

DOCUMENTS AND PROCEEDINGS OF THE FACULTY SENATE

MEETING NOTICE AND AGENDA

THE UNIVERSITY OF TEXAS AT AUSTIN
 MAIN BUILDING 212

MONDAY, OCTOBER 5, 1981
 2:15 p.m.

ORDER OF BUSINESS

- I. APPROVAL OF MINUTES
 - A. Minutes of the Meeting of September 14, 1981 (delayed)
- II. REPORT OF OFFICERS
 - A. Report of Chairman
 - B. Report of Vice Chairman
 - C. Report of Secretary
- III. NEW BUSINESS
 - A. Discussion of Proposed Revision of the Evaluation of Deans of Schools and Colleges (H.O.P 2.5, p. 33a)
- IV. Report of Committees
 - A. Extensive report and discussion of Committee on Undergraduate Curriculum Requirements (D&P 1575-1646) - James Daniel
 - B. Status Reports from Committees
 1. Committee on the Pedagogical Implications of Enrollment Growth - Eleanor Jordan
 2. Committee on the University Available Fund - John Durbin
 3. Committee on Inter-University Relations - William Glade

Phyllis Richards, Secretary
 The Faculty Senate

DOCUMENTS AND PROCEEDINGS OF THE FACULTY SENATE

REPORT OF THE COMMITTEE ON UNDERGRADUATE CURRICULUM REQUIREMENTS

The following report has been filed with the Secretary of the Faculty Senate by James Daniel, Chairman of the Committee on Undergraduate Curriculum Requirements. This report is being distributed to members of the Senate for their information. It will be discussed at the meeting of the Senate on October 5, 1981.

Phyllis Richards, Secretary
Faculty Senate

REPORT OF THE COMMITTEE ON UNDERGRADUATE CURRICULUM REQUIREMENTS

Last spring, the report of the Vick Committee was sent to each school/college to "...review the requirements for its undergraduate degrees and make changes to bring these requirements within the spirit of the report..."; this was done before most of the proposals for changes in the recommended requirements were debated by the Council.

The present committee was charged with arranging for the Senate to discuss the Vick Committee report in more detail, to consider alternatives or modifications to its recommendations, and to address related issues. We suggest that, starting with the October meeting, the Senate address the following questions in order.

- 1) Should there be general-education requirements imposed on every student receiving a Bachelor's degree of form from The University of Texas at Austin?
- 2) If so, in what form or focus should these requirements be met? (For example: by competency tests? by coursework? by faculty certification? or by what?)
- 3) If so, specifically what should these requirements be? Each department, school, and college should be urged to assess the impact of various requirements on enrollment in its courses and to determine which of its courses are indeed appropriate for meeting specific requirements.

In order to address Question 3, we suggest that the Senate proceed through the six items I-VI in the Vick Committee report, considering the various modifications that have been proposed and determining which versions of the requirement--if any--have significant support in the Senate; then, proposals for additions to or replacements of the Vick Committee report should be addressed. The present committee will then prepare a summary of Senate positions for communication to the schools/colleges and to President Flawn.

For the information of the Senate members, there now follows:

- a) a rough outline of the proposed modifications, additions, and replacements to the Vick Committee report;
- b) relevant pages from the University Council Documents and Proceedings (denoted in the outline as Grieder, Megaw, Durbin, Daniel, Rankin, Gloyna, and Nursing, among others);
- c) recent proposals from the Business Administration College (denoted in the outline as Williamson), from Bill Glade (denoted in the outline as Glade), and from a faculty group that met this summer (denoted in the outline as Summer Group).

OUTLINE

Proposed Modifications to the Recommendations I-VI

- I. Writing
 - Gloyna, Nursing, Williamson: hours and level
 - Summer Group, Williamson: generalize notion of communication
 - Summer Group: certification/referral for communication skills
- II. Social Sciences
 - Glade: require coverage of foreign cultures
 - Gloyna: reduce number of hours
- III. Mathematics
 - Daniel, Durbin: which courses are appropriate?
 - Summer Group: certification/referral for math skills
- IV. Natural Sciences
 - Grieder, Summer Group: History, and Philosophy of Science course
 - Rankin: require both life science and physical science
 - Williamson: require no 6-hour concentration
 - Daniel: require computing
- V. Foreign Language
 - Williamson: substitute foreign cultures
 - Gloyna: eliminate this requirement
 - Summer Group: certification/referral of language skills
- VI. Arts and Humanities
 - Gloyna: include social science
 - Daniel: require arts, humanities separately
 - Grieder, Summer Group: History and Philosophy of Arts course

Proposed Addition

Megaw, Summer Group: independent inquiry

Proposed Replacement

Grieder: two 3-hour courses--History and Philosophy of Arts and Sciences

Submitted by:

Jack Brokaw
Gaylord Jentz
Bob Kline
Jim Stephens
Jim Daniel, Chair

A COMPILATION OF DOCUMENTS AND PROCEEDINGS
OF THE UNIVERSITY COUNCIL WHICH HAVE TO DO WITH THE
REPORT CONCERNING RECOMMENDATIONS OF THE COUNCIL ON
BASIC EDUCATION REQUIREMENTS

University Council D & P	Faculty Senate D & P	TITLE OF D & P
8148-8166	1579-1599	Report Concerning Recommendations of the University Council Committee on Basic Education Requirements - James Vick
8170-8171	1600	An Alternative Proposal on Basic Education Requirements - Terence Grieder
8188-8203	1601-1616	Response to the "Report Concerning Recommendations of the University Council Committee on Basic Education Requirements - College of Fine Arts (Taken from Minutes of February 16 Meeting)
8203a	1617	Comments from the Committee on Basic Education Requirements in Response to the Issues Raised by the College of Fine Arts Committee on Educational Policy and Curriculum (Minutes of February 16)
8204-8207	1618-1620	Another Proposal Concerning Basic Education Requirements - Neill Megaw
8208-8210	1621-1622	Proposal to Amend the Recommendation Regarding Mathematics in the Report of the University Council Committee on Basic Education Requirements - John Durbin
8221	1623	Memorandum Concerning the Proposed General Education Requirements - James Daniel
8226-8228	1624-1626	Proposal to Amend the Recommendation Regarding Natural Science Requirements in the Report of the University Council Committee on Basic Education Requirements - Mary Ann Rankin
8232-8236	1627-1630	College of Engineering Response to Proposed General Education Requirements - Earnest F. Gloyna
8279	1631	Dean Werbow's HANDOUT at the March 23, 1981 Council Meeting (taken from March 23 Minutes)
8294a-8294d	1632-1635	Attachment to the Minutes of the University Council Meeting of March 23, 1981. Report from School of Nursing
	1636	Procedural Motion (Handout at February 16 Meeting)
	1637-1639	Formalization of Legislation Recommended by the University Council Committee on Basic Education Requirements (Handout at February Meeting)

University Council Committee on Basic
Education Requirements
December, 1980

In the fall of 1979 this committee was established by the University Council and charged with examining the basic education requirements for all undergraduate degrees at the University and reporting its findings and recommendations to the Council. As a part of our extended deliberations we have conferred with many elements of the University community, including student groups, the senior cabinet, departmental committees or delegations, chairmen, deans and their college representatives, and the president and vice presidents, as well as with individual students and faculty. Our preliminary reports to the Council last February and April elicited numerous responses. We have carefully considered the opinions and concerns of our colleagues in arriving at our conclusions. No votes were taken among the committee; we discussed and modified proposals on each issue until a consensus was reached. While some individual differences may remain, we strongly support the recommendations indicated in this report, and we believe that the matters they address are of fundamental importance to the University.

I. SURVEY OF THE PRESENT SITUATION

The most recent general legislation dealing with basic education requirements was adopted by the UT Faculty Council and the General Faculty in the spring of 1955 and approved by the Board of Regents in July, 1955. The details of the proposal, usually called the Graham Committee Report, are included as an appendix. In essence it required that every undergraduate degree program include a minimum of 45 hours in basic courses, to be chosen with considerable flexibility from several specified categories. Through the years all introductions of new programs and modifications of existing ones have been measured against these standards.

It is the judgment of our committee that the Graham Committee Report is no longer fulfilling the role for which it was originally intended, i.e., to assure that all of our undergraduates develop the characteristics of an

educated individual. The categories prescribed are very broad, and the increasing emphasis on specialization among both students and faculty has led to choices that de-emphasize or eliminate the study of basic topics we believe to be essential.

Many examples of this may be cited. In some programs the only substantial writing required of students occurs in freshman English. It is possible for a strong student to place out of these courses and complete a degree without ever facing a significant writing assignment. Alternatives are offered that make it possible for a student to avoid science courses entirely. Even our distinguished Plan II program does not require any exposure to mathematics. Others require no analysis of literature or limit this to English 307. Although all degrees include the legislative requirement in U.S. Government and U.S. History, some require no additional social science. Many programs require no foreign language proficiency or permit a wide variety of alternatives. Most professional degree plans include very few electives, and there is apparent pressure to use these in areas with maximal job-related benefits. Table 1 presents a sample of undergraduate programs from various schools and colleges broken down according to requirements in basic areas.

Another aspect of this situation is the general feeling of our faculty, supported by trends in national standardized tests, that the level of preparation of entering students is declining. While this may have many causes beyond the purview of our committee, it seems clear that a student's course selection in high school may be substantially affected by the awareness of the demands that student will face in college.

II. THE PURPOSE OF BASIC REQUIREMENTS

Once we accepted the hypothesis that our current system of basic requirements is inadequate, we spent considerable thought and discussion on the goals that these programs should be accomplishing. Specifically, what are the essential characteristics of an educated individual? What traits should be common to all recipients of baccalaureate degrees from The University of Texas at Austin?

Table 1.

Degree	Total Hours	English (Incl. Literature)	Social Science Beyond Legis. req.	Natural Science	Math	Foreign Language	Fine Arts & Humanities	Electives
BA Plan I	120	9	6	15	none	14	6	38
BA Plan II	120	6	9	12	none	14	12	40
BA Art	120	12	12	18	none	8	88	9
BFA Dance	121	6	none	-----total of 6-----	6	none	3	15
BBA Accounting	120	9	6	6	6	none	none	3
BBA Petroleum Land Management	120	9	6	19	6	none	none	25
BS Advertising	120	12	none	15	none	14 or substitute	none	28
BS RTF	120	12	none	15	none	14 or substitute	none	32
BS Chemistry	132	9	none	56	9	11	none	12
BS Education (Elementary)	126	12	6	6	6	none	none	12
BS Electrical Engineering	132	12	none	14	16	none	none	15

Degree	Total Hours	English (Incl. Literature)	Social Science Beyond Legisl. req.	Natural Science	Math	Foreign Language	Fine Arts & Humanities	Electives
BS Mechanical Engineering	131	9	none	14	12	none	none	6
B. Architecture	164 or 166	12	none	6 or 8	8	none	100	13
BS Nursing	129	9	6	18	3	none	3	6
BS Pharmacy	160	6	3	40	6	none	none	17
B. Social Work	132	9	6	15	none	none	6	13

Of primary importance is the ability to express one's thoughts clearly and correctly in writing. This skill can rarely be achieved simply by taking courses in freshman composition, especially in the case of students who read little and thus have neither models to imitate nor ideas to express. One should be capable of reasoning effectively from hypotheses to conclusions and logically analyzing the arguments of others.

One should have a critical appreciation for the social framework in which we live and the ways it has evolved through time. An understanding of our traditions in America is essential, but American History and Government should be viewed in the broader context of western civilization and the history of ideas. One should have experience in thinking about moral and ethical problems, particularly in the context of modern society.

One should have an understanding of some facets of modern science and of the ways we gain and apply knowledge of the universe. One should also be able to cope with some aspects of modern mathematics and the ways they are applied to solve problems. These are essential tools for arriving at sound judgments on complex scientific and technological issues.

It is no longer possible to conduct our lives without reference to the wider world in which we live. An educated person must have familiarity with and sensitivity to a foreign language, including an insight into how other cultures think and feel. This has recently been stressed in recommendations of prominent groups including the President's Foreign Language Commission, a panel of national leaders in government, business, academe, and foreign affairs.

Finally, one must have insight into the creative side of the human spirit. An educated person must acquire early some lasting appreciation of literature and the arts in order to make life more meaningful and enjoyable and to assure support for the continuation of our humanistic and artistic heritage.

It should be stressed that we do not seek to make every graduate a universalist with highly developed skills in multiple fields. We do not

seek fluency in a foreign language, mastery of advanced scientific methods, or talent as a creative artist. Nor are we concerned with the direct professional utility of any of these proposed traits. Rather we feel that they form a minimal set of characteristics which should be common to all of our graduates regardless of their field of specialization. Collectively they form the foundation for concentration and deeper study as well as for future adaptation and development in response to our ever changing environment.

III. RECOMMENDATIONS FOR CHANGE

The crucial first steps in accomplishing these objectives should be completed in the secondary schools. Indeed, by the time a student enters the University many of these traits should be acquired. For most students this is unfortunately not the case. We strongly urge that the University use whatever means are available to encourage better preparation of secondary school students in English, social and natural sciences, mathematics, and foreign language. A proposal to require more thorough preparation of students prior to admission to the University is now being considered by the Educational Policy Committee. We strongly support this proposal.

Our principal concern, however, must lie with the undergraduate curriculum. We believe that the stated objectives may be accomplished through a carefully planned selection of existing courses. It is not difficult to design a satisfactory curriculum in the absence of other restraints, but many professional programs are so tightly structured with extensive requirements in the major and in supporting fields that the number of hours set aside for basic courses is quite limited. The 45 hours satisfying the Graham Report are not necessarily available since the choices within each category resulted in several of these hours being absorbed into the major or into related work. In response to the serious concerns expressed by the professional schools and programs, we have made every effort to reduce the number of hours necessary to satisfy our proposed general education

requirements.

We recommend that the University adopt a new set of requirements which would be common to all undergraduate degrees. These would be minima in the sense that schools and colleges would be free to retain or institute more stringent requirements through normal procedures. Our proposal addresses six basic areas.

1. Writing

Students must not only be trained in basic composition, but they must also be expected to continue the development of their skills in their advanced work. This should not be viewed as the exclusive responsibility of the English Department; all members of the faculty should be concerned with the writing of their students.

It is our opinion that students with sufficient high school preparation should be able to obtain credit for E. 306 by advanced placement, although presently only 18% of the entering freshmen do so. Consequently our writing requirement is formulated in terms of courses beyond E. 306.

We recommend a writing requirement of 12 semester hours beyond E. 306, including 6 hours in upper-division courses. The first 6 hours could be satisfied by completing a normal lower-division English sequence such as E. 307 and E. 314K. The remaining 6 hours could be fulfilled by any upper-division courses certified to have a substantial writing component. These would not necessarily be courses designed to teach writing, but they would require substantial writing by students, and the written work would be evaluated on form as well as content. We urge all departments to develop courses of this type or to modify existing courses to have these characteristics. Since feedback from the instructor is fundamental to improving writing skills, it is essential that the courses satisfying this requirement be taught in small classes.

It is our intention that a student selecting E. 307 and E. 314K will simultaneously be satisfying 6 hours of literature as stipulated below. By doing so, and completing the upper-division work within the major field, the entire writing requirement (beyond E. 306) could be absorbed into other areas.

The English Department has recently proposed a new sequence consisting of E. 306, a sophomore literature course, and an upper-division course designed to develop writing skills in specific disciplines. We find this proposal to be entirely compatible with our objectives, and we support its adoption. If it should be approved, our requirement could be formulated as the English sequence followed by 6 hours of upper-division courses which have a substantial writing component.

2. Social Science

As a consequence of the legislative requirement, all undergraduate degree programs currently include 6 hours of U.S. Government and 6 hours of U.S. History. These are important subjects in which high school graduates often exhibit inadequate knowledge. However, this commitment of 12 hours places a formidable additional limitation on the availability of time for other areas. Some flexibility now exists through a variety of topics in Gov. 312L and an extensive list of courses dealing with aspects of American History. We recommend that the university administration explore the possibility of seeking greater flexibility in satisfying this requirement.

We propose that every program include 3 hours beyond the legislative requirement, to be chosen from Anthropology, Economics, Geography, Linguistics, Psychology, or Sociology.

3. Mathematics

We recommend a requirement of 3 hours of mathematics. It is not our intention to specify a course or topic. A strong case could be made for the need to understand the methods of statistical inference or the basic principles of calculus. One might also argue for courses containing linear programming, mathematical modeling, or other important applications. Our only stipulation is that certain courses not be allowed to satisfy this requirement: M. 301, an algebra course covering topics a student should learn in high school; M. 302, an introductory course in the cultural aspects of mathematics that may be primarily historical; M. 303F, the mathematics of finance; and M. 316K & L, techniques of mathematics for

elementary education.

4. Natural Sciences

The recent report of the Commission on the Humanities states, "Liberal education must define scientific literacy as no less important a characteristic of an educated person than reading and writing." Everyone is aware that science is playing an ever expanding role in our daily lives, yet it has been argued that some of our current programs allow students to graduate while remaining technologically illiterate. An attempt to convey specific aspects of modern technology to students may be futile in that continuing developments rapidly convert innovation into history. We feel that a student will be best prepared to adapt to change with an understanding of basic scientific principles and techniques.

We propose a requirement of 9 hours of natural science courses. At least 6 hours must be taken in one subject to assure a greater depth of coverage. A maximum of 3 of these 9 hours could be taken in mathematics, and these 3 hours would not overlap with the previous required 3 hours of mathematics. Students should be strongly advised to acquire a basic knowledge of how to use a computer.

5. Foreign Language

The decline in the role of foreign languages in the secondary and post-secondary curriculum over the past two decades has caused serious national concern. In its report released in 1979, the President's Commission on Foreign Language and International Affairs expressed alarm concerning "a serious deterioration in this country's language and research capacity at a time when an increasingly hazardous international military, political, and economic environment is making unprecedented demands on America's resources, intellectual capacity, and public sensitivity...Nothing less is at issue than the nation's security." The Commission and the recent Task Force of the Modern Language Association have both recommended various steps for improving language study in America's schools. They have now been joined by the Commission on the Humanities in calling for increased foreign language requirements for college admission and for reinstatement of foreign

language requirements in degree programs.

We believe that an acquaintance with a foreign language and culture should not be considered merely a utilitarian requirement or a social grace, but as one of the most efficacious means of broadening one's horizons and enabling one to judge our own culture and language. In an ideal situation most or all of this work should be completed in high school. We support the proposal currently being considered by the Educational Policy Committee to institute an admission requirement of two years of foreign language in high school. Recent reports indicate that approximately 75% of our current freshman class meet this standard.

We propose that each of our undergraduates should be required to master the basic grammar in a foreign language. Initially students could satisfy this requirement by presenting two years of high school language credit. Beginning in the fall of 1986 those submitting secondary credit would also be required to demonstrate proficiency at a specified level on a standardized examination. This would offer high schools a period of time to strengthen their foreign language programs. Students without high school credit and those unable to perform at the appropriate level would be expected to complete the second semester freshman course (407 in most languages). Records for advanced placement during the 1977-78 testing period appear in table 2.

Table 2.

Language	Number Examined	Credit for 406	Credit for 407
French	586	482 (82%)	338 (57%)
Spanish	2119	1828 (86%)	1080 (52%)
German	318	220 (69%)	43 (11%)

A strong minority of the committee favored requiring students to complete the second semester freshman course in a foreign language or to otherwise demonstrate proficiency at this level.

6. Fine Arts and Humanities

The oft-heard contention that Americans do not know how to use leisure

time is a severe indictment of our contemporary culture. The University and the Austin community offer a wealth of opportunities for students to develop an interest in literature and the arts.

We propose that every student be required to complete 6 hours of literature and 3 hours chosen from art, music, classics, archaeology, architecture, or philosophy (other than logic). As indicated in our discussion of the writing requirement, by choosing courses appropriately a student could simultaneously complete these 6 hours of literature. If the proposed English sequence is adopted, we would consider the sophomore literature course together with the upper-division writing course taken in the humanities or the social or natural sciences as satisfying the literature requirement.

General Discussion

The various aspects of the proposal may be summarized in the following example. Assuming that a student takes the upper-division writing courses in the major and that proficiency in a foreign language has been established, the remaining requirements could be satisfied by completing

- E. 307 and E. 314K,
- 6 hours U.S. Government,
- 6 hours U.S. History,
- 3 hours Social Science,
- 3 hours Mathematics,
- 9 hours Natural Science, and
- 3 hours Fine Arts and Humanities,

a total of 36 hours. Note that the lower division writing courses have been chosen so as to simultaneously satisfy the literature requirement. Students who do not place out of E. 306 would face an additional 3 hours.

In designing these requirements we have endeavored to accomplish each objective with the smallest possible number of hours, yet within each area there is considerable breadth from which students may choose. Consequently we feel strongly that exceptions or substitutions should not be allowed.

For some introductory courses, such as E. 306, M. 305G, Gov. 310L, or foreign language, advanced placement should be encouraged. However, we have serious reservations concerning the expansion of advanced placement further into the curriculum since there is much more to be gained from courses in residence than the ability to pass an examination.

If the University is to stress the importance of basic courses in the curriculum, then it must also commit itself to making these courses as effective as possible. President Flawn has already taken steps in this direction by recognizing and rewarding teaching excellence in these fields. Departments should be encouraged to give high priority to these courses in the assignment of faculty. The University as a whole should address the many needs that arise: reducing class size, furnishing graduate or clerical assistance, or supplying instructional aids and equipment. The condition of these courses should be such that they become a source of pride, both on the campus and in the broader community.

IV. IMPLEMENTATION

As we consider these recommendations, it is essential that we be aware of the means by which they would be implemented, the time periods involved, and the effects they could have on our existing undergraduate programs. While some of these are quite specific, others are subject to rather broad interpretation.

The writing requirement we have proposed states that the 6 upper-division hours must be taken in courses that have been "certified" to have a substantial writing component. We recommend that the certification of such courses be the responsibility of a standing university committee. Its membership should be broadly representative of our faculty, and its charge could be expanded to include the overall supervision of the writing requirement. A closely related body with similar responsibilities, the English Composition Board, is now in operation at the University of Michigan.

If these recommendations are adopted, they would be implemented by each individual school and college through its catalogue. Final catalogue

copy is now being prepared for the various 1982-84 editions. Consequently, the earliest that these changes could be instituted would be in the 1983-85 catalogues. This would mean that the first students subject to the requirements would be those entering in the fall of 1983, or the fall of 1984 for those colleges changing catalogues in even numbered years.

This delay offers the University the opportunity to communicate the changes to the high schools in the state. Students who will enter UT as freshmen in 1983 are currently in their sophomore year in high school. If we accurately convey the implications of the requirements to these students and those who will follow, they will have sufficient time to plan their academic preparation.

Perhaps the most immediate concern among the faculty and administration is the impact these changes would have on existing programs. We have not performed a detailed study of the effects on each major and degree plan on our campus; this would best be done by the faculty members directly involved. However, we have examined each of the undergraduate degrees listed in Table 1 and determined the primary modifications that would be necessary in order to comply. In the discussion below we have assumed that the student selects the lower division writing courses so as to simultaneously satisfy the literature requirement and takes the upper-division writing courses within the major. We also assume that foreign language proficiency has been established.

BA Plan I:

Area requirements may be adapted to satisfy the proposal; at least three hours of natural science would be taken in mathematics.

BA Plan II:

Although the freshman English sequence is different, and there may be no major area, it should not be difficult to meet the writing requirement. Three hours of science would be taken in mathematics.

BA Art:

Of the eighteen hours in science, three hours would be taken in mathematics.

BFA Dance:

The impact here is more substantial than in any of the other degrees surveyed. Three additional hours of literature and three of social science would be required. The six hours in science, mathematics, or foreign language would be forced into science or mathematics and expanded by six additional hours, with an overall minimum of three hours of mathematics. This would add twelve hours, of which only nine could be fulfilled by converting electives.

BBA Accounting:

Only minor adjustments would be necessary.

BBA Petroleum Land Management:

Three hours would be added in fine arts and humanities. Only three hours of electives are available.

BS Advertising:

Three hours of science would be taken in mathematics. Three additional hours of social science and three hours of fine arts and humanities would be required. Twenty-five hours of electives are available.

BS Radio-Television-Film:

Three hours of science would be taken in mathematics. Three additional hours of social science and three hours of fine arts and humanities would be required. Twenty-eight hours of electives are available.

BS Chemistry:

Three additional hours of social science and three hours of fine arts and humanities would be required. Thirty-two hours of electives are available.

BS Education (Elementary):

Three hours of fine arts and humanities would be added. While the other requirements appear to be satisfied, a problem arises due to the use of M. 316K, L as the six hours of mathematics. As our proposal is stated,

three additional hours of mathematics would be required. Twelve hours of electives are available.

BS Electrical Engineering:

Three additional hours of social science and three hours of fine arts and humanities would be required. Fifteen hours of electives are available of which six hours must be taken in approved non-technical courses.

BS Mechanical Engineering:

Three additional hours of social science and three hours of fine arts and humanities would be required. Six hours of non-technical electives are available.

B. Architecture:

Three additional hours of social science and three (or one) additional hours of science would be required. Eighteen hours of electives are available.

BS Nursing:

Only minor adjustments would be necessary.

BS Pharmacy:

Three additional hours of literature and three hours of fine arts and humanities would be required. Seventeen hours of electives are available.

B. Social Work:

Three of the fifteen hours of science would be taken in mathematics.

These comments are not comprehensive; they may overlook subtle changes in course selection that are of major importance. However, they should give a general picture of the impact of our recommended changes.

Another area that must be analyzed in detail is the capacity of the current faculty and staff to meet the resulting demands. The extent of the enrollment increases in basic courses should be predictable. We are strongly opposed to the prospect of expanding class size to accommodate these increases; in fact, we are specifically recommending that some class sizes be reduced in order to accomplish our goals. The time delay built into the implementation process would offer the University a brief period to begin addressing these needs.

Serious concern has been expressed that more stringent admission or degree requirements will have a negative effect on the recruitment of students into our programs, that talented students will select other institutions with less demanding curricula. This is certainly open to discussion and debate. In fact, we believe the effect will be positive rather than negative. These are not precipitous changes erecting insurmountable barriers, rather they are an indication that the University is committed to giving each of its students a solid educational foundation. Students are aware that the value of the degree is inseparably linked with the academic standards of the institution. It is in their interest, as well as our own, and in the interest of the people of Texas that we urge the adoption of these recommendations.

- | | |
|-------------------------|---------------------------|
| Frank D. Jean, Jr. | John Mark Metts |
| Philip C. Bobbitt | Melvin E. L. Oakes |
| Alan W. Friedman | Kenneth W. Prescott* |
| G. Karl Galinsky | Susan L. Russell |
| R. LaVerne Gallman | Robert J. Snow* |
| C. Robert Kline, Jr. | James F. M. Stephens, Jr. |
| William G. Lesso | Robert B. Williamson |
| James W. Vick, Chairman | |

*These professors were appointed to the committee on November 20, 1980. Since they were only involved in the final stages of our deliberations, they do not necessarily concur with our recommendations.

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Only minor adjustments would be necessary.

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Three additional hours of literature and three hours of fine arts and humanities would be required. Seventeen hours of electives are available.

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Three of the fifteen hours of science would be taken in mathematics.

These comments are not comprehensive; they may overlook subtle changes in course selection that are of major importance. However, they should give a general picture of the impact of our recommended changes.

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APPENDIX. Summary of the Graham Committee Report on basic education requirements, adopted by the Board of Regents in July, 1955. (See page 6572, Documents and Proceedings of the General Faculty).

The requirements for each Bachelor's Degree offered by the University of Texas (except the Bachelor of Laws Degree based on a Bachelor's Degree from another institution) include the subjects and hours specified in sections 1 - 4 below, to a total of at least 45 hours:

1. Area of Basic Courses: 12-15 hours, to include
 - A. Six hours of English Composition, and
 - B. Six to nine additional hours selected from the following list of subjects, provided that a student presenting three or more high school units in mathematics (except arithmetic or general mathematics) will be absolved from three hours of this requirement, and provided that a student presenting two or more high school units in a foreign language will be absolved from six hours of this requirement:

(1) Accounting	(5) Foreign Language
(2) Logic	(6) Drawing
(3) Mathematics	(7) Music Theory
(4) Statistics	
2. Area of Social Sciences: 12-15 hours selected from the following subjects:
 - (1) Government
 - (2) History
 - (3) Anthropology (except physical anthropology)
 - (4) Classical Civilization (except literature in translation)
 - (5) Economics
 - (6) Geography (except physical geography)
 - (7) Philosophy (except logic and aesthetics)
 - (8) Psychology (except experimental psychology)
 - (9) Sociology

3. Area of Natural Sciences: 6-9 hours, selected from the groups and subjects listed below, provided that 6 hours be from Group A.

Group A

Bacteriology

Biology

Botany

Chemistry

Geology

Physics

Zoology

Group B

Anthropology (physical)

Astronomy

Geography (physical)

Psychology (experimental)

4. Area of Arts and Literature: 6-9 hours selected from the groups and subjects listed below.

Group A: Aesthetics, Architecture, Art, Drama, Music

Group B: Literature in English or in another language. (Courses in B are above the freshman level.)

Group C: Composition, Creative Writing, Linguistics, Speech, Technical Writing. (Courses in C are above the freshman level.)

NOTE: Candidates for the Bachelor of Music degree and for the Bachelor of Fine Arts degrees in Drama and Art who present 15 hours in Area 2 (Social Sciences) and 6 hours in foreign language or in natural science or in mathematics may be absolved from 6 hours of the requirements set forth above in 1-4, provided the departments concerned designate the 6 hours to be so absolved.

An Alternative Proposal on Basic Education Requirements

As an alternative to the proposal of the Committee on Basic Education Requirements I submit the following proposal as a substitute motion:

That a requirement of two three-hour lower-division courses be added to all University undergraduate degree plans, to be taught as University Courses, and to be entitled as follows: (a) The History and Philosophy of the Sciences, and (b) The History and Philosophy of the Arts.

The rationale of this proposal has two bases, one a practical consideration concerning the effectiveness of our educational methods, the other a philosophical consideration of our educational goals.

In considering our methods, it is suggested that we substitute adult incentives to learning for the direct teaching of basic skills. American education offers 12 years of teaching of basic skills and there is no reason to believe that more of the same will produce a different result. We may distinguish between teaching and learning: one often sees young adults learn something when they feel the need to know it, when years of teaching have failed to reach them. Adult incentives include admission to college, admission to upper division or to a special program of studies. Our society provides many opportunities outside the university for the mastery of basic skills and since 18-year-olds are adults it seems appropriate to give them the responsibility for mastery of the skills which are the foundation of education.

In considering our educational goals we must distinguish between training and education. Training is concerned with skills and its courses can be titled beginning with "How to (use a computer, speak a foreign language, write correct English, etc.)." Education has always been defined as a knowledge of other times and places, knowledge which gives the educated person standards of judgement which transcend his own immediate time and environment. If it is our intention to produce educated men and women, as opposed to highly-trained ones, then we must expect a greater understanding of the history of the human experience. It is the history and philosophy of science that everyone needs to know to make sensible judgements about the role of science in the contemporary world.

It is a fact that cannot be ignored that our society considers the truly educated person to be one with a broad cultural knowledge. American society does not accept as educated a person who knows nothing of music, literature, and the arts. This area is often neglected by our students, who are eager for technical training but impatient with education. A one-course requirement which would explain the vocabulary and philosophical intentions of the arts as they have developed over the centuries might lead students to further enrich their minds on their own initiative.

Submitted by
Terence Grieder

ATTACHMENT A

College of Fine Arts
Committee on Educational Policy and Curriculum

Response to the "Report Concerning Recommendations of the
University Council Committee on Basic Education Requirements"
(Documents and Proceedings of the University Council, pp. 8148-8166)

The following response has been given a great deal of thought, a great deal of time, and reflects the efforts, not only of the College of Fine Arts Committee on Educational Policy and Curriculum, but also the interested and helpful participation of:

Gerard Behague, Professor and Acting Chairman, Department of Music
John Brokaw, Associate Professor of Drama and member of the
University Council
Terence Grieder, Professor of Art and member of the University
Council
Coleman Jennings, Professor and Acting Chairman, Department
of Drama
Kenneth Prescott, Professor and Chairman, Department of Art, and
member of the University Council Committee on Basic Education
Requirements
Robert Snow, Professor of Music and member of the University Council
Committee on Basic Education Requirements

Members of the College of Fine Arts Committee on Educational Policy and
Curriculum are:

Lita Guerra (Chairman), Associate Professor of Music
Rebecca Baltzer, Associate Professor of Music
Kathleen Conlin, Instructor of Drama
Paul Caffney, Assistant Professor of Drama
Peter Jenkyn, Associate Professor of Art
David Knott, Student Representative of The Department of Drama
Stefan Kostka, Associate Professor of Music
Sharon McGuire, Student Representative of The Department of Art
David Nancarrow, Associate Professor of Drama
Charles Roeckle (Ex-Officio), Assistant Professor of Music and
Assistant Dean, College of Fine Arts
Mary Taylor, Associate Professor of Art
Beth Todd, Student Representative of The Department of Music
Edward Triggs, Lecturer in Art

The College of Fine Arts Committee on Educational Policy and Curriculum has carefully studied the "Report Concerning Recommendations of the University Council Committee on Basic Education Requirements" (Documents and Proceedings of the University Council, pp. 8148-8166). As a standing committee of the College of Fine Arts, we are continually working to improve the quality of our educational programs, and are most interested in any proposals concerning academic requirements. Certainly, the faculty of the College of Fine Arts is eager to maintain academic standards of which The University of Texas at Austin can be proud.

For that reason, we are alarmed by the present report, and cannot endorse it. A careful study reveals a number of serious flaws in the report. The following points warrant particular consideration. (For ease of reference, the format of our response conforms to that of the report.)

I. Survey of the Present Situation

In the "Survey of the Present Situation," the report contains several unsubstantiated assertions on which arguments are based. For example, on p. 8150, the report mentions a "general feeling of our faculty, supported by trends in national standardized tests, that the level of preparation of entering students is declining." The substantiating data are not furnished. On the same page the report states ". . . it seems clear that a student's course selection in high school may be substantially affected by the awareness of the demands that student will face in college." No supporting data are offered. (In fact, the high school experience of the student members of our own committee contradicts this assertion.) More fundamentally, even if

available data do support such assertions for entering students, would this prove that graduates of The University of Texas at Austin have received an inferior education on our campus? Would such data not tend to prove that there is a problem with admission standards and practices rather than to prove that current university curricula are flawed?

The report accepts "the hypothesis that our current system of basic requirements is inadequate." (Cf. p. 8150). Statements are made (p. 8150) such as "Even our distinguished Plan II program does not require any exposure to mathematics . . . Many programs require no foreign language proficiency or permit a wide variety of alternatives. Most professional degree plans include very few electives . . ." But these statements are assertions, and lack convincing explanations of why such factors are to be considered indicative of inferior education. Extant curricula have been developed over many years and are the result of much deliberation. The report asserts, without evidence, that its proposals are equally valid for all undergraduates in all programs. Is it not important to consider the educational reasons for the variety of present degree programs?

II. The Purpose of Basic Requirements

In discussing the "Purpose of Basic Requirements" (p. 8150), the report asks the fundamental question: ". . . what are the essential characteristics of an educated individual?" Answers again are provided by way of assertions without adequate explanations. Why, for example, should every student at The University of Texas at Austin be "strongly advised to acquire a basic knowledge of how to use a computer"?

(Cf. p. 8157.) The report does not explain why this specific skill is essential to an "educated individual." Is it even possible to define an "educated individual" by a single set of characteristics? Cannot different people be equally well-educated and yet have vastly different educational experiences? Does uniformity guarantee quality? The standardization implied by the report limits the diversity of educational opportunity which is the very basis of a great university.

III. Recommendations for Change

Some of the most serious problems with the report are to be found in the section entitled "Recommendations for Change."

A. Writing

The report urges all departments to develop or adapt courses to satisfy the upper-division writing requirement, and points out (p. 8155) that because "feedback from the instructor is fundamental to improving writing skills, it is essential that the courses satisfying this requirement be taught in small classes." But other than a non-specific statement on p. 8164, there is no practical consideration of the implications of the proposal. Faculty evaluation of substantial writing assignments would necessitate smaller classes and more sections. How would

departments fund the increase in faculty which the additional teaching load would necessitate? Would salary lines now available to the English Department to teach writing courses be transferred to other departments which assume this responsibility?

In a related matter, the certification of writing courses which is suggested on p. 8160 is an extremely complex issue which the report does not treat fully. Many crucial questions

are left unanswered. Would the proposed certification committee be appointed or elected? Would there be equal representation from all colleges? For how long would courses be certified? How would such a committee enforce its rulings? Might such a committee be empowered to tell an instructor not only how he could teach a course, but what he could teach?

There are even more fundamental problems concerning the proposed writing requirements. Is English 314K, which the report offers as part of the writing requirement, a course in writing skills or literature? Can a student in a course devoted to content realistically be expected to develop writing skills equivalent to those he could develop in a course devoted to writing? And if there is evidence to suggest that undergraduates are deficient in writing skills, should we not assess the strengths and weaknesses of present writing courses, and seek possible solutions within the present writing curriculum?

B. Social Science

On p. 8153, the report states, "An understanding of our traditions in America is essential, but American History and Government should be viewed in the broader context of western civilization and the history of ideas." On p. 8156, however, the report specifically excludes history (as well as government) from the subject areas allowable as social science beyond the legislative requirements.

C. Mathematics

The report states that there is no intention to specify a mathematics course or topic (p. 8156), but goes on to exclude specific courses. If Mathematics 301 is "an algebra course covering topics a student should learn in high school" why is University credit offered for this course? Where are the explanations for the specific exclusions of Mathematics 302, 303F, 316K, and 316L? (Mathematics 302 is described as "an introductory course in the cultural aspects of mathematics that may be primarily historical." This course would seem to meet the report's own recommendation [p. 8153] that one "should have a critical appreciation for the social framework in which we live and the ways it has evolved through time.") Where is an explanation of the purpose of mathematics in the development of the "educated individual"? And what is the place of mathematics in the University? Is it an independent area as suggested on p. 8156, or is it a part of natural sciences as implied on p. 8157?

D. Natural Science

The report does not justify the specific total of nine (9) semester hours to be required in natural science. Neither does the report explain the importance of requiring at least six (6) semester hours in one natural science subject "to assure a greater depth of coverage." (Cf. p. 8157.) Why is such "depth" more important than breadth for non-science majors?

E. Foreign Language

After a discussion of the importance of the study of foreign language to national security (pp. 8157-8158), the report states (p. 8158) that "an acquaintance with a foreign language and culture should not be considered merely a utilitarian requirement or a social grace, but as one of the most efficacious means of broadening one's horizons and enabling one to judge our own culture and language." The report also suggests (p. 8153) that study of a foreign language can provide "an insight into how other cultures think and feel." If this insight is important, why does the report not discuss the role of the many cultural studies courses which are available at the University? (E.g., Latin American Studies, Middle Eastern Studies, European Studies, Asian Studies, etc.) Why is there no mention of the essential role of the arts in a culture?

F. Fine Arts and Humanities

The problems with the subsection on "Fine Arts and Humanities" begin with the first sentence (pp. 8158-8159): "The oft-heard contention that Americans do not know how to use leisure time is a severe indictment of our contemporary culture." Such a statement seems to equate the works of Aristotle, Michelangelo, Shakespeare, Beethoven and Sartre with the leisure time activities of roller skating and sunbathing. There is no discussion of the importance of the fine arts and humanities in a university education. No explanation is given for grouping fine arts and humanities together in the first place. No explanation is given for the exclusion of drama from the fine arts. No explanation is given for the exclusion of logic from acceptable study in philosophy.

Upon close examination of the report, one discovers that the "severe indictment of contemporary culture" is to be remedied by a three (3) semester hour requirement in fine arts and humanities. The six (6) remaining hours are to be made available as writing courses in the student's major--if he is majoring in natural science, social science, or humanities. No justification is offered for this option, which would foster the very parochialism the report seeks to remedy. (Incidentally, on p. 8155 the report implies that this option would be available to all majors, but fine arts students are excluded when the option is discussed on p. 8159.)

G. General Discussion

In the General Discussion, it is suggested that only thirty-six (36) hours are necessary to satisfy the proposed core requirements. But that figure is misleading. For example, the report itself implies (p. 8155) that 82% of entering freshmen would be required to take the additional three hours of English 306. And the report also suggests (p. 8158) that a large percentage (viz. 25%) of freshmen would be required to take additional coursework in foreign language.

Although it recommends the imposition of core requirements on all degree programs, the report does not address the problems of inequity in such universal implementation. Nor does the report explain satisfactorily why the well-educated science major needs but a single three-hour course in the fine arts and humanities, while the well-educated fine arts major must have

at least nine (9) hours in natural science and three (3) hours in mathematics.

There is one other matter which should also be mentioned with regard to the General Discussion. The report expresses "serious reservations concerning the expansion of advanced placement further into the curriculum since there is much more to be gained from courses in residence than the ability to pass an examination." This implies a major change in current University policy which favors credit by examination. No evidence is offered to support such a change, nor is there further discussion of the matter or its implications.

IV. Implementation

The report recommends (p. 8161) that its proposals be implemented in 1983. Is it realistic to expect secondary schools to prepare for such major changes in only two years? Were Texas secondary schools, junior colleges, and senior institutions asked to determine the impact of the proposal on their programs and to suggest a possible implementation date? Was the Coordinating Board consulted regarding state core curricula? Was the impact of the proposal on transfer students considered? Would the proposal adversely affect the recruitment of ethnic minorities to the University? (If so, how would concerned governmental agencies react?)

On p. 8161, the report states, "We have not performed a detailed study of the effects on each major and degree plan on our campus; this would best be done by the faculty members directly involved." Indeed, this is suggested by the fact that the two degree programs presented in the report as exemplary of the College of Fine Arts

are actually atypical. The program chosen to exemplify professional degrees in the College of Fine Arts, viz., the Bachelor of Fine Arts in dance, is a program pursued by only 2% of the students in our College. And there are two (2) Bachelor of Arts in Art programs in our College--one in studio art and the other in art history. That appearing in Table I of the report (p. 8151) is for studio art majors only, and requires the fewest hours in foreign language of any Bachelor of Arts program in our College. (The comparable degree program in art history requires seventeen [17] hours in foreign language.) The Bachelor of Arts in Art for studio art majors is also misrepresented in Table I as requiring eighteen (18) hours in science. The requirement is actually eighteen (18) hours of "science and/or mathematics."

The report ignores the important fact that a student in the College of Fine Arts has the option of choosing between two types of degree programs. A student who wants a broad education in the liberal arts and sciences, but who also wishes to emphasize the fine arts, may pursue the Bachelor of Arts in Art, Dance, Drama, or Music. A student who seeks professional education in the fine arts may pursue the Bachelor of Fine Arts or Bachelor of Music.

The type of degree program chosen depends upon a student's educational needs and goals, and such needs and goals have been paramount to our faculty as these programs have been developed over the past forty years. The present report does not consider these needs and goals, nor even the role of professional programs

in the University. And yet professional programs in our College would be altered considerably by the proposals. As suggested by the tables appended to our response (which will be submitted to the Secretary for inclusion in the Documents and Proceedings of the University Council), to accommodate the proposals it would be necessary either to lengthen most of our programs or eliminate free electives and professional courses in favor of core requirements. The results would prove deleterious to our students. Longer programs would place an added financial burden on the students. Elimination of courses in the major could impair seriously a student's professional education.

On what basis would such drastic changes be made? We find that the present report proposes solutions where it has not clearly identified problems. It adds requirements without considering remedies within the present curricula. It proposes specific semester hour requirements without explanation. It includes or excludes subject areas without adequate explanation, and at times in apparent contradiction to its own recommendations. And, ultimately, the report does not answer the most fundamental questions at issue here:

- 1) What are "the essential characteristics of an educated individual"?
- 2) Is it possible to define the "educated individual" by one set of characteristics?
- 3) What evidence is there that our graduating seniors are deficient educationally?
- 4) What improvements can be effected by improving the quality of present instruction, by upholding present grading standards, and by making necessary changes in present courses?

If evidence suggests a need to change our admission requirements, then the report should be referred to the Educational Policy Committee, which is now considering that matter. And if current University curricula are to be examined, then this should be undertaken by each College for its own programs. As the report itself suggests, this is best done "by the faculty members directly involved."

ATTACHMENT B

Comments from the Committee on Basic Education Requirements
in Response to the Issues Raised by the
College of Fine Arts Committee on Educational Policy and Curriculum

Most of the issues raised in the response from the College of Fine Arts Committee on Educational Policy and Curriculum were considered at length by our committee in the process of its deliberations. Some of these are key philosophical or pragmatic questions which should be openly debated among students, faculty, and administration.

Perhaps the most basic issue is the formulation of those traits which should be common to all graduates of The University of Texas. We have presented our view in Section II of the report; other views would be welcome. It is a fact that many of our current degree programs do not address all of these traits.

We believe these characteristics can be developed in our students by strengthening our admission criteria and requiring all graduates to complete a solid body of work in basic subjects. The recommendations for change are quite specific. If they are inappropriate, they should be amended.

The assignment of 40 hours to basic courses leaves approximately 80-90 hours in most degree plans. Should it not be possible to design a specialized or professional program within that framework? This does not seem to endanger the diversity of our current curricula. Indeed, we enthusiastically support this diversity, but we do not believe that it should form the basis for rationalizing the neglect of a common core.

One misstatement in the response should be corrected to avoid confusion. The proposed requirement in Humanities and Fine Arts is a total of 9 hours, with 6 hours in literature. Normally the literature courses involve substantial writing by students. It was our intention that such courses should simultaneously satisfy 6 hours of the writing requirement.

The University Council appointed this committee and placed before it some very difficult questions. After debating these issues and their ramifications for more than a year, we have proposed some answers. To assert that these answers are incorrect is easy. To offer more reasonable solutions will be much more difficult.

James W. Vick
1-29-81

ANOTHER PROPOSAL: TRAINING IN INDEPENDENT STUDY FOR THE AVERAGE STUDENT AND CREDIT-EARNING INTERDISCIPLINARY PROJECTS

The following proposal is not offered as an alternative to the Vick, Grieder, or Fine Arts positions but rather as a supplement. Those positions, in spite of their striking differences, resemble each other in at least one important respect: they all search for a combination of course-experiences which will give our students what they need. As the great debate continues, it is probable that other proposals will be brought forward as alternatives to or attempted compromises among these three; it is also probable that these additional proposals too will be master-cracksman attempts to find combination of courses.

A quite different view of what it is that needs fixing emerges if one accepts the proposition that a liberal education, whatever else it does, should liberate people: that is, make them likely to go on educating themselves successfully--at intervals, of course--for the rest of their lives. The fact that no American college or university has ever succeeded in so educating a majority of its graduating seniors is not sufficient reason, I think, for us to despair of doing so. The main difficulty is this: can most of us agree in the first place that this is an objective eminently to be desired?

"Required independence" or "the habit of independent study as a graduation requirement" might be other ways of describing it. The idea of a required independence, a mandated freedom, is a paradox only at first glance. Most of us carry about on our persons a document proving as much, a Texas driver's license. Nor is there any mystery about how any form of required independence is gained: baby steps first, then wobbly walking, and finally the self-confident stride of maturity. What our students--all of them, not just the clever and highly motivated--need from us is a gradually escalated series of demands for independent performance, throughout the four years of their undergraduate experience. By the time of graduation they should have been so thoroughly trained in the skills of independent investigation, problem-solving, and creative design as to find such efforts familiar and relatively easy--and therefore pleasurable and likely to be sustained in the many years after graduation.

Independent study for thousands of students, including the so-called "C-minus student" as well as the brilliant: is this possible? The first barrier that comes to mind may be that of cost. The one-on-one Oxford and Cambridge tutorial system, the basis for much of our thinking about independent study, may be admirable, but it is also the most expensive teacher-student arrangement going. It cannot be taken as a serious possibility for a university as large as ours.

But that is not the only possible arrangement for independent study: there is also the familiar graduate seminar, where each student completes a different individual investigation, though all are working in the same general area. Those who have taught such courses know how common it is for students to help each other; not all of the teaching that goes on is by the instructor of record. Undergraduate equivalents of those courses--freshman equivalents--are not beyond our collective wits.

An example: three teachers with overlapping specialties in a given department agree to team-teach a basic "reading-list course" for 450 freshmen. They draw up separately or together a master reading list, single or subdivided, representing seven or eight times as much reading as could reasonably be expected of the average student in a semester course. Each student is asked to choose one title out of seven or eight, to arrange these in whatever order seems best suited to his or her needs, and as the first assignment to present that individual syllabus of readings

with a written justification of the selection and arrangement in terms of the student's objectives in the course. (How very soon those students would be talking to each other about books!) The permutations and combinations here would make possible a different individual syllabus and completely independent study, since limited to choices within a generous but finite set, this is certainly a far cry from the usual introductory course. Needless to say, the three teachers would have to shed many old habits and master new skills, for at any time during the semester the students collectively might be reading a hundred or more different books. No ceremonial parade of lecture-discussions through a fixed agenda of these teachers! They would have to deal with topics cutting across many of the titles and teach techniques widely applicable; and they would have to learn how to train students to teach each other, and to tap the library more skillfully for help on individual works.

Note that in this arrangement more of the teachers' stored-up expertise is put to work than is usual now. In a traditional semester's teaching, we may cover 30-100 books (or an equivalent range in courses not centered on books); none of the many others we know well and would enjoy teaching--and learning more about--may be called into play. And even with the changes of teaching assignments each semester, year after year, hundreds of things we would like to deal with sit there on the shelves, as it were, in a dark, locked-up library.

This first example, on purpose, was within a single department; and by no means would I minimize the importance of this kind of specialized independent, or nearly independent, study. The reader will have seen long since that the "reading-list" example is easily adaptable to the science laboratory, social science projects, and many other courses not primarily concerned with the reading and discussion of books. The achievement of independence in even a relatively narrow field of specialization is no little accomplishment. The best thing about the Fine Arts position, in my view, is that the kind of preprofessional training they believe in--for some students, they would quickly add--does in fact lead to a large measure of assured independence in at least one speciality. In this respect, the Fine Arts people may be doing a better job than the rest of us, and proponents of general education-through-distribution might take a leaf from their book.

But there is merit also in the Vick Committee and Grieder argument that an almost exclusively preprofessional training can cheat the student of a liberal education, and that students should not be allowed to sign away their rights to the inheritance because they have no idea of its value. I find this traditional position congenial, but would suggest that it is not enough to introduce students to a little science, a little social science, a little of the humanities. The great majority of the world's largest problems are interdisciplinary, and I would urge the need for a substantial increase in the amount and variety of interdisciplinary studies in the undergraduate curriculum. Why should our students have to wait until after graduation to learn how to cope with problems which can be solved only by a combination of several, perhaps many, different disciplines? If training in independent study is my first major emphasis, this is my second; and indeed the two work best together: independent, or small-group, solving of interdisciplinary problems.

Interdisciplinary courses team-taught by faculty specialists from different disciplines are nothing new, of course; but they are still few in number, and highly vulnerable to faculty turnover. There is no blinking the fact that most of us are specialists rather than generalists, and our whole system is structured on that basis. But it is not so with the students; they are "the last generalists on campus." With some

arrangement for guidance by faculty specialists as needed--not formal team-teaching--and with the help of appropriate librarians, it should be possible to design credit-earning interdisciplinary projects in far greater number and variety than we are now able to provide. The earlier example, the "reading-list course," is easily extended into interdisciplinary use, and I believe some valuable courses could be mounted on that basis; but what I see as far more promising here is the development of more flexible and varied forms of independent or small-group student exploration of interdisciplinary problems under faculty observation and with the help on a part-time, ad hoc, advisory basis of appropriate faculty specialists and librarians, and possibly other part-generalist experts in group interaction, information retrieval and organization, and structure or process analysis and design. I should be very surprised if this was not the sort of thing that the LBJ School offers its students all the time, so I doubt that there is anything radically new about the idea. It is just that we need to incorporate it into the normal undergraduate experience of all our students.

When the dust has settled after the war about basic-education course requirements and the new peace treaty conditions and national boundaries have been printed up in the form of a university catalogue, my fear is that we shall be staring at only what arrangement of standard, teacher-to-student courses in separate disciplines is required for this or that group of our students. That is my excuse for tossing this additional paper into the discussion. Parts of this proposal could be implemented whatever the outcome in that other debate.

Neill Megaw
Department of English

PROPOSAL TO AMEND THE RECOMMENDATION REGARDING
MATHEMATICS IN THE REPORT OF THE UNIVERSITY COUNCIL
COMMITTEE ON BASIC EDUCATION REQUIREMENTS

Proposed amendment.

When the recommendations for change from the Report Concerning Recommendations of the University Council Committee on Basic Education Requirements (D&P 8148-8166) are presented for action by the Council, I plan to move to amend Section 3 (Mathematics, on D&P 8156-8157) by deleting the portion that specifies "that certain courses not be allowed to satisfy this requirement: M. 301, an algebra course covering topics a student should learn in high school; M. 302, an introductory course in the cultural aspects of mathematics that may be primarily historical; M. 303F, the mathematics of finance; and M. 316K & L, techniques of mathematics for elementary education."

Background information.

The courses offered by the Department of Mathematics that do not have calculus as a prerequisite are the following.

M. 301	College Algebra
M. 302	Introduction to Mathematics
M. 603A & B	Mathematics for Business and Economics
M. 303F	Mathematics of Investment
M. 304E	Trigonometry
M. 305E	Analytic Geometry (Not offered recently.)
M. 305G	Elementary Functions and Coordinate Geometry
M. 807A & B	Mathematics for Architects (Open only to architecture students.)
M. 808A & B	Calculus I and II
M. 608EA & B	Calculus
M. 316	Elementary Statistical Methods
M. 316K & L	Modern Topics in Elementary Mathematics I and II (For elementary education and mathematics education students.)

The proposal of the Committee on Basic Educational Requirements would require 3 hours of mathematics, but it would prohibit students from satisfying this requirement with either M. 301, M. 302, M. 303F, M. 316K, or M. 316L. Of the remaining courses, M. 808 and M. 608E are calculus courses taken for the most part by students in mathematics, science, and engineering; M. 807 is for architecture students

only; and M. 304E, M. 305E (if offered), and M. 305G are taken mostly, though not exclusively, by students preparing for calculus (M. 808 or M. 608E). That leaves M. 603 and M. 316.

Brief reasons for the amendment.

1. The preceding remarks, along with consideration of the contents of M. 304E, M. 305E, and M. 305G, show that many students would essentially be forced to take either M. 603A or M. 316 to satisfy the proposed 3 hour mathematics requirement. That is too restrictive.
2. The proposal to exclude M. 316K & L from the list of courses that can be used to satisfy the 3 hour mathematics requirement would pose a serious problem for the teacher training program. The Committee acknowledges this problem (D & P 8162-8163) but then appears to ignore it.
3. The reasons offered by the Committee for excluding M. 301 and M. 302 are insufficient, in my opinion. The remark concerning M. 301 ("an algebra course covering topics a student could learn in high school") does not accurately convey the nature of the course. The remark concerning M. 302 ("an introductory course in the cultural aspects of mathematics that may be primarily historical") would seem to be a reason for including the course on the acceptable list rather than for excluding it.
4. I favor the requirement of 3 hours of mathematics, and I also believe that the mathematics requirements for admission to the University of Texas at Austin should be strengthened. But the Committee's proposal is unjustifiably restrictive as it applies to students outside of areas that require specific mathematical knowledge and skills.

I will elaborate on these reasons when the amendment is presented to the Council.

John R. Durbin
Department of Mathematics

AMENDMENTS TO VICK COMMITTEE PROPOSAL

PARAGRAPH 1. Writing

- (1) Change "6" to "3" in line two.
- (2) Delete "upper-division" in line three and in lines seven and eight.
- (3) Insert after "courses" on line three: "offered outside the Department of English."
- (4) Change "essential" to "desirable" in third-from-last line of paragraph.

The amended paragraph will then read:

1. Writing: 12 semester hours of credit in courses beyond E. 306 (Rhetoric and Composition). At least 3 of the 12 hours must be in courses outside the Department of English certified to have a substantial writing component; the certification of such courses will be a responsibility of a standing committee of the General Faculty, with broadly representative membership. These courses will not necessarily be designed to teach writing, but they will require substantial writing by students, and the written work will be evaluated on form as well as content. Since feed-back from the instructor is fundamental to improving writing skills, it is desirable that the courses satisfying the writing requirement will be taught in small classes.

Purpose of the amendment: to permit greater flexibility in the development of courses to satisfy the writing requirement in order to avoid potentially serious practical problems in implementing the requirement as originally stated.

The amendment would provide a greater opportunity for lower-division courses which would satisfy other parts of the new general requirements (such as, courses in social sciences, natural sciences, and fine arts and humanities) to be offered in a form which would also satisfy the writing requirement. Also, with the amendment, departments other than the Department of English which have large numbers of students majoring in their particular subject areas would be able to test the feasibility of offering moderately large writing classes--at the lower-or upper-division level--in some of the subject areas required of their "majors." The statement in the original proposal that "it is essential that the courses satisfying this writing requirement be taught in small classes" probably would make it impossible for some departments and colleges to offer writing courses for their majors.

Another practical advantage of the amendment, in not requiring that at least 6 of the hours be in upper-division courses, is that the University would be able to share a greater part of the burden of teaching writing with the other universities who send us large numbers of transfer students before they commence their upper-division coursework.

The amendment does not reduce the total number of hours in the writing requirement, and the greater flexibility in the level and location of the writing courses that it makes possible need not be used to reduce the quality of the courses, if budgets and other practical considerations would otherwise permit the offering of the ideal kinds of writing courses.

PARAGRAPH 1. WRITING

Insert after "E. 306 (Rhetoric and Composition)." on line two: "Three of the 12 hours may be in the study of an interpersonal communications skill other than writing."

The first two sentences of the amended paragraph will then read:

1. Writing: 12 semester hours of credit in courses beyond E. 306 (Rhetoric and Composition). Three of the 12 hours may be in the study of an interpersonal communications skill other than writing.

Purpose of the amendment: to give recognition to the fact that speech and other forms of interpersonal communication skills besides writing are an important part of effective communication, and to give students an opportunity to overcome deficiencies in these other skills as a part of this general requirement.

PARAGRAPH 4. NATURAL SCIENCES

Delete after "science courses," on line two: "at least 6 hours of which must be taken in one subject."

The first sentence of the amended paragraph will then read:

4. Natural Sciences: 9 semester hours of credit in natural science courses.

Purpose of the amendment: to give recognition to the fact that this requirement cannot be expected to give the average student who is not majoring in the natural sciences more than an introduction to the field and that in some cases the student would have a better introduction if he were not limited in regard to the number of subjects that he could take in the way the original proposal would limit him.

The remainder of the Natural Sciences proposal as it was originally presented by the Vick Committee is strongly supported by the College of Business Administration. We may have preferred wording that made clearer the mathematics-natural sciences options being proposed, but we support the idea in the proposal that for the purpose of these requirements mathematics and natural sciences are related fields and that within a total of 12 semester hours of credit required in mathematics and natural sciences courses a student should be able to choose either 3 or 6 hours of mathematics and either 6 or 9 hours of natural sciences. We feel that the option that would better serve basic education requirements for most students would be a minimum of 6 hours of mathematics and 6 hours of natural sciences, but the small degree of flexibility permitted under the present proposal probably is desirable in view of the significant differences in mathematical aptitudes among students who deserve an opportunity to earn a university degree.

Although we might prefer a larger total of hours required in these areas--especially in mathematics, statistics, and computer sciences--we do not believe that we could justify expanding the total hours in these areas relative to all the other areas covered in the basic requirements. And, an attempt to expand the total hours for all basic requirements could lead to a rejection of the entire Vick proposal.

PARAGRAPH 5. FOREIGN LANGUAGE

- (1) Insert after "language" in line four: ", or 9 semester hours of credit in university courses in foreign societies and cultures."
- (2) Delete "Initially" in line four.
- (3) Delete "beginning in the Fall Semester of 1986" in lines seven and eight.