

**REPORT OF THE SPECIAL COMMITTEE
TO STUDY THE FEASIBILITY
OF A CENTRALIZED UNIVERSITY RESEARCH CENTER
ON UNDERGRADUATE EDUCATION**

February 25, 1987

MEMBERS OF THE SPECIAL COMMITTEE
TO STUDY THE FEASIBILITY
OF A CENTRALIZED UNIVERSITY RESEARCH CENTER
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In late spring of 1986 President Kenneth Keller and Professor Stuthman, then chair of the Senate Consultative Committee, requested that the undersigned come together to examine the feasibility of establishing a research center on the Twin Cities campus that would focus on questions associated with educating undergraduates. They requested that we submit our report to the Coordinating Committee for Commitment to Focus.

We were asked to bring forward, "not a lengthy but a comprehensive proposal which speaks to the size, funding, and strategy for developing this research center" and provide a clear definition of the scope of research work and a precise proposal for how best to establish it. We were told that the research center should be multi-disciplinary in its approach and we were asked to give attention to both its organizational home and the need for establishing a permanent advisory board.

In the remainder of this report we describe procedures followed in carrying out our multi-faceted charge, and present our proposal for your consideration.

Our initial efforts centered on the issue of whether there is need for such a center. We started with the question of whether there is needed research on undergraduate education which would better be done in a centralized center on the Twin Cities campus than elsewhere (e.g., in existing centralized data gathering centers, in individual undergraduate collegiate units, or in established research centers on higher education at other institutions). Thus, our early work was an attempt to identify ongoing activities related to our charge.

All units on the Twin Cities campus involved in undergraduate education were contacted and requested to provide information on 1) research activities related to undergraduate education, 2) research functions that could be carried out by a centralized research center that would benefit their unit, and 3) faculty members who might be interested in participating in the research activities of a centralized center. While we received specific responses to the first and third questions, few of the collegiate units responded directly to the question concerning the functions a centralized center might serve. The appendix provides a list of the units contacted, the letter requesting information and a summary of responses.

Existing centralized data gathering centers contacted included the Data and Reporting Services of OSA, MPIS, and the Office of Research and Technology Transfer Administration. We related our charge to individuals in each of these units and requested information regarding recent, ongoing or planned future activities related to it.

Materials describing the higher education research activities and agendas of centers for higher education research at the University of Michigan, the University of Maryland, City University of New York, and the University of California at Berkeley, were secured, studied and discussed in terms of general research needs relating to undergraduate education that might be served by a center at the University of Minnesota. In addition, several articles related to proposed characteristics of effective higher education research were considered.

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Four basic conclusions grew out of these efforts and provide the basis for our proposal:

1. It is important that relevant research be used as a basis for improving the undergraduate experience at the University; some will come from higher education research elsewhere and some must be carried out locally.
2. The most effective way to generate research on the undergraduate experience at the University is to involve faculty (and others who provide those experiences) directly in the design and conduct of the research.
3. There is a need to provide funds, expert assistance, coordination, and dissemination of research findings if research is to have a significant impact on undergraduate education at the University.
4. Needed research conducted by our faculty will lead to results that scholars and administrators elsewhere will find interesting and useful.

PROPOSAL

We propose that a center that would facilitate research on undergraduate education be established in the Office of the Vice President for Academic Affairs.

The primary functions to be served by this Center would be:

1. Provide consultation and assistance to faculty on the use, design, conduct and reporting of research on undergraduate education;
2. Administer the allocation of designated University funds to faculty for the support of research on undergraduate education; and
3. Disseminate information about research on undergraduate education.

The following characteristics of the Center operation would be necessary for it to carry out these functions efficiently and effectively:

1. The Director of the Center must report to the Office of the Vice President for Academic Affairs.

To operate effectively as an all-University research center on undergraduate education, the allocation of funds and the dissemination of results to the University community must be under the control of a centralized agency. Since

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the academic experience is the *raison d'être* for undergraduates being at the University, to maximize the impact of the activities of the Center it must have visible backing from and connection to the Vice President for Academic Affairs.

2. **A Governing Board charged with setting policy and guiding the program of the Center should be established.**

The first responsibility of the Governing Board would be to advise the academic vice president on the selection of the director. While it is proposed that the director of the Center report directly to the Office of the Vice President for Academic Affairs, it is important that there be input into the operation of the Center from those most directly involved in the conduct of the research and the use of the results thereof. This can best be accomplished by a governing board with representation from those directly responsible for the education of our undergraduates. Graduate and undergraduate student representation on this board is desirable.

3. **While the professional staff of the center can be relatively small (2-4), it must be capable of providing expert assistance to those interested in conducting research on undergraduate education.**

The staff of the Center must be capable of assisting a wide variety of faculty and others who desire to do research on the undergraduate experience at the University. The degree to which the staff gets involved in the research itself will vary from one piece of research to another. At one extreme research might well go on in one of the undergraduate colleges or a department with no input by the staff. In this case, the responsibility of the staff would be to become knowledgeable about the research. At the other extreme involvement could range from assisting in identifying research reports or data bases relevant to a study to assisting in the development of sampling designs, instrument construction and data analysis. It could involve assisting in the location of funding agencies that might be interested in funding a piece of research.

The overall principle guiding the degree of involvement of the staff is that those expected to use the results of the research should be involved in the definition of the research questions or hypotheses to be address, the design of the study and the preparation of the research report. The staff then could be involved from the translation of a concern into a research question to the identification of a research journal that might publish the report and at any point between. Those social scientists who have worked in areas related to undergraduate education, including faculty in the College of Education, are likely to need little assistance from the staff. Those less familiar with social sciences related to educational research are likely to draw more extensively on the expertise of the staff.

4. **Specialized expertise such as that of bibliographers, statisticians, design experts and editors from across the University must be accessible as needed by those faculty doing research on undergraduate education.**

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It is important that the professional staff of the Center be qualified to assist those involved in research on undergraduate education. In addition, researchers should have ready access to some of the best experts in the country, if not the world, who are members of the University faculty and support staff.

5. **The Center must function as a communication "hub," securing and disseminating information regarding research, research interests and research resources related to undergraduate education.**

Policies must be known and understood, there must be general knowledge of availability of resources, the existence of mutual concerns and research interests must be shared, and the knowledge base on undergraduate education must be readily available if research is to aid improvement of undergraduate education at the University. Responsibility to see that these things happen should reside with the Center.

Staff in the Center must have ongoing communication with those doing and those interested in doing research on undergraduate education if resources are to be used prudently and the results of research are to benefit the undergraduate experience. The Center should be a resource for information regarding research on undergraduates conducted at the University and elsewhere. The staff should maintain up-to-date records of research findings and data bases that may be relevant to faculty research on undergraduates.

6. **Funds designated for support of undergraduate research must not be commingled with those designated for educational development.**

Research on undergraduate education is fundamentally different from educational development. The questions addressed by the two types of effort and the expertise required to deal with them are different. Keeping the funds and functions separated will help preclude the lack of attention to important questions of one sort because of undue attention and allocation of funds to those of another.

In addition to these basic elements for an effective center, we propose that the following would help maximize its impact on undergraduate education at the University:

1. Initially, a minimum of \$100,000 per year should be designated for competitive grants allocated to researchers. It is expected that considerably more will be needed once the Center is fully operative. The operating costs of the Center would need to be in addition to the funds designated for research.
2. A multi-disciplinary project review committee similar to the Graduate School research fund review committee should be constituted to advise on the allocation of the research funds.

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3. The research funds should support both small scale research and pilot studies specifically designed to provide the basis for a request for external funds.
4. All facets of the undergraduate experience (i.e., those related to student characteristics, use of resources, and organization, as well as those directly related to the instructional process) should be legitimate topics for research and funding.

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COLLEGIATE UNITS CONTACTED

College of Agriculture

College of Biological Sciences

Continuing Education and Extension

College of Education

College of Forestry

General College

College of Home Economics

College of Liberal Arts

Curtis L. Carlson School of Management

School of Nursing

College of Pharmacy

Institute of Technology

University College

College of Veterinary Medicine

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October 3, 1986

Dean

Dear :

As you may know, President Keller and Deon Stuthman, on behalf of the Senate Consultative Committee, sent a letter in June to a small group of individuals noting that, "As the State's flagship research campus, it is most consistent with our mission to establish a research program which will delve into the full range of issues associated with undergraduate education on a land-grant, metropolitan campus." and inviting us, "to come together as a Special Committee to study the feasibility of establishing a research center on the Twin Cities Campus." By the end of Fall Quarter, 1986 we are asked to, "bring forward not a lengthy but a comprehensive proposal which speaks to the size, funding, and strategy for developing this research center..." and to give attention to the organizational home for such a center. As Dean of one of the units in the University that enrolls undergraduates, we are writing for your assistance as we undertake this task.

The Committee has had its first meeting of the quarter and determined that there are three types of information from undergraduate units that could well serve as the basis for our efforts. They include:

1. Research on the undergraduate experience that now, or in recent years has been conducted in your College. Copies of reports and information regarding matters researched, source of resources used, and personnel involved would be useful for us to have.
2. The kinds of research that might be conducted by a centralized research center devoted to undergraduate education that could lead to results useful to your College.
3. The names of members of your faculty that you feel would be interested in being involved in the research activities of a centralized center if one is established.

We would appreciate having this input from your College as soon as possible. We feel it is crucial to our deliberations and

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delay would make it difficult to meet our charge to present a report by the end of the quarter.

Thank you very much for your cooperation.

Cordially,

Jack C. Merwin, Chair
Special Committee

**Summary and Interpretation
of Responses from Undergraduate Colleges
Regarding Research Activities and Needs**

To assess the levels of current research activities and future research needs, the deans of undergraduate colleges on the Twin Cities campus were asked to respond to a series of questions concerning the proposed undergraduate research center. We received responses from 11 units, almost all of those to which initial letters were sent. The attached matrix summarizes current research activities and future research needs of responding units. The following summary and interpretive statements are offered as general conclusions from the survey of deans:

- o Current research activities varied, both in terms of content and extensiveness, from college to college. In most cases, the activities were descriptive or evaluative, as opposed to experimental studies. The context of particular studies included the following: class size studies, characteristics of students, pedagogical research, studies of student recruitment procedures, and studies of employment experiences of graduates.
- o Within each of the colleges, the content of particular studies was directly related to pressing issues and concerns within the college, rather than to theoretical questions of teaching and learning. In the realm of research on undergraduate education, colleges support studies that yield specific, usable results, in contrast to results that might have generalizability to other institutions.
- o Colleges' future research needs also vary from college to college, with relatively little overlap in terms of needs for specific research studies. Additional future needs not now being met included better information about relevant literature, studies of the factors related to the selection of a major, curricular research, studies of underprepared students, and studies on retention and predictors of college outcomes and success.
- o In each college, there was at least one faculty member already active, or interested in being active, in educational research activities. The members of interested faculty were large in some colleges, suggesting the availability of a critical mass of who would benefit from the services of a center.
- o Over half of the colleges either had a publication series, or isolated publications, of results of applied research studies.
- o Colleges did not respond directly to questions concerning the need for a central undergraduate center, although some of the respondents expressed concerns about centralized responsibility for some functions. Alternatives were proposed, such as a pool of central resources from which colleges might draw to address particular research questions of interest to the college.

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	UNITS													
	Ag	Bio Sci	CEE	Ed	For	GC	Home Ec	Lib Arts	Mgt	Nurs	Pharm	Teach	UC	Vet Med
CURRENT RESEARCH ACTIVITIES														
Registration Trends and Class Size					X				X					
Characteristics of Special Needs Students						X								
Curriculum Innovation and Evaluation				X		X								
Comprehensive Examination						X								
Special Retention Programs				X		X		X						
Student Surveys (Plans and Activities)	X	X	X	X	X	X		X	X	X			X	
Formative Evaluation for Course Improvement						X		X				X		
Pedagogy in the Disciplines				X								X		
Program Linkages with High School Students and Teachers				X				X				X		
Recruitment and Selection of Students				X	X		X	X						
Degree Productivity					X									
Employment Experiences of Graduates				X			X	X		X			X	
FUTURE RESEARCH NEEDS														
Design of High School Outreach	X													
Student Profiles			X	X				X					X	
Factors in Selecting Major	X							X						
Underdeveloped Students						X		X						
Local and National Trend Analyses			X											
Laboratory for Graduate Students						X								
Undergraduate Curriculum (CTF)	X													
Retention								X	X				X	
Enrollment Management			X					X	X				X	
College Outcomes				X				X	X				X	
Computerized Degree Audit					X								X	
Alternative Predictors of College Success					X								X	
How Students Learn Best					X					X			X	
Program Evaluation			X	X									X	
Comparative Surveys of University Graduates										X			X	
NUMBER OF ACTIVE FACULTY	20	8	1	10-15	1	30	1	50-75	3	5	—	11	4	—
PUBLICATION SERIES	X	—	X	X	—	X	X	X	X	X	—	—	X	—