THE OHIO STATE UNIVERSITY

INTERIM REPORT OF THE SPECIAL COMMITTEE FOR

UNDERGRADUATE CURRICULUM REVIEW

January 26, 1987

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Introduction

As the Committee faces the task of defining anew the concept of general education, of shaping once more a vision of what an educated person ought to be, it does so with the knowledge that there is an intense national concern with higher education. Colleges, universities, foundations, and organizations of every patch and hue have rediscovered the undergraduate curriculum with an enthusiasm virtually unparalleled in our history.

Many of these re-examinations of the undergraduate curriculum begin, quite properly, by reaffirming the traditional functions of the university, by reminding us that we are chiefly concerned with developing and enhancing the inquiring mind. We are reminded as well that our valuing of the liberated mind and the pursuit of truth both reinforce and are reinforced by the importance we place on the worth and dignity of all human beings. The proper education of the modern university student is not only buttressed by these convictions but also examines and exposes practices, habits, and biases of all kinds (e.g., racism, gender bias, and attacks on the freedom of inquiry) which diminish the achievement of these core values. Our goals, then, are not new nor are they different: our task remains that of assisting students to liberate their minds so that they become an important part of a more truly human community.

Although our general goals remain the same, the nature of the modern world may demand a sweeping revision of means to achieve our desired ends. The educated person, many authorities

suggest, must be prepared for life-long learning. The rapidity and magnitude of technological and social change will continue to transform our world. Established jobs and occupations will disappear and new ones will appear. Institutions will be radically altered, presenting new and perplexing problems. Educated people, to deal with these changes, will need to develop a much higher level of intellectual flexibility and social intelligence. If this higher level is to be achieved, our students must be informed by the past, knowledgeable about the present, and intellectually prepared to meet an uncertain future.

The literature of educational reform directed at colleges and universities is also clear on some of the obstacles to major revisions of undergraduate programs. Among these obstacles are (1) intense academic specialization, (2) over-emphasis on professional preparation, and (3) over-reliance on the view that students, like other consumers, should determine what "products" universities continue to offer. In the case of the first, the high degree of specialization that serves well the research enterprise may serve less well the general education needs of students. The second obstacle, an undue emphasis on professional preparation and job-entry training during the undergraduate years, may meet the short-range needs of employers and the short-range interests of students but may as well fail to prepare students to deal with future problems and changes almost certain to affect radically their world of work. The third factor, the notion that the student is a "consumer" who

shops and buys and that the curriculum is analogous to a supermarket properly regulated by the laws of supply and demand, calls legitimate and appropriate academic attention to the importance of student interest and motivation. Too much uncritical reliance on this metaphor, however, may lead us to forget that our obligation is not that of providing students a general education that they are interested in, but it is rather to provide an education which is <u>in the interest of</u> students as well as the rest of the human community.

There is no paucity of models and pronouncements on the subject of reforming general education. Neither is there any shortage of problems to be overcome if that reform is to be achieved. Many of the documents produced in the 80s that reviewed and evaluated the undergraduate curriculum have been useful to the Committee. However, in addition to being informed about what is happening nationally, we recognize our responsibility is that of stating our own principles and illuminating our own vision. These principles and this vision must take into account not only the national context and national concern, but must also recognize the realities, the problems, and the promise that are all a part of The Ohio State University context.

The Committee was given an extremely broad charge--that of identifying "a basic body of knowledge, thoroughly grounded in the liberal arts, that each of our students would be required to achieve." "General Education" is the term often applied to this "basic body of knowledge". We have, from the outset,

assumed that this is merely one term that might be used to describe the liberating process which aims at developing an educated person, one which we are convinced should occur over the length of the undergraduate experience (including the major) and extend beyond the completion of the B.A. or B.S. degree.

In meeting our charge, we found it useful to begin by defining the aims of education. Although these aims should not be narrowly utilitarian, genuine education is useful because knowledge and understanding are useful. Education should impart to students abilities that will enable them to (1) participate usefully in decisions regarding the welfare of themselves, society and its institutions, (2) contribute to the pool of knowledge necessary for the making of such decisions, (3) live a life occupied with further learning and active concern for others, and (4) understand efforts, habits, constraints, and cultures of others from all places and all times.

ATTRIBUTES OF THE EDUCATED PERSON

> To achieve the aims of education, there are certain capacities and understandings, certain qualities, abilities, and characteristics, which are part of what we understand as the liberating process a university is particularly suited to develop, nourish, and hone. Primary among these capacities is the ability to write and speak with clarity and precision; to read and listen critically and with comprehension. Of the same order is the ability to engage in careful logical thinking and critical analysis, including the abilities that permit intelligent responses to problems and arguments which involve quantitative data.
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> An understanding of and appreciation for the important modes of human thought and inquiry are crucial characteristics of a liberal education. An understanding of the methods of modern science and social science, the effect of science and technology on the natural and social environment, and the nature of mathematical knowledge constitutes part of this knowledge. The development of a refined historical, artistic, and literary consciousness is a further part. A liberal education should also develop and sharpen the capacity and confidence to make informed and discriminating ethical and aesthetic judgments.
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> We believe that a liberal education in a university in our own nation today should foster an understanding of American institutions and the pluralistic nature of American society. It should also promote an understanding of the global interdependence of the modern world and should ensure facility with at least one language other than English. Finally, we think that an American university should seek to develop a deep appreciation for the cultural traditions that have formed and informed our nation and to develop a sense of the place of other cultures in world history.

The Committee is well aware that an attempt to capture in three brief paragraphs the important attributes of the ideal of the educated person is an enterprise which wise people would likely avoid. The brevity and generality are likely to suggest to some that virtually any aspect of the curriculum could be justified as a legitimate part of general education. Others are

likely to see the lack of specificity as a potential threat that some favored discipline or sub-discipline may be excluded. However, we begin with a fairly general statement describing the attributes of an educated person in order to facilitate thinking anew about means to achieve these educational ends. Such thinking must go beyond examination of existing courses. It should consider reshaping of curricula including structure, format and length of courses; methods of instruction; support for instruction; enhancement of faculty preparation to teach in the general education programs; better utilization and training of teaching associates; modifications of the reward system and faculty perceptions of that system; and modification of resource allocation to encourage improvements in general education without constraining our efforts to excel as a national leader in research and graduate instruction.

RATIONALE

In the paragraphs that follow, the Committee provides the rationale for the attributes of the educated person which we believe our general education should be structured to develop.

The abilities to read and listen with comprehension and critical acuity are requisite to the gaining of knowledge in a university setting. The ability to express oneself with clarity, both orally and in writing, provides the deepest proof of understanding. Only through such expression can one demonstrate the powers of careful thinking and critical analysis. Further, we recognize that writing especially is a

primary tool in learning itself, not just a means of expressing learning that has taken place. Writing is a powerful mode of thinking; writing involves making choices and then ordering those choices effectively. We think that writing should be taught as a cornerstone course for all students, but students should also receive ample, long-term experience in both writing and speaking in a variety of intellectual settings over the entire undergraduate program, including that of their area of specialization.

Of equal importance in the development of logical and critical thinking is the ability to make intelligent and sophisticated responses to problems involving quantitative and statistical data. Students should be able to discern the truth and fiction inherent in quantitative presentations used for planning, budgeting, or other matters affecting the general public. They should have a command of mathematical concepts and methods adequate for contemporary life and should understand arguments based on statistical data, surveys, and polls.

Careful logical thinking and critical analysis should be developed in courses which emphasize writing, the study of logic, and quantitative analysis early in a student's undergraduate education, since they are important prerequisites to the other qualities of mind we seek to develop. But these attributes should be honed in all courses across the curriculum.

The second paragraph of our statement describing the attributes of the educated person focuses on understanding and

appreciating the major modes of human thought and inquiry. Such appreciation and understanding is central in general education. Critics and scholars of general education find much about which to disagree, but they approach consensus on the view that the educated person understands the nature of mathematics and of modern science, appreciates the influential role of literature and the arts, has developed an historical perspective, and has the knowledge and ability to make informed and discriminating ethical and aesthetic judgments. Although we do not believe that this traditional core constitutes a sufficient general education, we do find persuasive the many arguments in both historical and contemporary literature to defend this core as a central and necessary part.

In the third paragraph of our statement describing the attributes of the educated person, we have delineated those aspects of general education that deal with the importance of gaining an appreciation for contributions of various cultures. This appreciation is crucial for at least two reasons. First, we can understand fully our own culture and institutions only if we appreciate the diversity and pluralism which mark our nation. Second, our role in a world characterized by global interdependence requires an understanding of other cultures. Not only do we influence others, but we are influenced by them as well. To recognize the reciprocal nature of this influence is to accept the responsibility to know both ourselves and others culturally, politically, and historically.

In coming to know ourselves, we must first recognize that

the United States has a population which is an amalgamation of many cultures. Some of these cultures have been highly assimilated; others have not. It is important that educated people understand the significance of cultural differences within their nation. The United States of America is not--and never has really been--a "melting pot".

For historical reasons, the most obvious of which is the early dominance of European settlers, American higher education curricula have generally reflected a "Eurocentric" bias. This is understandable, and there should be a strong commitment to the study of what has historically been viewed as Western civilization. We should also provide our students with the opportunity to know and understand the other cultures in world history.

A distinct aspect of any cultural or ethnic group is its spoken and written language or dialect. Through this system of signs, it expresses and defines itself. Students should learn proficiently at least one tongue other than English, the dominant language of our nation. This will assist them in coming to understand the culture(s) which use that language. It will also enhance the sense of being different that every educated person should experience in order to live effectively in an increasingly interdependent world.

The Committee has emphasized the importance of international study. We feel that to recognize, appreciate, and understand diversity is a hallmark of an educated individual.

These attributes are best inculcated through a curriculum that recognizes that nations and cultures interact and are influenced by one another.

In the remainder of this report, the Committee has attempted to describe what we see as central in (1) the national context of higher education reform in general education, and (2) the general education context at The Ohio State University. We then attempt to summarize some of the problems which we must, collectively, overcome as we develop a curricular plan which promises to maximize the chances that our students will become educated persons. Finally, we remind ourselves and our fellow University citizens of some of the difficulties we must face if a defensible plan for the reform of our general education program is to be successfully implemented.

THE NATIONAL CONTEXT

The intense national concern with higher education in the United States during the past five years is both reflected in and encouraged by five major national reports. The first of these reports was the National Institute of Education's "Involvement in Learning: Realizing the Potential of American Higher Education." The text of this report was printed in The Chronicle of Higher Education on October 24, 1984. The second report was the National Endowment for the Humanities report entitled "To Reclaim a Legacy," the text of which appeared in the November 28, 1984, Chronicle. The Association of American Colleges Project on Redefining the Meaning and Purpose of

Baccalaureate Degrees produced the report "Integrity in the College Curriculum," published in the Chronicle on February 13, 1985. The fourth report is that of the Carnegie Foundation for the Advancement of Teaching, the prologue and major recommendations of which are published in the November 5, 1986, Chronicle. The full report, entitled "College: The Undergraduate Experience in America," will be published in book form early next year. The most recent report is that of the National Commission on the Role and Future of State Colleges and Universities, chaired by former U.S. Secretary of Education Terrel H. Bell. Entitled "To Secure the Blessings of Liberty," this report was published in the November 12, 1986, Chronicle.

Among the five reports there are, of course, minor differences concerning the recommended goals of general education. The similarities are, however, striking. It seems a fair appraisal to assert that there is general agreement about these goals. This should not surprise us, for the goals are not new or novel: they are the traditional goals of general education which are simply being reaffirmed. They are being reaffirmed in the context of yet another area of general agreement in the national reports: present general education curricula are inadequate means to achieve the goals of general education.

A common contemporary approach to general education is the use of so-called "distribution requirements". In this approach the student is required to select courses from several different categories, e.g., science, social science, humanities, mathematics. On the surface this may appear to be an

appropriate and promising plan, but in practice there are a number of common problems. Among the problems often cited nationally are: (1) the list of courses in each category tends to grow, and the student selection process may result in a general education program which lacks both breadth and coherence; (2) many courses tend to be developed simply as beginning steps in disciplinary sequences, not as courses designed to meet general education goals; (3) since courses are not specifically designed and designated as general education courses, instructional practices often are not designed in accordance with general educational goals; (4) there is often no systematic attempt to ensure that "across-the-curriculum" aspects of general education are included in all or most courses, e.g., writing, critical and analytical thinking, integration, synthesis.

The literature of higher education reform makes it clear that there are some general tendencies and problems in colleges and universities which exacerbate the difficulties in developing and maintaining a strong general education program. Three of these problems/tendencies were mentioned in the introduction of this report. They are (1) the academic specialization which is a necessary mark of the modern research university; (2) pressures for providing students with narrow and premature professional and occupational preparation; and (3) the view that the student is an "academic consumer" who properly determines what much of the content of university general education is to

be. Some discussion of these three tendencies/problems follows:

Specialization and Undergraduate Education. Most faculty members in the modern university are highly trained academic specialists. This academic specialization seems absolutely essential for first-rate programs of research and graduate study. First-rate programs of general education for undergraduates, however, require more than specialization, demanding as they do that the academician expend time and intellectual effort to display the field in a way that contributes to the development of the general intellectual perspective of the student.

Although it is surely true that faculty members at typical colleges and universities have the potential to offer first-rate general education, we need to reject the careless assumption that holding a Ph.D. and a faculty appointment (in a field generally held to be a part of general education) is ipso facto demonstration of a person's readiness to offer a good general education course. To participate fully and effectively in the general education process, the faculty member needs not only be a master of the discipline taught, but needs as well to turn needed attention to questions such as how the particular discipline might best be taught and how the discipline fits with other disciplines in contributing to the general education of the non-specialist. In short, one needs an understanding of and a commitment to general education as well as mastery of one's discipline.

It should be emphasized that the academic specialization

which is a necessary part of the modern university is not seen here as a weakness to be overcome but as a strength upon which to build. The modern scholar is a specialist, and the need is not to denigrate nor reduce that specialization. It is rather to provide more and better opportunities for scholars to extend their roles within universities by developing curricular and instructional means that enrich the general education of undergraduate students.

We do need to be wary of over-specialization in the general education curriculum. Given the extent of and emphasis on academic specialization in the research university, it is likely that at least some disciplinary courses intended as general education will be taught as if each student will eventually become a specialist in the field, i.e., the general education course might be taught not primarily as general education but as an introduction preparing the student for more advanced study in the discipline. Although this may be appropriate in some cases, we cannot assume that such an approach is an effective one in general. If general education is our concern, then we should select the content, the approach to teaching that content, and the evaluation of the students not on the grounds of how the course might contribute to the development of professional scholars but rather on the grounds of how the course might contribute to the development of generally educated persons. To be prepared to take the second or third course in a variety of highly specialized disciplines

may not provide sufficient evidence that the student has made progress toward becoming an educated person. It is not that general education is unrelated to the major field of study, but rather that general education should provide a broad intellectual base which serves both as a foundation and a perspective for the development and use of the specialized knowledge of the major field.

Professional Preparation and Undergraduate Education. During the past fifteen years, observers and critics of American higher education have pointed out what they take to be a growing emphasis on professional and vocational preparation during the undergraduate years. Increasing numbers of students seek programs which promise to provide entry qualifications for a preferred occupation, and colleges and universities have responded with curricula to provide students with career entry-level skills and with institutional certification of those skills. Our institutions are appropriately concerned with the quality of the professional and occupational preparation we provide, and we should not denigrate well-designed and effective professional curricula.

We do, however, need to be alert to the tendency to place an undue emphasis on a too narrow professional preparation that may fail to be in the long-range professional interests of our students. A too narrow and specialized professional preparation is not in the student's interest both because of the rapidly changing demands of the professional role and because many

students will not remain in the same occupation throughout their working lives. Such preparation may also discourage a strong general education program in at least two ways. First, it tends to de-emphasize the importance of general education, both in the minds of the students and in the institutional response to the students' interests. Students with strong vocational orientations are likely to view general education as irrelevant to their personal educational goals. And college and university faculty and officials, seeking to attract and retain these students, may be tempted to allow and perhaps even condone a diminished commitment to general education. A second way in which over-professionalization may have a negative effect on general education is to encourage the modification of general education courses so that they are more directly related to specific occupational preparation, e.g., philosophy requirements are met by a course in business ethics, a mathematics requirement is satisfied by a course in math for elementary teachers, a science requirement is fulfilled by a course in chemistry for nurses, etc. The point here is not that general education ought ignore the contribution it may make to professional competence, but that general education is weakened when such competence becomes the primary criterion used in designing general education curricula. An emphasis on professional and occupational preparation is appropriate when that preparation is based on, accompanied by, and buttressed with a strong program of general education.

Student Consumerism and Undergraduate Education. For the past two decades it has been common to hear students referred to as the consumers of higher education. We recognize, of course, that this metaphor is one which suggests that students are, in important ways, like the consumers in the marketplace. And it suggests as well that a college or university education can be seen as analogous in some ways to "products" which are to be tested on the basis of their appeal to the consumers.

The analogy is not altogether inappropriate, and some aspects of this "student-as-consumer" view seem worthy of not only approval but of applause. Clearly what a college or university promises prospective students should have more than a mere ring of truth. "Truth-in-packaging" requirements may be as important in protecting students from unscrupulous institutions of higher education as are comparable protections for the grocery or drug shopper from unscrupulous advertisers. The analogy may also serve to remind us of the danger of "goal reversal" in our institutions, i.e., to allow our institutions to function as if the end is the enhancement of the institution, and as if the students are the means to this end. One of the primary goals, we should remember, is the education of students, and a large segment of the institution is properly designed and viewed as a means to achieve that end.

Sometimes, however, the student-as-consumer notion is used in a way which is inappropriate. To extend the metaphor slightly, distribution requirements may be seen as analogous to a supermarket. A multitude of general education courses are on

the shelves, and students pick and choose those that fit their tastes and wants. The assumption, or the hope, appears to be that the courses selected will somehow produce a balanced and coherent general education. Given a wise adviser and a motivated student, this assumption or hope may be warranted. In far too many cases, however, the desired balance and coherence are not realized.

The supermarket approach to general education comes very close to constituting an abrogation of our responsibility to students. Although this may have a paternalistic ring, it does seem that members of the academy should collectively recommend in rather specific terms what they regard as crucial in general education. To fail to do so, and to ask students to make these decisions under the guise of "individualizing" their educational programs, may also violate a "truth-in-packaging" concern if we in effect promise students they will receive an adequate general education. It is true, of course, that academicians may not agree among themselves as to what the best general education would be. This lack of unanimity calls for continuing debate and constant evaluation of general education programs. It does not call for nor does it justify asking students to make the decisions because the faculty cannot reach complete agreement. Students may have some sort of wisdom which accrues to inexperience, but such a limited wisdom is hardly a sufficient background for the difficult task of designing a program of general education.

THE LOCAL CONTEXT

The national problems outlined above are reflected in the particular situation of Ohio State. Too often we allow the specialized model of graduate education to influence in inappropriate ways our formulation of undergraduate courses and curricula. Frequently, at one end of the spectrum we allow pre-professional undergraduate programs to dominate an undergraduate's program at the expense of liberal education. At the other end of the spectrum we allow students in less structured programs to flounder in a sea of courses which makes no connections, provides no coherence, and what is most unsettling of all, fosters no sense of what a liberal education is.

There are also difficulties with the way in which we implement the programs we now have in place. We entrust far too much of the teaching of a great many undergraduate courses to graduate teaching assistants (in some cases we even entrust this teaching to other undergraduates). Our present advising system is neither coherent nor conducive to sound direction in general education; registration for and scheduling of classes are often chaotic and work at odds with intelligent academic planning; the academic calendar is not being currently employed to give needed flexibility and may be viewed as an impediment to thoughtful education. Finally, the reward system for faculty who might wish to devote more energy to undergraduate education is not as fully or carefully developed and used as is the reward system for those engaged primarily in research and graduate education.

We wish to elaborate on several of these points. What is in the service of general or liberal education here at Ohio State is a list of basic education courses. The three areas of the Basic Education Requirements are so broad and filled with so many courses, it is hardly a wonder that students derive little sense of liberal education upon completing the hour requirements for the BER. Further, the system was conceived for completion during the first two years of enrollment. As a consequence, virtually all the courses that appear on the BER lists are lower division courses aimed at freshmen and sophomores. However, many students in fact take their BER courses over four years. While we believe that general education should be spread over the entirety of an undergraduate's education, upper division students ought to enroll in general education courses more appropriate to their greater intellectual maturity.

We compound the problem of a structureless mass of courses by making advising a low priority activity in the University; until a student finds a major, each is only one of hundreds who flock to a non-faculty advisor for guidance through the maze of basic education requirements. Even when a student finds a major advisor, that advisor is usually responsible only for advising about the major. Instructors in BER classes are likely to be little help in placing the particular course within the context of liberal education, since those instructors are more often than not teaching assistants knowledgeable about little beyond their own discipline. In short, neither the structure of the requirements as they now exist, nor the advising which we give

students, nor the teaching of the courses themselves is likely to foster any sense of a liberal education.

A final comment upon instruction. The extensive use of teaching assistants as instructors with primary responsibility for so many courses is a major problem. While many of our teaching assistants do well instructing undergraduates, there can be little argument that they are neither so experienced, knowledgeable, nor well trained as are faculty. Ohio State remains seriously understaffed in terms of regular faculty appointments in those areas where much of the general education occurs; we must move to remedy this situation. We should also explore different approaches to teaching general education courses if we are to reach the desirable goal, placing the primary responsibility for all general education courses on the faculty. Further, we must ensure that where teaching assistants are used, they are properly trained, supervised, and supported. Although the University has done a great deal to recognize distinguished teaching, still, teaching at the graduate level, supervising graduate work, and research are the activities most highly prized and rewarded in the University. For example, many documents relating to university policy matters routinely ignore such things as undergraduate advising, directing honors theses and so forth. We have a highly articulated ranking of faculty that limits and defines what they are worthy to do at the graduate level; no such system exists at the undergraduate level. The point is not that we believe the incentives too many or the rewards too great for research and graduate teaching, but

rather that we believe that there is a need for more incentives for excellence in undergraduate teaching. Until there are more clear incentives, we can hardly expect faculty to devote themselves, even for an assigned period of time, to developing and teaching general education courses; we can hardly expect them to embrace notions like writing across the curriculum or development of innovative undergraduate courses or advising if there is no reward for performing such difficult and time-consuming tasks.

THE TASK BEFORE US

The Committee recognizes that developing and implementing a new general education curriculum is no easy task. It should be clear from our discussion of the existing local context that merely adjusting the current BER will not achieve the reformation we see as desirable. A completely new system should be constructed.

We are aware that past attempts at curriculum reform have led to serious battles over questions of turf and that curricular thinking has been bound by the strong departmental structure of the University. Development of vigorous, innovative cross-disciplinary programs has often been difficult. We urge that faculty charged with the development of curricular models attempt to free themselves from such restrictions.

We are also aware that previous curricular reforms have often bogged down over very difficult issues of staffing and instruction, especially as they are constrained by budgetary concerns. Such issues obviously cannot be ignored. For example, teaching assistants are still going to have to play a significant instructional role, but we hope such concerns will not unduly influence curricular development. It is our expectation that resources will be found to encourage fresh instructional approaches. For example, we realize that in calling for some form of writing across the curriculum, we are asking for something which requires specially qualified instructors responsible for far fewer students than has been the case heretofore. We believe that a requirement for writing in many components of the curriculum should be developed with the understanding that a commitment sufficient to support such a program will be forthcoming.

What is true in the area of writing instruction might, in fact, prove true for general education courses as a whole. The University should commit itself to a program of faculty development to assist faculty members in preparing themselves to function more fully and effectively in the general education instruction of undergraduates. Such a program assumes that many of the faculty will want to participate in such instruction, and we recognize that this will not occur if the current reward system in the University is not modified to recognize such participation. Modification and further development of the reward system for faculty should have as its goal greater

emphasis on excellence in undergraduate teaching without de-emphasizing in any way the importance of research and graduate teaching. If we are to elevate the importance of undergraduate instruction, we will need to develop a system for evaluation that is at least as comprehensive and rigorous as is our approach to the evaluation of research and scholarship. Student evaluation of teaching may be a part of such a system, but an adequate system will have to go far beyond this and include peer evaluation of classroom and informal teaching, peer judgment about the unique characteristics of particular academic fields, peer evaluation of instructional materials, and peer evaluation of student advisement activities.

In recognizing that whatever reforms are enacted, teaching assistants will, and should, continue to play a significant role in undergraduate instruction, we believe that new programs for training and supervising teaching associates must be instituted.

Finally, a mechanism must be found for monitoring and supervising the general education program. It is not sufficient simply to construct a new system and expect it to function properly without appropriate controls, constraints, and provision for orderly modification.

We have an exceptional opportunity to develop a new general education program that will truly expand and enrich the intellectual experience of every undergraduate student at The Ohio State University. The task is not small, nor will the needed transformation result from merely adapting the rhetoric of reform or by making cosmetic changes in our current program.

What is required is the commitment of the University community to a comprehensive rethinking of our undergraduate enterprise. It is a commitment we must make if we are to secure our place as one of the nation's premier centers for higher learning.

APPENDIX

EXCERPTS FROM NATIONAL REPORTS

Although there are differences between and among the reports, they all share the view that undergraduate education in general is in need of reform, and that the general education component of the undergraduate experience has become incoherent and ineffective. The reports recognize that each college and university needs to design a general education program that takes into account its particular context and problems. At the same time, the goals of general education are properly similar in the several reports. Some brief representative excerpts from these reports should demonstrate this.

The NIE Report speaks of "liberal education requirements":

> Liberal education requirements should be expanded and reinvigorated to insure that (1) curricular content is addressed not only to subject matter but also to the development of capacities of analysis, problem solving, communication, and synthesis, and (2) students and faculty integrate knowledge from various disciplines.
>
> Here we identify the critical elements of a liberal education and recommend that they be specified in such a way that standards of content are clear. Liberal education seems to have fallen out of favor over the past two decades, particularly with parents and students who have come to believe that the best insurance in a technological society is a highly specialized education that will lead to a specific job. However, no one knows precisely how new technologies will affect the skills and knowledge required by our future labor force. We thus conclude that the best preparation for the future is not narrow training for a specific job, but rather an education that will enable students to adapt to a changing world.
>
> Successful adaptation to change requires the ability to think critically, to synthesize large quantities of new information, and to master the language skills (critical reading, effective composition, clear speech, and careful listening) that are the fuel of

thought. Adaptation to change requires that one draw on history and on the experience of other nations, and that one apply the theories and methods of empirical investigation. It requires a disposition toward lifelong learning and the ability to partake of and contribute to the richness of culture and citizenship of our Nation. These requirements are as relevant to the future medical technician in training at a community college as they are to the biology major at a university. To fulfill them is to achieve a liberal education.

We know that a liberal education curriculum will not and cannot be the same for students of all levels of ability, ages, and interests. But we are convinced that what should distinguish the baccalaureate degree from more specialized credentials is the broad learning that lies behind it. An increase in liberal education requirements is one way to guarantee that comprehensiveness.

But adding requirements--or offering students a larger set of liberal arts courses from which to select--does not achieve one of the principal aims of liberal education: the ability to integrate what one has learned in different disciplines. What happens too often when liberal education requirements are increased is fragmentation, as politics come to overwhelm learning objectives. Instead, the reform of liberal education must:

> Be based on collaboration among faculty from different departments, such as that which occurs when faculty from all disciplines work together to improve the substance, coherence, and persuasive power of student writing.
>
> Establish specific integrative mechanisms such as senior seminars and theses that require reflection on the knowledge gained in previous years of college and that students actively apply learning from different disciplines in individual or group projects that open the windows of their learning to the world beyond.

We stress the ability to synthesize for three reasons: (1) the evidence strongly suggests that college students have considerable difficulty with abstractions and models that are the grounds of advanced study in the disciplines; (2) the task of integrating knowledge, though central to liberal education, is frequently ignored in favor of analysis; and (3) the ability to synthesize is necessary for the development of judgment and for the application of academic learning to real life situations.

The NEH report "To Reclaim A Legacy" does not deal primarily with the question of the whole of general education but focuses on the major role to be played by the humanities:

> A good curriculum. If the teacher is the guide, the curriculum is the path. A good curriculum marks the points of significance so that the student does not wander aimlessly over the terrain, dependent solely on chance to discover the landmarks of human achievement.
>
> Colleges and universities have a responsibility to design general education curricula that identify these landmarks. David Savage of the Los Angeles TIMES expressed the consensus of the study group when he said: "Most students enter college expecting that the university and its leaders have a clear vision of what is worth knowing and what is important in our heritage that all educated persons should know. They also have a right to expect that the university sees itself as more than a catalogue of courses."
>
> Although the study group embraced the principle that all institutions should accept responsibility for deciding what their graduates should know, most members believed that no single curriculum could be appropriate in all places. The study group recognized the diverse nature of higher education under whose umbrella are institutions with different histories, philosophies, educational purposes, student body characteristics, and religious and cultural traditions. Each institution must decide for itself what it considers an educated person to be and what knowledge that person should possess. While doing so, no institution need act as if it were operating in a vacuum. There are standards of judgment: Some things are more important to know than others.
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> The choices a college or university makes for its common curriculum should be rooted firmly in its institutional identity and educational purpose. In successful institutions, an awareness of what the college or university is trying to do acts as a unifying principle, a thread that runs through and ties together the faculty, the curriculum, the students, and the administration. If an institution has no clearly conceived and articulated sense of itself, its efforts to design a curriculum will result in little more than an educational garage sale, possibly satisfying most campus factions but

serving no real purpose and adding up to nothing of significance.

Developing a common curriculum with the humanities at the core is no easy task. In some institutions it will be difficult to attain. But merely being exposed to a variety of subjects and points of view is not enough. Learning to think critically and skeptically is not enough. Being well rounded is not enough if, after all the sharp edges have been filed down, discernment is blunted and the graduate is left to believe without judgments, to decide without wisdom, or to act without standards.

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Based on our discussions, we recommend the following knowledge in the humanities as essential to a college education:

-Because our society is the product and we the inheritors of Western civilization, American students need an understanding of its origins and development, from its roots in antiquity to the present. This understanding should include a grasp of the major trends in society, religion, art, literature, and politics, as well as a knowledge of basic chronology.
-A careful reading of several masterworks of English, American, and European literature.
-An understanding of the most significant ideas and works in the history of philosophy.
-Demonstrable proficiency in a foreign language (either modern or classical) and the ability to view that language as an avenue into another culture.

In addition to these areas of fundamental knowledge, study group members recommended that undergraduates have some familiarity with the history, literature, religion, and philosophy of at least one non-Western culture or civilization. We think it better to have a deeper understanding of a single non-Western culture than a superficial taste of many. Finally, the study group thought that all students should study the history of science and technology.

The AAC Report "Integrity in the College Curriculum" includes the following general statement concerning the goals of general education:

Our message to administrators and professors alike is that the curriculum requires structure, a

framework sturdier than simply a major and general distribution requirements and more reliable than student interest. We do not believe that concern for coverage and factual knowledge is where the construction of a curriculum should begin. We propose a minimum required program of study for all students, consisting of the intellectual, aesthetic, and philosophic experiences that should enter into the lives of men and women engaged in baccalaureate education. We do not believe that the road to a coherentundergraduate education can be constructed from a set of required subjects or academic disciplines We do believe that there are methods and processes, modes of access to understanding and judgment, that should inform all study. While learning cannot of course take place devoid of subject matter, how that subject matter is experienced is what concerns us here. We are in search of an education that will enable the American people to live responsibly and joyfully, fulfilling their promise as individual humans and their obligations as democratic citizens. We believe that the following nine experiences are essential to that kind of education: some of them might be thought of as skills, others as ways of growing and understanding; we think that all of them are basic to a coherent undergraduate education.

The nine experiences, as summarized in the Chronicle, are:

*Inquiry, abstract logical thinking, critical analysis. "To reason well, to recognize when reason and evidence are not enough, to discover the legitimacy of intuition, to subject inert data to the probing analysis of the mind--these are the primary experiences required of the undergraduate course of study," the report says.

*Literacy: writing, reading, speaking, listening. "A bachelor's degree should mean that its holders can read, write, and speak at levels of distinction and have been given many opportunities to learn how. It also should mean that many of them do so with style."

*Understanding numerical data. "Students should encounter concepts that permit a sophisticated response to arguments and positions which depend on numbers and statistics. Such concepts would include degree of risk, scatter, uncertainty, orders of magnitude, rates of change, confidence levels and acceptability, and the interpretation of graphs as they are manifest in numbers."

*Historical consciousness. "The more refined our historical understanding, the better prepared we

> are to recognize complexity, ambiguity, and uncertainty as intractable conditions of human society."
>
> *Science. The report says students should not only understand the scientific method, but also study the "human, social, and political implications of scientific research."
>
> *Values. Students must learn to "make real choices, assume responsibility for their decisions, be comfortable with their own behavior, and know why."
>
> *Art. "Without a knowledge of the language of the fine arts, we see less and hear less," the report says. "Without some experience in the performing arts we are denied the knowledge of disciplined creativity and its meaning as a bulwark of freedom and an instrument of social cohesion."
>
> *International and multicultural experiences. "Colleges must create a curriculum in which the insights and understandings, the lives and aspirations of the distant and foreign, the different and neglected, are more widely comprehended by their graduates."
>
> *Study in depth. "Depth requires sequential learning, building on blocks of knowledge that lead to more sophisticated understanding and encourage leaps of the imagination and efforts at synthesis."

There seem to be three of the major recommendations of the Carnegie Foundation's College: The Undergraduate Experience which focus on the goals and curriculum of general education. They are:

> The First Requirement. Proficiency in the written and the spoken word is the first prerequisite for a college-level education. Students need language to grasp and express feelings and ideas effectively. To succeed in college, undergraduates should be able to write and speak with clarity, and to read and listen with comprehension.
>
> We urge that the reading and writing capability of all students be carefully assessed when they enroll. Those not well prepared in written and spoken English should be placed in an intensive, noncredit, remedial course that meets daily during the academic term. And good English usage must be reinforced by every professor in every class.

While the need for remedial programs is a fact of life, we are convinced that the long-term answer is better precollegiate education. Every college and university should work closely with surrounding districts to improve the teaching of English in the nation's schools.

We also recommend that all college freshmen, not just those with special problems, begin their undergraduate experience with a year-long course in English, with emphasis on writing.

Language and thought are inextricably connected, and as undergraduates develop their language skills, they hone the quality of their thinking and become intellectually and socially empowered. The goal must be to extend, through language study, the common knowledge of its students and, in so doing, sustain the heritage of our culture.

General Education. The weak and ineffective approach to general education--through distribution requirements--should be strengthened. To achieve this essential goal, we propose an approach called an integrated core. By the integrated core we mean a program of study that introduces a student to essential knowledge, to connections across the disciplines, and, in the end, to the application of knowledge to life beyond the campus.

To translate the purpose of the integrated core into practice, we suggest seven areas of inquiry that touch the disciplines and relate knowledge to experiences common to all people. The following academic framework for general education is suggested:

*Language
*Art: The Esthetic Experience
*Heritage: The Living Past
*The Social Web
*Nature: Ecology of the Planet
*Work: The Value of Vocation
*Identity: The Search for Meaning

It seems clear to us that an exploration of these universal experiences--through courses, seminars, all-college convocations, and the like--is indispensable if students are better to understand themselves, their society, and the world of which they are a part. Ideally, general education, the integrated core, is not something to "get out of the way." but should extend vertically from freshman to senior year. And in a properly designed baccalaureate program, general education and specialized education will be joined.

The Enriched Major. The baccalaureate degree is now divided into two separate parts, general education and the major. We believe these two essential segments of the baccalaureate experience should be blended in the curriculum just as, inevitably, they must be blended during life. Therefore, in tandem with the integrated core, we propose an enriched major. By an enriched major, we mean encouraging students not only to explore a field in depth, but also to put the specialized field of study in perspective.

The major, as it is enriched, would respond to three essential questions: What is the history and tradition of the field to be examined? What are the social and economic implications to be understood? and What are the ethical and moral issues to be confronted and resolved? Every student, as an essential part of the undergraduate experience, should complete an enriched major. Beyond the separate courses, the field of study should include a written thesis that relates some aspect of the major to historical, social, or ethical concerns. Every student should write a senior thesis and we further suggest that each student participate in a senior seminar in which he or she presents the report orally to colleagues and also critiques the papers of fellow students.

As the major begins to intersect with the themes of common learning, students return, once again, to the considerations of language, heritage and social institutions, and the rest. At a college of quality when a major is so enriched it leads the student from depth to breadth and focuses, not on mere training, but on liberal education at its best.

The National Commission on the Role and Future of State Colleges and Universities report states that:

America's colleges and universities have become too utilitarian, too vocational in their orientation, too parochial in their world outlook, with their curricula incoherent and in a state of disarray. Campuses have become "supermarkets," the critics charged, with narrow specialties the order of the day and the humanities on the decline.

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Public colleges and universities should respond to these concerns by agreeing on and adopting a set of minimum academic skills and levels of proficiency

that all students should attain, preferably by the end of the sophomore year. This should be done on the basis of faculty recommendations and administered in a way that will assure the public that the necessary skills expected from a college education are, indeed, being achieved. Students should be required to match or exceed these threshold requirements, which would provide a basic accountability and a standard upon which individual institutions can build. Each college and university should further specify clearly not only the skills but also the means by which it will facilitate their acquisition by every student before a bachelor's degree is awarded. Recipients of baccalaureate degrees should have obtained knowledge and experiences that equip them with a sense of competence, relevance, and pertinence for the future. Not only must they function well in a multilingual, technological, global society, but they must also contribute to its advancement and quality. It would be tragic if America's colleges allowed baccalaureate graduates to be monolingual in that global society; to be technologically naive in an age demanding technical skills and sophisticated understandings; or to be uninitiated to the "real life" worlds of work and of social responsibility.