

Report of the University Committee on the Handicapped

August, 1979

President C. Peter Magrath constituted and appointed the University Committee on the Handicapped in August of 1978. The Committee is the main policy development committee with respect to access for handicapped students to University programs. In this capacity it figures as the successor to two previous committees, the University Committee for the Physically Handicapped which was appointed in 1974 to work on the access problems of handicapped persons, and the 504 Compliance Review Committee, which was appointed in 1977 to evaluate the accessibility to University programs with respect to their compliance with the provisions of the 504 Regulations.

The University Committee on the Handicapped met four times during the academic year of 1978-79, and its work led to the creation of this report. A list of the members of the Committee is included below.

Leo Abbott, Director
Admissions & Records

Orlo Austin, Director
Student Financial Aid

Barbara Blacklock
DVR Liaison Counselor

Nancy Crewe, Assoc. Prof. & Psychologist
Physical Medicine & Rehabilitation

Lynn Eklund, Student

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Steve Granger, Asst. Provost & Prof.
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Peter Roll, Spec. Asst. & Assoc. Prof.
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Don Sargeant, Prof. & Asst. Provost
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Marj Schneider, Student and Pres. Student
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Jim Shearer, Executive Assistant
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Pat Swanson, Student

Les Szomor, Architect
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Al Ward, Asst. Prof. & Director
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Lillian Williams, Director
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REPORT OF THE UNIVERSITY COMMITTEE FOR THE HANDICAPPED

Introduction

What should institutions of higher education do to make their programs and activities fully accessible to students with disabilities? Since federal regulations implementing civil rights legislation for handicapped people came into effect in 1977,*this question has occupied the attention of colleges and universities across the country. At first glance, the answer appears simple. Ramps, readers, and remediation come immediately to mind. Upon closer inspection, however, the question raises some difficult issues that encompass such diverse areas as educational finance, educational philosophy, management practices, rehabilitation theory, and even demography. As the small but growing body of literature in the area indicates, thoughtful attempts have been made to explain what accessibility involves and how it is to be attained but, at this early stage, there is no definitive answer.

By the same token, this report of the University Committee for the Handicapped should not be regarded as a definitive answer; however, it introduces the issues that must be explored if meaningful long term answers are to be found. When President C. Peter Magrath established the committee during the summer of 1978, he assigned to it the work of policy development as a logical outgrowth of the 504 Self Survey conducted the previous year. It was the consensus of committee members that their efforts could be spent most profitably on the clarification of principles for the education of students with disabilities and the assessment of long-term developmental needs in such areas as research, training, and funding. In addition, the committee decided to offer recommendations concerning the general design of programs to accommodate students who are handicapped.

*See Federal Register, May 4, 1977, for regulations implementing Section 504 of the 1973 Rehabilitation Act (as amended).

The Committee's recommendations immediately follow this introduction. Taken together, they set forth a plan of action which the committee hopes will result in significant progress toward the goal of optimum accessibility.

The committee organized its activities around the generation, discussion, and revision of a set of papers on issues needing definition and resolution. The issues papers, prepared by committee members and collected here (beginning on page 20), represent honest attempts to come to terms with relevant problems and conflicts, such as rising program costs vs. diminishing resources, validity and fairness in assessment, student growth and program dependence, integrated vs. segregated services, use and abuse of accommodations in assessments, entitlement vs. needs-based student supports, and other dilemmas that need to be reconciled if an institution is to have a consistent approach toward providing access. It is this recognition of conflicting principles, of discrepancies between the ideal and the attainable, that gives the report its searching, tentative quality. then, should be looked upon essentially as a set of working ideas. Some parts have been written primarily to test hypotheses and others only to provide a conceptual framework for needs that are as yet inadequately defined.

The committee's work and report can best be understood if they are viewed in relation to the principles inherent in the regulations of Section 504 of the Rehabilitation Act of 1973 (as amended) and the University's administrative response to them. Section 504 constitutes major civil rights legislation for handicapped people. Its language is comparable to that of Title VI of the Civil Rights Act of 1964 and Title IX of the Higher Education Act of 1972. It states "No otherwise qualified handicapped person shall, solely by reason of handicap, be excluded from parti-

icipation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance."

On June 3, 1977, the Department of Health, Education, and Welfare's (HEW) regulations implementing Section 504 came into effect. With respect to universities and colleges, the regulations require that handicapped students and employees be accorded an equal opportunity to participate in education and employment programs. To achieve this end, a college or university must make its programs and activities readily accessible and usable in the most integrated setting appropriate.

To the question of what institutions should do to make their programs accessible, the Section 504 regulations set forth some definite requirements. Admissions policies, of course, must not discriminate against students on the basis of disability. Preadmission inquiries about disability are prohibited unless they are accompanied by statements explaining the safeguards that will be used to ensure that the information collected will not be abused. College personnel must use those tests that have been proved effective in assessing relevant abilities and that do not depend on irrelevant sensory, manual, or speaking skills.

During the course of the University's self-evaluation, admissions policies were reviewed and positive actions were taken to ensure that they comply with the admissions provisions of the regulations.

The Section 504 regulations require that physical access be provided

Definition of Handicap

The HEW regulations implementing Section 504 of the Rehabilitation Act of 1973 (as amended) define a handicapped person as anyone who has a physical or mental impairment which substantially limits one or more major life activities has a record of such an impairment or is regarded as having such an impairment. The following handicaps are included: mobility and sensory impairments, major physiological illness, emotional and psychological illnesses, specific learning disabilities, mental retardation, and chemical dependency. The 504 Regulations stipulate that federally assisted programs may not deny equal opportunity to qualified handicapped persons. With respect to employment, a qualified handicapped person means a handicapped person who, with reasonable accommodation, can perform the essential functions of the job in question. With respect to postsecondary and vocational education services, a qualified handicapped person means a handicapped person who meets the academic and technical standards requisite to admission or participation in the education program or activity.

For purposes of clarification, selected sections from an analysis of the HEW regulations are included below.

"...drug addiction and alcoholism are 'physical and mental impairments' within the meaning of [the Act]."

"...a recipient may hold a drug addict or alcoholic to the same standard of performance and behavior to which it holds others..."

the term 'specific learning disabilities' is used "to describe such conditions as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia and developmental aphasia"*

"...Academic and technical standards must be met by applicants to [post-secondary education programs]. The term 'technical standards' refers to all nonacademic admission criteria that are essential to participation in the program in question."

"...In administering its admission policy a recipient...may not apply limitations upon the number or proportion of handicapped persons who may be admitted."

*Committee note: Generally a 'specific learning disability' is said to exist only when a person's general intellectual ability is relatively high as compared with language abilities - usually meaning reading and spelling.

to all programs for all persons, including those with handicaps. There are several ways of achieving this end: If a particular program is housed in inaccessible facilities, physical modifications can make the program accessible, new facilities can be constructed for the program, the program can be moved to already accessible facilities, or programs can be arranged so that classes or services can be offered at accessible locations. In choosing among alternatives, planners must give special consideration to those solutions that offer services in an integrated setting--that is, to programs that do not separate handicapped and nonhandicapped persons.

During the course of implementing these provisions of the regulations, University compliance officers have encountered a number of challenges. For example, techniques for making laboratories accessible are still in early developmental stages; thus a good deal of basic groundwork is necessary to identify actual and potential problems and to design appropriate solutions for the accommodation of students with various handicaps. In designing solutions to access problems, care must be taken so that the arrangements do not convey an implication of second-class status for the disabled users of such arrangements. Since it is virtually impossible to make all programs totally accessible through structural modifications by the 1980 deadline for the achievement of physical access, program directors should be introduced to alternatives and encouraged to make internal program arrangements that will increase accessibility.

The regulations identify another area requiring action by placing on universities the obligation to ensure that educational opportunities for students who are handicapped are not restricted because of the absence of educational auxiliary aids. Auxiliary aids may include readers in li-

braries, interpreters, and various kinds of adaptive equipment. They do not include attendants, readers, or other aids and devices for personal use or study.

Compliance with this provision of the regulations has confronted University planners with challenges in the area of resource development and coordination. Support systems combining the resources of not only the University, but also state and community agencies have been organized to enable students to make effective use of compensatory skills and alternative techniques in pursuing educational opportunities. In addition, individual programs have been encouraged to provide auxiliary aids and other useful arrangements to improve access on location.

The final major provision of the regulations requires adjustments in those academic rules and procedures that may have a discriminatory effect on students who are handicapped. Rules, for example, prohibiting the use of guide dogs in buildings or tape recorders in classrooms must be appropriately altered. Other adjustments may include the substitution of required courses, the adaptation teaching methods and the provision of alternative testing arrangements. The regulations, however, do not require the provision of accommodations that sacrifice essential academic standards.

The University's approach to this particular requirement involves maintaining flexibility in policy so that accommodations can be provided on the basis of individual need. The success of this approach depends on the effectiveness of ongoing efforts to familiarize members of the faculty and staff with the abilities and needs of students who are handicapped and to provide the technical assistance which is needed by faculty and staff to plan and realize appropriate accommodations.

The progress achieved by the University's compliance program over the last two years is largely due to the contributions which have been made by various University personnel in the past. The mainstreaming initiatives set in motion by the Student Counseling Bureau, the work on building accessibility carried out by the Office of Physical Planning and its consultative staff committee, the compliance activities of the Office of Equal Opportunity, and the problem-solving activities of the University Committee for the Physically Handicapped have enabled University planners to begin to unify different schools of thought into a consistent approach to providing educational access for students with handicaps.

Organization of the Report

The remainder of this report is organized to present (a) the recommendations of the Committee and (b) the issue papers that formed the agenda of the Committee during the academic year 1978-79. The topics of the issue papers are as follows:

The Categorizing and Labeling of Students

A Model for University Services to Students Who Are Handicapped

The Extent of University Responsibilities

Assessment: Some Issues and Considerations

Training, Research, and Technical Assistance

Funding Issues

Recommendations

General Recommendations

1. To realize its commitment to equal opportunities and to fulfill legal requirements, it is recommended that the University organize its support programs for handicapped persons in a distributive service system.

(See issue paper beginning on p. 23). This is to say that services for persons who are handicapped should be organized essentially like the general organization of the University: some leadership and services may be centralized but emphasis should be given to the broad decentralization of services. Such a plan suggests a "mainstreaming" philosophy to the maximum extent possible. Persons with handicaps should be served by and in academic departments and other units that are normally responsible for providing these services.

This recommendation supports and works toward the goal of reducing the physical and psychological barriers that are often encountered in institutions of higher education by persons with handicaps. It seeks to provide services for such persons in integrated settings whenever possible. It permits centralized direct services when they are obviously needed.

An Example:

A student in a wheelchair described his experiences at his previous college; registration, housing, attendant care, financial aids, and transportation all were handled by one office. In addition, any problem with classes or other campus matters was immediately referred to that special office.

At the U. of M., he rented an apartment with two friends through campus housing, argued with a professor for testing adapted to his needs, hired a driver and attendant through student employment, and complained directly to maintenance about snow removal on one ramp. The student described the U. of M. as more "hassle" but more "free." He does not like registration lines but he enjoys handling things himself and having nonhandicapped friends.

2. The committee noted with much favor and appreciation the leadership given by President Magrath and other central officers of the University to programs relating to persons with handicaps. We urge their continued concern and leadership in this important area. The committee believes that the delivery of necessary services to persons with handicaps requires a special coordinating authority at a high administrative level -- a person who has direct links with the central officer group concerned with the academic, health-related, physical plant, and student personnel units of the University. Such a coordinating authority should be responsible for implementing the principles of equal access to the University for all persons with handicaps, in the sense of providing general leadership and coordination within the University over the broad domains touched upon in this report.

3. We recommend that because the University continues to face problems of physical and program access by persons who are handicapped, a broad, policy advisory committee be continued for at least the next few years. In addition, it is suggested that three working committees be formed. The policy committee should include students, staff, faculty, and administrators. Care should be taken to appoint representatives of the full range of handicapping conditions, including those who tend to be less visible (e.g., chemical dependency and learning problems).

The three major areas of work which require continuing attention and working committees of University staff members are (a) physical access, (b) program access, that is, access to academic programs and (c) student services.

The policy committee presumably would work closely with such staff members on the problems of both physical and program access and on student services.

Recommendations on Classification, Information,
and Accountability Systems

4. The Committee believes that the University should treat data on individuals who are handicapped with maximum confidentiality. No information should be collected except that required internally or by law; there should be no release of information on individuals who are handicapped, except as required by law or authorized by the individuals concerned.

(See issue paper beginning on p.20).

5. The Committee proposes that all members of the University community resist the labeling of students according to the traditional categories of the handicapped. Emphasis should be on the development of the necessary resources and skills to serve students who have such problems as limited hearing, vision, and mobility, without attaching labels to the persons.

(See issue paper beginning on page 20). Admittedly, subtle distinctions are involved here; but it is possible to give visibility to programs for persons with problems without encouraging them to think of themselves or others to refer to them as "alcoholic" or "emotionally disturbed," for example.

An Example:

The University now operates a Study Skills Clinic for students who need intensive help on basic academic skills. Students who receive help are not and should not be labeled "learning disabled" because they receive the services of this important unit.

6. The University should put its primary efforts into the development of necessary support programs to serve students, faculty, and staff who have special needs. Recruiting and enrolling students who are handicapped, for example, actually may be a disservice unless attention is given first to the development of effective support services for them. Thus, immediate attention should be given to developing high-quality programs for persons who have problems with drugs and alcohol, for those with emotional and learning problems, and for those who require special modes of communication and mobility. Then, the programs could be opened to the students, faculty, and staff who need them, and the problem would become one of screening, identifying, referring, and serving the appropriate clients.

7. University officials should seek to meet accountability criteria for program accessibility on the basis of programmatic descriptions rather than by reports on individuals served by "category." (See issue paper, beginning on p. 20).

An Example: A report might describe services available to students, faculty, and staff members who have problems with alcohol or drugs. Data could demonstrate that the services are well known, widely used, and provided promptly and effectively.

Such an approach avoids auditing systems that begin with rosters of individuals by category. This recommendation may be difficult to implement if governmental agencies insist on categorical rosters of individuals, but in this instance the University can provide leadership to efforts for better auditing and accountability systems.

8. University services, including screening procedures and academic program adjustments, should be available to all students and other members of the University community who have handicapping conditions, whether tem-

porary or permanent, of all degrees and kinds, and not just to those with the most severe problems or those who fall under governmental regulations.

An Example: All large classrooms and amphitheaters are equipped with microphones and amplification devices to accommodate persons with mild to moderate hearing losses, and all students and faculty and staff members are informed of the availability of audiological services to check for such losses.

Recommendations on the Extent
of University Responsibility to Students

9. Programs for students with handicaps should continue to emphasize student self-reliance and increased student abilities to benefit from educational opportunities. (See issue paper beginning on p. 27). Often, a decreasing pattern of staff involvement in organizing support services and of increasing student responsibility in seeking and using needed services may be indicated. Implementation of this policy requires carefully individualized, flexible programming to meet a broad range of needs and abilities that vary over time, even for individual students.

Example: A beginning student who is blind used "reader" services arranged by University counselors. Later, the student identified his own "readers," made up his own schedules and evaluations, and arranged payments for them.

10. All programs for students with handicaps should continue the present University policy of voluntary participation; however, all forms of communications should be used to make information on the programs available to all students.

An Example: Braille and cassette tapes are used to make information on programs (degree requirements, for example) available to low-vision and blind students.

Recommendations Relating to Assessment

11. Because present methods of assessment for students with handicaps (including all forms of testing, observations, and ratings which are used to make decisions about students) involve many technical difficulties and because accommodations in assessment procedures that are valid for such students are not widely known, it is proposed that a program of research and development be initiated in this field. (See issue paper beginning on p. 33).

At least the following elements should be included:

(1) Students with handicaps should be surveyed to obtain their ideas on assessment processes used at the University that may be compromised in validity because they lack appropriate accommodation, and on accommodations that, in their judgment, would increase validity.

(2) A survey should be made of staff and faculty members who use the results of assessments to determine their understanding of handicapped students' needs for accommodations and their attitudes toward accommodation, their conceptions of desirable assistance in dealing with accommodations, and the forms in which they prefer such assistance to be offered (e.g., workshops, consultation, brief publications, etc.).

(3) A survey should be made of accommodations in assessment procedures which have proven to be successful in other institutions of higher education and in secondary schools.

(4) Specific assessment accommodations that are tried in various units of the University of Minnesota should be systematically evaluated.

12. Where needed accommodations in assessment procedures cannot be provided or the effectiveness of a given accommodation is questionable, decisions should err on the side of increasing rather than decreasing the educational opportunities for students with handicaps. (See issue paper beginning on page 33).

An example: A deaf student applied to a technical program. Grades and educational background seemed adequate but scores on scholastic aptitude tests were low. A member of the admissions staff met with the student; several professors and rehabilitation experts met to consider ways equipment involved in the program could be monitored without hearing. Because results on the aptitude test were considered to be quite uncertain and programmatic accommodations were feasible, the student was admitted.

13. Assessments of students who are handicapped should be treated as part of the total picture of the person's capabilities and should include records made in pre-college educational work, where there is a greater base of experience in the development of accommodations.

14. Assistance should be provided to University faculty and staff members who conduct and use the results of assessments so that they can increase the ability to provide needed accommodations.

Examples of frequent questions from faculty about assessments of students with handicaps: ...Should students who are handicapped (blind, cerebral palsied, quadriplegic, learning disabled) be given extra time to complete course exams? How much extra time is "fair"?

Recommendations Related to Training,
Research, and Technical Assistance

15. Special efforts should be undertaken to acquaint all members of the University community with the presence and needs of persons who have handicaps and with the educational and legal imperatives that relate to educational services for them. See issue paper beginning on p. 33).

This program will necessarily be long-range and many-faceted in order to create the requisite attitudes, knowledge, skills, and resources to serve the broad range of students with handicaps.

Examples of training needs:

- ...orientation for dormitory counselors;
- ...technical training for admissions officers;
- ...orientation of financial aids counselors;
- ...specialized training for interpreters of the deaf;
- ...orientation of all students to needs of fellow students who are handicapped;
- ...consultation with faculty on instructional and assessment accommodations.

16. In developing support services for persons with handicaps, attempts should be made to coordinate them with training and research functions which call upon all of the relevant expertise available at the University. (See issue paper beginning on p. 38). This is to suggest that services to students with handicaps ought not to be thought of and planned as separate, strictly service-oriented activities but, rather, should be linked systematically with academic units that conduct related training and research activities.

Example of a possibility: In developing services to students who are deaf, connections with the training and research staffs in special education, audiology, linguistics, otolaryngology, counseling psychology, and other fields should be considered. This may involve joint appointments of new staff, cooperative staff development projects, mutual advisement, cooperative research, etc.

17. University administrators and faculty should actively foster interinstitutional cooperation, including the development of regional and national centers or networks of institutions in the domain of education for students with handicaps as a basis for the more rapid development and dissemination of knowledge. (See issue paper beginning on p.40). Such cooperation will require the regular participation of University representatives in the work of such groups as the American Association for the Advancement of Science, The American Council on Education, the College and University Personnel Association, and similar organizations that conduct programs relating to persons with handicaps. Continuing close liaison is recommended with the U.S. Office of Education, the Office of Civil Rights, the Rehabilitation Services Administration, and comparable agencies at both federal and state levels.

Recommendations Related to Funding

18. The University should maintain its total commitment to support departments and units that provide appropriate accommodations for students with handicaps. (See issue paper beginning on p. 41). It should be recognized that the supports required are of several kinds, for example, technical assistance, help in making physical accommodations, effective

student supports, training for staff, and budgeting accommodations to cover costs of modified materials.

19. The University should continue to develop partnerships with vocational rehabilitation agencies and other community services so that the resources of these organizations can be integrated into University support systems to improve the access of students with handicaps. (See issue paper beginning on p. 41).

20. In general, financial supports to both students with handicaps and units of the University serving such students should be provided on the basis of an "excess cost" principle: that is, students who are handicapped should receive financial supports (as entitlements) at a level that relieves them of any "excess" or extra costs (over and above those of other students) because of their handicaps. Similarly, departments or other units of the University should receive financial supports in such measure that will relieve them of "excess" costs because they enroll and serve students with handicaps. (See issue paper beginning on p.18).

21. Regents and central administrative officers of the University are urged to continue to seek state appropriations as necessary to implement fully the principle of equal access for students who are handicapped. Simply absorbing the costs involved into the present departmental budgets is highly undesirable, especially at a time when many departments are being asked to cut back on existing programs.

22. The University should appeal to Congress and to the Rehabilitation Services Administration for a clear delineation of the respective responsibilities of Universities and vocational rehabilitation agencies for providing auxiliary aids and other financial supports to individual students

with handicaps. Also, requests should be made to support training, re-
search, and technical assistance functions. A major new federal initiative is required to support research, leadership training, and highly specialized training in relation to the needs of college-level students with handicaps. In effect, such support would extend to the higher education level of the federal programs which currently are quite generously available to support programs at elementary and secondary school levels and in vocational education.

Issue Papers

The Categorization and Labeling of Handicapped Students

The Problem

Section 504 of the Amended Rehabilitation Act of 1973 makes the University responsible and accountable for serving students who are deaf, hard-of-hearing, blind, partially sighted, orthopedically disabled, emotionally disturbed, learning disabled, or otherwise handicapped, including drug addicted and alcoholic. The problem addressed here is how the University should classify such students in order to comply with Section 504.

Student classification systems in the University are employed usually to facilitate its educational programs. Some of the more common classifications are undergraduate, graduate, lower division, and upper division. However, students are also classified by the colleges in which they are enrolled (e.g., CLA; Education) and the programs (e.g., Mechanical Engineering; Nursing). Such classifications have sound educational justifications. It is noteworthy that the language used for these classifications refers mainly to programs and not to students, and that they are not stigmatic in tone.

Special provisions for students with handicapping conditions have heretofore been provided in elementary and secondary schools but not in universities. The provisions in the lower schools for students with handicaps, in the past, have been mainly in the form of special, segregated classes and schools. In most instances, provisions were based on category of handicap and, thus, on the labeling of the individuals. Unfortunately, labels, especially those with such negative connotations as "disabled," "disturbed," and "addicted," tend to be attached to the person as well as to the handicap, creating a stigma. Even blind, deaf, and

cerebral palsied can be stigmatic terms because they may arouse unexpressed fears in persons who interact with the individuals bearing these labels. Furthermore, individuals with different handicapping conditions tend to be stereotyped, which leads to the consideration of such persons by labeled class rather than on the bases of individual competencies and needs. In an important volume (Futures of Children, Jossey-Bass, 1975) Nicholas Hobbs, a noted psychologist and former Chancellor of Vanderbilt University, suggests that nothing less than children's futures are placed in jeopardy by the ways they are classified. The same statement may be made of university students.

Currently, there is a trend in the elementary and secondary schools to "mainstream" handicapped students; that is, to include students with handicaps in regular school programs and to deliver whatever special support services they need in the regular school environment. Thus a new generation of handicapped students is emerging from the secondary schools who have been a part of the mainstream of the schools and now fully expect to be part of the mainstream of University life.

Clearly the classification and labeling of university students raises difficult issues. By all means we must try to avoid the stereotypes that are attached to labels and that do injustice to individual students; yet we also must identify special needs when they exist and provide needed services: That is the challenge.

Purposes of Classification

Classification can serve many different purposes. The researcher may seek to create clusters of people to identify etiologies or causes of varying conditions; the psychologist, to make long range predictions about levels of attainment or occupational choices; the bureaucrat, to determine qualifica-

tions for special governmental subsidies, such as extra income tax deductions or Social Security disability payments; and the teacher, to adapt the management of the instructional environment and of instruction itself. Obviously, classification systems result in very different boundaries, depending on their purposes. Systems of classification, especially of handicapped persons, which may be useful in other settings, usually are not suitable at the University.

It cannot be denied that some persons have distinct handicapping conditions that require definite modifications in educational settings and programs. They include persons who are profoundly deaf or totally blind, and those who have major long term mobility problems (e.g., are confined to wheelchairs for movement). Such persons usually identify themselves readily--they often require distinctly specialized arrangements for communication and travel--and they frequently use the services provided by rehabilitation agencies.

Persons who have lesser degrees of handicap in hearing, sight, and mobility may not be willing to be publicly identified as handicapped, yet often have significant needs for special modifications in instructional programs or work-related conditions.

Still other handicapping conditions covered by Section 504 are quite invisible in most social environments and are frequently considered to be private matters (e.g., drug and alcohol addiction, emotional disturbances, and learning disabilities). Each condition presents major definitional problems and, if made public, tends to be stigmatic. The very process of labeling individuals as "emotionally disturbed" or "drug addicted" can be handicapping in itself, both directly and indirectly, if rosters

of those so categorized are made public in any way.

Whatever the nature of the handicap, individual students may be expected universally to resent and resist the stereotyping that so often accompanies labeling processes. Everyone at the University must try to understand each person, including those with handicaps, as an individual and to serve each person as competently as possible in terms of his/her individual needs.

A Model for University Services
to Students Who Are Handicapped

The Problem

With the enactment of recent federal legislation and the publication of regulations regarding the mainstreaming of handicapped individuals in our society, postsecondary education must look beyond the bricks and mortar of accessibility to the creation of a barrier-free environment. Architectural accessibility has been addressed systematically (see the University of Minnesota Self-Evaluation Task Force Report, 1978), but increased attention needs to be given to the broader issues relating to program accessibility. One such issue relates to the organizational structure that is needed to deliver support services to students.

In addressing the issue of organizational structure, some thought should be given to the centralization or decentralization of support services for persons who are handicapped and, in particular, to the unique strengths and weaknesses of each structure. Such considerations may make it possible to create a distributive service model for handicapped persons that captures the strengths of both centralized and decentralized approaches.

Centralized Model

In the past, it was assumed that the special needs of handicapped students could not be met except within a specialized setting which was removed from the population at large. This assumption was based on the idea that individuals with special needs could be served best if resources (e.g., capital, personnel with special training) were centralized. In certain respects this assumption was correct; unfortunately, the use of the centralized model tended to isolate and segregate disabled persons. Centralization perpetuated the negative concepts held about disabled persons. Consequently, caution must be exercised in organizing highly centralized support programming in order to preclude stereotyping persons with handicapping conditions.

Decentralized Model

The decentralized model incorporates features that make it particularly appealing to individuals who are charged with the responsibility of implementing Section 504 of the Vocational Rehabilitation Act of 1973. For example, with this model there is less duplication of services and some promise of lower costs; each direct service unit on a campus serves both handicapped and nonhandicapped students. Even assuming that it might be necessary to expand a given service staff and to provide special training for a variety of staff members, administrative costs should remain relatively low because there is no specialized unit providing a "separate but equal" service for the handicapped.

Also, with the use of the decentralized model there is a systemwide effect on attitudes and actions toward handicapped persons. Adaptation and exposure to the needs of disabled persons provide continuous sensitivity

training sessions for individuals both within and beyond the walls of the University. Educational institutions, however, have been directed to create an accessible environment, and the model they use to address the needs of the handicapped serves as a role model for society. The closer this model simulates the general model of a mainstreamed society, and thereby promotes a more accessible society, the better it will be for persons with handicaps and for others as well.

Finally, in a decentralized design services probably can be established more quickly by using the expertise and resources that a given unit has provided for the nonhandicapped population. For example, counseling will counsel, placement will place, and transportation will transport. When located in traditional units, services are not only less vulnerable to cutbacks, but each unit avoids seeing handicapped people as "someone else's responsibility." Thereby, each unit becomes responsible for establishing the type of programming necessary to meet the defined needs of the handicapped population.

A Distributive Model

Although there are many attractive features to both centralized and decentralized models, each also has certain disadvantages. For example, a completely decentralized model may provide no single reference point or information source for persons who are handicapped. This problem can be corrected quite easily, however, by providing in central offices of each campus a general source of information relating to handicapped persons. Indeed, general information services are provided for all students, faculty, and staff and the attachment of service relating to handicaps would seem natural enough. In effect, one arrives at a form of distributive

services to handicapped persons which follows closely, and in integrated forms, the services provided to all other members of the University community.

A distributive model of services would involve a central "coordinating authority" with the following general array of task assignments as related to services for persons with handicaps.

- To be a focal point for information and referral to students, faculty, and staff in their efforts to use existing University resources.
- To identify specific issues and concerns, locate the appropriate existing resources, and then formulate and implement a plan by which the University addresses the issue or concern.
- To develop resources to meet specific disability group needs when similar existing services cannot be located within the University system (e.g., interpreter services for hearing-impaired students).
- To establish and administer a general fund to support technical assistance, and training, and occasional small supplements for existing service units.

- To maintain ongoing public relations efforts to publicize the services offered by the University and to sponsor awareness activities within the institution and surrounding community.

The effects of many of these tasks cross over traditional boundaries or areas of responsibility, such as academic programming, building and grounds, and student services. It is, therefore, also important that the coordinating authority be placed at an administrative level that is high enough to permit direct interactions with leaders of the variety of units and services that exist in a system as large as the University.

While the coordinating authority would provide very little direct service to individual students, its existence is essential if the University is to adequately and efficiently meet the needs of its disabled constituents.

It should be pointed out that each campus of the University must decide for itself the details of what is the most appropriate organizational structure for its services to persons with handicaps. For example, the Twin Cities campus has a broad array of service units that can be called upon to serve persons who are disabled. This is not true to the same extent on coordinate campuses, thus forcing a somewhat different approach to service delivery.

The Extent of University Responsibilities

The Problem

The University of Minnesota pursues a policy of providing educational opportunities to students who are handicapped, of adapting programs as necessary to increase students' ability to benefit from those opportunities, and of providing a context that encourages students to assume as much responsibility as possible. There are difficult and delicate problems in setting boundaries for what institutions undertake on behalf of students with handicaps and what the University expects students to undertake for themselves.

In considering the extent of programming for students with handicaps particular issues stand out.

1. Providing more open admissions may not provide equal opportunity if appropriate support assistance is unavailable.

2. Some students with handicaps are underprepared for the University of Minnesota due to cultural disadvantages and educationally or socially overprotected backgrounds. They may not be aware of these deficiencies.
3. Handicaps due to disability (directly or indirectly) are sometimes difficult to differentiate from lack of interest or intellectual limitations.
4. In practice, providing extensive services may involve restrictions on student freedom in scheduling, location of services, choice of aids, etc.
5. Meeting student needs may be different from enabling students to meet their own needs.

Some students with handicaps prefer to pursue their education with little or no assistance. Most students function somewhere between the extremes on the continuum of program possibilities. Clearly, under equal opportunity policies, the University of Minnesota must provide some adaptations for students with disabilities.

Models

A variety of models may be used to describe a continuum of programming for handicapped students at the college level. One possibility is to place responsibility solely on the student to compete by the same rules as all students, developing adaptations on his/her own. A shared responsibility philosophy provides some standard adaptations by the college and delineates other needs as students' responsibilities. Another shared responsibility philosophy provides some standard adaptations and programming for student

Figure 1. A Continuum of Support Services for Students with Handicaps: Two Illustrations

0
(High student responsibility)

5

10
(High U. responsibility)

Interpreters for deaf students

U of M provides funding for students to hire interpreters, student employment listings, (jobs available and jobs wanted), counseling, and back-up assistance if problems arise.

U of M coordinates student efforts to hire, fire, supervise interpreters, and informs or advises on student explanations to professors re use of interpreters.

U of M refers students to programs in the community on use of interpreters and basic sign skills. U of M provides and supervises interpreters, assists in explaining, interpreting to professors.

English skills/notetaking for many groups of students (blind, deaf, cerebral palsy, etc.)

U of M provides information, backup counseling, NCR paper in bookstores.

U of M offers occasional assistance with skills, information and advice on adaptations and discussions with professors.

U of M provides individual assistance or special classes in English and use of notes, and assists in explaining needs to professors and developing class adaptations.

The continuum of programming involves continuums of student need, student ability to fulfill needs, student responsibility, and freedom of choice. To provide for these continuums, programs can be individually tailored to meet a student's present needs in a context that encourages him/her to learn increased independence. Remedial programs in the community may also be used to upgrade some student skills. Following are two examples of growing student responsibility through growing competency:

Jan, who has a learning disability, requested tutoring for two classes. The tutoring was provided along with training in study skills and test taking. Reading and study skills training continued for over one year. Jan no longer asks for tutoring and feels "smarter."

Joe entered the University after attending a special school for the blind for many years. The first quarter he wanted (and needed) someone to register him for classes, talk to his professors, and walk him to classes. This was done with the agreement that he would be present at these activities to listen and learn. Mobility training was provided on campus by a community agency. The second quarter, Joe did the talking and registering with someone present for backup and support. Joe no longer needs any assistance and says he is proud of his "freedom."

Examples of providing for stable needs while increasing student responsibility include the following:

Ed, in a wheelchair, needs special transportation to campus. This was arranged for him the first quarter, assisted for two more quarters, and is now arranged by himself. He is glad not to have to try to reach the special counselor for transportation, and now arranges transportation to other places as well.

Assessment: Some Issues and Considerations

The Issues

The valid assessment of students with handicapping conditions is critical in many ways, whether a student is in the process of getting in, staying in, or getting out of a program of study. Thus the University is obligated to ensure accommodations that will minimize, if not eliminate, the impact of handicapping conditions on the outcome of such assessments. This obligation exists whether the assessment is used to determine aptitude for admission to a program, to measure achievement in a course, to certify learning as a basis for graduation, or to provide information for personal decision making.

It is important that the accommodations in fact counter the potential negative impact of disabilities that are irrelevant to the purposes of the assessments. Such accommodations should not lead to a lowering of standards nor lessen the results' meaningfulness but, rather, should increase the validity of the assessments for the persons concerned. For example, when a disability creates difficulty in a person's ability to respond, an appropriate adaptation would be to allow him/her extra time; simply adding an arbitrary number of points to the score would be inappropriate.

For a number of persons with handicaps, simple attention during the regular assessment procedures is often sufficient; for other persons, alternative procedures may be required. In the following discussion, the focus is on both general and specific considerations in academic assessment at the higher education level. Not included in this discussion are the assessment procedures used by counselors and other persons who are trained in providing clinical services.

Among general considerations, the most obvious is that the person be able to get to and to have access to the building, floor, and place where the assessment is to be made. In the assessment process itself, consideration should be given to the possible need for accommodation in both the mode of presentation (e.g., a braille test booklet or reader for the blind student; an interpreter of verbal instructions for the hearing-impaired student) and the mode of response (e.g., when the required response is movement, an alternative is needed by the person with a missing or artificial limb).

An Example:

In preparing the final exam for the course the instructor recalls the disastrous events that surrounded the administration of last year's test to some students with handicapping conditions. Realizing that these difficulties could have been avoided, the instructor meets with the two blind students in the class, the teaching assistants, and support service personnel to discuss and determine the logistics for the current final exam. The outcome of this meeting is the decision to prepare the test materials in braille and to have it administered in a separate place with a definite but expanded time limit.

Aside from general considerations, specific situations require specific adaptations. The discussion is presented in terms of the use of assessments in connection with studies, that is, the satisfactory completion of tests to get in, stay in, and get out of programs of study.

Admissions to a Program of Study

Usually, the assessments used in admission procedures are evaluated according to the accuracy with which they predict the outcome of a relatively fixed program of educational experiences and study. The degree to

which the assessment procedures are affected by the lack of needed accommodations to handicaps leads to errors in such predictions. The American College Testing Program and College Entrance Examination Board have been working on alternative procedures to accommodate some types of handicaps. It is hoped that more will be forthcoming and that University personnel will make full use of them. Personnel responsible for admissions testing should be aware of the various adaptations and alternatives that are made available by test publishers and should

plan procedures to accommodate a variety of effects of disabilities that otherwise would invalidate the testing.

Assessments in Courses

Assessments that measure achievement in a course of study normally are designed and conducted by instructors, often with the participation of teaching assistants. On the basis of these assessments, students are awarded course credits or, sometimes, counseled to discontinue programs. Thus, the assessments cannot be taken lightly. In general, the assessments fall roughly into two classifications: performance and paper and pencil.

Performance is assessed through observation (direct, via video taping, etc.), especially in laboratory or field work. It is used in job-related internships in such fields as medicine and education to evaluate both how well students work and the quality of the products resulting from the work. Here, the person with a handicap faces the possibility of double jeopardy, first, if the general considerations discussed previously are ignored and, second, if the observations and ratings focus on details of performance rather than completion of task. A simple example is the distribution of classroom

An Example:

A student with a vision problem was given a multiple-choice test orally while other students used paper-and-pencil. The instructor, claiming that the test was easy, read only the stem of the questions. It appeared to the student that because the test was quite long, the instructor did not wish to read every question and its multiple choices.

In another class, the same student was given a test in a hallway just as a class of some 200 students was let out. The noise level was very high for about 15 minutes and the student found it very distracting.

materials by student teachers: Those who are not handicapped make the distribution themselves but those with handicapping conditions may assign the distribution task to students: the important variable is not how the materials are distributed but that the distribution is achieved. Thus the attention of the observer must be on the extent to which the task is completed satisfactorily rather than the adaptations in procedure or differences in time which are needed by the handicapped persons.

Paper-and-pencil tests usually can be accommodated through changes in mode of presentation, providing common sense is used. For example, the instructor who reads only the stem of multiple choice items to a blind student is not making adequate accommodation; nor is the instructor who seats a blind student taking a test and his/her reader on a busy stairway outside the classroom.

Program Exit Assessments

Program exit or certification assessments call for many of the considerations already discussed. However, sometimes they fall outside the control of the persons who provide the program, for example, a graduate degree examination committee, professional boards, or practitioners who assess

the demonstration of learning in a professional field (dentistry, theatre, etc.). Such persons also need to be cognizant of the principles of accommodation. Assessments related to study in higher education, whether for the award of credit to recognize the completion of a course, the award of the proverbial sheepskin, or the evaluation of the capability to perform in the employment situation cannot be dismissed from these considerations.

Problems lie, then, in attempting to ensure that needed accommodations are made. A major problem is the lack of understanding by persons who conduct assessments regarding the role of accommodation in increasing the validity of assessments. The magnitude of this problem is undoubtedly heightened in the case of students with handicaps of a non-physical nature, in terms of both recognizing that the handicaps prevent valid assessment and finding ways to accommodate to them.

The problems which must be overcome by University faculty and staff members who make assessments or who determine the technology of assessments fall in the areas of both recognizing and accepting the limitations imposed by disabilities. These members must be helped to understand and accept the need for accommodations to accomplish valid assessments. Those who use the results of assessments must come to understand the potential for the lack of validity when accommodations are ignored. For both groups, attitudes as well as level of understanding may need to be changed. This problem may be particularly difficult in the case of students with handicaps that are not highly visible.

Technical difficulties arise primarily from the earlier limited enrollment of handicapped persons in institutions of higher education. This lack of experience with accommodations is not much of a basis on which to

build alternative procedures that will, indeed, increase rather than decrease the validity of assessments. So far, we simply lack base rates on which to judge the results.

Training, Research and Technical Assistance

The Issue

There is a growing awareness that if the needs of students with handicaps are to be met in institutions of higher learning, additional attention must be given to training, research, and technical assistance. The focus of this discussion is on relevant general concerns.

Training

Two questions are apparent in this area: Who is to be trained? What is to be the content of training programs? For discussion purposes, the two are addressed concurrently.

Although potential trainees include almost everyone, four types of trainees require service first: 1) students with handicaps need assistance in learning about and using the resources that are available to them. 2) Nonhandicapped students need help in understanding and accepting the needs of students with handicaps and, especially, in recognizing the similarities rather than differences between themselves and handicapped persons.

An Example:

A student who is blind and in his third year at the University arrived at the Rehabilitation Services Office. His courses required too much high-level reading for his friends to keep up with his reading needs. He had not heard about the free taped textbooks available through Minnesota State Services for the Blind.

3) University staff members, such as registration clerks, dormitory counselors, and office receptionists, require orientation to the needs

of handicapped students and access to information which they can use

An Example:

A dormitory resident came in for counseling about how to tell her roommate who is blind that she was tired of doing the girl's laundry and getting her meals. She had offered to do both and never talked to the roommate about it.

to make proper referrals; perhaps most important, they need to be committed to serving all students and staff, including the handicapped, in accepting, supportive ways.

An Example:

A student with a hearing impairment informed a clerk writing during registration that she was unable to hear. Thereupon, the clerk talked louder and slower and looked directly at the student's face so that her lips could be read. About 80-100 students in the lines were able to hear the clerk. The student had to write an additional message to inform the clerk that she could not read lips.

4) Faculty members need help in similar areas, but especially in the area of the support services that are available to them when they have students with handicaps in their classes. For example, are additional secretarial and TA services available to professors who have blind, deaf, or learning disabled students in their classes? Are they educated in their options in and obligations to make adjustments in programs and assessments for such students?

An Example:

A student with cerebral palsy reports professors who stop in the middle of their lectures to ask him specifically if he understands or has questions. Other students are not singled out in this fashion.

The need for training also becomes immediately apparent when we consider efforts to provide special services for students. Whatever the delivery system, providers must have special training. For example, the provision of compensatory services for students with learning disabilities requires highly specialized training for which very few formal programs exist. In the development of specialized training programs for particular types of handicaps consideration must be given to issues such as the size of the population to be served, special funding programs (e.g., by federal granting agencies), and availability of training at other Universities.

Although the main concern here is with the University's responsibility to meet the training and information needs of students, faculty and staff members, it should be noted that the general public also requires information. The provision of resources for disabled students depends on the public's as well as the legislators' level of awareness. For example, the state legislators must understand the special needs which deaf students have for interpreters if these are to be provided. Furthermore, public awareness and acceptance of handicapped persons determines in large part whether University graduates with disabilities will obtain appropriate employment. It will not serve the physically handicapped student well, for example, to help him complete work in teacher education if the public schools are unprepared to offer him employment. Thus, the training needs of students, staff, faculty, specialists, and public all must be taken into account in efforts to meet the needs of students with handicaps.

Research

Far too little is known about the needs of students with handicaps and ways of meeting them. Thus, research in this entire area of education is essential. The University is challenged to mobilize some of its talent

for research and development and to do so in ways that enrich related service and training programs. For example, researchers in medicine, law, psychology, sociology, and education might engage in interdisciplinary investigations to explore the broad issues of "research on handicaps" on the young adult level. Other undertakings might involve the study of needs associated with specific handicapping conditions, such as improving interpretation in advanced subjects for deaf students.

A particular opportunity at the University is to link programs of service, training, and research.

An Example:

The Study Skills Clinic of the Student Counseling Bureau offers intensive instruction and counseling to students who have learning disabilities. The leaders of the clinic have faculty rank and appointments; in addition to offering "services," they teach courses, advise graduate students, and conduct research in problems of learning disabilities. As a result, the University of Minnesota is a leading producer of ideas in the field of learning disabilities at the college level and of graduate students who go to other campuses to give leadership to comparable programs.

Technical Assistance

When public concern for handicapped children resulted in legislation to insure adequate educational programs and efforts in elementary and secondary schools, some provision for technical assistance was made. Public elementary and secondary schools receive help in the forms of special publications, training materials and aids, program consultation, advice on physical plant improvements, and similar items.

At the college level, such supports have not yet been made available, and the result is a set of very difficult problems. Most colleges are limited in resources and cannot be expected to develop all the needed technical resources on their own campuses. Thus, it is particularly

important that there be developed a broad national plan for the development and sharing of technical information and skills among institutions of higher education.

The need for technical assistance is a very complex issue that involves economic, political, legal, and professional judgements and much interinstitutional cooperation which will have to be carefully considered. The University of Minnesota is in a good position to help in the development of adequate technical assistance systems.

Funding Problems

The Issues

A good deal of concern has been expressed nationally with the cost of carrying out the provision of Section 504 of the 1973 Rehabilitation Act that states, "No otherwise qualified handicapped individual ... shall ... be excluded from participation in ... any program or activity receiving federal financial assistance." Groups such as the National Governors' Conference have protested that implementing the regulations would be too costly and that the requirements should be relaxed.

A variety of suggestions have been offered to explain why Congress did not specify how the costs of Section 504 were to be met. Neal R. Peirce of the Washington Post quotes the provision's author, Charles Vanik, as saying, "We never had any concept that it would involve such tremendous costs." Peirce suggests that the legislation was hastily and thoughtlessly passed; indeed, he described it as a "multi-billion-dollar adventure in regulation writing run amok." He put the price tag at "\$400 million in capital investments, mostly at schools and colleges, plus another \$2 billion annually for additional services for the handicapped."

An alternative reason for the lack of specific funding provisions is that Congress intended to distribute the burden of accessibility to all segments of society that previously have excluded handicapped citizens. Asking each university, hospital, business, and other affected institution to devise and implement solutions to accessibility problems seems likely to generate more creative and economical solutions than would the establishment of a large federal fund through which institutions could finance their activities. Realistically, what we face is the imperative to do all that we can with existing resources while we try to develop new resources for the achievement of our objectives.

It can be argued persuasively that the United States cannot afford the cost of not removing barriers, thus preventing persons with handicaps from achieving preparation for employment. The cost of income-maintenance programs is growing at a staggering rate and will continue to do so unless disabled people are given greater opportunities to move into the mainstream of society as self-supporting participants.

The University's Self-Survey of Accessibility already has identified many of the services that should be provided to make the University fully accessible in the physical sense to students with disabilities, but much more is involved. In this discussion, we touch only briefly on the nature of appropriate services in order to raise issues related to their funding. For example, what is the extent of the University's responsibility for providing services--particularly expensive, individualized ones, such as tutors? Should services be considered a basic entitlement or should the cost be shared by students as their circumstances permit? How may the University cooperate with the Division of Vocational Rehabilitation (DVR) and other service agencies to improve access through shared costs or other arrangements?

Where may the University obtain funding to carry out such measures as physical and program accessibility for which it is clearly responsible? How can the University meet these expenses at the same time that it faces shrinking resources and retrenchment? Much emphasis is needed in the immediate future on improved funding systems. Several of the options and principles for guiding approaches to funding are included in the Recommendations section of this report.

Physical Barrier Removal

President Magrath indicated in his memorandum to the Executive Committee of the National Association of State Universities and Land-grant Colleges (February 10, 1978) that a high level of recognition is already being accorded to the costs of removing physical barriers to accessibility. The University became aware of this problem and began working to correct it a number of years ago. The Division of Vocational Rehabilitation provided incentive funding to start work on curbcuts and ramps. As of the summer of 1979, appropriations from the Minnesota State Legislature have totaled \$1.7 million and additional requests have been made to continue capital expenditures on structural modifications to facilities. The most significant challenges now involve the design of laboratory facilities and the wide-scale promotion of the kind of sophisticated awareness that will enable programs to carry out innovative solutions to problems for which structural change may not be applicable or feasible.

The task of physical barrier removal continues to be a source of concern to many colleges. The 1978 Amendments to the Rehabilitation Act provide for the creation of a board that will submit to the President and the Congress a report containing an assessment of the amounts required

to be expended by states and their subdivisions to provide handicapped individuals with full access to all program and activities receiving federal assistance. The board is authorized under Section 502 of the 1973 Rehabilitation Act, so its jurisdiction is apparently limited to investigating the costs of removing architectural barriers.

Student Support

Interagency Cooperation. Student support is one of the most challenging aspects of funding because it involves the need for universities to build cooperative relations with state and community service agencies. The 504 Regulations make universities and colleges responsible for insuring that students' participation in programs is not restricted by the absence of educational auxiliary aids. Such aids may include interpreters, readers in libraries, or various kinds of adaptive equipment. They do not, however, include attendants, devices, or services whose purpose may be defined in terms of personal use or study. From a planning and management standpoint, the provision of auxiliary aids is far more complex than is the provision of structural access. In order to assess and meet the costs involved, institutions must answer the questions of (a) what auxiliary aids students need to pursue educational opportunities on an equal footing with other students; (b) who is responsible for funding them; and (c) how and where they can be most appropriately provided? Some auxiliary aids and services, such as library reference assistance, adapted telephones for the deaf, braille computer printers, and study skills assistance can be provided most appropriately and effectly as components of support systems. Still others, such as reader services and communication

devices, can be provided most conveniently in the form of direct student funding or equipment loan.

In order even to begin dealing with the costs involved, universities and colleges must reach understandings with state vocational rehabilitation agencies and community services. In the past, vocational rehabilitation provided the bulk of auxiliary aids for handicapped students through its client-funding programs. In order to incorporate these vocational rehabilitation resources into its overall plan for providing auxiliary aids, the University of Minnesota found that it was necessary to reconcile the funding practices of vocational rehabilitation with those of its own financial aid programs. Vocational rehabilitation counselors would provide funding to clients attending the University as part of an individually negotiated strategy to enhance clients' employment prospects. University financial aid officers, on the other hand, fund students on the basis of need, which is determined by resource and cost analyses and is met through the application of formulae drawn up on the basis of principles of equity. Formerly, these different funding approaches, together with conflicting federal regulations and communication difficulties, prevented the two organizations from reaching completely satisfactory agreements on the coordination of student funding.

The funding system that was subsequently developed rests on the concept that DVR assistance should be supplemental to the basic financial aid package and that it should be applied on an individual basis to compensate for specific economic disadvantages related to disability. Financial aid officers work out packages for DVR clients just as they do

for other students. A combination of grants, loans, and work-study appointments helps students to meet the usual costs of attending the University. DVR counselors, in turn, provide assistance to students in the form of grants to meet the direct and indirect costs resulting from their disabilities. The funding system thus builds upon the strengths of both the financial aid and DVR approaches to student support. It combines the expertise in budget matters and the tradition of equitable treatment, which are characteristic of the Student Financial Aid Office, with the expertise in disability and tradition of individualized services, which are characteristic of DVR, in such a way that students with handicaps are able to pursue educational opportunities at the University on a more equal basis with other students.

Basis and Extent of Support. Although progress has been achieved in the area of coordinated student support, a number of cost issues still may need further resolution. The student funding system administered by the University and DVR recognizes the fact that some auxiliary services, such as individual equipment and tutorial assistance for students with disability related language or learning problems, should be included within the rehabilitation services traditionally provided by DVR, while others, such as interpreter services and study skills assistance, can be offered most effectively as components of educational support systems. The line separating such funding responsibilities, however, is indistinct. In order to insure that students receive quality services in the future, it is essential that educational and vocational rehabilitation organizations maintain a spirit of cooperation. Certainly, funding responsibilities must be

clarified, but once this is done and institutions face the need of meeting new costs with limited resources, the focus should be not on who pays but on how institutions can work together to develop funding sources.

The cooperation between the University and DVR on the question of interpreters for deaf students illustrates this constructive approach. In the discussions, possible funding sources for interpreters were reviewed and the decision was made to make a request to the state legislature. It was agreed that the University would make the request, but with support to the fullest extent possible from DVR. In the same spirit, DVR would assist during the interim by contributing interpreter services at the same level as in previous years.

Another key question (particularly relevant to the provision of interpreters) is whether auxiliary aid services should be considered a basic entitlement or provided on the basis of need. If a deaf professional, for instance, were to return for some classes at the University, he or she might not be eligible for interpreter services if a needs test had to be met. At lower school levels, the so-called excess-cost principle is often applied; this means that students with handicapping conditions receive as entitlements such supports as are necessary to put them in a position of equity with other students. Thus, students with hearing impairments, for instance, receive full support for interpreters and no excess cost is involved in their attending school. Recent court decisions have tended to regard interpreter services as an entitlement, and, accordingly, to hold institutions responsible for providing access to such services regardless of student income. At the same time, the courts

seem to be drawing a line that suggests that extreme accommodations might be considered unreasonable. The University submitted a request to the state legislature for interpreter services and other auxiliary aids on the grounds that additional resources are needed to provide access to the services. This effort was successful in large measure, but if the appropriation proves to be insufficient to meet the excess costs of students, the entitlement issue may need further resolution.

Program support

In addition to meeting the costs of aids and services for individual students, the University faces substantial expense in making all its programs generally accessible to students with handicapping conditions. For example, adapting admissions testing, helping instructors to develop appropriate teaching aids, conducting awareness activities, and publicizing University services to current and prospective students all entail additional expenses. As President Magrath indicated in the memorandum cited previously, the cost to institutions of providing program and support services are substantial, but have not been given adequate recognition. Federal reimbursement for special education has been provided at the pre-school, elementary, and secondary levels, but no assistance has been provided for comparable systems in higher education. As a result, the University is ill-equipped to meet the needs of the growing numbers of learning disabled and other special students. In the area of learning disability, for example, universities have not received sufficient research money to study questions related to identification, to determine what treatment strategies would be most effective, or to establish adequate service programs. Serious unanswered questions also remain about how to deal with the

costs incurred by individual departments in making their programs accessible. Small departments in particular may have limited resources and flexibility for providing individualized assistance. For example, obtaining special teaching aids or moving heavy equipment out of an inaccessible building to a location that can be used by a student with a mobility impairment entails extra costs for which departments have difficulty in budgeting.

The excess-cost principle, again, might be considered in the context of institutional costs. In most states, special institutional educational financial aids are paid to local school districts according to formulae that are intended to neutralize institutional decisions on students with handicapping conditions, in so far as costs are concerned. The intent is to supply categorical funds in sufficient amounts so that decisions on programming for students with handicaps can be made on the same basis as for other students, without financial disincentives for the institution. Higher education has yet to create the necessary funding systems to achieve the goals implied in the excess-cost principle.