

The Special Committee on Unified and Increased Preparation Requirements

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In addition to the above members of the Special Committee, numerous faculty, staff, and students from throughout the University and across the state have contributed their time and ideas during the preparation of this report. We are indebted to them for helping us develop a broadly based view of preparation for the University.

Introduction

The Special Committee on Unified and Increased Preparation Requirements was charged by President Kenneth Keller and Professor Deon Stuthman, Chair of the Senate Consultative Committee, in September, 1985, with making recommendations about policies governing the preparation of students for the baccalaureate programs of the University.

Specifically, the Committee was asked to make recommendations for policies in two areas:

1. The preparation standards that should be expected of students across the freshman-admitting colleges of the Twin Cities, Duluth, and Morris campuses of the University; and
2. The impact of unifying and increasing standards and issues in the implementation of changes in standards.

Included in the Committee's purview were policies that guide the admission and placement of students; policies that determine which courses carry credit toward baccalaureate degrees and which do not; policies that determine the proportion of instructional costs paid by students for courses taught at the University that do not apply toward completion of a baccalaureate degree; and the potential effects of changes in these policies on access to the University.

A review of preparation standards was first suggested in President Keller's A Commitment to Focus, submitted to the Board of Regents in February 1985. A significant implication of that document is that increased, rigorous preparation will enable students to learn more effectively at the university level and enable the faculty to focus its efforts on improving the quality of undergraduate programs at the University. Thus, preparation standards are critical to the University's goal of providing access to a quality education for all students.

The University of Minnesota is not alone in its concern with the preparation of students for university-level work. In recent months, a national concern has emerged for the improvement of education and the enhancement of student learning at all levels of the educational system. Exhortations to unify and increase preparation standards are themes in the recent report of the National Commission on Excellence in Education and, in Minnesota, in statements from the Governor's Commission on the Future of Minnesota Postsecondary Education and the Higher Education Coordinating Board. By stating preparation requirements clearly, the University will provide both a useful guide for students' high school planning and a basis for the expectation of rigorous coursework once they enter.

Throughout its work, the Special Committee has been mindful of the fact that its recommendations require significant attention to implications for four areas:

Impact upon access to the University by minorities, older adult students, international students, students from rural and inner-city schools; and students who live in regions of the state in which alternative four-year programs are not readily available;

Impact upon the secondary schools of the state, with particular concern for curricular and budgetary impact;

Impact upon the academic programs of the University, including curriculum and advising; and

Impact upon student services and financial aid.

These concerns have been primary to the Committee's discussions of the impact of changing preparation standards and difficulties that might be encountered in effecting changes.

In its deliberations, the Special Committee examined a large body of pertinent background material, including previous University and HECB reports related to admissions and information from comparable institutions that have adopted preparation requirements. In addition, broad consultation was undertaken with faculty, administrative, student, and student-services groups on the Twin Cities, Duluth, and Morris campuses. An interim report, issued January 10, 1986, served as the basis for additional discussion within and outside the University community. Members of the Special Committee sat with University committees and faculty and staff deliberative bodies, as well as groups of educators and others outside the University, to receive comments and points of concern regarding the directions proposed in the interim report. (A list of groups and individuals consulted appears in Appendix A.) Copies of the interim report, with requests for comments, were also sent to the four hundred thirty-five school districts in Minnesota, to principals of all secondary schools, and to the State Board of Education and the Higher Education Coordinating Board. The responses of these individuals and groups and of University faculty, staff, and students have had important influences on the recommendations in this final report.

In the recommendations that follow, the Special Committee is presenting a plan to unify and increase standards of basic preparation for study at the University, drawn from the best thinking in and beyond the University community. We believe that, by acting upon this plan, the faculty and regents of the University can further enhance the contributions of this institution to the citizens of Minnesota and to the quality of education in a state already admired for its educational achievements.

Part I - Preparation for Study at the University of Minnesota

Preparation for a rigorous instructional program at a research university requires foundational knowledge in a broad range of disciplines. At present, students at the University of Minnesota vary considerably in their previous exposure to core areas of knowledge. Entrance to most colleges of the University is currently determined solely by high-school class rank and scores on the Preliminary Scholastic Aptitude Test (PSAT) or the American College Test (ACT). Although specific course requirements in mathematics and science also enter into admissions decisions in some colleges, these standards vary in the number and content of courses expected. For all other students, coursework in English, social studies, mathematics, and science is recommended as preparation for the University. However, current students are quite varied in the extent to which they have taken the recommended preparatory courses.

This variation in knowledge of core areas is a disadvantage to both students and faculty. Some students find themselves under-prepared for the rigor of University courses, while others find insufficient challenge and gain in courses that must be pitched to less prepared students. Faculty find it necessary to plan courses to accommodate both students who have had extensive background work and also those who have had little or none.

The Special Committee found strong support both inside and outside the University for a clear statement of preparation standards. The results of our interviews with school officials and counselors throughout Minnesota indicate that these standards will most strongly affect the actions of prospective students and secondary-school counselors if they are stated as requirements for University-level work. By requiring specific academic preparation, the University will most effectively communicate its institutional focus and goals, which is a primary aim in establishing standards. Furthermore, the educational benefits of increased preparation can best be achieved if preparation requirements apply to all students entering the University, transfer students as well as new freshman students.

Instituting preparation requirements indicates that the University considers certain types of pre-college work to be particularly important in the ability of students to benefit from University-level instruction. An especially critical point underlying the recommendations in this report is that preparation requirements are not intended to restrict admission to colleges of the University that, at present, do not have specific coursework requirements for entrance. Admissions decisions will continue to be made on the basis of the criteria that presently govern admission decisions to most colleges (i.e., high-school class rank and achievement-test scores).¹ Students who meet these

¹The Special Committee's recommendations entail the assumption that the General College in the Twin Cities will continue to serve as an port of entry for some students. Those students who enter through this unit will be expected to demonstrate competency in the areas of the preparation requirements before transferring to other colleges of the University, however. The Supportive Services Program serves a similar port-of-entry function for the Duluth campus and would also be a major source of help to Duluth students needing additional preparation.

admissions criteria may be admitted to the University even if they do not meet all preparation requirements. Other colleges (IT in the Twin Cities and the College of Science and Engineering in Duluth; the Colleges of Forestry, Agriculture, and Home Economics in the Twin Cities) will continue to follow current policies regarding coursework requirements for admission.

In responding to the charge to determine what preparation should be expected, the Special Committee has built upon the necessity of a sound foundation in the standard core areas of English, social studies, mathematics, and science. In addition, the committee viewed background in a second language as important preparation for study in a University committed to an international perspective and to the ideal of a liberal education.

In each of these areas, the Special Committee has viewed preparation requirements in terms of the competency of students to perform at desired levels. It is common to discuss preparation in terms of completed coursework; indeed, studying subjects in high-school courses will undoubtedly be the most common way in which students achieve competency. However, adequate methods for assessing whether students have achieved the desired level of competency should, when possible, be the primary indicator of whether a student is prepared for University-level work. Nationwide, such tests are increasingly being administered in high schools -- usually in the eleventh grade -- as a way of helping students assess their level of preparation in a subject. Students whose preparation is deficient then have the chance to seek extra help or additional coursework in high school.

Establishing competency criteria that are independent of enrollment in specific courses offers a number of potential advantages to students who enter the University. Many students will be able to demonstrate competency without having to enroll in courses that, for them, would be repetitive. For some students, information from these tests will be useful as a basis for helping some students identify needs for further preparatory work early in their careers at the University. For others, placement in advanced courses will be warranted when competency is very high.

In recommending that competency criteria for preparation be established, the University is following the lead of the State Board of Education in Minnesota and of similar groups in many other states. An advisory group on linkages between the University of Minnesota and the prekindergarten - grade 12 systems in the state is now working to facilitate collaborative efforts in the area of competency assessments, among others.

The recommendations that follow embody the Special Committee's view of the subject areas in which preparation is needed for University study and the ways in which students may achieve and demonstrate competencies.

RECOMMENDATION 1. Require evidence of competency commensurate with the following minimum preparation in grades 9-12 for students entering the Twin Cities, Morris, and Duluth colleges of the University of Minnesota to pursue baccalaureate degrees:

- a. Four years of English, with emphasis on writing and including instruction in reading and speaking skills and in literary understanding and appreciation;
- b. Two years of social studies, including American history;
- c. Three years of mathematics, including geometry and intermediate algebra;
- d. Three years of science, including one biological and one physical science;
- e. Two years of a single second language.

Two additional areas of preparation were addressed extensively by the Special Committee and by individuals and groups from which comments were sought. Of particular concern were the arts, which are essential elements in a liberal education and which broaden the perspective of students regardless of their field of study. In the varied discussions following the release of the interim report, however, we found widespread concern that the range of arts instruction now available in secondary schools would not accommodate the variation in ability and interests among students who might choose to come to the University. Accordingly, we are proposing that study of the arts be strongly encouraged, although not required, for all students coming to the University and that information to prospective students and to secondary schools carry a strong endorsement of arts study as valuable preparation for higher education.

RECOMMENDATION 2. Recommend one year of instruction in the arts (music, drama, or the visual arts) as valuable preparation for study at the University.

Another area of preparation, commonly known as "computer literacy," may be more properly described as a set of skills rather than an area of knowledge. As tools in academic settings, microcomputers are already commonplace and, in many instances, necessary. Consequently, students should be familiar with the most common types of computer hardware and software. Operation of the keyboard and familiarity with the standard steps in using common software may be learned in a number of settings, and we strongly recommend that students acquire these skills before coming to the University.

RECOMMENDATION 3. Recommend computer skills as part of general preparation for University work. Remedial help in developing such skills should be readily available in academic-support centers within the University.

Implementation

A primary task in implementation of these preparation requirements is establishing the criteria for competency commensurate with the preparation desired for University coursework. This task fell outside the charge to the Special Committee and, in any case, would have required more than the time allotted to it. We urge, however, that the University call upon its rich array of experts in assessment and testing on its faculty and staff, as well as subject-matter experts, to specify the most valid and desirable methods for determining competency. In addition, these individuals, in consultation with the schools, can determine whether assessment should be based in the secondary schools, with the technical support of the University, or on the University campuses or in extension centers by University staff. As noted above, this group can draw upon current work by the Minnesota State Board of Education and by the University's Advisory Committee on Prekindergarten - Grade Twelve Connections in this area.

RECOMMENDATION 4. Establish a working group of testing and subject-matter experts to specify the competencies expected in each of the above areas and to ascertain the best methods and timing for assessing these competencies for entering students. This group might build on the deliberations of subject-matter groups now considering these questions within and outside the University.

Our charge did not include a review of the class-rank and test-score criteria now used in admissions. Indeed, A Commitment to Focus affirms that maintaining these criteria is an essential guarantee of access to the University. Furthermore, some units have particular instructional missions that make more or less stringent admission criteria essential. However, the present thresholds for automatic admission vary so greatly across colleges as to be a potential source of confusion for students. We urge the colleges to work together to improve the consistency and clarity of these criteria.

RECOMMENDATION 5. In the interest of simplifying admission criteria, undertake a review of the feasibility of increasing the consistency and clarity of collegiate criteria for class-rank and achievement-test scores for admission to the University.

Part II - Protecting Access to the University

The goal of increasing and unifying preparation requirements in core areas of study is to enable the faculty to focus on providing more rigorous, higher quality courses, thus improving access to a quality education for all students. In considering how best to achieve this goal, the Special Committee has given particular attention to assessing the likely impact of increasing preparation requirements on the diversity of the student body at the University. Of special concern is access for minorities and older adult students re-entering or coming to college for the first time. In addition, the particular needs of international students and students from rural and inner-city schools have received attention throughout our discussions.

The Committee's investigations revealed that, in general, the proposed preparation requirements are consistent with current educational policy in Minnesota's secondary schools and with typical patterns of coursework for students who now attend the University:

- A 1985 ruling by the State Board of Education mandates that all high schools in the state must make available instruction at the level of or exceeding the number of courses specified as desirable preparation in our requirements (see Appendix B).
- In a study of sample transcripts of freshman who entered the Twin Cities colleges in 1985, a large majority of students in general and, particularly, students from rural high schools had taken the stipulated amount of coursework in English, social studies, mathematics, and science. For example, in mathematics 83% of students in general had taken the required courses; in science, 72% had taken the required three years. The corresponding percentages for students from rural high schools were 81% (mathematics) and 85% (sciences). The proportion of 1985 entering freshmen who met the proposed coursework requirements across all areas is estimated at 30-40%.
- Enrollments in foreign-language courses in state high schools increased significantly in 1984-85 and in 1985-86. One impetus for these increases was the announcement of a new three-year language requirement by the College of Liberal Arts on the Twin Cities campus. In the study of 1985 freshman transcripts, 58% of students in general had taken two or more years of a foreign language. Only 24% of rural school students had done so, but the increasing trend in high-school language enrollments will undoubtedly result in larger numbers with the proposed level of preparation in the future. CLA has also experienced increases in applications for admission during the period since higher language requirements were announced.

However, students in groups for whom access is a special concern appear to be somewhat less likely than other students to meet the proposed requirements at present. For example, minority students who entered as freshmen in 1985 typically had taken one fewer course in math and in science than had students in general. In foreign languages, 49% of minority students had taken at least one

year of coursework in high school, compared with 61% of students in general. The trends noted above will undoubtedly produce a change in these percentages.

Nevertheless, it must be recognized that the conventional wisdom about what courses students should take in preparation for college has either not been as readily available to minority students or has not had the same impact on them as it has on students in general. Such gaps in preparation are disadvantageous to minority students in their coursework at the University. The Special Committee regards the "information gap" about optimal preparation as one of the major points to which the University must respond in protecting access for minority students. Indeed, improving access to information about adequate preparation may be one of the major benefits of establishing and clearly communicating preparation requirements.

A. The need for a transition period and information programs regarding preparation

A critically important strategy for reducing differences in preparation may be overcome by allowing an adequate period of transition before the University puts its preparation requirements into effect. Given adequate lead time and extensive communication of expectations on the part of the University, students who are currently in high school will have a greater opportunity and incentive to meet preparation requirements than today's students have had.

RECOMMENDATION 6. Allow for a transition period of no less than five years before the proposed preparation standards become requirements. In the interim, the standards should be instituted as recommended preparation.

Implementation

A phased transition to full implementation of requirements may be useful: new preparation standards would be recommended for students entering in Fall 1987; and these recommended courses would become required preparation in Fall 1990.²

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²The College of Liberal Arts on the Twin Cities campus has already adopted for its students a foreign-language standard that will eventually require three years of high-school study. The CLA standard will be phased in over three years. In Fall 1986, incoming first-year students and transfer students with less than 39 credits will be expected to demonstrate a level of language proficiency that will normally have been gained by one year of high-schools study. The proficiency level expected will be set at the equivalent of two years of study for Fall, 1987, and three years for Fall 1988.

During the transition a major public-relations and communication program will be needed to inform school districts and the people of the state of the new preparation requirements. In addition, considerable consultation and collaboration will be needed with other parts of the state educational system. The secondary schools will need lead time and, in some cases, technical assistance to make the necessary curricular and academic-advising changes to prepare students to meet new requirements. The community colleges and state universities should also be included in discussions of competency criteria and other planning for the preparatory coursework needs of prospective students.

RECOMMENDATION 7. Undertake extensive and carefully planned communications to school districts, faculties, students, and parents in Minnesota and in major feeder areas in other states in preparation for instituting new requirements. In particular, new printed information booklets for parents and students should be designed to explain the preparation requirements and recommendations.

RECOMMENDATION 8. Initiate cooperative planning with the secondary schools, community colleges, and state universities toward the implementation of increased requirements. In addition, through its regular programs and such special efforts as are warranted, endeavor to provide instruction, technical assistance, and other aids to help school districts prepare for implementation of new requirements.

B. The need for procedural safeguards to protect access

Access can also be protected by continuing or instituting procedures to assure special attention to minority, international, rural, and older-than-average applicants to the University. The current practice of providing individual review for marginal applicants has been important in guaranteeing access and should be continued. It should be noted that this recommendation refers to class-rank and test-score criteria for admission, not preparation requirements.

RECOMMENDATION 9. Continue the current practice of individual review of credentials for students who do not meet class-rank and achievement-test criteria for automatic admission.

In the case of older than average students, individual review of preparation may be necessary, however. Future students who completed high school before 1987 are likely to be deficient in many of the preparation areas because information about the University's expectations will not have influenced high-school decisions before that time. The Special Committee believes that these students should not be required to meet all preparation requirements in the same ways and to the same extent that more recent graduates will.

RECOMMENDATION 10. To facilitate entrance of older-than-average students, allow appropriate "grandparenting" for prospective students who completed high school before 1987.

Equally important is assurance by the University that students who have accepted the challenge of study at the University, but who lack adequate preparation, will have access to programs, resources, and other services that may improve their chances of succeeding in university-level work. Although this provision may benefit students for whom access is not typically a concern, minority, international, and older students may especially benefit from such supports. For these students, access to entry alone may not be enough; access to skills development and individualized advising programs may be essential to their ability to succeed in courses for which the majority of students have more extensive preparation. Both the Special Committee for Minority Programs in Support of A Commitment to Focus and the Special Committee on Enriched Advising for Academically Fragile Students are currently giving extensive attention to these needs.

RECOMMENDATION 11. Insure that students put at risk by preparation requirements have access to academic and student services to facilitate their work after admission.

Access in a broader sense refers to the University's mission to serve certain unique educational needs within the state: (a) service to areas of the state in which alternative four-year degree programs are not readily available (e.g., Duluth); and (b) service to particular clienteles (e.g., four-year undergraduate residential college at Morris; baccalaureate programs in agriculture in the College of Agriculture). The Special Committee was mindful of these issues in formulating its recommendations and urges that continued attention be given to them in the implementation of this reports.

Part III - Student Preparation and the University's Academic Program

Higher-level preparation for learning creates the potential for improving the quality and effectiveness of undergraduate education at the University of Minnesota. The institution of preparation requirements thus places even greater responsibility upon the University for improving the quality of its undergraduate instructional programs. Courses can be taught at a higher level throughout the curriculum, with the result that students can reach more advanced levels of competency by the time they receive their baccalaureate degrees. Academic planning and placement of students in courses can be based on more extensive knowledge about student readiness and about the demands of University study.

To realize this potential, however, the University must consider how its academic programs should change as the preparation of students increases in core areas of study.

A. The need for preparatory coursework at the University

A primary consideration must be the amount and kinds of preparatory instruction needed at the University for students who require additional preparation. Although an adequate transition period and information campaign should gradually reduce the number of such students, educational concerns dictate that the University must make some provision for students whose preparation is incomplete. The availability of preparatory coursework may be especially important in maintaining access to the University for minority, international, and older-than-average students.

RECOMMENDATION 12. Establish an adequate program of preparatory coursework to meet the needs of students who are otherwise qualified for admission, but are deficient in specific areas.

Implementation

Planning for preparatory-coursework offerings should involve disciplinary departments of the colleges, as well as academic-support service units. The General College in the Twin Cities and the Supportive Services Program in Duluth are likely homes for some preparatory coursework, as well as for courses designed to help develop basic academic skills.

The Special Committee believes that several principles should guide the formulation and delivery of preparatory coursework at the University:

First, if the educational benefits of preparation requirements are to be realized, preparatory coursework should be completed early in the student's career at the University. Preparatory work should ordinarily have been completed no later than the time at which students have completed 39 credits, or roughly the equivalent of their first year in college.

RECOMMENDATION 13. Require students who must achieve proficiency in preparation areas after entrance to do so within the first 39 credits taken at the University.

A second principle is that credit should be granted for preparatory coursework. These credits should not substitute for credits earned in university-level coursework in a student's degree program or in meeting distribution requirements at the University, but should be added to that student's graduation requirements. This provision allows preparatory coursework to qualify in determining financial-aid eligibility; furthermore, students may be able to transfer the credits to other institutions if they leave the University. Tuition costs for preparatory-coursework credits should be the responsibility of the student.

RECOMMENDATION 14. Grant credit for preparatory coursework taken at the University, and add this coursework to degree requirements.

Additional steps might be taken to facilitate the tracking of preparatory coursework in students' records. For example, common course identifiers could be established to facilitate evaluation of preparatory coursework for transfers between campuses and colleges within the University system.

B. The need for review and revision of curriculum and advising

To achieve the goal of improving undergraduate education, better student preparation must be matched by increased attention to the level and quality of undergraduate instruction at the University. The proposed transition period before full implementation of preparation requirements should also be a time for rethinking curricular offerings and instructional goals from the perspective of students who are prepared to work at advanced levels. Many of the relevant issues have been raised previously in the reports of the Page Committee on Quality Undergraduate Teaching and Learning (May, 1985) and the Task Force on the Student Experience (July, 1984).

RECOMMENDATION 15. Undertake a University-wide review of undergraduate curricula to identify and initiate changes necessary to adjust instructional programs to the needs of students with more consistent and rigorous preparation.

A fundamental element in realizing the educational benefits of increased preparation requirements is appropriate academic advising. With increased preparation requirements, academic units may find it both more possible and more necessary to provide individualized academic planning. Advisers can use preparation requirements to improve the quality and specificity of academic advising for all students. For students who do not initially meet all preparation standards, the goal of advising will be to identify the appropriate initial course of study, including preparatory work to redress subject-area deficiencies. For students with advanced preparation, similarly differentiated advising will help to assure advanced placement and to provide optimum

challenge. To achieve these goals, longer, more comprehensive advising sessions may be required; and more well trained advisors and better coordination among collegiate units in advising information and services will be needed.

RECOMMENDATION 16. Establish advising systems and procedures that allow for the greater amount of individualized program planning that will be possible when new preparation requirements are in place. Provide adequate funding to support personnel, training, and support services for such systems.

Part IV - Preparation Requirements and Student Services

The benefits of enhancing student preparation and instructional programs depend partly on services that enable students to take advantage of the University's academic resources. Several such services -- financial aid for students needing additional preparation, and admissions and student records operations -- are especially critical to the implementation of preparation requirements.

A. The need to revise procedures regarding financial-aid eligibility

Although an adequate transition period with extensive communication of requirements should reduce the risk of financial-aid ineligibility due to preparatory requirements, the Special Committee has been especially concerned that enhanced preparation requirements be consistent with the ability of students to secure financial aid. For students who must take preparatory coursework, the recommendations in Parts II and III would meet the standards of most types of financial aid currently available.³ Students can maintain adequate progress toward their degrees if preparatory-coursework credits are added to their graduation requirements. The Special Committee believes this provision is essential to addressing the problem of access to financial aid in the critical early days of University study.

The risk of ineligibility still exists, however, for students whose time in preparatory coursework slows their progress toward degrees. Such students may be unable to secure federal financial aid because of time limits on eligibility. Although the needs of these students for financial aid must be considered along with those of other students for whom time-to-degree is longer than usual, we urge review and revision of guidelines for non-federal sources of financial aid to meet the needs of students for whom the federal timeclock runs out because of the amount of preparatory work they must take at the University.

RECOMMENDATION 17. Review and modify financial-aid eligibility guidelines, where possible, to facilitate access to aid for students who must take preparatory coursework at the University.

B. The need to assure adequate student services

Instituting preparation requirements also requires changes in the University's procedures for admitting students and for monitoring their progress. Reviewing coursework transcripts for all entering students will necessitate extensive procedural and operational changes in offices concerned with admissions and with records. Because high-school courses vary considerably in content and coverage,

³It should be noted that eligibility for the major federal financial aid programs may be changed as a result of reauthorization reviews that are currently underway. The University should monitor this situation carefully so that changes can be taken into account in formulating financial-aid guidelines in light of new preparation requirements.

equivalencies must be established. In addition, proficiency examinations must be identified and procedures developed for administering tests and recording and reporting test results. Completion of preparation requirements after entrance to the University will have to be monitored by records offices. Careful, coordinated planning will be required to insure that these services are consistent with other activities associated with implementing preparation requirements. Reductions in student services staff in recent years may impede the ability of these units to undertake the necessary tasks, and the Special Committee urges that adequate resources be made available to support these activities.

RECOMMENDATION 18. Insure that resources are available for establishing procedures and data systems for determining proficiency of entering students and for monitoring the progress of students who must fulfill requirements after entry.

Part V - Implementation and Oversight

Implementation of preparation requirements has been addressed in connection with specific recommendations throughout this report. The Special Committee believes an overall structure for implementation is also needed to assure that the diverse aspects of the foregoing recommendations are coordinated and their benefits maximized.

One aspect of this structure is centralized administrative authority for assigning to the appropriate officers and units the responsibility for implementing the recommendations presented in this report.

RECOMMENDATION 19. The President of the University should direct specific responsibility for implementation of the various recommendations of this report to the most appropriate officers or units.

In addition, there is a need for on-going review and coordination of the activities of the many individuals and groups that will be involved in implementing these recommendations. For example, activities in the various colleges, in the Offices of Student Affairs and Academic Affairs, and in secondary schools and community colleges and state universities should be regularly reviewed as the time for full implementation of requirements approaches. The Special Committee believes that a small advisory committee of individuals familiar with these various spheres of activity could greatly increase efficiency and effectiveness in implementation. The work of this group will necessarily extend across a period of years, and some provision should be made for continuity across time in its operation.

RECOMMENDATION 20. The President of the University and the Senate leadership should appoint a small advisory committee to coordinate and oversee the implementation of this report. The committee should report to the President and to the Senate, through the Senate Committee on Educational Policy, at regular intervals both before and after full implementation of preparation requirements.

Appendix A

GROUPS AND INDIVIDUALS CONSULTED ON PROPOSED STANDARDS

Minnesota Public Schools and Community Colleges

Minnesota State Board of Education
North Hennepin Community College
University Advisory Committee on Prekindergarten - Grade 12 Connections
Working Group on Advanced Placement
Working Group of Superintendents
High-school counselors from 20 school districts in Minnesota
Questionnaires regarding reactions to the interim report to all 435 school districts and all secondary-school principals in Minnesota

College/campus consultative groups and faculty

Special Committee for Minority Programs in Support of A Commitment to Focus
College of Liberal Arts Policy and Planning Committee
Institute of Technology Deans and Department Chairs
College of Agriculture Department Chairs
University College Assembly
College of Education Administrative Council
Council of Professional School Deans
Council of Undergraduate Deans
Directors of Undergraduate Studies (three open meetings)
Council on the Arts in Education
Intercollegiate Athletics
Morris: Campus Resources and Planning Committee; Scholastic Committee; Advising Council; Division Chairs Group; faculty representatives in English, mathematics, sciences, and foreign languages
Duluth: Educational Policy Committee; student-government representatives; Chancellors and Deans Council

Senate Committees

Student Academic Support Services Committee
Committee on Educational Policy
Senate Consultative Committee
Student Senate Consultative Committee

In addition, an open forum was held prior to the Senate meeting on February 20, 1986.

Student Services

Office of Student Affairs/College Student Affairs Group

Registrar's Advisory Committee

Minority Affairs Coordinating Committee

Morris: Vice-Chancellor for Student Affairs, Director of Admissions and Financial Aid, Registrar, Director of Academic Assistance Program, Minority Student Program representatives

Duluth: Associate Deans and student-services officers

APPENDIX B

3500.2110 REQUIRED CURRICULUM OFFERINGS FOR FOUR-YEAR SENIOR SECONDARY SCHOOLS.

Subpart 1. Required during grades 9-12 program. The subjects listed in subpart 2 are required to be offered to students in a secondary school having grades 9 to 12. Except for physical education, each of the listed subjects must be made available over the four-year period for the minimum number of clock hours shown in subpart 2. Physical education must be offered for a minimum of 80 clock hours in grade 9, and 60 clock hours in grade 10. One credit/hour is equal to 120 clock hours. The minimum requirements may be expressed in clock hours or credit/hours.

Subp. 2. Schedule.

| Subjects | Minimum Clock Hours | Credit/Hours |
|--|---------------------|--------------|
| Communication skills | 600 | 5 |
| Mathematics | 480 | 4 |
| Science | 480 | 4 |
| Social studies | 480 | 4 |
| One modern-classical language | 240 | 2 |
| Music | 240 | 2 |
| Visual arts | 240 | 2 |
| Industrial arts | 120 | 1 |
| Health | 60 | 1/2 |
| Physical education | | |
| in grade 9 | 80 | 2/3 |
| in grade 10 | 60 | 1/2 |
| Electives, local district choice in five subject areas | 1,200 | 10 |

Subp. 3. Required offerings without minimum hours. The programs in A and B must be offered to students. The number of clock hours to be devoted to each is up to the local school board. Satisfactory completion will be based on locally determined learner outcomes which are defined as knowledge, skills, or understandings that an individual student derives from a learning experience.

A. A school district must provide a career education program developed by involving parents or guardians and the community. The program must be designed to assist pupils in making career decisions including course selections.

B. A school district must provide an information technology program to meet individual student needs. Information technology includes such things as student learning about and with one or more of the following: computers, telecommunications, cable television, interactive video, film, low power television, satellite communications, and microwave communications. Information technology may be integrated with course content of other subject areas.

L 1983 c 314 art 8 s 23

Effective 1985-86 school year

From: Rules of the State Board of Education, Minnesota Department of Education.