Are the classes themselves at fault or does the change in the placement test allow more marginal students into classes that they do not have the skills to benefit from? That the number of sections of remedial classes have increased has

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been established. Has the number of students in each class and the increased number of sections resulted in a decrease in the level of student-teacher interaction? This may have negatively affected the ability of learning disabled students to benefit from the classes and successfully compete for passing grades.

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Appendix A

Appendix A is the script used for each of the phone interviews. Scripting was done to insure that all subjects got the same message about

how the information would be used, about how the confidentiality would be guarded, and about the fact that there was little chance of harm coming to the subjects by participating and no reward for participating in the study.

Survey Script

Hi, this is Ken Norstrud from Rehabilitation Services. I was wondering if you could take a few minutes right now to answer a few questions about your experience at Lake Superior College? Your answers will be kept confidential, your name will not appear on the response sheet I will fill out and there will be no report made to Lake Superior College about any of your responses. This is research for my master's degree at the University of Wisconsin-Stout in Menomonie, WI. There will be no method of identifying who made responses in the final paper. You need to know that there is little or no chance of any harm coming to you by participating in the study and there is no benefit to you for participating in the study. It will take us less than ten minutes to complete the questions and you can choose at any time to stop without consequence to you. If you choose to stop before the end of the questions, I will not use any of your responses. Do you understand what I just said?

Appendix B

Appendix B is the survey form used by the investigator. During the study, each form that was filled out had a number in the upper left corner to track which subjects had been reached and which subjects still needed to be contacted.

SURVEY FORM

1) Age (please	circle one group) 18	to 24 25 to	34 35 to 44	45 to 54	55 and above		
2) Your racial	group (please circle o	ne) White	African Amer	ican	Hispanic		
Aı	merican Indian		Asian or Pacific Islander				
3) When you applied for entrance into the Duluth Technical College/Lake Superior College did you want to pursue a vocational/technical or regular college major? (please circle one) vocational/technical major college major							
4) When you applied to the college were you aware of the Office for Students with Disabilities? (please circle one)							
1 no awareness	2 somewhat aware	3 aware of the	office told of the	•	5 net with the office	;	
1	ice and their teachers 2 somewhat helpful	3	h your goals? (pl 4 very helpful	5			
6) If you enrolled in remedial classes where did you need help? (please circle all that apply) reading writing math study skills							
7) Were you able to pass the remedial classes? (please circle one) Yes No							
8) When you completed the remedial classes did you enroll in classes for your major? (please circle one) Yes No							
9) Did you change majors? (please circle one) Yes No							
10) What was your new major vocational/technical or a regular college major? (please circle one) vocational/technical major regular college major							
11) Were you satisfied with your experience at the Duluth Technical College/Lake Superior College? (please circle one)							
1 not satisfied	2 somewhat satisfied	3 satisfied	4 very satisfied	a really g	5 creat experience		

Comments:

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Appendix C

Appendix C shows the raw data for the 1995 group of subjects. The raw data is shown in parenthesis by each of the responses possible for the survey item. The raw data is shown on the survey form. Where there was no information given by any of the respondents, a zero is shown in the parenthesis. Because one subject was not required to take remedial classes, an additional response was added to item 6.

Raw Data for the 1995 Group

1) Age (please c	ircle one group) 18	3 to 24 (5)	25 to 34 (4)	35 to 44 (0)	45 to 54 (0)	55 and above (0)	
2) Your racial g	roup (please circle		hite Af	frican Ame (0)	rican	Hispanic (0)	
Amo	erican Indian (0)	(,	an or Pacifi (0)	c Islander	(0)	
3) When you applied for entrance into the Duluth Technical College/Lake Superior College did want to pursue a vocational/technical or regular college major? (please circle one) vocational/technical major college major (5) (4)							
4) When you ap (please circle on		were you	a aware of	the Office	for Students	with Disabilities?	
1	2		3		4	5	
no awareness	somewhat aware	aware o	_	e told of t	he office 1	net with the office	
(2)	(0)		(2)		(2)	(3)	
5) Did this offic	e and their teacher	s help you	ı reach you	r goals? (p	olease circle	` '	
1	2	3	•	4	5		
not helpful so	omewhat helpful	helpfu	ıl very	helpful	really great	t help	
(1)	(3)	(3)		(1)	(1)		
6) If you enrolled in remedial classes where did you need help? (please circle all that apply)							
reading	writing	math	study ski	lls no	o remedial c	classes required	
(5)	(6)	(5)	(4)		(1)		
7) Were you able to pass the remedial classes? (please circle one) Yes No (8) (0)							
circle one) Yes	mpleted the remed No (0)	ial classes	s did you e	nroll in cla	sses for you	r major? (please	
9) Did you change majors? (please circle one) Yes No (6) (3)							
10) What was your new major vocational/technical or a regular college major? (please circle one							

(3) (3) 11) Were you satisfied with your experience at the Duluth Technical College/Lake Superior College? (please circle one) 3 5 4 very satisfied not satisfied somewhat satisfied satisfied a really great experience (0)(2) (3) (2) (2)

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Appendix D

Appendix D shows the raw data for the 1999 group of subjects. The raw data is shown in parenthesis by each of the responses possible for the survey item. The raw data is shown on the survey form. Where there was no information given by any of the respondents, a zero is shown in the parenthesis. Because one subject was not required to take remedial classes, an additional response was added to item 6.

Raw Data for the 1999 Group of Subjects

1) Age (please	e circle one group) 18	8 to 24 (11)	25 to 34 (2)	35 to 4-(1)	4 45 to (1		and above (0)
2) Your racial	group (please circle	one) W		African Ar	merican	His	panic
Λ	merican Indian		(14)	(1) sian or Pac	rific Island	or	(0)
A	(0)		A		0)	ici	
want to pursue vocationa	applied for entrance are a vocational/technical major (9) applied to the college	cal or re	gular colle college m (6)	ege major? ajor	(please c	ircle one))
(please circle		were yo	ou aware c	or the Offic	c for Stud	ichts with	Disdomnies.
1	2		3		4		5
no awareness	somewhat aware	aware	of the offi	ce told o	of the offic	e met v	with the office
(2)	(2)		(3)		(2)		(6)
5) Did this off	fice and their teacher	s help yo	ou reach y	our goals?	(please ci	ircle one))
1	2	3	·	4	-	5	
not helpful	somewhat helpful	help	ful ve	ry helpful	really	great hel <mark>j</mark>	p
(4)	(4)	(2	2)	(4)		(1)	
6) If you enro	lled in remedial class	ses where	e did you	need help?	(please ci	rcle all th	nat apply)
reading	writing	math	study s	kills	no remed	lial classe	es required
(10)	(11)	(7)	(3))		(1)	
7) Were you a	ble to pass the remed	dial class	ses? (pleas	se circle on	Yes (9)	No (5)	
8) When you	completed the remed	ial class	es did you	enroll in c	classes for	your maj	jor? (please
circle one) Y			-				<u>-</u>
(6) (9)	-11-		NI.			
9) Dia you ch	ange majors? (please	circie o	*	No			
			(6)	(9)			

10) What was your new major vocational/technical or a regular college major? (please circle one)							
vocational/technical major			regular college major				
	(2)		(4)				
11) Were you satisfied with your experience at the Duluth Technical College/Lake Superior							
College? (please circle one)							
1	2	3	4	5			
not satisfied	somewhat satisfied	satisfied	very satisfied	a really great experience			
(0)	(2)	(6)	(4)	(3)			