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ABSTRACT

The need for postsecondary educational programs for handicapped people is increasing, and colleges and universities need to provide access to postsecondary education. In addition to providing access, they also need to ensure that handicapped individuals are accommodated in the social and educational environment of college. However, it appears that the environment has not sufficiently been adapted to their special educational needs, as large percentages of deaf persons and unknown percentages of other handicapped groups withdraw from colleges and universities without graduating. These findings have a theoretical base in the prodictive theory of the persistence/withdrawal process, which indicates that attrition rates will be much higher when low levels of student social and academic integration exist. There is a need for more reliable data on attrition rates; and causes of attrition must be determined, considering such factors as learning disabilities of the handicapped, mobility problems, and communication problems. Institutional researchers must be prepared to describe the dimension of enrolled handicapped persons, their attrition rates, and their use of essential services. Then subgroups of the college population that have unacceptable rates of withdrawal can be identified and plans can be made to meet their special needs. (JDD)



Providing for the Needs of Handicapped Students in a Postsecondary Environment

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INTRODUCTION

The growth of postsecondary education since 1945 has been unprecedented in U.S. history. Returning World War II veterans, large numbers of whom might not otherwise have gone to college, entered universities and colleges from 1945 to 1950 in large part because of federal legislation commonly known as the "GI Bill." In the 1950's community colleges began to develop, opening college doors to large numbers of individuals who would not therewise have had access to higher education.

During this same period, the growth of higher education was fostered by changes in societal attitudes regarding college attendance. The launching of Sputnik, the goal to put a man c the moon, and the civil rights movement resulted in the emergence of concerns regarding access, quality, and choice. Access to postsecondary education, and choice of school by individuals, initially centered on the issue of college opportunities for minorities and children from families with low incomes. The passage of section 504 of the Rehabilitation Act of 1973, as amended in 1974, provided federal protection regarding access by handicapped individuals to higher education.

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 of activity receiving federal financial assistance.

The United States Congress:

Section 504 of the Rehabilitation

Act of 1973. P.L. 93-1121



¹In its original version, Section 504 defined "handicapped individual" only with respect to employment. This was subsequently amended under the Rehabilitation Act Amendments of 1974 (P.L. 93-516) to include education.

The efforts of American society to provide access and choice in higher education has markedly influenced the numbers of handicapped persons seeking postsecondary education. To illustrate this point, data are displayed in Figure 1 concerning the enrollment of hearing-impaired persons in colleges

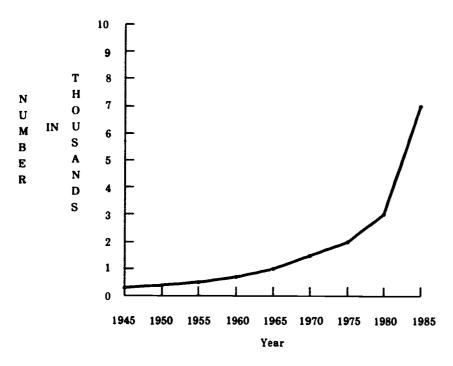


FIGURE 1. Number of disabled students estimated to be enrolled in U.S. colleges and universities from 1945 to 1985.

in the United States since 1945. The growth during this time was the result of the baby boom after World War II, at least two significant rubella epidemics during the same time, and changes in societal attitudes toward providing educational opportunities to people with disabilities. While we do not have good data for other handicaps, there is no reason to expect that the proportional increase in numbers of enrollments is any less.

As the 1990's approach, the rate of growth depicted in Figure 1 is expected to diminish, as is the growth of higher education generally. However, the need for postsecondary educational programs for handicapped people will not lessen in a country that is moving from a "manufacturing" to an "information" based economy. Professionals in business, industry, health, and education; engineers; technicians; and supervisory personnel



will be in greater demand. As a result, colleges and universities will need to provide more than access to postsecondary education--they will need to insure that handicapped individuals are accommodated in the social and educational environment of college.

The growth in numbers of handicapped individuals in colleges and universities tends to indicate that the issue of access is being addressed. However, despite this apparent success, it is estimated that approximately 75 percent of deaf persons enrolling in colleges and universities in the U S. withdraw without graduating. If this generalization can be made to other handicapped groups, then the question of whether the environment has sufficiently been adapted to accommodate to the special educational needs of handicapped individuals must be asked. This question is more important in an era of declining enrollments, when reducing the number of withdrawals coupled with finding new markets are two strategies for maintaining enrollment quotas. The purpose of this paper is to discuss some approaches to accommodating handicapped persons (in a sense a new market) at the postsecondary level in order to increase the probability of their graduating.

A Theoretical Starting Point

The theoretical model presented by Spady (1970), elaborated by Tinto (1975), and tested in various environments by Pascarella and Terenzini (Pascarella & Terenzini, 1979, 1980; Pascarella & Chapman, 1983, Theophilides, Terenzini & Lorang, 1984) provides an explanatory predictive theory of the persistence/withdrawal process that can be applied for use with handicapped college students. The theory posited by Tinto (1975) considers persistence, primarily, a function of the quality of a student's interactions with the academic and social systems of an institution. That is, students come to a particular institution with a range of background traits (achievements, communication skills, personality traits, etc.). These background traits influence not only how the student will perform in college, but also how he or she will interact with, and subsequently become integrated into, an institution's social and academic systems. Other things being equal, the greater the student's level of social and academic integration, the more likely he or she is to continue at the particular institution.



Depending on the nature of the impairment, handicapped students will have some unique difficulties being integrated into the social and academic mainstream of college l.fe. Consider as examples the isolation of the hearing-impaired person who cannot hear a lecture, use a telephone, or interact with peers; or the mobility handicapped person who cannot negotiate the library stacks or attend a bonfire rally; or the blind person who must rely on imagination to visualize the relationships on the professor's overheads, or the action on the basketball court. Thus, while the handicapped individual may meet all the minimal academic requirements for admission to college, we must question whether the environment has accommodated to the special needs of the handicapped individual in order to provide some level of social and academic integration. What we are saying is that while the intent of the law to provide access is being met, the question still exists whether handicapped individuals continue to remain isolated both socially and educationally from the mainstream. If the theory of Tinto is accurate, and these individuals are not being integrated, then attrition rates will be much higher than for the non-handicapped individual.

Data for One Handicap

These authors know of only one study which attempted to assess attrition rates of handicapped persons in colleges. Such studies are difficult, because there tends generally to be no good and consistent record keeping about handicapped individuals in postsecondary education, such as the legal requirements which exist at the elementary and secondary levels. Thus, even the known numbers tend to be estimates rather than exact counts. The one study reported here is from a survey of postsecondary programs for deaf students in North America conducted in the fall of 1985 by Gallaudet University and the National Technical Institute for the Deaf at the Rochester Institute of Technology (Rawlings, et al., 1986). Each college, university, or technical school known to have a specially designated program for hearing-impaired or deaf students was contacted and asked to complete a questionnaire focusing on information about enrollments in the program. Information obtained from 145 programs indicates that an average rate of attrition (from college) for hearing-impaired students is about 71% of an



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entering class. This figure varies from a low of about 61% for Diploma and Certificate programs to a high of 82% for programs offering primarily Associate degrees. Comparisons were made with published attrition rates for hearing college students which were about one-third lower (47%) than the figure for hearing-impaired people.

These data lead one to ask whether the rates of attrition for other handicaps are equally as high and whether such a high level of attrition is acceptable. In order to address these issues we need, perhaps, to make the case that documentation of attrition rates for "special needs" groups would be a way for individual colleges and universities to proceed. Certainly such an approach has been carried out for the variable of race--why not for handicapped individuals? If attrition is to be truly addressed, its causes must be explored for groups known to have unusually high rates.

Handicapping Areas

Learning disabilities. The most obvious area of concern, which can lead to withdrawal from college, is lack of basic skills which enable a person to take advantage of the academic and social environment in college We have spent a great deal of effort in many colleges and universities accommodating to the learning difficulties of the foreign student, but what about the handicapped student who has a reading or language problem? Are special adjustments being made to assist in the transfer of information? We attempt to do this through the provision of a sign language interpreter or notetaker for the hearing impaired, but the provision of this service alone may not improve the person's ability to understand the content of a textbook or a lecture. The provision of lecture notes or sign language interpretation for lectures does not necessarily mean that the "achievement barrier" created by low reading and mathematics skills has been breached. It may be necessary to modify texts and instructional materials and provide a comprehensive battery of compensatory and remedial programs to accommodate the needs of such language handicapped persons. Thus, even though the language handicapped individual has access to the classroom, he/she may remain isolated both socially and educationally from the mainstream of the educational community.



Mobility problems. Thile most colleges and universities have provided ramps and elevators to assist the person with mobility problems to gain access to classrooms, laboratories, and essential buildings, these by themselves may not serve to provide integration into the educational community. What about access to essential offices such as the registrar, financial aid, or dean of students office? These additional services are often over looked when designing space. Consider also the common occurrence of temporary classroom changes. Often a mobility impaired person has taken a considerable amount of time to get to class only to discover it has been moved to another building. Such changes may make his/her getting there on time impossible. Socially, mobility impaired persons have an even more difficult time taking part in the activities of campus life--many ad hoc activities such as going out to get a pizza, attending a sporting event, or just an informal meeting in the neighboring building require advanced planning and additional time to negotiate transport barriers. Such planning often serves to isolate the mobility handicapped person from the mainstream of student life activities in colleges and universities.

Communication. Communication handicapping conditions are any which hinder a person's receiving or sending information in a way commonly used in colleges or universities. This can include the person who has difficulties reading an assigned text, a deaf person who cannot hear the lecture, or the speech impaired, cerebral palsied person who cannot express his/her thoughts through the speech mechanism. Regardless of the nature of the handicapping condition, communication difficulties inhibit a person from using the avenues most often required for information transfer in collegelecture and reading. Often, access to the classroom is not a problem for these individuals, but integration into the questions and answers of the classroom is blocked. Even for the person with an interpreter, the delay imposed by an interpreter often keeps the hearing-impaired person a step behind the information flow--thus making question often seem out of place or interrupting to the lecture. For the dyslexic who cannot read anything written on the board or overhead, while being able to understand the lecture, questioning anything about something displayed in written from is a guess at best. In the social arena, problems are even more pronounced since there is



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almost total reliance on the spoken word to communicate, whether it be through the telephone or face to face cor munication. Just taking part in a discussion in the dining hall is probably very difficult for a person with a communicative handicap -- and since much socialization in our culture occurs over food, these persons will tend to eat alone even when sitting at a table with other students.

We do not mean to imply that it is the responsibility of the college or university to make accommodations for all possible handicapped individuals. This is probably not economically feasible when one considers the diversity of handicapping conditions and the small numbers involved at any given school. What is important for this group is to understand that the high attrition among the handicapped population in your school will increase the overall attrition rate within your institution. As institutional researchers, we will need to be able to identify such groups of "high-risk" students. Unless we develop our data bases to be able to carry out the analysis by group, we will not be able to identify which groups of students have a high attrition rate. This, then, is a first-step--developing our data base in order to identify handicapped students in the population.

After we have established the attrition rates for the various handicapped groups, we can then proceed to decide what the university can do, if anything, to reduce the rate of attrition. One thing is is be sure that essential services of the university such as financial aid, counseling, learning development, and health services are communicated to all handicapped individuals. A recent Harris poll of disabled Americans indicates that most disabled persons are not familiar with some of the most widely available services. Such is probably the case within colleges and universities.

In summary, unless we as institutional researchers are prepared to describe the dimension of enrolled handicapped persons, their attrition races, and their use of essential services, then it will not be possible to address any potential problems for this minority group. It is the feeling of these authors, if we are to truly attack the problem of withdrawal from college, that we must begin to identify subgroups of the college population that have unacceptable rates of withdrawal and move to meet the special needs of these groups.



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